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Social Capital and Internet Usage: A Study in Lisbon

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During this doctoral research I was a visiting researcher/scholar at NetLab, University of Toronto, and IMK, University of Norway.

“When you want to escape from the world as it is, you can be a musician, or a philosopher, or mathematician. But how can you escape it as a sociologist? Some people manage to. You just have to write some mathematical formulae, go through a few game-theory exercises, a bit of computer simulation. To be able to see and describe the world as it is, you have to be ready to be always dealing with things that are complicated, confused, impure, uncertain, all of which runs counter to the usual idea of intellectual rigour.”

Pierre Bourdieu (1991:259)

Dedication

For Marcos, almighty companion, loving teacher, and proofreader extraordinaire.

For my mother, Maria Helena, and my brother Tiago, my ultimate supporters.

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Every time I had some epistemological doubt about what social capital is or means I would always think about my own life. Social capital has been instrumental in my life: I owe a great deal of what I am to my social ties. Coming from a family with low economic capital, my mother had to work hard to provide me with cultural capital. But my cultural capital would not be enough without the social capital I was able to reproduce, create, maintain, and mobilize throughout the years. This dissertation is a product of that social capital; it would not be possible without the contribution of so many friends.

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1 Introduction

“To have friends is to have power: for they are strengths united”
Thomas Hobbes, [1651] 1961:150 Leviathan

1.1 Internet and social capital

In less than a decade, the Internet has become pervasive and progressively embedded in our daily lives. In 2000, there were 361 million Internet users worldwide, while in 2010 nearly 2 billion people worldwide were using the Internet (Internet World Stats, 2011).

The ubiquity that characterizes the Internet can also be used to characterize the concept of social capital, although in a smaller scale. Social capital is a very elastic concept with a plethora of definitions, but “the basic idea of social capital is that one’s family, friends, and associates constitute an important asset, one that can be called upon in a crisis, enjoyed for its own sake, and/or leveraged for material gain” (Woolcock, 2001:20).

During the last decades, the number of academic papers focusing on social capital has been steadily on the rise (Field, 2008; Ostrom & Ahn, 2003). According to the Social Sciences Citation Index, in 1990, there was no single article using social capital as a keyword, whereas in 2006, there were 429 articles (Field, 2008:4-5). Similarly, social capital has become an increasingly used concept in the public sphere: “During recent years, the concept of social capital has become one of the most popular exports from sociological theory into everyday language” (Portes, 1998:2).

At least five reasons account for this growth: First, social capital is a concept closely related to other significant sociological concepts, such as social support, solidarity, social cohesion, community, among others. As Bourdieu notes, “The notion of social capital imposed itself as the only mean to designate the principle of social effects (...)” (1980:2). The idea of social capital is perceived as simple to explain and apply, giving it broad appeal and application: it “consequently speaks to a lot of different people (...), and gives classical (and contemporary) sociological themes a voice they would not otherwise have” (Woolcock, 2001:13).

Second, and as a consequence of the first, it has become a multidisciplinary concept used by a range of different disciplines, from economics (e.g. Becker¹, 1996; Becker & Murphy, 2000; Woolcock, 2001), to political science (e.g. Putnam, 1993, 1995, 2000, Fukuyama, 1995, 1997; Ostrom, 1990, 2000; Ostrom & Ahn, 2003). Its wide application has also caused the concept to be continuously redefined for the purpose of each discipline.

Third, organizations, such as the World Bank and OECD, and governments make use of the concept—giving the concept a degree of legitimacy amongst policy-makers. For instance, the UK, Australia, and Canada conduct social capital measurements as part of the policy research of their official statistics centers. Social capital involves social and economic perspectives and attracts policy-makers, as it presents “less costly, non-economic solutions to social problems” (Portes, 1998:3).

Fourth, because social capital is based on a holistic approach to human connections and its resources, it can be applied to study the micro, meso, and macro levels of social relationships (Field, 2008). For instance, what is true for individuals also seems to hold for groups: the communities with high levels of social capital are safer, more civically engaged, and less affected by crime (Woolcock & Narayan, 2000; Putnam, 1993, 1995, 2000).

Fifth, the concept has been associated with a variety of positive outcomes: with getting jobs or getting better jobs (Lin & Erickson, 2008), better coping strategies and lessening of disabilities (Carter & Maluccio, 2002; Pavey, 2003), well-being, better public health, lower crime rates, more efficient financial markets, social integration (Adler & Kwon, 2002; Putnam, 2000; Halpern, 2005), better management of common resources, and alleviation of poverty (Grootaert & Bastelaer, 2001; Ostrom & Ahn, 2003).

Social capital has also been a strong predictor of academic performance, employment, occupational attainment, cohesion, well being, and civic engagement (Portes, 1998; Putnam, 2000; Lin & Erickson, 2008). Those with a higher level of social capital have greater professional, economic, and political opportunities (Cf. Lin & Erickson, 2008). Those with more social capital seem to be better off.

Despite its popularity, social capital is far from being a consensual concept. As such, I define social capital as: *the resources that can be derived from our social networks, i.e. resources that are potentially available and can be mobilized from our social connections* (drawing on the work of Bourdieu, 1980, 1986; and Lin, 2001).

¹ Gary Becker, Nobel of economics, even defined a formula to express the formation of social capital = $S_i^{t+1} = X^i + (1 - d_s) S_i^t$, where d_s is the depreciation rate on social capital, and $X^i (= \sum_j x_j^i)$ is the effect of choices by the j members of i 's network on his social capital (Becker, 1996:12).

Social capital shares similarities with other types of capital, such as human and cultural capital, namely the nonmonetary aspect (Grootaert & Bastelaer, 2001; Bourdieu, 1986). But besides the specificity of each capital, social capital accumulates with use (Ostrom, 1994), and requires at least the interaction of two people (Grootaert & Bastelaer, 2001). There is also a connection between social capital and other types of resources – those with higher economic and human capital, seem to have higher social capital (Lin, 2001). Social capital adds value, or complements other types of capital (Bourdieu, 1986).

Because social capital can shine some light on how social elements explain human behavior, from status attainment to well being, social capital can be an important concept in the debate around the Internet's effects on society:

- How is the Internet affecting social capital?
- Is the Internet reinforcing and complementing social capital?
- Or is it dividing and isolating people, and diminishing their social capital?

Fears of social isolation and alienation have been constantly associated with new technology. In the words of Steven Pinker (2010), “New forms of media have always caused moral panics: the printing press, newspapers, paperbacks and television were all once denounced as threats to their consumers’ brainpower and moral fiber. So too with electronic technologies. PowerPoint, we’re told, is reducing discourse to bullet points. Search engines lower our intelligence, encouraging us to skim on the surface of knowledge rather than dive to its depths. Twitter is shrinking our attention spans. But such panics often fail basic reality checks.”

In fact, despite the growing research that supports the positive relationship between Internet usage and social interaction, sociability, and even social capital (Hampton et al., 2011; Robinson & Martin, 2008; 2010; Williams, 2007, Boase et al., 2006; Kuovo & Räsänen, 2005; Katz & Rice, 2002; Quan-Haase & Wellman, 2004), the dystopian view of the Internet seems to be more prominent in the public discourse. This view keeps feeding a certain moral panic about the Internet and its effects (Cf. Wang & Wellman, 2010).

Of course the Internet is not exclusively a force for good. But we need to overcome the Manichean utopian/dystopian view of technology, acknowledge the research in the field, and recognize the positive and negative elements of any socio-technical system. Similarly, social capital can also be negative: it can promote segregation, oppression, inequality, illegitimacy, nepotism, in-group mentality, social exclusion, discrimination, conflict, and crime (Portes, 1998; Levi, 1996; Ostrom & Ahn, 2001; Putnam, 2000; Streeten, 2002). Gangs and patronage networks are some examples of this negative social capital for society (Streeten, 2002).

The majority of authors focus on the positive and not on the negative externalities of social capital – since it is mainly perceived as a positive capital for the individual or the group being analyzed. I follow this line, considering the positive outcomes of social capital for the individuals I am studying, while commenting on some of the less-positive aspects of social capital.

This study explores social capital and Internet usage, aiming to analyze if there is any association between them. This analysis follows a mixed methods strategy, which combines quantitative and qualitative methods. I designed a two-phase sequential mixed methods study:

- In the first phase, I draw on quantitative research to examine the relationship between Internet usage and social capital. I do this through a surveyed stratified random sample of 417 participants, above 17 years of age, living in Lisbon, Portugal.
- In the second phase, I draw on qualitative research to explore in-depth the relationship between Internet usage and social capital, namely through semi-structured interviews with 14 participants of the survey sample.

It must be noted that the field of social capital research has been dominated by quantitative analysis of survey data. As a consequence, I believe that contexts, meanings, and motivations to create and sustain social capital have not been adequately explored in the literature. Therefore, I rely on qualitative research to explore these contexts, meanings, and motivations.

1.2 Thesis outline

This thesis is composed of four parts, but not explicitly marked as such. The first part (chapters 2 and 3) explores the concept of social capital in the literature, and informs the definition and operationalization of social capital, as well as the theoretical framework of my research. The second part (chapter 4) focuses on the literature review of Internet usage and social capital, which informs the analytical model of my research. The third part (chapter 5) comprises the research strategy, methods, and measures, which informs my empirical model. The fourth part (chapter 6, 7, and 8) presents and discusses the results of the study that I conducted in Lisbon.

In *Chapter 2*, I first look at the history of social capital as a term and as a concept, and I then critically explore the work of its main contemporary proponents: Pierre Bourdieu, James Coleman, Robert Putnam, and Nan Lin. Despite the importance of the social capital concept in the sociological research, the large uptake of the concept and its broad nature has created conceptual ambiguities. These ambiguities but also

similarities are explored in this chapter, since identifying different elements helps to give a perspective to the study of social capital, while identifying common elements helps to clarify the meaning of social capital. As Ostrom & Ahn (2003:2) elucidate, “After a decade of unprecedented growth, the social capital approach has now reached a point where serious theoretical reflections are imperative to maintain the concept's integrity when applied to empirical research. A way of reflecting on the fundamentals of the social capital concept is to go back to the foundational ideas.” The ambiguity of the concept requires such an effort. This chapter ends with a section addressing the main criticisms against the concept of social capital.

In *Chapter 3*, I draw on the previous chapter to define and operationalize social capital. Social capital is a multidimensional concept, measured through its different dimensions. In this chapter, I review the main dimensions of social capital in the literature, namely bonding social capital, bridging social capital, resources, civic engagement, linking social capital, and social trust and reciprocity. To be consistent with my definition of social capital, I explain why I only select three of these dimensions (bonding, bridging, and resources) for my study. Moreover, research in the field has been showing that there is no strong evidence or strong theoretical framework to support the inclusion of reciprocity, civic engagement, social trust, or norms in the concept of social capital (Cf. Lin & Erickson, 2008).

In this third chapter, I also explore the theory or theories of social capital, laying down a broad theoretical framework for my research. My multi-theory approach to social capital combines elements from constructivist structuralism, neo-capital theory, theory of social capital, bounded rationality, and second-generation collective-action theories. While I am not specifically testing this general multi-theoretical model, this is how I approach social capital in my research. The rationale for this multi-theory approach is presented and discussed herein. This chapter ends with a section that describes the social capital research in Portugal.

In *Chapter 4*, I review the research on social capital and Internet usage. As there is no unified definition of social capital, a significant number of these studies rely on different approaches, which means that some studies include social trust and civic engagement, while others are based on other concepts such as sociability.

While I review these studies, I primarily focus on studies that directly (or indirectly, in some cases) consider social capital as resources available in social networks or that study bonding or bridging social capital. The studies on social capital and Internet usage can be divided into three approaches:

1. The ones that point to a positive relationship between the two,
2. the ones that point to a negative relationship,

3. and the ones that point to no relationship.

Although these three approaches have supporting research, the majority of studies in the field have been validating the first approach, i.e. the positive relationship between social capital and Internet usage.

This literature review (and the previous chapters) informs the research goals, research question, hypotheses, and the analytical model of my research. Therefore, the main goal of this study is to examine if social capital and Internet usage are related. To frame the relationship between social capital and Internet, I rely on the theory of social affordances (Wellman, 2003; Hogan, 2009). Even though I do not consider civic engagement and social trust as components of social capital, I measure them as independent variables, aiming to see if there is any association between these two and social capital. This latter is a secondary goal of my research, which might be an important contribution to the general definition and operationalization of social capital. Finally, I describe the research site, i.e. the city of Lisbon.

In *Chapter 5*, I discuss the different perspectives for measuring social capital and present the one I use in my research. A look at the literature shows that there is no unique methodological framework for social capital, and measurements are often linked to the goals of each study or to the field in question. Since social capital is a concept that eludes definition, one can imagine the conundrum of trying to measure it. Hence, my perspective of measurement of social capital combines methods and instruments from social network analysis and Internet studies.

In *Chapter 5*, I also describe the mixed methods research strategy and design, as well as the data collection and analysis. In the first part, I look at mixed methods techniques and discuss the epistemological and axiological aspects associated with my research strategy. I also present the empirical model of my research, showing how the three dimensions of social capital are measured, and how they are combined to create the social capital variable through Latent Class Models (LCM).

LCM is a clustering probabilistic technique used to find latent classes from multivariate data (Fonseca, 2009). Social capital and its dimensions are the dependent variables of this study, whereas Internet usage (measured through frequency of usage) and some socio-demographic indicators are the independent variables. In the second part, I present a report on the sample design, the data collection, the measures of social capital, the basic socio-demographic composition of the data and its representativeness, and the quantitative and qualitative techniques of analysis. Chapter 5 ends with a description of my ethical conduct during the data collection and the subsequent data analysis.

In *Chapter 6*, I describe how my survey respondents use the Internet, through descriptive results. I categorize them in four groups, based on the extent of Internet use: non-users, light users, moderate users, and heavy users. I believe that this is a richer categorization than a simple binary dichotomization. I also present the composition of each dimension of social capital (bonding, bridging, and resources), using a Latent Class Model (LCM) estimation. Then my research sub-hypotheses are tested, namely the association between each dimension and Internet usage. The bonding and the resources dimensions are tested using a binomial logistic regression analysis. The bridging dimension is tested using LCM estimation, due to validity problems found in the multinomial logistic regression model.

In *Chapter 7*, I present the composition and analysis of an “online social capital”. I did not define this “dimension” beforehand; it originated from my data analysis. My primary objective was to create a bonding and a bridging dimension with both offline and just online dimensions, and to create a social capital variable with both offline and just online social capital. For this I used the *Internet Social Capital Scales* developed by Williams (2006), which include an offline and an online dimension.

However, when administering the questionnaires in the pretest phase of the survey, people became confused about the online dimension. They would ask if it meant only “online people” or also people that they know offline, and interact with online? To avoid further confusion, I had to explicitly add “people that you only know online” to the online scales. Considering that most of people’s online contacts are also offline contacts, and that the online is progressively embedded in the offline and vice versa, this differentiation caused some analytical challenges.

In the end, because of technical limitations and a relatively small number of people that actually knew only online people, I was not able to add this online social capital to the final social capital variable. I decided, therefore, to analyze it separately. Online social capital is defined as the social capital that can be derived from online ties.

In *Chapter 8*, I present the final quantitative and qualitative data analysis by: Firstly, presenting the composition of the variable “social capital” and its statistical analysis. I created the variable of social capital by combining the three measured dimensions: bonding, bridging, and resources. Social capital is then tested in a binomial logistic regression model, allowing me to test the main hypothesis of my research. I also test for social trust and civic engagement, presenting the results of the secondary goal of my research. Secondly, presenting the results of the semi-structured interviews, and a more in-depth qualitative analysis of the research subject. This phase of the study contributed to new insights on the relationship between social capital and Internet usage, while it shed light on the findings of the quantitative analysis, particularly

through people's account of their perceived social capital, their Internet usage, and the linkages between the two.

I conclude this thesis by reviewing the main themes addressed in the results chapters, and summarizing the theoretical, methodological, and practical contributions of my research to the literature on social capital and Internet usage. These contributions are related to the knowledge gain with this study in Lisbon on two levels: firstly, on the relationship between social capital and Internet usage, using a mixed methods approach; secondly, on the relationship between social capital, social trust, and civic engagement. In the first case, the findings of this study indicate that social capital and Internet usage are positively related, which supports the literature that points to a positive relationship between the two, and the social affordances of the Internet. In the second case, the findings demonstrate that social capital, civic engagement, and social trust are not related. These findings confirm my definition of social capital, and the claims that these are independent concepts (Lin, 2001; Lin & Erickson, 2008; Fischer, 2005). Finally, this chapter describes the limitations of my research and suggests directions for future research.

2 Social Capital: A conceptual challenge

2.1 Introduction

The literature on social capital has grown significantly in the last decades (Field, 2008; Ostrom & Ahn, 2003). In 1993, when Robert Putnam and colleagues examined the social capital concept in their book *Making Democracy Work*, there were only ten articles on the subject, but in the last 15 years, 160 articles, on average, have been published per year (Akçomak, 2011). Despite this growth – visible across different disciplines, from sociology to economics – there is no consensual definition or measurement of social capital.

The large uptake of social capital and its broad nature has created conceptual, theoretical, and operational ambiguities. Each discipline focuses on a particular aspect of social capital, and there is limited interaction between disciplines: the social capital of the social capital research (i.e. the collaboration among disciplines measured through co-authorships) is extremely low (Akçomak, 2011). So it is not surprising that for some authors, particularly social network theorists, social capital is practically equal to social networks (Glanville & Bienenstock, 2009), whereas for others it also includes elements such as *trust*, *norms*, and *resources* (Coleman, 1987; Putnam, 2000; Halpern, 2005; Lin, 2001; Bourdieu, 1980). There is also an ongoing debate whether social capital is a cause or an effect: is social capital the cause of social networks? Or is social capital the outcome of those social networks? (Williams, 2006)

The distinction between individual social capital and collective social capital also brought more ambiguity (Portes, 2000). Not because the concepts are irreconcilable, but because there are some inconsistencies. Firstly, there is no theoretical framework to explain the transition from the individual resource to a community or national resource. They can even be in opposition, as a good connection might allow an individual to undermine collective social capital (Portes, 2000). Secondly, causes and effects of social capital as a collective asset were never properly separated, creating circular reasoning (Portes, 2000).

Aiming to deal with the conceptual ambiguity of social capital, in this chapter I first look at the history of social capital as a term and as a concept. I show that social capital is not a new concept, being present in early sociological studies (at least as an idea). Then I critically explore the contemporary approach to the concept, through the work of its

main proponents: Pierre Bourdieu, James Coleman, Robert Putnam, and Nan Lin.¹ This literature review maps the diversity of the conceptualization of social capital, but also its similarities. Identifying different elements helps to give a perspective to the study of social capital, while identifying common elements helps to clarify the meaning of social capital. This exercise was essential to refine the conceptual and theoretical framework of this research.

Finally, I address some of the criticisms against the concept of social capital, claiming that it can be a useful conceptual and theoretical tool.

Through a brief historical account in the next section, I differentiate between the use of social capital as a term and as a concept.

2.2 Term versus concept

Despite its recent recognition, social capital is not a new idea for sociology (Portes, 1998). So, when it comes to social capital, it is important to differentiate between the use of the *term* and the use of the *concept* (Cf. Farr, 2004). Doing so provides us with insight into the historical evolution of social capital both as a term and as an idea.

Tracking the conceptual roots of social capital into classical times means revisiting sociology's influential nineteenth century sources (Portes, 1998). Classical sociologists such as Émile Durkheim, Ferdinand Tönnies, Max Weber, and Friedrich Engels focused their work on the *quality* of human interaction, which can be considered a form of social capital. However, the social theories of the classical sociologists were more concerned with traditional foundations of social order, such as habit, faith, and obedience (Field, 2008).

Eighteenth-century scholars such as David Hume and Adam Smith, and nineteenth-century scholars such as John Stuart Mill and Alexis de Tocqueville also used the concept, without the term, when writing about the civil society in the capitalist age (Farr,

¹ There are, of course, other scholars with important contributions to the social capital field, such as Robert Burt (defines social capital as “friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital”, 1992:9; Cf. theory of structural holes, which describes the network structure of social capital, 1988, 1992, 1997a, 1997b, 2000) and Francis Fukuyama (defines social capital as “the ability of people to work together for common purposes in groups and organizations” 1995:10; refining it in 1999, “social capital is an instantiated informal norm that promotes cooperation between two or more individuals”). However, Bourdieu, Coleman, and Putnam are widely acknowledged as the core historical exponents of social capital (Cf. Portes, 1998, 2000; Halpern, 2005; Field, 2008). Lin has also been recognized for his work on the theory of social capital (Häuberer, 2011).

2004). Using the term, without the concept, it is possible to find writers of the nineteenth-century: Karl Marx (in 1867); Henry Sidgwick (in 1883); John Clark (in 1885); and Alfred Marshall (in 1890) (Farr, 2004). They used the term mainly to challenge the ideas that underpinned the classical political economy of their time (Farr, 2004).

In the 1970s, James Buchanan also used *social capital* to define a “society’s capital investment characteristic of adherence to rules” (Buchanan cit. by Farr, 2004). Earlier economists, such as Alfred Marshall and John Hicks, also applied the term to distinguish temporary and permanent stock in the stock market (Woolcock, 1998).

But even if some early authors used the term and the concept, there is a general consensus that its contemporary meaning draws from the authors of the 1980s and 1990s (Field, 2008). Lyda J. Hanifan appears in the literature as the first known author to use social capital in a contemporary sense (Putnam, 2000). But recent historical research has shown that the pragmatist John Dewey used social capital earlier: Dewey first used social capital in the book *The Elementary School Record* (1900), preceding Hanifan’s usage (Farr, 2004). This book compiled nine monographs, which were edited and had Dewey’s contribution. It addressed the pedagogy of critical pragmatism, showing how schools were social communities of collaborative learning. In the last monograph, Dewey draws attention to the mind as a “function of social life” and not as a purely individual matter, stressing the need to frame the 3 R’s (education based on reading, writing and arithmetic) in social life activities:

...these subjects are social in double sense. They represent the tools which society has evolved in the past as the instruments of its intellectual pursuits. They represent the keys which will unlock to the child the wealth of **social capital** which lies beyond the possible range of his limited individual experience. (Dewey, 1900, as quoted in Farr, 2004:17; my emphasis)

Dewey uses social capital in three other publications (1909, 1915, 1934), mainly to reinforce the need for a change in education and the idea of schools as centers of community and social life (Farr, 2004). In an address to the *National Negro Conference* (1909), Dewey states:

There’s no inferior race...All points of skill are represented in every race, from the inferior individual to the superior individual, and a society that does not furnish the environment and education and the opportunity of all kinds which will bring out and make effective the superior ability wherever it is born, is not merely doing an injustice to that particular race and to those particular individuals, but it is doing

an injustice to itself for it is depriving itself of just that much of **social capital** (Dewey, 1909, as quoted in Farr, 2004:180; my emphasis).

For Dewey, society is association and cooperation. Citizenship “is coming to mean all the relationships of all sorts that are involved in membership in a community”. And, communities are a collective form that provides “the network of social activities that bind people together”, aggregating “resources of the whole group” (Dewey, 1900, as quoted in Farr, 2004:15). The term and the concept of social capital are, therefore, visible in John Dewey’s work. Even his “sympathy” is extremely similar to trust: “more than mere feeling: it is a cultivated imagination for what men have in common and a rebellion at whatever unnecessarily divided them” (Dewey, 1900, cit. by Farr, 2004:16).

Several authors consider trust to be one of the main elements of social capital (Putnam, 2000; Halpern, 2005; Ostrom & Ahn, 2003). I will explore the elements or dimensions of social capital in chapter 3, but for now, trust can be defined as “confidence in the reliability of a person or system” (Giddens, 1990:34).

Dewey seems to be the first to describe social capital in a contemporary sense, but he did not present a formal definition of social capital. For the first formal contemporary definition we need to turn back to Lyda J. Hanifan.

Hanifan explored social capital through an analysis of a rural community based in West Virginia, USA (Hanifan, 1916). Hanifan defined social capital as: “...tangible substances [that] count for most in the daily lives of people, namely goodwill, fellowship, sympathy, and social intercourse among a group of individuals and families who make up a social unit...”

On the one hand, Hanifan associates social capital with collaboration, social needs, and community well-being. On the other hand, he makes social capital the antonym of social loneliness: “The individual is helpless socially, if left to himself... If he comes into contact with his neighbors, and they with other neighbors, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potential sufficient to the substantial improvement of living conditions in the whole community. The community as a whole will benefit by the cooperation of all its parts, while the individual will find in his associations the advantages of the help, the sympathy, and the fellowship of his neighbors” (Hanifan, 1916:130).

Hanifan re-published this article in his book, *The Community Center* (Hanifan, 1920), attempting to reach out more educators. Hanifan was a supporter of the “social center

idea”, which was a movement that placed education and schools as the centers of public life (following Dewey’s philosophy). The question that emerges is, did Hanifan get the concept from Dewey? According to James Farr (2004), there is proximity in time, field, and philosophy to Dewey, but we cannot conclude anything in this regard. Hanifan constantly cites Dewey, but he does not cite the works where Dewey speaks of social capital. Hanifan may well have thought he came up with the concept himself, proving what Putnam found as a pattern: authors of social capital did not know each other until recently (Farr, 2004).

The contemporary definition of social capital is associated with four main authors: Pierre Bourdieu, James Coleman, Robert Putnam, and Nan Lin. Their work influentially shaped theories of social capital. But before them, it is important to note that there are other two contemporary sources of social capital: the economist Glenn Loury, and the sociologist Jane Jacobs. Both only briefly tackled the concept. Loury used the term once in his PhD dissertation in economics, within a critique of traditional neoclassical theories of racial income inequality:

An individual’s social origin has an obvious and important effect on the amount of resources that is ultimately invested in his development. It may thus be useful to employ a concept of “**social capital**” to represent the consequences of social position in facilitating acquisition of (say) the standard human capital characteristics (Loury, 1976:46, my emphasis).

The above paragraph was repeated in his article “A Dynamic Theory of Racial Income Differences” (Loury, 1977:176). Loury wanted to call attention to other factors that would have an impact on racial inequality, factors that were not being considered in the economic study of inequality. Loury found that the black youth was in disadvantage by the lack of influence on job opportunities and parental connections to the labor market. In his book *The Anatomy of Racial Inequality*, Loury brings back the concept of social capital, stating:

[referring to social capital,] I formalized the observation that family and community backgrounds can play an important role, alongside factors like individual ability and human capital investments, in determining individual achievement. (Loury, 2002:102)

The concept did not have any systematic development, however.

Jacobs was also too brief when tackling social capital, mentioning it once in her work *The Death and Life of Great American Cities* (1961). Claiming that a good city's neighborhood can take in newcomers and even protect passing populations, Jacobs states:

If self-government in the place [the neighborhood] is to work, underlying any float of population must be a continuity of people who have forged neighborhood networks. These networks are a city's irreplaceable **social capital**. Whenever the capital is lost, from whatever cause, the income from it disappears, never to return until and unless new capital is slowly and chancily accumulated (Jacobs, 1961:148, my emphasis).

For Jacobs, city neighborhoods are ordinary organs of self-government, being self-government an "informal and formal self-management of society" (Jacobs, 1961:124).

Jacobs was addressing the problems of city planning (especially of Euclidean zoning), and its negative impact on urban life and "neighbourliness": from the reduction of sidewalks, to the construction of big residential areas with no real public spaces or commerce, to the destruction of diversity by planning to make cities uniform.

For Jacobs, failures with neighborhoods are failures with self-government. In a big city, despite all the mobility and diversity it contains, neighborhoods are vital: "even the most urbane citizen does care about the atmosphere of the street and district where he lives, no matter how much choice he has of pursuits outside it; and the common run of city people do depend greatly on their neighborhoods for the kind of everyday lives they lead" (Jacobs, 1961:127). There is, therefore, a need to safeguard the "social capital" of the city, through, for instance, some of the self-government functions of city streets as "to weave webs of public surveillance and this to protect strangers as well as themselves; to grow networks of small-scale, everyday public life and thus of trust and social control; and to help assimilate children into reasonably responsible and tolerant city life" (Jacobs, 1961:129).

Cities would have more vitality if planners considered small-scale pedestrian-friendly blocks and streets, the high density of population and activities, a mixture of primary uses, and the combination of old buildings with new ones. Throughout her book, Jacobs presents examples of a neighborhood social capital. Examples that feed the city's social vitality and that go beyond close ties: Mr. Joe Cornacchia is the owner of a deli in her neighborhood that keeps keys for the neighbors, and when a relative or a friend comes over they can pick up the key at Joe's store. Mr. Jaffe is the owner of a candy store that

supervises children crossing the street in front of the store, receives packages if neighbors are not home, lends umbrellas and even money, listens to people's sorrows, etc. (Jacobs, 1961).

But Jacobs did not define social capital or elaborate on it.

In the next section, I look chronologically at the work of Pierre Bourdieu on social capital. Bourdieu presents the first contemporary analysis of social capital.

2.3 Proponents of social capital

2.3.1 Pierre Bourdieu: the forms of capital

In 1980, the French sociologist Pierre Bourdieu published the first contemporary analysis of social capital in his "*Le capital sociale, notes provisoires*" (Social capital, provisional notes)². However, the article was written in French and did not receive many citations in English-written academic literature. Neither did his first translation of the article into English in 1985, which was published in a book about sociology of education (Cf. Portes, 1998).

To understand Bourdieu's approach to social capital, we need to understand that it was done within a broad analysis of the foundations of social order (Fields, 2008). He was essentially interested in the study of social classes, reproduction of social domination, and inequality (Bourdieu, 1970; 1972; 1980; 1984; 1986).

Before developing social capital, Bourdieu first explored what he defined as "cultural capital". Observing that economical aspects were not sufficient to explain disparities in the educational attainment of children from different social classes, Bourdieu and Passeron introduced the concept of "cultural capital". They argued that beyond economic factors, "dispositions" inherited from the family were significant to school success (Bourdieu & Passeron, 1970). Cultural capital exists in three forms: embodied state (dispositions of mind and body); objectified state (cultural goods as books,

² It seems that Bourdieu used the concept for the first time in 1972, in his *Esquisse d'une théorie de la pratique, précédé de trois études d'ethnologie kabyle* (English translation, 1977). In this book, he uses the term only once, to explain the modes of domination in society: "So, it is in the degree of objectification of accumulated **social capital** that one finds the basis of all pertinent differences between the modes of domination: that is, very schematically, between, on the one hand, social universes in which relations of domination are made, unmade, and remade in and by interactions between persons, and on the other hand, social formations in which, mediated by objective, institutionalized mechanisms, such as those producing and guaranteeing the distribution of "titles" (titles of nobility, deeds of possession, academic degrees, etc.), relations of domination have the opacity and permanence of things and escape the grasp of individual consciousness and power" (Bourdieu, 1977:184, my emphasis).

instruments, etc.) and institutionalized state (as educational qualifications, competences, etc.) (Bourdieu, 1986).

This new paradigm breaks with the previous research in education, which saw academic success as a result of natural ability (Bourdieu, 1986). Economists had already pointed for the relationship between academic success and economic investment, but they failed to recognize the “socially most determinant educational investment, namely the domestic transmission of cultural capital” (Bourdieu, 1986:48). This shift from natural aptitudes to the larger social effects on individual’s academic success framed educational research since then. Bourdieu’s theory has been used by the sociology of education to explain social class, status, and power in pedagogic settings (Grenfell & James, 1998).

In parallel with cultural capital, Bourdieu defines social capital. His definition is explored in the next section.

2.3.1.1 Provisional Notes: outlining social capital

Bourdieu (1980) defines in his “*Le capital sociale, notes provisoires*” another form of capital: social capital.³

Social capital is “the sum of actual or potential *resources* related to the possession of a *durable network* of more or less institutionalized *relationships* of acquaintance and recognition; or in other terms, to a group *membership*, as a set of agents who are not only equipped with common characteristics...but are also united by permanent and useful *connections*” (Bourdieu, 1980:2, my emphasis)⁴. The “volume” of social capital depends on the size of the connections an agent⁵ is capable of effectively mobilize, and on the economical, cultural, social or symbolic capital that each of those connections has. Bourdieu’s definition explores four main intertwined concepts:

³ Unless stated otherwise, the text of this section is a description of the ideas of Bourdieu (1980).

⁴ “Le capital social est l’ensemble des ressources actuelles ou potentielles qui sont liées à la possession d’un *réseau durable de relations* plus ou moins institutionnalisées d’interconnaissance et d’interconnaissance; ou, en d’autres termes, à l’*appartenance à un groupe*, comme ensemble d’agents qui ne sont pas seulement dotés de propriétés communes (susceptibles d’être perçues par l’observateur, par les autres ou par eux-mêmes) mais sont aussi unis par des *liaisons* permanents et utiles.” (Bourdieu, 1980:2)

⁵ Bourdieu uses the concept “social agents”, which pertains to individual and collective actors. The concept is used to underline that there are “operated” from the inside and the outside. They do not act freely, but are conditioned by internal and external forces (Corcuff, 1995). As Bourdieu indicates “Agents and groups of agents are...defined by their relative positions within that [social] space” (Bourdieu, 1985:196).

1. Resources – the supplies or sources of aid that are or might be available in an individual's social network.
2. Social network – a stable and “durable” social network (or networks) that allows individuals to access resources.
3. Relationships – interactions based on subjective (e.g. feelings, such as friendship, respect, etc.) or institutional (e.g. the name of a family) acquaintance and recognition. It is through acquaintance and recognition that social capital gains a *symbolic* character that allows it to be acknowledged and legitimized.
4. Group membership – the association with a group that provides durable and helpful social connections.

Social capital is related to the volume, quality, proximity, and durability of the social networks where resources can be drawn from. We can not reduce an individual's social capital to the economic and cultural capital his/her connections have. But social capital is never totally independent of it because it is based on exchanges that presuppose mutual acknowledgement.

The social network is the product of a social institution, just like a family. It results of conscient or unconscient, individual or collective, social strategic investments aiming at establishing or at reproducing social relationships that can be directly usable in the short or long term. This social institution produces symbolic and material exchanges that generates mutual knowledge and recognition among its members, reproducing the group and reaffirming its limits. It also presupposes a common identity and group homogeneity.

The reproduction of social capital, mainly seen in an instrumental way, implies a continuous effort of sociability and exchange. This effort is done so that social recognition can be incessantly acknowledged and re-acknowledged: social connections have to be constantly reinforced and fed to allow any sort of outcome. To transform contingent relationships (such as of neighborhood, workplace or kinship) into relationships that can be useful when necessary, the individual has “obligations” that can be feelings (e.g. feelings of recognition, respect, friendship, etc.) or institutional guarantees (e.g. rights). So, people have to spend a great amount of energy and time (and directly or indirectly of economic capital) in social connections.⁶

⁶ It might seem a risky and time-consuming investment (because it might only be useful in the long-term), but as Bourdieu explains later in his 1986 article, there are several services and goods that can only be reached through social capital (Bourdieu, 1986, p. 254).

The profitability of accruing and preserving social capital rises in proportion to the size of the capital. Social capital accumulated from a relationship is greater when the person who is the object of it has a high level of capital (mostly social, but also cultural and even economic capital). For instance, when compared to the average person, a person with a famous family name (that inherited the family social capital) will probably find it easier to create and mobilize social connections.

For Bourdieu, social connections are based on material and symbolic exchanges. The instauration and perpetuation of those exchanges are established on the recognition of proximity. However, social connections can not be totally reducible to objective relations of proximity in the physical space (geographic) or even in an economical and social space. This is an interesting idea, especially in terms of physicality, when thinking about the Internet. Nowadays, a great number of social interactions are often developed and maintained on-line. Rather than being restricted by the communities of the physical world, individuals can now associate themselves with people and online communities that transcend spatiotemporal boundaries. The Internet allows us to overcome distance, and facilitates social exchanges of interest in a virtual setting. Individuals can find people online who share the same interests, views, etc.

But, to the same extent, physical proximity still seems to matter. Even digital communities exhibit some reliance on physicality (Xie, 2008; Carter, 2005; Wellman & Gulia, 1999). On the one hand, initial online interactions create the need for individuals to meet face-to-face. This is mainly observed with those who share interests and backgrounds. On the other hand, interactions in the physical world help strengthen relationships between individuals (Xie, 2008).

2.3.1.2 Distinction: cultural and social capital

Despite these “Notes Provisoires” on social capital, Bourdieu predominately focuses on the cultural capital concept that seems to rank higher than social capital in his scale of capitals (Cf. Bourdieu, 1987). In his study of the judgment of taste, published as *La Distinction*, Bourdieu (1984) uses statistical data (from a survey applied to 1217 people in 1963 and 1967-68) to show how art and cultural practices/consumption (the “good taste”) are defined by the dominant class and serve to legitimate and reproduce social differences. Social classes tend to define a person’s taste and that “distinctive taste” is a way of reinforcing social stratification, but “It must never be forgotten that the working class ‘aesthetic’ is a dominated ‘aesthetic’, which is constantly obliged to define itself in terms of the dominant aesthetics” (Bourdieu, 1984:41).

Bourdieu assesses cultural capital looking at cultural practices and opinions, educational capital (qualifications), and social origin (father's occupation). In this 1984 work, he does not define empirical indicators for social capital but presents some considerations on the subject:

- Income is determined by hidden factors, such as social capital – to a given volume of inherited capital, there are a number of probable trajectories. One of the elements that influences that trajectory is the skill in operating “connections”, which enables the holders of higher social capital to preserve or increase it. For instance, the rate of return of an education (a diploma) derives of the economic and social capital that can be committed to explore it. Social capital is essential in the labor market, especially in an era of overproduction of qualifications and a consequent diploma's devaluation.
- In addition to education, there is a whole set of specific skills that function as an entrance to the aristocratic world, such as dancing, rare sports, and parlor games. These skills contribute to explain differences in career, because of the social interaction they provide and help to accumulate.

For example, sports vary according to the social origin: chess seems less connected than bridge to social traditions and to the pursuit of the accumulation of social capital. In the same context, looking at the differences between sports leisure of three main occupational groups – teachers, professionals and employers – Bourdieu concludes statistically that there are sports activities (even if relatively rare: about 10%) distinctive of each of the three-referred groups. The teachers prefer mountaineering or cycle-touring; the professionals (such as doctors or executives) go for high-status activities, such as yachting, open-sea swimming, cross-country skiing or under-water fishing; while the employers gather around golf and their exclusive spaces, which are ideal spaces for the accumulation of social capital.

These are some of the reasons why high-skilled workers, such as doctors and lawyers, invest not only in their offspring's education, but also particularly in cultural practices proper to a bourgeois life-style. These practices also provide social capital: “a capital of social connections, honorability and respectability” (Bourdieu, 1984:122), crucial to maintain a high social position, and even to pursue a political career.

- The dominant class is not only richer in social capital (has more influential and rich connections), it is also richer in the socializing techniques employed to sustain that capital. Cultural practices, cultural goods consumption, and “taste” are also connected to social capital: the consumptions of means of self-representation, such as clothes and shoes, represent a need and a facility of a social position. It also represents a condition for a specific life-style that determines the value of ‘social connections’. For instance, some of the striking expenditures that are seen as extravagant and wasteful are mandatory for a specific life-style. Plus, those expenditures are very often excellent investments in social capital, as in the case of engagement parties: “Ostentation, big spending and generosity” are some of the conditions for the reproduction of social capital in the upper classes (Bourdieu, 1984:330).

2.3.1.3 The forms of capital

In “The Forms of Capital” (1986), Bourdieu explores different forms of capital, starting to define capital as accumulated labor, in its materialized or personified form. As he explains, if we only account for the capital recognized by the economical theory, we will never be able to describe the structure or functioning of the social reality. This is because we can identify three types of capital: economic, social, and cultural.

The *economic capital* “is immediately and directly convertible into money and may be institutionalized in the form of property rights; *cultural capital*, which is convertible, on certain conditions, into economic capital and may be institutionalized in the form of educational qualifications; and as *social capital*, made up of social obligations (‘connections’), which is convertible, in certain conditions, into economic capital and may be institutionalized in the form of a title of nobility” (Bourdieu, 1986:247).

Bourdieu also mentions *symbolic capital*, which is the way each capital is perceived in the social structure, i.e. the symbolic value each capital has in a given society. Symbolic capital can be, for example, prestige, honor, lineage, or the symbolic value of a book. Symbolic capital does not assume a “material form” such as money, diplomas, etc., even though it can be re-convertible into other forms of capital. It merely exists in the “perception” world, but it legitimizes the other forms and uses of capital, and consequently the social order (Cf. Bourdieu, 1984, 1986). Bourdieu does not dwell into the concept of *symbolic capital* in this 1986 article. However, symbolic capital is a main concept in his theory of capitals: economic, cultural, and social capitals are only socially

effective and legitimized by symbolic capital.⁷

The text pertaining to social capital in “The Forms of Capital” (1986) is a translation of his “Notes Provisoires” (1980). He introduces, nonetheless, some important ideas about the conversion of these forms of capital:

- Cultural and social capital can derive from economic capital, but only when there is an effort that sustains that transformation. For instance, some goods or services are immediately available through economic capital, but others can only be accessed through social capital. However, for these social connections to be useful, they would have had to be fed for a long time. This long-term investment in sociability (that can be desinterested emotional investment) will thus create gratitude, instead of debt.
- There is a labor associated with these transformations. For instance, converting economic capital into social capital implies a specific labor: there is an expenditure of time, attention, and care when selecting and personalizing a present.
- Converting the different forms of capital presupposes costs and even losses.
- The convertibility of these different forms of capital is the base for strategies that aim to ensure the reproduction of capital and social positions. Reproduction strategies are simultaneously legitimization strategies, used to consecrate an exclusive appropriation and its reproduction.
- There is always a level of uncertainty in all conversions, because this convertibility is made difficult by the “(apparent) incommensurability of the different types of capital” (Bourdieu, 1986:255).
- The different forms of capital can be distinguished by their level of reproducibility, meaning how easily they are transmitted. This transmission may imply losses and be done in disguise. But the disguise of economic capital tends to augment the risk of loss, specially for intergenerational transmissions. The disguise of social capital, such as visits and gifts, may entail the risk of ingratitude or of non-recognition. The disguise of transmission of cultural capital has the risk of,

⁷ “Symbolic capital...is nothing other than capital, in whatever form, when perceived by an agent endowed with categories of perception arising from the internalization (embodiment) of the structure of its distribution, i.e. when it is known and recognized as self-evident” (Bourdieu, 1985:204).

besides the loss, prevent, for instance, the transmission of nobility titles.

- The privileged, the ones who hold the capital, have a great interest in the use of reproduction strategies capable of guaranteeing a better-disguised transmission, taking advantage of the convertibility of the types of capital. Even when the risks of losing capital are considered. This way, the hindered capital is distributed and becomes determinant in the reproduction of the social structure.
- The economic capital is at the root of cultural and social capital, but these cannot be totally reducible to economic capital. In the words of Bourdieu, “So it has to be posited simultaneously that economic capital is at the root of all the other types of capital and that these transformed, disguised forms of economic capital, never entirely reducible to that definition, produce their most specific effects only to the extent that they conceal (not least from their possessors) the fact that economic capital is at their root, in other words – but only in the last analysis – at the root of their effects” (Bourdieu, 1986:254).

To be clear, Bourdieu wasn't saying that social capital is reduced to economic capital, as it is suggested in some of the literature (Cf. Lin, 2001). Instead, Bourdieu was criticizing the economic view that reduces everything to economic capital: *“The real logic of the functioning of capital, the conversions from one type to another, and the law of conservation which governs them cannot be understood unless two opposing but equally partial views are superseded: on the one hand, economism, which, on the grounds that every type of capital is reducible in the last analysis to economic capital, ignores what makes the specific efficacy of the other types of capital, and on the other hand, semiologism (nowadays represented by structuralism, symbolic interactionism, or ethnomethodology), which reduces social exchanges to phenomena of communication and ignores the brutal fact of universal reducibility to economics”* (Bourdieu, 1986:254, my emphasis).

Cultural and social capital cannot be reduced to economical capital, but both are linked and can, in certain conditions, be convertible into economic capital. As Alejandro Portes points out, for Bourdieu the outcomes of cultural and social capital can be reducible to economic capital, but not “the processes that bring about these alternative forms” (Portes, 1998:4).

2.3.1.4 Habitus, field, and social capital

The characterization of different types of capital clearly separates Bourdieu from the main Marxist theorists⁸. Marxist sociology was very popular in France in the 1960s, 70s, and 80s (Cf. Béraud & Coulmont, 2008). But, his use of capital and his assumption that economical capital was the root of the other types of capital shows the influence of Marxism. It is important to be aware of Bourdieu's main interest: how these forms of capital could be combined to create and reproduce inequality.

The structure of the distribution of capital represents, in a given moment, the indwelling structure of the social world (Bourdieu, 1986). His work was devoted not only to the structure and resources, but also to the distribution of those resources in a social class perspective (Bourdieu, 1987). So, Bourdieu's concept of inequality was visibly influenced by different social theories, from Marxist sociology and conflict theory to structuralism. But he had a critical position towards them, criticizing Marxists on their sole focus on economic capital; and structuralists and symbolic interactionists on their emphasis on discourse theory that reduced social exchanges to communication (Bourdieu, 1986).

Bourdieu also rejected the conservative social theory, which viewed inequality as an unavoidable part of the human condition (Field, 2008). Failing to find a model to position his research, specially the one of his *La Distinction* (1984), Bourdieu created his own. His theory integrated structuralist explanations of inequality with constructivism, creating the "structuralist constructivism" or "constructivist structuralism" (Bourdieu, 1989). The goal of this theory was to bridge sociological antimonies, integrating subjectivism and objectivism; agency and structure; micro and macro. With it Bourdieu was able to merge the thoughts of sociologists like Émile Durkheim, Karl Marx, and Max Weber, which were until then considered in opposition (Corcuff, 1995).

Thus, Bourdieu's work is based on what he labeled as "constructivist structuralism" or "structuralist constructivism"⁹. With structuralism, he emphasized the objective

⁸ "Constructing a theory of the social space presupposes a series of breaks with Marxist theory. First, a break with the tendency to privilege substances...at the expense of relationships; and with the intellectualist illusion which leads one to consider the theoretical class, constructed by the sociologist, as a real class, an effectively mobilized group. Secondly, there has to be a break with the economism, which leads one to reduce the social field, a multi-dimensional space, solely to the economic field, to the relations of economic production, which are thus constituted as coordinates of social position. Finally, there has to be a break with the objectivism which goes hand-in-hand with intellectualism and which leads one to ignore the symbolic struggles of which the different fields are the site, where what is at stake is the very representation of the social world and, in particular, the hierarchy within each of the fields and among the different fields" (Bourdieu, 1985:195).

⁹ "Si j'avais à caractériser mon travail en deux mots, c'est-à-dire, comme cela fait beaucoup aujourd'hui, à

structures of the social world. Structures that are independent of the conscience or of the desire of the social agents yet are able to shape practices and representations of social agents (like language and culture). With constructivism, he wanted to highlight the social origin of systems of perception, thought, and action, what he called *habitus*, and the social structures, particularly what he defined as *field*¹⁰ (Bourdieu, 1987). Bourdieu proposes to study the social construction of objective structures by stressing how people perceive and construct their own social world, but without ignoring how perception and construction are constrained by those structures (Ritzer & Goddman, 2004). Turning to habitus and field, which are central concepts in Bourdieu's work:

1. *Habitus* corresponds to "systems of durable transposable dispositions, structured structures predisposed to function as structuring structures, meaning the principle of the generation and structuring of practices and representations that can be objectively "regulated" and "regular" without being, in any way, the product of obedience to rules, objectively adapted to them, but without supposing a conscious aiming at ends and an express mastery of the operations necessary to attain them, and, being all this, collectively orchestrated without being the product of the orchestrating action of a conductor" (Bourdieu, 1972:256)¹¹.

Those "dispositions" are expressed as a result of an organizing action, but also as a way of being and a predisposition to (Bourdieu, 1972, note 39:392). They are ways of thinking, feeling, and acting in a certain and frequently unconscious way, according to the individuals' existence and social path (education, socialization, etc.).

These dispositions are **systems**, because they tend to be entangled; **durable**,

lui appliquer un label, je parlerais de *constructivist structuralism* ou de *structuralist constructivism*, en prenant le mot structuralisme en un sens très différent de celui que lui donne la tradition saussurienne ou lévi-straussienne. Par structuralisme ou structuraliste, je veux dire qu'il existe, dans le monde social lui-même, et pas seulement dans les systèmes symboliques. Langage, mythe, etc., des structures objectives indépendantes de la conscience et de la volonté des agents, qui sont capables d'orienter ou de contraindre leurs pratiques ou leurs représentations. Par constructivisme, je veux dire qu'il y a une genèse sociale d'une part des schèmes de perception, de pensée et d'action qui sont constitutifs de ce que j'appelle habitus, et d'autre part des structures sociales, et en particulier de ce que j'appelle des champs et des groupes, notamment de ce qu'on nomme d'ordinaire les classe sociales" (Bourdieu, 1987:147).

¹⁰ The concept of "duality of structure" by Giddens seems to have some similarities with Bourdieu's habitus (Cf. Giddens, 1984; Sewell, 1992).

¹¹ Translated by me from the original: "Système de dispositions durables et transposables, structures structurées prédisposées à fonctionner comme structures structurantes, c'est-à-dire en tant que principes générateurs et organisateurs de pratiques et de représentations qui peuvent être objectivement adaptées à leur but sans supposer la visée consciente des fins et la maîtrise expresse des opérations nécessaires pour les atteindre objectivement « réglées » et « régulières » sans être en rien le produit de l'obéissance à des règles, et, étant tout cela, collectivement orchestrées sans être le produit de l'action organisatrice d'un chef d'orchestre" (Bourdieu, 1972:256).

because even though they can change with personal experience, they are normally rooted in the individuals as part of the individuals' continuity; and **transposable**, because the dispositions acquired during a determined experience, such as a professional one, will have impact on other spheres, such as the family one.

Habitus accounts for how, facing the social structure, the individuals mediate and shape their actions and thoughts, i.e. their practices. It is the internalization of the exteriority, meaning the way each human mentally and subjectively internalizes the objective social structures (Bourdieu, 1972). In other words, it is how people perceive and deal with the social world. There are, for instance, individual habitus (subjective, embodied in the individual) and class habitus (collective and homogenous), which explain why individuals are not fully conditioned by the social world, but are not fully free either – we might plan particular actions and strategies, but the *habitus* still defines the conditions for those actions and strategies to take place. Habitus cannot be reduced to structures, as it mediates the relationship between the structure and the praxis, i.e. practices (Bourdieu & Passeron, 1970:244).

2. *Field* is a structured space of power and struggle, where agents and their social positions are placed – it is the network of social relationships that affects the habitus of the agents. The social positions within this space are the result of the interaction between the rules of the field, the agents' habitus, and the agents' capital (social, economic, and cultural) (Cf. Bourdieu, 1984). These agents act strategically in this 'field' (and depending on their habitus) to enhance their capital (Bourdieu, 1984). The field is, therefore, the part of the exteriorization of the interiority (Cf. Corcuff, 1995).

Society is constituted by a plurality of fields (economical, political, cultural, etc.). Each form of capital contributes directly to define the positions and opportunities of the individuals in the field. Each field is a "champ de force" (field of forces) (Bourdieu & Passeron, 1970).

Social capital is, therefore, a resource in the social struggles that are carried out in these fields. A resource that is, at the same time, conditioned by habitus. The idea of a continuous struggle for social position, capital, power, and domination is the cornerstone of Bourdieu's work.

2.3.1.5 Critiques

For some, Bourdieu offers the most theoretically refined sociological approach to social capital (Portes, 1998). Bourdieu was able to bring social capital from metaphor to

concept (Fields, 2008). However, his approach is not free of criticisms. For instance, Fields (2008) presents a set of critiques that I explore next:

1. Bourdieu views social capital as an exclusive property of the elites

Bourdieu does explore social capital in an inequality setting: social capital was highly used by the privileged, as a powerful asset to reproduce social positions. Those who have more social capital will be more productive on creating and mobilizing it (Bourdieu, 1980). He inclusively says that “the title of nobility is the form of the institutionalized social capital, that assures a particular form of social relationships in a lasting way” (Bourdieu, 1980:47). However, I could not find a single passage in Bourdieu’s literature where he actually states that only elites could have social capital (or the inverse).

The position of an agent in the social space can be “defined by the positions he occupies in different fields, that is, the distribution of the powers which are active within each of them. These are, principally, economic capital (in its different kinds), cultural capital and social capital, as well as symbolic capital...” (Bourdieu, 1985:724). So, when describing class fractions¹² (dominant bourgeoisie, dominated bourgeoisie, petit bourgeoisie, and working class), Bourdieu (1984) notes that the primary differences of class derive from the overall volume of capital. The secondary differences are defined by different asset structures, meaning the “different distributions of their total capital among the different kinds of capital” (Bourdieu, 1984:114).

When talking specifically about the different distribution among classes, Bourdieu mentions only economic and cultural capital: “The distribution of the different classes (and class fractions) thus runs from those who are best provided with both economic and cultural capital to those who are most deprived in both respects” (Bourdieu, 1984:114). For instance, the dominant upper class is rich in all sorts of capital, while the dominated upper class is particularly rich in cultural capital (Cf. Bourdieu, 1984).

¹² Exploring the concept of class, Bourdieu indicates: “On the basis of knowledge of the space of positions, one can separate out *classes*, in the logical sense of the world, i.e. sets of agents who occupy similar positions, and who, being placed in similar conditions and subjected to similar conditionings, have every likelihood of having similar practices and adopting similar stances. This “class on paper” has the *theoretical* existence in which is that of theories: insofar as it is the product of an explanatory classification, entirely similar to those of zoologists or botanists, it makes it possible to *explain* and predict the practices and properties of the things classified—including their group-forming practices. It is not really a class, an *actual* class, in the sense of a group, a group mobilized for struggle; at most, it might be called a *probable class*, inasmuch as it is a set of agents which will present fewer hindrances to efforts at mobilization than any other set of agents” (Bourdieu, 1985:725).

The concept of social capital seems to be defined by Bourdieu as a general one, not limited to any specific social class or group (Yves Gingras, personal communication)¹³. But while different forms of capital have different logics of distribution, when different forms of capital are distributed unevenly there is an effect of accumulation: those with higher economic capital will also benefit and receive more cultural, symbolic, and even social capital, because they are in a privileged position (Tore Slaata, personal communication)¹⁴. The profitability of accruing and preserving social capital rises in proportion to the size of the capital (Bourdieu, 1980). Thus, dominant classes would have higher levels of capital, while the dominated classes would have lower levels of capital. Bourdieu did not quantify these levels but certainly lower does not mean any. The working class would have a lower level of social capital, at least in its usefulness to reach other social positions in the field (upward social mobility).

Hypothetically, in a social classes struggle, the lower classes (working class, poor) would access social capital through their close networks, where their ability to use it to improve their social situation would be limited by their lack of economic and cultural capital; or as through weak ties (bridging social capital), which are also limited since their connections to the upper class are restricted (Allan Sutherland, personal communication)¹⁵.

But this does not mean that the social capital of the dominated classes would not be useful horizontally (within the same class) or even vertically (upward mobility). *A propos*, in one of Bourdieu's footnotes, we can read the following text:

National liberation movements or nationalist ideologies cannot be accounted for solely by reference to strictly economic profits, i.e., anticipation of the profits which may be derived from redistribution of a proportion of wealth to the advantage of the nationals (nationalization) and the recovery of highly paid jobs (see Breton 1964). To these specifically economic anticipated profits, which would only explain the nationalism of the privileged classes, must be added the very real and very immediate profits derived from membership

¹³ I am part of a Google's group called "Bourdieu", where researchers and scholars discuss the work of Pierre Bourdieu. Taking advantage of this membership, I sent out to this group my doubts about this criticism of Field, which I did not find valid. Allan Sutherland, Yves Gingras, and many others, sent me very interesting insights and comments that are included in this discussion.

¹⁴ Tore Slaata is a Professor of the Institute of Media and Communication (IMK), at the University of Oslo, Norway. Because of his extensive knowledge of Bourdieu's work and his kind availability, Slaata was a useful resource in this discussion.

¹⁵ *Ibid.*

(social capital) which are proportionately greater for those who are lower down the social hierarchy ('poor whites') or, more precisely, more threatened by economic and social decline (Bourdieu, 1986:57).

In this footnote, Bourdieu acknowledges that social capital would be even greater for the non-privileged, never stating that the "poor whites" could not have social capital. Although I do not agree with Field's critique (2008), I believe that Bourdieu's neglect to address how individuals from lower social classes could benefit from their social connections is one of the main flaws of his work.

2. Bourdieu overrates the role of social capital based on kinship

Bourdieu, while explaining that the network of relationships was a product of investments, states that this network is the outcome of "...transforming contingent relations, such as those of neighborhood, the workplace, or even kinship, into relationships that are at once necessary and elective..." (Bourdieu, 1986:52).

He also underlines that social capital is not a natural or social given, as it implies an effort of producing, reproducing, and securing useful relationships. But he does posit that the agents that possess an inherited social capital, like a great family name, are able to transform all circumstantial relationships into lasting connections – the agent is known to more people than he/she knows and the investment on sociability, if done, is highly productive (Bourdieu, 1980).

3. Bourdieu considers social capital mainly as positive

Social capital was a positive resource for those who possessed it. Nevertheless, Bourdieu clearly saw social capital as a form of producing and reproducing inequality, whose outcomes are seen as negative.

4. Bourdieu has an individualistic perspective of social capital

Bourdieu focuses on the individuals and their investments in connections, but he does not forget the collective: "capital is accumulated labor...by agents or groups of agents..." (Bourdieu, 1980:46). He explores institutions and groups, considering institutionalized delegations: an agent or a small group of agents that represent and speak for the group. These agents ensure the concentration of social capital and limit the consequences of individual failures (Bourdieu, 1980). His analysis was always driven by class issues, which have individual and collective dimensions. As Martti Siisiäinen states "social capital for Bourdieu is a collective phenomenon, even though it is viewed from the perspective of actors who are exploiting its potentialities" (Siisiäinen, 2000:11).

As Bourdieu did not publish further on social capital, some of the questions concerning his conceptualization are still unanswered. I consider three main criticisms: First, the lack of concrete indicators of social capital (there is no operationalization of social capital) leaves the concept in an abstract dimension, difficult to tackle and measure.

Second, Bourdieu fails to explore how individuals from lower social classes could benefit from their social capital.

Third, Bourdieu does not explore uninterested social interaction or nonpurposive actions, and he over-emphasizes instrumental resources (those that are used to gain more resources). He says that investments in sociability can be disinterested emotional investment; that they can be unconscious or conscious investments, but he does not elaborate more on that. He states that “the social network is the product of social investment strategies, consciously or unconsciously oriented to the institution or reproduction of directly usable social relationships, in the short and in the long term...” (Bourdieu, 1980:2).¹⁶ But, as Small points out, how can an investment strategy be disinterested or unconscious? (Small, 2009).

Perhaps, independently of how those ties are formed they all end up being an investment (Cf. Small, 2009). In Bourdieu’s writings there is a sense of an individual self-interest, in constant investments, conditioned by habitus and field. Bourdieu later adds that “If the disinterestedness is sociologically possible, it can be so only through the encounter between habitus predisposed to disinterestedness and universes in which disinterestedness is rewarded” (Bourdieu, 1998:88). But many actions might be more habitual than purposive, as Bourdieu addresses with his “habitus” (Bourdieu, 1984).

As Small (2009) notes, Bourdieu’s sociology is relational, but there is a struggle to accommodate the formation of those social connections without merely addressing them as investments. What is missing is a model that explains how people make connections, and not merely the assumption that social ties come from investments (Small, 2009). This criticism can be extended to the remaining three authors, especially to Coleman and Lin, who view this process as a rational choice.

¹⁶ “Autrement dit, le réseau de liaisons est le produit de stratégies d’investissement social consciemment ou inconsciemment orientés vers l’institution ou la reproduction de relations sociales directement utilisables, à court ou à long terme...” (Bourdieu, 1980:2).

2.3.2 James S. Coleman: social capital and rational choice theory

James Samuel Coleman was a renowned American sociologist, a contemporary of Bourdieu. Coleman's work on social capital had a wider influence, however (Field, 2008). Like Bourdieu, Coleman was also interested in the study of education. In 1966, he conducted a major study – called *The Equality of Educational Opportunity*, also known as the “Coleman study” – with a sample of more than 150,000 students of schools in the United States.

The study was funded by the *Department of Health, Education, and Welfare* to evaluate the availability of equal educational opportunities to children of different race, color, religion, and nationality (ICPSR, 2010). His report shows that the students' background and socioeconomic status were more significant in educational attainment than the school resources, but also, that socially disadvantaged black students benefited from racially mixed schools (Hanushek, 1998; Carver, 1975; Coleman, 1968).

As Coleman states “a child's home environment, as well as the environment of other children in which he finds himself, is a very crucial influence on his performance in school” (Coleman, 1968). It was in this context, that James Coleman developed social capital.

2.3.2.1 Norms as Social Capital

In his “Norms as Social Capital” (1987), Coleman explores norms (and sanctions), proposing their integration in a rational choice perspective. Norms are “expectations about action – one's own action, that of others, or both – which express what action is right or what action is wrong” (Coleman, 1987:135). For instance, religious dress codes and dietary choices such as the not eating pork serve as examples of established social norms. The rational choice theory (also called rational action theory) posits that individuals' actions are always a calculation of costs and benefits, aiming to maximize their personal interests: “rational behavior simply implies consistent maximization of a well-ordered function, such as a utility or profit function” (Becker, 1962:1).

Norms arise when actions have external effects: negative or positive externalities. Norms constrain behaviors, and therefore the choices the individuals make: if norms are internalized through socialization, the utilities of certain actions are already conditioned; if they are dependent on external sanctions, the utility of an action takes into account if the individual believes that those external sanctions would or would not be applied (and their cost). Obedience to norms takes place when sanctions – internal or external – cost

significantly more than obedience. According to Coleman, a rational choice theory should treat social norms as “supra-individual entities that affect the costs and benefits which individuals take into account when exercising choice” (Coleman, 1987:135).

In the conclusion of this 1987 article, Coleman argues that social norms constitute social capital:

It is in this sense that social norms constitute social capital. Their presence results in higher levels of satisfaction – though perhaps at the cost of reducing the satisfaction of some members whose actions are most constrained by norms. Their absence allows individuals to realize greater satisfaction from their own actions, but leaves them with less satisfaction overall, as they suffer from the unconstrained actions of others (Coleman, 1987:153).

However, it is in his 1988 article that social capital is defined.

2.3.2.2 Social capital creates human capital

Coleman defines social capital by function: “It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure” (Coleman, 1988:98)¹⁷. Because social capital exists in the relations among people, it is less tangible than human capital (e.g. skills and knowledge) and physical capital (e.g. buildings, machines, etc.), which are fully tangible.

Coleman¹⁸ introduces various examples to illustrate the economic and noneconomic value of social capital – one of these examples is the wholesale diamonds markets where merchants hand to others diamonds to be analyzed, without any type of formal insurance. A more formal or bureaucratic structure would probably slow down the process.

The family is, par excellence, the nest of social capital. More than that, Coleman states that social capital is important for a “child’s intellectual development” (Coleman, 1988:110). The social capital of the family corresponds to the relations between its members. One of the examples presented by the author is of the Asian immigrant

¹⁷ Coleman first developed the concept in an article of the *American Journal of Sociology* (Coleman, 1988), later integrating the article in a chapter of his book *Foundations of Social Theory* (Coleman, 1990). In this chapter, he adds a few new ideas, but the bulk of the text is the one pertaining to the 1988 article.

¹⁸ Unless stated otherwise, the text of this section is a description of Coleman’s ideas (1988).

families that used to buy two copies of each textbook, one for the child, and the other for the mother, so she could study it and help the child. This example illustrates that the human capital of the parents (parent's education) might be low, but the social capital might be high. Human capital and social capital are complementary.

Theoretically, Coleman used social capital as a conceptual tool to introduce social structure into the rational action theory. The rational action theory is based on an individualistic paradigm of the social order, where rational human beings exchange/interact with their own self-interest in mind (Marshall, 1994). Within a rational action theory, the actor has control over some resources and has interest in other resources. So, social capital corresponds to the specific types of social-structural resources that are available to an actor (Coleman, 1988; 1990). He identifies three forms of social capital:

1. **Obligations and expectations** – this form is based on favors and reciprocity. If Anna does something for Bruno and trusts Bruno to eventually return a favor, an expectation is established for Anna and an obligation for Bruno. These are defined as “credit slips” and can be compared to financial capital. Anna gets a “credit” that she can use whenever she needs, unless her trust was misplaced and the favor will not be “repaid”. This system of credits and debits depends on two factors: trustworthiness of the social milieu, and the extent of perceived obligations.

The differences in both dimensions – obligations and expectations – can be explained by several factors: the actual need for help; other sources of aid/care, such as institutions; wealth (which might reduce the aid needed from others); cultural aspects that influence the predisposition to ask/give aid; closure of social networks; etc. Individuals with a high degree of outstanding obligations have more social capital on which they can draw from.

Individuals also differ in the number of credit slips outstanding on which they can draw at any time – the extreme example being a “godfather” (Coleman, 1988). There might also be a struggle: between a person that wants to do a favor for another and the other not wanting that favor; or between a person trying to repay a favor and the creditor trying to avoid repayment (Coleman, 1990).

2. **Information channels (that in his 1990 book is named “Information Potential”)** – information is an important form of social capital, as it provides a basis for action, and it is a part of social relations. Acquiring information has a

cost that can be reduced if the information is acquired through social relations. For instance, not being able to watch the news and ask a spouse for a summary of the daily news.

- 3. Norms and sanctions** – effective norms are powerful forms of social capital. For instance, effective norms that restrain crime make it possible to go for a walk at night in the city. A particular important form of social capital is the norm that focuses on the collective interest of a community – this strengthens the community and its ties. Of course norms facilitate certain actions, but also limit others.

For Coleman, all social relations and social structures allow for some form of social capital. The actor establishes a relation and continues to feed it if it continues to be beneficial. Nevertheless, there are some types of social structures that are important in facilitating social capital: close social networks and appropriable social organizations. The closure of social structure allows for: firstly, effective norms, meaning norms that curb negative externalities and promote positive ones; and, secondly, trustworthiness which subsequently allows for the circulation of obligations and expectations.

Appropriable social organizations such as voluntary organizations can create social capital as they generally support other purposes, in addition to the ones they were created for. For instance, they promote cohesion, inner help between members, job references, etc. The creation, maintenance, and destruction of social capital are also connected to stability (disruption of social organization and/or of social relations can be destructive of social capital) and ideology (a collective versus an individualistic ideology) (Coleman, 1990). The more people call for other people's help, the greater quantity of social capital will be generated. Other factors such as affluence and government aid might affect social capital negatively: since in such cases people need each other less, less social capital is created (Coleman, 1990).

To operationalize the concept, Coleman (1987; 1988) looks at how social capital can contribute to the creation of human capital. He examines the impact of social capital on educational outcomes, through a statistical analysis of a random sample of 4000 students of American public schools. Because of the importance of the family in this matter, Coleman (1988) measures family social capital with the following variables:

- 1. Two parents at home** – The presence of both parents in the household is a very important variable, as the physical absence of the parents is a structural deficiency in family social capital.

2. **Number of siblings** – The number of siblings affects social capital, as a high number of siblings will reduce the adult attention to the child.
3. **Parent’s expectations for child’s education** – The mother’s expectation of the child going to college is, according to Coleman, another indicator of adult’s attention in the family; even though he admits it is not a “pure measure of social capital” (Coleman, 1988:112).
4. **Frequency of talking with parents about personal experiences** – This variable also accounts for attention and the strength of relations between parents and children.

Coleman uses these measures and dropout rates of students from grade 10 and grade 12, while controlling for human capital and financial capital in the family in a logistic regression model. Coleman concludes that children with single parents, four siblings, and mothers with no expectation of having their children in college have a significantly higher rate of dropouts.

Combining these three variables of social capital into one shows that sophomores with one sibling, two parents, and a mother’s expectation of a college education have a dropout rate of 8.1%, while sophomores with four siblings, one parent, and no expectation of the mother for a college education get a rate of 30.6%.

The fourth item in the above list, frequency of talking with parents about personal experiences, has no significant statistical relation with dropping out.

But what about outside the family? Is there social capital beyond the family? Within the children’s context, Coleman states that social capital can be found in the “community of the social relationships that exist among parents, in the closure exhibited by this structure of relations, and in the parents’ relations with the institutions of the community” (Coleman, 1988:113).

Continuing the dropouts’ analysis, Coleman uses the number of times the child has changed schools if the family moved as an indicator of social capital; considering that the social relations that form social capital break at each move. He also uses the type of school (public, private, religious, and non-religious) as an indicator of social capital outside the family.

Results show that the dropout rates are lower for children whose family did not move, 11.8% compared to a rate of 23.1% if the family moved twice within a given period. Concerning the type of school, the dropout rates are significantly lower in Catholic schools, 3.4%, comparing to the 14.4% in public schools, and 11.9% in other private schools. These differences are not related to religion or level of religious celebration, as Catholic students in public schools are only slightly less likely to drop out than non-Catholics.

If we consider the frequency of attendance at religious services – also a measure of social capital through intergenerational closure – the results show that this indicator is strongly related to dropout rate.

Looking at the private religious non-Catholic schools, Coleman observes that their dropout rate is very close to the Catholic schools' dropout rate. These religious communities seem to provide more intergenerational closure, and therefore, social capital. These overall findings support the importance of social capital outside the school, and in the adult community that surrounds the child. Nevertheless, Coleman adds that the deficit of family social capital does not have an impact on dropout rates in Catholic schools, so social capital in the community compensates partly for the absence in the family.

More than being an important factor for children's development, social capital is for Coleman a public good. And it is that public good aspect that differentiates social capital from the other types of capital. Social capital cannot be easily exchanged and it is not a private property of the ones who benefit from it, as "it is an attribute of the social structure in which a person is embedded..." (Coleman, 1990:315).

For Coleman (1990), social capital is underinvested at the individual and the collective levels. When an individual asks for a favor, he is not thinking that he does the other a favor as well because he creates an obligation for himself and a credit for the other. He asks for a favor, because he needs a benefit of some sort. If someone leaves a voluntary association, the other members of the association or the whole community related to it will experience losses because social capital consists of the relations among people.

Within rational action theory, social capital is mostly a "by-product of activities engaged in for other purposes" (Coleman, 1990:312). This explains why actors create social capital: actors will rationally pursue their own self-interest. In this sense, social capital is created and destroyed without notice. Coleman believes that to overcome the problem

of supply of this public good (since strong communities and families are disappearing) we need a formal organization that is capable of replacing voluntary and spontaneous social organizations, which were past sources of social capital.

2.3.2.3 Critiques

Coleman's work contributed decisively to the definition and operationalization of social capital, and to place it in a broader sociological discussion. His account of social capital (contrary to Bourdieu) is supported by empirical data. However, his approach has some major weaknesses:

Firstly, he only conceptualizes social capital as positive, as a public good. But social capital can be negative, causing illegitimacy, nepotism, in-group mentality, oppression, social exclusion, inequality, discrimination, conflict, and crime (Levi, 1996; Ostrom & Ahn, 2001; Putnam, 2000; Streeten, 2002). As Streeten (2002) claims, social capital can be antisocial. The Klu Klux Klan, gangs, patronage networks, the Indian caste system, and the South African apartheid are some examples of the dark side of social capital (Streeten, 2002).

Secondly, his work is based on a rational action theory (also called rational choice theory), which posits that individuals' actions are always a calculation of costs and benefits, aiming to maximize their personal interests: "rational behavior simply implies consistent maximization of a well-ordered function, such as a utility or profit function" (Becker, 1962:1). Gary Becker (1974), economist and Nobel laureate, uses the economic theory to analyze social interactions. His main goal is to bring social interactions back to economic studies, but it ends up reducing and oversimplifying the analysis of social interactions. For instance, analyzing the family and the head of the family (the one that distributes income), Becker states:

Not only the head but other members too act "as if" they "loved" all members, even when they are really selfish, in the sense that they maximize not their own income alone but family income. As it were, the existence of a head economizes on the amount of true love required in a family. A family acts "as if" it maximized a consistent and transitive utility function subject to a budget constraint that depended only on family variables. This utility function is the same as the head's not because he has dictatorial power, but because his concern for the welfare of other members integrates all their utility functions into one consistent "family" function (Becker, 1974:1091).

Despite also recognizing irrationality in behavior (at the market and at the individual levels), Becker underlines that “irrational units would be often ‘forced’ by a change in opportunities to respond rationally” (Becker, 1962:12). Rational Choice theory has been criticized as reductionist since it fails to take into account other factors in decision-making processes, such as psychological or sociological ones (Green & Shapiro, 1994; Kahneman, 1997; 2002; Fine, 2001; Bilhim, 2004; 2000). Moreover, it has offered weak explanatory value and weak empirical studies (Green and Shapiro, 1994).

To address some of these factors, Herbert Simon (1957) developed the concept of “Bounded rationality”. Bounded rationality is modeled on a theory that posits that rationality is cognitively limited: depending on the information the agents have bounded rationality, which is based on “the limits upon the ability of human being to adapt optimally, or even satisfactorily, to complex environments” (Simon, 1991:132; Simon, 1957).

Nobel laureate Daniel Kahneman (1997; 2002) used bounded rationality as a model to overcome some of the constraints of the rational choice theory. Looking at choices at the moment of consumption, Kahneman notes that the maximization of utility or pleasure, which would be consistent with a rational action theory, is not always linear:

First, preliminary findings suggest that people lack skills in the task of predicting how their tastes might change. The evidence for this conclusion is still sketchy, but its significance is clear: it is difficult to describe as rational agents who are prone to large errors in predicting what they will want or enjoy next week. Another obstacle to maximization is a tendency to use the affect associated with particular moments as a proxy for the utility of extended outcomes. This peculiarity in the cognitive treatment of time explains the importance that people attach to the emotions of transactions, and may cause other forms of myopia in decision-making. The use of moments as proxies entails a neglect of duration in the evaluation of past episodes, which has been confirmed in several studies (Kahneman, 1997:121-122).

So Coleman, who relied on rational action theory, fails to “pay much heed to affect, to the fact that people like, love, or loathe one another – and therefore associate together or avoid each other – for reasons that lie outside the domain of rational calculation” (Field, 2008:31).

Thirdly, his vision of social interaction also considerably draws from the exchange theory, which shares some basic assumption with the rational action theory. As George

Homans, who is credited for developing the social exchange theory, describes it: "Social behavior is an exchange of goods, material goods but also non-material ones, such as the symbols of approval or prestige" (Homans, 1958:606). He goes further to explain: "For a person engaged in exchange, what he gives may be a cost to him, just as what he gets may be a reward, and his behavior changes less as profit, that is, reward less cost, tends to a maximum. Not only does he seek a maximum for himself, but he tries to see to it that no one in his group makes more profit than he does" (Homans, 1958:606).

Homans' (1961) approach to social behavior is related to a behavioral psychology that neglects the social: individuals have to be studied as members of the human species (human group) and not of groups or cultures (social group). Social behavior is conditioned by elements, such as cost, profit, investment, exchange, and "distributive justice" (Homans, 1961). Distributive justice is, according to the author, what humans expect from interaction in a fair sense. So, human behavior is based on an expectation of an exchange of rewards and benefits (Homans, 1961; Blau, 1964).

The major criticisms to this theory are the definition of human behavior as exchange and the reduction of that behavior to economic transaction or a psychological process (Zafirovski, 2005). Once again, social relationships are linear, rational, asocial, and oversimplified (Fine, 2001). However, it is important to state that while recognizing great value to this theory (Cf. Coleman, 1987; 1990), Coleman also criticizes its individualistic focus: "exchange theory in sociology has been incorrectly individualistic, failing to recognize that externalities create an interest in exercising control over the action, and interest that may come to be regarded as a legitimate right, and thereby, failing to grasp that social norms, together with their accompanying sanctions, are expressions of that right" (Coleman, 1987:153).

Fourthly, his idea of family or community is extremely traditional, and he values only close ties. But as Granovetter (1974) shows the weak ties (acquaintances, people not so close to us) are extremely important, giving access to different flows of information, resources, etc.

Fifthly, even though he follows a rational action theory, and attempts to bridge the agency versus structure discussion, Coleman is very critical and negative about individualism. As Fine critically puts it, for Coleman "social capital is simply the extension of economics to address the handling of market imperfections and public goods/bads" (2001:76). Coleman's attempt to bring the "social" to the rational action theory seems to lead into a methodological individualism, also visible in rational choice and social exchange theories: "Although [Coleman's] verbal accounts mentioned many agents,

monitors, and authorities who influenced individuals actions, his mathematical formulations tellingly portrayed a single actor's computations rather than interactions among persons" (Tilly, 1999:19).

Finally, the indicators to measure social capital are volatile and it seems one could add almost anything relational as an indicator. Coleman's (1988) definition of social capital by function allows that subjectivity.

2.3.3 Robert Putnam: social capital and civic engagement

Robert Putnam is the most acknowledged proponent of social capital. He is an American political scientist, author of the best seller *Bowling Alone* (2000) that took the concept of social capital to a mainstream audience. His study of the regional governments in Italy was seminal for the development of his approach to social capital (Putnam, Leonard, & Nanetti, 1993). In this section I explore critically the work of Putnam, firstly describing his contribution, and secondly, discussing some of its weaknesses.

2.3.3.1 Civic-ness & *capitale sociale*

In his study of the regional governments in Italy (political decentralized structure created in 1970s), Putnam et al. concluded that "civic-ness" (civic involvement of a community) is positively correlated with economic development and effective governments (Putnam, Leonardi & Nanetti, 1993). These authors¹⁹ measured civic-ness with indicators of associational life, newspaper readership, and electoral turnout (preference voting and referendum turnout). These variables form the civic community index.

Applying this civic community index, Putnam and colleagues identified regions with different levels of civic-ness. Some Italian regions had active networks of civic engagement, while others had vertically structured institutions (monopolistic and extremely hierarchical) that had a culture of civic isolation and distrust. Through empirical analysis, the authors observed that these differences in "civic-ness" affected the democratic success of Italy.

To explain the different levels of civic-ness, the authors explore the dilemmas of collective action, namely the failure to cooperate for mutual benefit. As to act cooperatively one has to trust others and believe in other's trust in return, cooperation is

¹⁹ Unless stated otherwise, the text of this section is a description of the ideas and results of Putnam, Leonardi, & Nanetti (1993).

deemed "...irrational, and all end up with an outcome no one wants – unharvest corn, overgrazed commons, deadlocked government" (Putnam, Leonardi, & Nanetti, 1993:164).

Classical political philosophers such as Thomas Hobbes, who presented the *Leviathan* model suggesting a third-party enforcement, offered some of the solutions to the dilemmas of collective action. The "*bellum omnium contra omnes*" ("the war of all against all") could only be avoided by a strong central government (Hobbes, 1660). However, as Putnam and colleagues acknowledge, besides being problematic – as neutral parties are unrealistic – game theory explains that an impartial third-party imposition is not a "stable equilibrium", because players have no incentive to change their behavior. Cooperation is facilitated by repetitions, punishment of defectors, and information about the players. According to the game theory, impersonal cooperation should be atypical but it happens regularly in society.

The impact of formal institutions in reducing "transaction costs" and "soft solutions", and the formation of community and trust have been possible explanations for civic-ness: "In a world in which there are prisoner's dilemmas, cooperative communities will enable rational individuals to transcend collective dilemmas" (Marvin Becker, 1981 as quoted in Putnam, Leonardi, & Nanetti, 1993).

Voluntary cooperation is facilitated by a community with social capital, through norms of reciprocity and networks of civic engagement. Social capital is defined as "features of social organization such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (Putnam, Leonardi, & Nanetti, 1993:167). Thus, spontaneous cooperation is facilitated by social capital. Using the example of "rotating credit associations" – a group of people that make regular contributions to a fund that is given to one of the contributors in rotation – Putnam et al. show that there is a risk but essentially trust in these associations. They do not need a Leviathan to punish defection. Information about members and its reputation is crucial, as well as strong norms, and a dense network of reciprocity.

Social capital and its dimensions, such as trust, social norms, and networks, augments with use and vice versa, being cumulative and self-reinforcing. It is the "virtuous circle" of social capital: social capital facilitates the creation of more social capital (Putnam, 2000:317). Like Coleman, Putnam and colleagues state that social capital is a public good that is normally underinvested. Social capital "unlike other forms of capital, must often be produced as a by-product of other social activities" (Putnam, Leonardi, & Nanetti, 1993:170). Addressing the dimensions of social capital, Putnam, Leonardi, &

Nanetti underline that trust is essential for cooperation, and that personal trust becomes social trust through norms of reciprocity and networks of civic engagement – norms are taught and maintained by socialization and sanctions.

The norm of generalized reciprocity is a fundamental component of social capital, as it combines self-interest and solidarity. For the authors, networks of civic engagement (that are essentially horizontal networks, bringing together people of similar status) have important side-effects:

1. Increase the probable costs to a defector in any transaction.
2. Promote strong norms of reciprocity.
3. Facilitate communication and information about the trustworthiness of individuals.
4. Represent successful collaboration, serving as a model for future collaboration.

Vertical networks (networks that connect individuals with different status in a hierarchical and dependent way) are less advantageous than horizontal ones in solving dilemmas of collective action. While relationships with close ties (kinship, close friends) have a powerful role in solving problems of collective action, networks of civic engagement are more likely to include broad segments of society (involving weak ties), and therefore, support cooperation at the community level.

The south Italian regions were more stable in a Hobbesian way, with predominantly vertical networks, but less civic-ness, with higher levels of mistrust, criminality, and corruption. The north regions were primarily civic, with dense networks of local associations, high levels of social participation and trust, and with more law-abidingness and equality. The civic regions had higher citizen satisfaction rankings and more efficient local governments. To change the reality of the less civic regions, the authors state that Italians need more social capital: “Building social capital will not be easy, but it is the key to making democracy work” (Putnam, Leonardi, & Nanetti, 1993:185). Adopting these premises to the American setting, Putnam studies civic engagement in the USA.

2.3.3.2 Civic engagement in America: re-using social capital

Discussing America’s declining civic engagement, Putnam (1995a, 1995b) reuses the social capital concept. He slightly changes his definition of social capital, presenting it as “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for a mutual benefit” (Putnam, 1995a:67). Civic engagement is defined as “people’s connections with the life of their communities, not merely with politics” (Putnam, 1995b:2).

According to Putnam, life will be easier in a community with good levels of social capital. Assuming this benefit of social capital, Putnam analyzes political and civic participation in the USA. He demonstrates, through data from elections and the Roper organization, a decline of participation in national elections, as well as in political organizations. Similarly, using findings from the General Social Survey, Putnam (1995a, 1995b) shows a decline in religious affiliations and activities; in labor unions; and in civic and fraternal organizations, such as parent-teacher association (PTA), Red Cross, or the Boy Scouts. But his big red flag is the bowling leagues: membership in bowling leagues has decreased, but the number of bowlers has increased – people are now bowling alone.

Are other forms of organization or participation replacing the traditional forms of civic organization? Putnam thinks not. He points out that some organizations such as the environmental, feminist or nonprofit ones have exponentially grown since the 70s. For example, the American Association of Retired Persons (AARP) grew from 400,000 members in 1960 to 33 million in 1993 (Putnam, 1995a).

The majority of the members of these organizations are contributing monetarily and/or reading the newsletters, but very few attend meetings or have other forms of participation: “from the point of social connectedness, the Environmental Defense Fund and a bowling league are just not in the same category” (Putnam, 1995:71). Other groups that go against the “decline” tendency are support groups, such as the Alcoholics Anonymous or book/hobby clubs.

These support groups are a form of social capital, but they tend to focus more on the individual and do not imply a deep level of obligation/reciprocity: come if you have time, talk if you want, do not judge others, etc.. Putnam (1995a, 1995b) concludes that social capital in the form of civic associations, as well as other primary forms of social capital such as the family and neighbours, has declined.

Social trust is also eroding, and there is a significant correlation between social trust and associational membership (Putnam, 1995a). The movement of women into the labor force; mobility; demographic transformations (e.g. fewer marriages, more divorces, fewer children); and the technological modification of leisure (e.g. television); are some of the explanations proposed by Putnam (1995a, 1995b) to justify why social capital is declining. Television is a central culprit in this discussion – TV viewing is negatively correlated with social trust and group membership, while the opposite happens with newspaper reading (Putnam, 1995b).

His ideas are more profoundly explored in his book *Bowling Alone* (2000), which I examine next.

2.3.3.3 The decline of social capital and civic engagement

With the same goal of studying the civic and the social life of the American communities, Putnam now defines social capital as the “connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them” (Putnam, 2000:19)²⁰. Putnam recognizes that social capital was invented and re-invented by different authors in the last century, always to show how social ties make our lives more productive. Following Coleman's conceptualization of social capital, Putnam adds that social capital is not only a public good, it is also a private good. A charity association, for instance, mobilizes aid and care for others but also provides its members with friendship and valuable connections.

Like Coleman, Putnam emphasizes that networks are more than mere contacts; they involve mutual obligations: networks or communities share norms of reciprocity. Related to this reciprocity is trustworthiness, which “lubricates social life” (Putnam, 2000:21).

Contrary to Coleman, Putnam points out in this 2000 work that the external effects of social capital can be positive or negative, so “it is important to ask how the positive consequences of social capital – mutual support, cooperation, trust, institutional effectiveness – can be maximized and the negative manifestations – sectarianism, ethnocentrism, corruption – minimized” (Putnam, 2000:22).

Bonding and bridging social capital

One of the most famous distinctions that Putnam makes is the one between “bonding social capital” and “bridging social capital”. Putnam does not coin these concepts (he references their origin: Ross Gittel & Avis Vidal, 1998), but rather he disseminates them.

Bonding social capital is related to homogeneous and closer groups, such as fraternal groups. Bridging social capital is related to more diverse and heterogeneous groups, such as the civil rights movement. Bonding social capital is good to support reciprocity and solidarity; bridging social capital is good to access external assets and to a better diffusion of information – “Bonding social capital constitutes a kind of sociological

²⁰ Unless mentioned otherwise, the text of this section is a description of Putnam's work (2000).

superglue, whereas bridging social capital provides a sociological WD-40” (Putnam, 2000:23).

Social capital has a clear impact at the individual and collective levels: “an impressive and growing body of research suggests that civic connections help make us healthy, wealthy, and wise” (Putnam, 2000:287).

The importance of social capital

For Putnam the importance of social capital can be described in three main statements:

1. Social capital enables an easier resolution of collective problems – Social norms and networks have the power to ensure conformity with the collectively desired behavior.
2. Social capital allows communities to advance efficiently – when there is a good level of trust and interaction, everyday business and social transactions cost less.
3. Social capital “improves our lot by widening our awareness of the many ways in which our fates are linked” (Putnam, 2000:288) – Social capital improves people’s life, through social and emotional support. There is even evidence that suggests that people with high levels of social capital cope better with traumas and illnesses. Social capital also allows for information flows that facilitate our goals; for instance, the majority of North Americans find jobs through personal connections.

To prove the importance of social capital, Putnam considers the impact of social capital on different fields, from education to democracy in America (and by state), using a “social capital index”²¹. This index includes measures of community organizational life, engagement in public affairs, community volunteerism, informal sociability, and social trust. The results of the application of this index are summarized next.

Beginning with education and children’s welfare, Putnam (2000) shows that social capital is strongly correlated with positive development and school performance, even when controlling for socioeconomic and demographic factors. Children in states with higher levels of social capital are more successful and less depressed. In addition, children who watch less TV are in what Putnam calls “high-social-capital states”.

²¹ This index is described in more depth in the methods section.

Schools and local communities work better in states with high levels of social capital. Social capital affects neighborhoods as well, boosting safe and productive communities. Violent crime and hostility are more rare in high-social-capital states. Putnam recognizes that there are other factors that affect crime rates, and that social capital effects – good or bad – are not limited to poor or minority communities, even though poorer communities would benefit more from social capital as they lack economic or/and human capital.

Social capital is also associated with economic prosperity, at least, at the individual level. Putnam shows that social networks and economic success are correlated (while the macro level is still in discussion), as are also health and happiness.

Finally, Putnam claims that social capital affects the external and internal “outcomes” of politics and civic life. Externally, through membership in associations, the individuals are able to express and protect their interests, while creating a collective bond and voice. Internally, it equips participants with several skills: communication, collaboration, and social and civic capabilities. So, social capital promotes civic virtues, such as active participation in the public life, trustworthiness, and reciprocity (Putnam, 2000). Putnam shows, for instance, that tax evasion was lower in states with higher social capital.

But are all associations good for democracy? What about the KKK? Putnam (2000) is not saying that all groups work to promote democratic values, and he acknowledges the polarization, cynicism, and class bias some associations promote, but “politics without social capital is politics at a distance” (Putnam, 2000:341).

Critiques to social capital

Exploring the dark side of social capital, Putnam (2000) states that the first classical argument against social capital is that community limits freedom and promotes intolerance.

Looking at indexes of tolerance for racial integration, gender equality, and civil liberties, Putnam concludes that over the last decades Americans became more tolerant: of working women, of interracial marriages, of homosexuality, etc. Americans became more tolerant between the 1960s and late 1990s, exactly the same time were they were becoming disengaged from civic life.

Is there any association between tolerance and social capital? Putnam has not found any empirical evidence that provides a link between intolerance and community involvement. On the contrary, more engaged individuals are generally more open and

tolerant (to gender equality and racial integration, for instance) than their passive neighbors.

Putnam claims that there is a positive correlation between tolerance and social participation. Associating tolerance and social capital, Putnam develops four types of *society*: individualistic, anarchic, civic community, and sectarian community (see table 1).

Table 2.1
Social Capital and Tolerance: Four types of Society

	Low social capital	High social capital
High tolerance	<i>Individualistic</i> : You do your thing, and I'll do mine	<i>Civic community</i> : Salem without "witches"
Low tolerance	<i>Anarchic</i> : War of all against all	<i>Sectarian community</i> : in-groups vs. out-group, Salem with "witches"

Source: Putnam, 2000 (p. 355)

Applying his social capital and tolerance index per state, Putnam demonstrates how citizens of high-social-capital states are more tolerant of civil liberties, and more devoted to racial and gender equality than citizens of low-social-capital states. Additionally, he shows that those born around 1940-45 constitute the most engaged and tolerant cohort in America. In the present time, "The most intolerant individuals and communities in America today are the least connected, not the most connected" (Putnam, 2000:358).

The second argument against social capital is that social capital is in opposition to equality (Putnam, 2000). The bonding social capital, in particular, helps to reinforce social stratification. Putnam recognizes that social inequalities may be rooted in social capital, but evidence shows that community and equality are mutually reinforcing each other. In his analysis, Putnam demonstrates that the American states with higher levels of social capital had higher economic and social equality: incomes are distributed more equally, the gap between the rich and the poor is smaller, people from different social classes are equally engaged (more likely to attend public meetings, more likely to lead local organizations, and so on).

Some socially homogenous groups, like the ones boosted by bonding social capital, might discourage the creation of bridging social capital or vice versa. The type of social capital certain individuals or groups need to create might depend on the type of collective problems they are facing – even though bonding and bridging social capital

are important for different things. For Putnam, to tackle the biggest problems of the current American society, Americans need more bridging social capital.

Trends of social connectedness

Putnam's big concern is the civic disengagement of the American people in the last century. In *Bowling Alone* (2000), Putnam shows comparatively and historically that America is suffering from political and civic disengagement, and thus, from a decline of social capital.

Putnam explores different trends of social connectedness, which support the political, civic, and social disengagement. These trends are related to Putnam's approach to social capital, and are summarized next:

1. Political Participation

In terms of political participation, Putnam shows that Americans' involvement with politics has changed in the last thirty years. There are not only fewer voters per year²², as Americans are not politically active outside the voting booth. Some of the possible explanations include the bureaucratic requirements of registration, but also structural causes such as the Jim Crow laws and the disenfranchisement of the Southern Black Americans.

Even when the barriers to vote were substantially lower, vote turnout decreased. Considering that voting is the most common form of political activity in a democracy, which embodies a principle of equality and encourages volunteering and other forms of active citizenship, this panorama is of great concern for healthy democracies. Moreover, "declining electoral participation is merely the most visible symptom of a broader disengagement from community life" (Putnam, 2000:35). The declines in political participation involve every form of community involvement, from petition signing or attending a meeting to running for office. For instance, between 1973 and 1994 the number of Americans who attended one public meeting (town or school affairs) was down by 40%. Such declines are transversal to the American society, but in absolute terms they are higher among the more educated. Correspondingly, the political knowledge and interest is lower among the new generations. Americans are failing to be a dynamic part of a grassroots democracy, but are they replacing this political involvement with a social and civic one?

²² Putnam's analysis of electoral participation is carried out until the end of the 1990s. To many, the last presidential American election (2008) was a landmark of an increase of voters. In fact, it was a set record for the number of votes cast, but the percentage of voter turnout was lower or the same as in 2004 (CNN Politics, 2008).

2. Civic Engagement

The evidence seems to point to a higher civic engagement: Americans are more likely to be involved in voluntary organizations than are citizens from other countries. There is also an increase in the number of voluntary associations over the last thirty years. But even though the number of voluntary associations tripled, the average membership decreased. In addition, these new groups focus more on defining and debating policies in the national spectrum than providing a connection between members – “One distinctive feature of social capital-creating formal organization is that it includes local chapters in which members can meet one another” (Putnam, 2000:51). From a social connectedness standpoint these new organizations differ from the traditional “secondary associations”, and so they are labeled as “tertiary associations” (Putnam, 2000:52). For the author, the number of voluntary associations is not a reliable indicator of social capital. Similarly, membership figures are not fully reliable, as the popularity of an association(s) may augment and diminish independently of the general level of community engagement. Also, a new common form of membership – “card-carrying” – says little about the participation in civic activities. Thus, “What really matters from the point of view of social capital and civic engagement is not merely nominal membership, but active and involved membership” (Putnam, 2000:58).

3. Membership

Using data from the General Social Survey (GSS), Putnam demonstrates that over the last quarter of the twentieth century, formal membership rates have not changed significantly (if education is not considered). Membership in religious groups, labor unions, fraternal organizations, and veterans groups has declined, but this decline was more or less compensated by increases in professional groups, hobbies, sports, and other groups. If we consider education, the organizational membership has declined by 30% among college graduates. Active participation in local clubs and organizations of all sorts fell by more than half in the last decades of the last century – for instance, the number of members that took any leadership role in any local organization was down by more than 50%. These declines in organizational participation and club attendance are visible in all educational and social classes, even though the relative decline was greater among lower classes. The assumption that increases in education would promote political and civic engagement does not seem valid: “In short, Americans have been dropping out in droves, not merely from political life, but from organized community life more generally” (Putnam, 2000:64).

4. Religion

Putnam considers religion a central aspect of the American community life: “Faith-based organizations serve civic life both directly, by providing social support to their members and social services to the wider community, and indirectly, by nurturing civic skills, inculcating moral values, encouraging altruism, and fostering civic recruitment among church people” (Putnam, 2000:79). Religiosity correlates significantly with most forms of civic engagement, and religious involvement is a strong predictor of volunteering and philanthropy. For Putnam, faith-based communities where people worship together are the most important depositories of social capital in the USA. However, the younger generations (including the boomers) are less involved in religious activities: they are going to church less often, and are less active in religious practices.

5. Work

If Americans are spending most of their time at work, can it be that social capital has moved to the workplace? Work-related organizations are a space for cooperation and connectedness, and therefore, a critical space for social capital. But even if the majority of workers have friends at work, those friendship relations are not, in most of the cases, intimate or generally supportive. Work-based networks have a more instrumental character – they are used for specific purposes, mainly work-related ones. Social connections with co-workers are a strong predictor of job satisfaction, but these are limited by job instability, an increased competition and individualism of the labor market, and the norms that inhibit socializing at the workplace, such as conditioning communication between co-workers. Furthermore, Americans are less likely to join co-workers in formal organizations such as labor unions.

6. Close networks

What about close ties? Are Americans creating social capital through informal sociability? Friendship and other informal types of social connections provide an important form of social support. According to Putnam, they normally do not contribute to the development of civic skills as does the involvement in an organization, union, or club. However, informal connections are crucial in supporting social networks. And against all eschatological predictions of urban life, friendship survived and it is highly valued in the modern metropolis. On average, Americans are not socially isolated, but they interact more as friends (for what he uses the Yiddish term “schoomers”, those who spend a lot of time in formal organizations) than as citizens (for what he uses the Yiddish term “machers”, those who spend a lot of time in informal interaction). Even considering friendship, “going out with friends” and “having friends over to our home” has been declining, while dining out

(alone or with friends) has slightly increased in the last decades. Putnam also presents other factors that illustrate the change in the American social connectedness:

- the decline of the family evening meal;
- the decline of going to a bar, nightclub, tavern, or disco;
- the decline of eating and drinking establishments (in opposition to the increase of fast food venues, with little ambience for conversational opportunities);
- the decline of card playing (replaced by more individualistic games);
- the decline of sending greeting cards;
- the decline of spending evenings with neighbors (“neighborhood watch” groups are important in the neighborhood dynamic, but fail to replace the social capital of traditional neighborhoods);
- the decline of social events in the neighborhood;
- the decline of playing team sports, and the rise of more individual sports, like fitness;
- the increase of watching television;
- the decline of “doing culture” instead of just consuming it.

The bowling example (which the book is named after) – less league bowling, more solo bowling – is used to show how some forms of social capital are vanishing. So, “...it is not merely ‘do good’ civic activities that engage us less, but also informal connecting” (Putnam, 2000:115).

7. Philanthropy and volunteering

Interestingly, against the declining trend, philanthropy and volunteering seem to be on the rise. Also, they are both significantly predicted by civic engagement. On the one hand, Americans give more money for charity. On the other hand, giving money is not the same as social capital; it is not the same as “networks of social connection”, i.e. doing with. Doing good for other people, however honorable, is not part of the definition of social capital” (Putnam, 2000:117). To measure philanthropic generosity we need to look at the proportion of money given from one’s income. Doing this proportional analysis, Putnam concludes that since 1961 the philanthropic share of Americans’ income has dropped gradually even with a rise of prosperity. Material resources are not the strongest predictor of altruism: the poor give an equivalent fraction of their income, compared to the wealthy. The most consistent predictor of giving time and money is involvement in the community. Secular involvement has a greater effect than religious one: “churchgoers” volunteer, on average, five times per year, while “club goers” volunteer, on average, 12 times per

year. Sociability is also associated with volunteering: Americans who entertain their friends at home are much more likely to work on community projects and to volunteer. Churchgoing and club going are strong predictors of donating blood, even when controlling for age, education, and gender. Americans who were involved in youth groups/youth volunteering are more likely to donate to charity and twice more likely to volunteer than those who were not involved when young. There is an increase of volunteering, but a decrease of work in community projects. This is interesting since involvement in churches and clubs is declining.

So who are the new volunteers? Putnam finds out that the increase of volunteering is condensed among people aged sixty and over. Volunteering has grown modestly among the twentyish and declined among the 30-59 age range. At the same time, it has doubled among the elderly (60 and over). Possible explanations are early retirements, more free time, and better health and physical conditions. The most "civic generation" was born between 1920-1940, what refers to the cohort of people of 60 and above that are more inclined to volunteering. Volunteering is not increasing among other age cohorts, and it is not coming out as a way of compensating for the decline in other forms of civic participation.

8. Reciprocity

Reciprocity, or "generalized reciprocity", is the yardstick of social capital: I'll do something for you, and whenever I need you (or someone else) you will return the favor. Generalized reciprocity is hard to differentiate from altruism, and hard to cast as self-interest. A society that is based on generalized reciprocity is more efficient, successful, and healthy than one based on distrust. Social trust is an important asset for a community, but only if warranted. In the same way, generalized reciprocity is an important asset for a community, and "trustworthiness, not simply trust, is the key ingredient" (Putnam, 2000:136).

Social trust is associated with other forms of civic engagement and social capital: people with higher levels of social trust volunteer more often, donate more often, participate in political and communitarian organizations more often, are more tolerant towards diversity, and are more compliant with their tax obligations. Similarly, according to Putman, people who are more civically engaged are less likely to lie, cheat, or steal. Honesty, civic engagement, and social trust reinforce each other reciprocally: "...people who trust others are all-round good citizens, and those more engaged in community life are both more trusting and more trustworthy" (Putnam, 2000:137).

Like with the other measures, social trust rose from mid-1940s to the mid-1960s, afterwards beginning a long-term drop. The majority of Americans believes they live in a less trustworthy society than their parents lived. Putnam uses other examples to explain a declining in generalized trust and reciprocity, namely the refusal rates of surveys and census, the declining civility of drivers, the crime rate, and the big rise in society's investment in lawyers, which are formal mechanisms of social control and of conflict resolution. Of course, as the author recognizes, there might be more specific factors to explain the above decline, such as the growth of telephone solicitation, more attention and control of drivers, etc., but for him, globally, these trends are associated with a decrease in thin trust. Thin trust is trust of the other, i.e. trust that goes beyond the people one knows in person, contrary to thick trust, which is the trust in strong and close personal networks.

Is it all that bad?

But not all is deteriorating in the American realm: small groups, social movements, and telecommunications seem to boost membership and social connections. In his 1995 article, Putnam (1995a) addressed small groups (such as self-help groups or hobby clubs) and social movements (such as feminism or the environmentalism). He now explores in depth these two groups, though concluding the same: these groups represent an important stock of social capital in the ties and involvement they imply, but they focus more on the individual than on the community. In the case of social movements, membership is largely associated with donating money (mere "mailing list" groups), than actively participating or meeting members in the organizations' chapters (if existing).

Concerning telecommunications, Putnam addresses the case of the telephone, which did not transform or replace but reinforced personal communication. Despite the predicted effects of replacement, the telephone – which had the potentiality to bring closer distant friends and relatives – ended up reinforcing more local than distant ties. The Internet was not the cause of the decline of social capital, and might end up being a solution or a problem. For Putnam, it was too early to evaluate the social effects of the Internet. Nevertheless, he points out that it is reasonable to assume that the Internet will enhance our communication, and therefore, communities: "Social capital is about networks, and the Net is the network to end all networks" (Putnam, 2000:171).

Will the Internet become an active mean of communication or a passive private mean of entertainment? Putnam warns about the inaccuracy of utopianism or dystopianism, but if Computer Mediated Communication's (CMC) main goal is to reinforce rather than substitute face-to-face relationships, then the Internet will not be able to overturn the

corrosion of social capital. For Putnam, the final big question is: how can we make the Internet part of the solution?

Reasons for the decline of civic engagement and social capital

As shown by Putnam there is a clear trend in the decline of civic engagement and social connectedness in the American society (noticeable over the past two generations). Looking at the possible reasons for this decline, Putnam suggests:

1. Pressures of time and money: busyness, economic, and two-career families pressure are an explanatory factor. But a modest one, according to Putnam it accounts for no more than 10% of the total decline.
2. Suburbanization, commuting, and sprawl: This mobility also contributed to the decline, but it is still modest, like the above one.
3. Electronic entertainment: Television watching and dependence is strongly correlated (negatively) with civic engagement. Americans were watching more TV, more habitually and pervasively, more often alone, and specific types of contents that were not calling out for civic involvement – more (passive) shows, less news. The beginnings of these trends match precisely the decline in social connectedness. Even though the association is powerful, Putnam underlines that he cannot prove cause and effect. There is no evidence that people would be more engaged without television. Nevertheless, Putnam suggests that the television has a 25% effect on the erosion of civic engagement and social connectedness.
4. Generational change: The replacement of an unusually civic generation by several generations that are less involved in the community life is the strongest explanatory factor of the decline in civic engagement in America. Putnam accounts for an impact of 50% on the overall decline. A higher engagement might be related to social habits and values influenced by cataclysms, such as wars.

Putnam also tackles other possible factors that are generally addressed in the literature as causes for civic disengagement, but finds no correlation between the changes in the traditional family structure and civic engagement; between racial differences and the erosion of social capital; between decline of social capital and higher state intervention, namely measures of welfare spending or government size (social capital seems to be higher in Scandinavian countries, paradigms of welfare intervention); and between capitalism and social capital.

Putnam ends *Bowling Alone* (2000) with an agenda for social capitalists, aiming to restore American communities through collective and individual means. According to him, as America is not dealing with any national crisis, war, or depression, it is hard to create social capital. In a hortatory style, Putnam calls out numerous groups/areas suggesting actions and setting 2010 as the year to see changes in civic engagement²³.

2.3.3.4 After Bowling Alone

In his next book, *Democracies in Flux* (2002), Putnam edits a collection of articles of social capital in different countries: USA, UK, France, Germany, Spain, Sweden, Australia, and Japan. Once again, Putnam underlines that healthy democracies are based on civic engagement, which is intimately related to social capital. The definition of social capital continues to be similar to his previous ones: “social networks and the associated norms of reciprocity...because like physical and human capital (tools and training), social networks create value, both individual and collective, and because we can “invest” in networking” (Putnam, 2002:8).

Despite the positive externalities of social capital, Putnam recognizes, once again, that it can also have negative outcomes: some forms of social capital can be harmful for democracy and civil society. Recognizing the inexistence of a single theoretical and empirical classification of different forms of social capital, Putnam (2002) states that, at least, four distinctions have risen from the academic debate:

1. Formal versus informal social capital

Some groups are formal, such as labor unions, while other are extremely informal, such as a group of people that gather in the same cafe. Both compose networks, where reciprocity can emerge with public or private gains (Putnam, 2002).

²³ Putnam (2000) addresses parents, educators, and adults in general, to improve civic education, to encourage children and teenagers to be involved in volunteering and other extracurricular activities. He speaks to employers, employees, labor leaders, and public officials to make the workplace friendlier and more community oriented, while encouraging employees to do more community volunteering. He challenges urban and regional planners, developers, community organizers, and homebuyers to create friendlier, diverse, and social neighborhoods and public spaces, while reducing the commuting time. He addresses faith-based communities, challenging them to promote more engaged, tolerant, and pluralistic religious communities. He asks everybody to use ICT in an active and community engaging way, and to connect with different people through arts and sports.

2. Thick versus thin social capital

This distinction is based on the difference of strong ties and weak ties, meaning close friends versus acquaintances. Strong ties are important for social support, whereas weak ties are important to access information that is not available in closer networks (Putnam, 2002).

3. Inward-looking versus outward-looking social capital

Some forms of social capital are inward-looking, because they support the interests of their members, whereas others are outward-looking, because they promote public interest. An example of an inward-looking group would be labor organizations or a gentleman's club, while an outward-looking group would be a charitable one, such as the Red Cross. It is difficult to prove that one is more positive than the other, as both might benefit largely the community and the society (Putnam, 2002).

4. Bridging versus Bonding social capital

Interconnected with the inward/outward distinction, Putnam re-introduces bridging and bonding social capital (already addressed in his 2000 book). Bridging social capital is related to social networks that are constituted by different people, while bonding social capital is related to social networks that are constituted by close and similar people. Bonding social capital, according to the author, might have more negative externalities than bridging social capital, but it is where the majority of people find social support. Nevertheless, a healthy society cannot rely solely on homogeneous groups; it has to have heterogeneous groups as well, or it will probably end in group dispute and even fights. The Bosnian case illustrates this type of unbalance (Putnam, 2002).

It is hard to quantify social capital in terms of less or more, so Putnam (2002) suggests that the analysis of social capital should be done in a qualitative sense, of showing which types of social capital are more visible in a specific society. The purpose of his 2002 book is to describe how social capital is evolving in eight advanced postindustrial democracies. Despite some differences – social, economic, and political ones – it is possible to define some commonalities. As Putnam points out, there are four main thematic conclusions in the book:

1. Declining electoral turnout

The decline of electoral turnout started in the 1960s in the US and in the 1980s in Europe, accelerating in both through the 1990s. Australia and Japan show similar declines²⁴. This decline was only less visible in Scandinavia.

2. Declining public engagement in political parties

This decline followed the same chronological path as the electoral turnout, starting in the 1960s and 1970s in the US, and in the 1980s in other advanced industrial countries (occurring last in newer democracies like Portugal and Spain). This decline is stronger in the younger generations and spreads to other forms of civic engagement such as attendance of political meeting or even discussing political matters.

3. Declining union membership

This follows along the same path as the two declines described above. The only considerable exceptions are the Scandinavian countries where labor unions remain strong.

4. Declining Church attendance

The trends are similar in the postindustrial democracies, being even more visible in Europe than in the USA, even considering that the decline started earlier in the USA²⁵.

Even though it is possible to observe trends in social capital, Putnam (2002) warns that social capital does not follow a single global tempo. The historical contexts of each country determine considerably that tempo and social capital dynamics. The industrialization of each country destroyed and created new forms of social capital. In addition to the similar patterns mentioned above, Putnam (2002) provides other hints such as the impact of war in reinforcing civic involvement, new forms of civic participation (that for the author will result in a privatization of social capital, more cathartic, but less focused on solidarity), and evidence that the welfare state supported social capital.

²⁴ Putnam states this information on p.404 (2002). However, Australia has compulsory voting, which brings some questions in terms of this comparative analysis.

²⁵ It is interesting to note that Putnam continues to value significantly the religious involvement, even when in his previous book (Putnam, 2000), the data showed that secular involvement had a greater effect than religious one: "churchgoers" volunteer, on average, 5 times per year, while "club goers" volunteer, on average, 12 times per year. This valorization might be because the data also shows that churchgoers are strong predictors of donating blood, even when controlling for age, education, and gender (Cf. Putnam, 2000).

Putnam (2002) concludes that instead of merely studying the number of social ties and social capital, we need to study the distribution of social capital in society. The data from the different countries, with the exception of Japan, showed that social capital distribution is unequal: those who have more of it need it less.

Following his quest to restore the American civic engagement, in *Better Together: Restoring the America Community*, Putnam, Feldstein, and Cohen (2003) embark on a journey in the United States to tell stories of people committed to building social capital and re-empowering their communities. The authors widen the definition of social capital to include “social networks, norms of reciprocity, mutual assistance, and trustworthiness” (Putnam et al., 2003:2). Once again, Putnam and his co-authors underline that social networks have value for the people in those networks and also for the bystanders. For instance, neighborhoods where neighbors know each other well and trust each other have lower crime rates (Putnam et al., 2003). The twelve stories are cases of social capital’s success, as well as different community based projects that include neighborhood projects. Nevertheless, the stories show the tension between bonding and bridging social capital, the insiders and the outsiders, and the informal sanctions that come into place such as gossip (Putnam et al., 2003).

2.3.3.5 Critiques

Despite being recognized as a work of valuable empirical and systematic analysis, Putnam does not escape criticism. The criticisms of his work before *Bowling Alone* (2000) are:

- A call for a more precise definition of social capital and trust²⁶;
- the lack of an institutional connection to social capital;
- the need to use different sources of data;
- overlooking of a number of types of civic activities;
- and the failure to acknowledge a “dark side” of social capital (Levi, 1996; Schudson, 1996; Ostrom & Ahn, 2001; Misztal, 2000).

²⁶ Putnam’s conception of trust was contested on at least two grounds: Firstly, a healthy society depends on trust and on distrust (Misztal, 1996); secondly, a “causal link between trust and a rich network of associations” is never fully explained (Sztompka, 1999:196 – note 14). In his 2000 book, Putnam addresses trust in a more satisfactory way: defining and characterizing it (thin vs. thick trust), and showing that higher levels of social trust are correlated with more volunteering. But, of course, correlation is not causation.

These critiques were generally taken into account in his subsequent writings. Particularly, Putnam recognized that even the capacity to engage in collective action might not be generally positive (Cf. the example of Tutsi and Hutus killing each other in Rwanda presented by Levi, 1996). As noted by an article in the *New York Times*, Timothy McVeigh and other co-conspirators in the Oklahoma city bombing were members of a bowling league, so in this case it might as well be better to bowl alone (Fareed Zakari, *New York Times*, 13 August, 1995 as cited in Levi, 1996).

Bowling Alone (2000) was also highly scrutinized by the academic community and some of its flaws are examined here:

Firstly, his data and claims are not as clear as they seem. Some results seem rather confusing, pointing in different directions. For instance, attendance rates of sports have increased according to his data (generally done with family and/or friends). However, Putnam does not consider attendance rates as sociability, because for Putnam “doing sports” is better than “watching sports” (Putnam, 2000:115; Fischer, 2005). Similarly, crime rates have fallen considerably in the 1990s, as has social capital, which goes against Putnam’s claims that higher social capital is related to less crime (Fischer, 2005). Putnam makes a compelling case for the decline of civic engagement, but it seems to fail to do the same for social capital: “The sheer breadth of the concept, covering all kinds of social ties, makes it impossible to judge whether social capital is rising or falling” (Starr, 2000:3). This last critique is considered in his 2002 book, *Democracies in Flux*, where Putnam states that, as it is hard to quantify social capital, in terms of less or more the analysis should be focused on which types of social capital are more visible in a specific society.

Secondly, critics charge Putnam with statistical errors and inconsistencies, namely:

- The DDB Needham Life Style and Roper data set is based on a sample with a 5% response rate (Fischer, 2005)²⁷.

²⁷ It is important to clarify that a low response rate might not even matter as an indicator of survey quality: Visser et al. (1996) claim that surveys (for forecasting election outcomes) with lower response rates (21% to 28%) were not necessarily low in terms of validity, being more accurate than the ones with a higher response rate (compared with the University of Akron surveys with 60% response rate, and the University of Cincinnati with almost 70% response rate). And even when controlling for other factors that might affect these results, since the low response rate one was a mail survey, and the other two a telephone survey. More recently, studies show that surveys with lower response rates were minimally less accurate in terms of effect on general cross-sectional estimates (Curtin, Presser, & Singer, 2000) and of demographic representativeness (Holbrook, Krosnick, & Pfent, 2008). Nonetheless, the implications of a survey with a 5% response rate must be considered for sampling bias purposes.

- The GGS survey fails to capture some data. For instance, it counts types of organizations and not memberships: if you are part of two groups, it will be counted as one; and the standard questions do not include new groups or new forms of sociability (Fischer, 2005; Starr, 2000).
- The “fitting” of concepts from existing surveys instead of developing new questions to measure social capital more accurately (Cf. Field, 2008). As a response to this “flaw”, since 2000 Putnam has been coordinating the Saguro Seminar at the University of Harvard, which conducts surveys and studies to improve the measurement and availability of data on social capital.
- Statistics have been rhetorically framed to fit an argument. As Fischer (2005) notes, sometimes a 20% variance is a great change, while in other cases 30% is modest (Cf. Putnam, 2000, pp. 39, 43, 129).
- Even though Putnam states more than once that correlation is not causation (Cf. Putnam, 2000, pp. 235, 292, 334, 475 – note 11), some authors indicate that he muddles up correlation and causation, showing an “overstatement of the implications of particular empirical studies” (Durlauf, 2002:260).
- Fischer statistically analyzed seven of Putnam’s indicators of social capital taken from the GSS Survey, 1972 to 2000. The indicators were: trusting most people, voting, church attendance, belonging to organizations, socializing with neighbors, socializing with friends outside the neighborhood, and giving money to charity. Fischer found that the associations between the items were weak, and that some items such as voting and getting together with neighbors were unrelated. This was a small-scale exercise but the strong interconnection amongst social capital elements did not seem so observable in the data.

Thirdly, the causal link between civic activity and social capital has been largely questioned (Starr, 2000; Lin & Erickson, 2008).

Fourthly, in terms of personal sociability, Putnam’s data shows that “having friends over” and “going out with friends” is declining. But other forms of sociability, namely talking on the phone and the Internet, are not considered in the analysis. Similarly there is a decline of traditional community organizations and conventional social participation, but Putnam fails to explore in-depth other forms of social participation (more flexible ones). This includes support groups, neighborhood watch groups, walks, community festivals and street parties, and even groups that grew on the web.

Despite recognizing some of these new forms, particularly small groups and social movements, Putnam dismisses these new forms because they afford less social connectedness and social capital. But if online communities, support groups, and people volunteering are on the rise, but they do not increase civic engagement, they have to signify a new development in social networks and, therefore, in social capital (Starr, 2000). Blaming the generational succession for the civic decline might as well be muddy: civic participation might not be declining, but changing (Cf. Wuthnow, "Changing Meanings of Involvement" in *Loose Connections*, 1998). For instance, the decline of sending greeting postcards – one of Putnam's indicators in showing a decline in social connectedness – might not have been declining, but may have been replaced with text messages, telephone, or services provided by the Internet.

Fifthly, Putnam places much importance on the traditional organizations without considering the conformist, oppressive, and even exclusionary nature of the majority of these organizations (such as the conservative evangelists and the Rotary Club). In addition, despite observing that secular involvement has a greater effect than religious one ("churchgoers" volunteer, on average, 5 times per year, while "club goers" volunteer, on average, 12 times per year; Cf. Putnam, 2000, p. 119) he continues to emphasize enormously the role of religion – especially Catholic, Evangelical and Protestant – on social capital. Religiosity correlates significantly with most forms of civic engagement, and it is a strong predictor of volunteering and philanthropy, but so does secular engagement. Nonetheless, Putnam claims that faith-based communities where people worship together "are arguably the single most important repository of social capital in America" (Putnam, 2000:66). As Levi (1996) notes, Putnam has a very romanticized view of community.

Sixthly, concerning political participation, protests and rallies have been on the rise (as Putnam shows on pp. 164-166), but Putnam does not treat this as significant. The decline in political participation might be related to a change in the structure of politics, as politicians are more likely to focus their attention on a particular population and not on big-scale organizations (Levi, 1996). People may be sporadically involved in political and civic activity when specific issues that appeal to them arise in politics. Members of political organizations might not meet on a regular basis, but they occasionally mobilize in political contests to advance their interests (Schudson, 1996). The increased mistrust in politics might be happening because of scandals and crisis disseminated by the media, and not particularly because of lower levels of social capital (Fischer, 2005). Or this political mistrust might even be more visible in those who are active in civil society (Cf. McLean et al., 2002).

Seventhly, a more sociologically oriented critique underlines the lack of human agency in Putnam's work (Field, 2008): There is no space for individual preferences or choices, as everything is explained by structural factors. And even those structural factors are limited since there is no space for power, conflict or inequality in Putnam's account of the decline of civic engagement and social capital.

Lastly, the operationalization and measurement of social capital ends up being ambiguous: Is civic engagement a *dimension of* social capital or is civic engagement *related to* social capital? This confusion is related to what some authors call an amalgam of different concepts. For instance, Fischer (2005) argues that "individualism" and "privatism" rather than social capital would be better concepts to tackle the social change.

Putnam also seems to create circular arguments: "The key condition for overcoming dilemmas of collective action is the existence of a stock of social capital, but at the same time, the fostering of norms of reciprocity and networks of civic engagement requires pre-existing solidarity and collaboration" (Misztal, 2000). Other critics say that Putnam lacks a strong theoretical framework, failing to explain, for example, how social capital is produced and maintained (Cf. Levi, 1996). Despite these criticisms, the scientific value of Putnam's work is highly recognized. His work and also the criticisms I enumerated above are taken into account in my approach to social capital, and in my analytical model.

2.3.4 Nan Lin: a theory of social capital

Nan Lin is a Professor of Sociology at Duke University in the USA who has been working on social networks and resources since the 1960s²⁸. Even though he is not as frequently cited in the literature as a major proponent of social capital (compared with Bourdieu, Coleman or Putnam), his 2001 book *Social Capital* proposes a far-reaching theory of social capital that aims to bring together structure and agency²⁹. For Lin, social capital is based on the general theory of capital and can be understood through the ways "embedded resources in social networks are captured as investment" (Lin, 2001:3).

2.3.4.1 Capitals

Starting with a conceptualization of different types of capital, Lin defines capital as "investment of resources with expected returns in the marketplace" (Lin, 2001:3). The

²⁸ Nan Lin's homepage at Duke University - <http://fds.duke.edu/db/aas/Sociology/faculty/nanlin/>

²⁹ Coleman does acknowledge Lin's work on social ties and occupational mobility (Cf. Coleman, 1988:S102)

Marxian definition of capital is for Lin (2001)³⁰ the *classical theory of capital*, in contrast with the *neo-capital theory*, that includes human, cultural and social capital. The main difference between the classical and the neo-capital theory is that the latter either changes or eliminates the idea of social class as central to capital, while in the former social class differentiation is central to capitalism. So, social capital is an “investment in social relations with expected returns in the marketplace” (Lin, 2001:19). The basis for social interaction is, therefore, profits: “Individuals engage in interactions and networking in order to produce profits” (Lin, 2001:19). In this sense, capital is drawn from social relations, being simultaneously a social asset through the individuals’ connections and the access to resources in the individual’s network/group.

For Lin, four elements explain why social capital is important and distinctive of other forms of capital: information, influence, social credentials, and reinforcement.

- **Information:** As social capital facilitates the flow of information, it can provide individuals, or an organization, with useful information that would not be available otherwise (e.g. job opportunities).
- **Influence:** because social ties (social connections) might have strategic positions that influence decision-making processes (e.g. a tie with a higher position in a company that has power/or a word in the hiring/promotion of individuals).
- **Social credentials:** because the social ties of an individual might be seen as a sign of certification, reassurance, or reputation (e.g. knowing a famous person or a politician).
- **Reinforcement:** because social ties reinforce identity and recognize the individual, and this provides emotional support but also social recognition (e.g. being part of a club or group).

For Lin, social capital can be used for the gain of an individual or of a group. In the case of a group, these gains can be obtained, directly or indirectly, through the aggregation of the capital of individual members of that group. It can also be used to achieve returns in instrumental actions (e.g. finding a job) or to maintain gains in expressive actions (e.g., emotional support).

Lin finds convergence in the definition of social capital of Bourdieu, Coleman, Flap, and others, which highlights the existence of resources in people’s social networks (that can be used when needed). Like Bourdieu, Lin states that social capital is based on an investment in social relationships: being “resources embedded in social networks

³⁰ Unless stated otherwise the text and ideas of this section are taken from Lin (2001).

accessed and used by actors for actions” (Lin, 2001:25). For actors to mobilize and capitalize resources they have to be aware of their social networks and potential resources.

Lin’s concept of social capital is based on social network theory and rejects the following three ideas from the literature of social capital: the first is Coleman’s and Putnam’s idea of social capital as a collective asset or good. This means that Lin excludes culture, norms, etc. from the definition of social capital. The second idea that Lin rejects is Bourdieu’s and Coleman’s proposition that only strong and close networks provide resources. Instead, Lin calls for research that will focus on bridges in networks and in weak ties. The third idea that Lin rejects is that social capital is simultaneously a cause and an effect; he rejects Coleman’s approach to define social capital by its function and the idea that the potential causal explanation of social capital can be captured only by its effect. In this last case, Lin is not denying that there might be a relationship, for instance, between social capital and getting a better job. But these variables (social capital and getting a job) have to be measured separately, without confusing outcome and cause.

2.3.4.2 The postulates of a theory of social capital

Lin’s theory of social capital is based on a set of structural, network, interaction, and action postulates. Social capital corresponds to “**resources embedded in a social structure** that are accessed and/or mobilized in purposive **actions**” (Lin, 2001:29; my emphasis). First of all, **resources** are “material or symbolic goods” (Lin, 1982 as quoted in Lin, 2001). Communities give (by consensus or influence, in the latter, through persuasion, petition, or coercion) different values to resources, signaling their relative importance. Scarcity (but also historical and cultural aspects) defines the appraisal of the different importance of resources, which might change over time.

The possession of valued resources is related to high status, and confers more opportunities for individual or collective self-interest: “all actors [individual or collective] will take actions to promote their self-interest by maintaining and gaining valued resources if such opportunities are available” (Lin, 2001:31). Individuals with higher resources are, for instance, in better position to have a say in the decision-making process of a community, and are more protected by their value – during World War II, Japan’s kamikaze pilots were the youngest and lower-ranking pilots. So, individuals with less valuable resources face superior structural constraints and fewer opportunities. This capital is, as Bourdieu would claim, used as a way of reproducing a class-based society.

The structural-postulate argues that the **social structure** consists of a group of *positions*. Each position has varying amounts of valuable resources, which are hierarchically linked to *authority, rules* for sharing and using those resources, and delegated to *agents* that act on those rules. All these typically form a pyramidal structure, with the top of pyramid having a higher level of valued resources and authority but a lower number of agents. Resources are embedded in social positions: the occupant of that position might change, but the resources remain in that position.

According to Lin, resources embedded in a social structure are different from resources possessed by individuals. And so, “positions, authority, rules and agents collectively define the social macrostructure as a system of coordination for the maintenance and/or acquisition of one or more types of valued resources for the collectivity” (Lin, 2001:34). Generally, a social structure reflects a complex hierarchical world of different structures, and types of resources. For example, an agent with accrued wealth is also more likely to have obtained higher education than someone with less wealth.

Social structures can be formal or informal: a formal structure is defined by a hierarchical structure that involves positions connected in authority over the control and use of specific valued resources, such as a firm. An informal structure has no formality in the definition of positions and rules, such as a social network, where there is a mutual agreement about the participation and the positions of actors. This agreement is achieved through persuasion, and not authority or coercion.

The network-postulate states that a social network may exist and may be constructed for different interests, linking nodes in different parts of the network. In this sense, “being in a node of a network directly and indirectly provides potential access to other nodes (actors) in the social network. Resources embedded in these nodes become ego’s social capital” (Lin, 2001:38). So, social capital represents more than the personal resources of those nodes in the network, as actors in a certain position also bring resources embedded in those positions. Social interaction should, therefore, be analyzed as “resource patterns linked in interaction patterns” (Lin, 2001:38).

In relation to the interaction-postulate, Lin calls for Homans’ (1950) studies which show that positive and reciprocal relationships are based on interaction, sentiment (feelings, emotion), and activity. Sentiment is the primary cause for that type of interaction (Homans, 1950, as cited in Lin, 2001). To this sentiment-interaction hypothesis, Lin adds the homophily principle that posits that interactions are more likely to occur between people with similar interests, lifestyles, and socioeconomic status. Considering that lifestyles and socioeconomic status represent resources embedded in actors’ social

networks, interactions will tend to happen among people in similar social positions in the hierarchical structure. Consequently, Lin formulates the sentiment-interaction-resources hypothesis.

Finally, the action-postulate explains how agents access and use resources. Resources can be personal: resources that an individual owns. Resources can also be social: resources accessible through social connections. Social capital refers to the latter type of resources, the social ones that can be material (e.g. a car) or symbolic (e.g. reputation): “resources of other individual actors to whom an individual actor can gain access through direct or indirect social ties” (Lin, 2001:43). Even if the individual does not use those social resources, they have a symbolic utility because they promote an association with power, social position or recognition (e.g. knowing a movie star or a millionaire).

Resources can be accessed through direct and indirect ties. Usually it triggers a connection of multiple actors: an ego might ask an alter for something, and that alter has to ask another alter to be able to reach that resource (Lin, 2001). These resources are mobilized for two main reasons: to protect existing valued resources, and to gain valued resources. To access or mobilize those resources, individual or collective actors take purposive action: to protect valued resources, actors (individual or collective) usually undertake expressive actions, as it recognizes legitimacy, reputation, sentiment, and support. An example would be a friend complaining about her boss to another friend. To gain valued resources, actors undertake instrumental actions with the goal of activate actions/reactions that will allow them to allocate more resources. An example would be seeking a promotion or a better job.

To undertake these purposive actions, actors interact. This interaction can assume two forms: homophilious or heterophilous. The homophilious interactions occur between people with similar resources (that can be power, reputation, etc.). Heterophilous interactions occur with people with dissimilar resources. These concepts are related to the bonding and bridging concepts, which I discussed previously: Homophilious interactions are a kind of normative relationships, because there is a tendency to homophily in social interaction. Even if heterophilous interactions would be more useful for the individual with the lower social position to gain resources, they are less likely to occur because they require more effort and costs. Similarly, there are asymmetric exchanges involved as there has to be something in return for the actor with the higher social position – “actors occupying the lowest level of positions are not expected to garner as much return from heterophilous interactions as higher-level actors” (Lin, 2001:51).

Lin argues that action and structure are important in a theory of social capital: motivated/purposive action leads to interactions, but the endeavor of mobilizing resources is controlled by the resource's availability and diversity in the social structures where individuals act. Of course, it would be impossible to define in terms of causality if action or if structure is more significant in the access to social capital. Structure and agency reinforce each other, but individuals can trigger structural modifications (valued resources can, for instance, be different for the structure and for the actors) (Lin, 2001). Nevertheless, Lin proposes a theoretical scenario that puts action leading social structure through the mobilization of social capital.

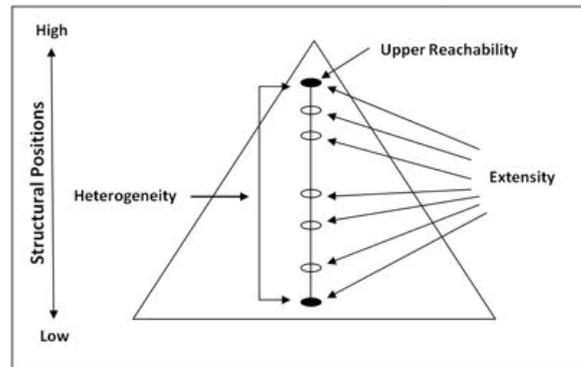
2.3.4.3 Propositions of a theory of social capital

To link theory and action (and considering an imperfect market), Lin advances seven propositions:

1. **The social-capital proposition:** *the success of action is positively associated with social capital.* This means that the access and use of good social capital leads to more successful action. But what measures can be indicators of social capital? Lin defines three main types of social capital resources: wealth (economic assets), power (political assets), and reputation (social assets). Lin also defines three measures of social capital, related to those resources (see figure 2.1) These measures are: upper reachability (the resource of a topmost position that can be reached by the ego in the hierarchical structure through social ties), heterogeneity (the range of positions whose resources are reachable through social ties), and extensity (number/diversity of positions, and their embedded resources, that are reachable by the ego). Lin makes an interesting note about the heterogeneity and its verticality in the hierarchical structure. While this criterion might not be so obvious, it is important: having all social ties of high status may not be useful for life's needs, such as quick help with a computer or babysitting.

This first social-capital proposition is central in Lin's theory of social capital. As he emphasizes, if this one cannot be verified empirically, then the next propositions are irrelevant. Although it is assumed that the measures of economical, political, and social position will be strongly correlated, they may vary across societies and communities.

Figure 2.1
Measures of social capital by Lin



Source: Lin, 2001, p.62

2. **The strength-of-position proposition:** *the better the position of origin, the more likely the actor will access and use better social capital.* The individuals that have better social positions will have advantages in accessing and mobilizing social ties with better results.

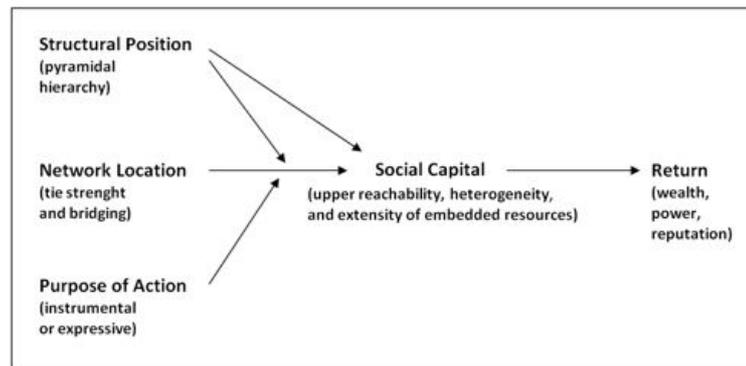
3. **The strength-of-strong-tie proposition:** *the stronger the tie, the more likely the social capital accessed will positively affect the success of an expressive action.* Research shows that in strong relationships (based on sentiment, trust, and even homophilia), the sharing of resources tend to happen more frequently.

4. **The strength-of-weak-tie proposition:** *the weaker the tie, the more likely the ego will have access to better social capital for instrumental action.* The work of Granovetter (1974) shows the strength of weak ties, supporting the homophilia principle. To have access to different information, an individual might need to go out of his/her social circle, connecting with ties that belong to other social circles. These ties between two different social circles are called bridges, and that is why bridging is also largely used in the literature to define weak ties. These weak ties permit resource heterogeneity and upper-reachability, as individuals will connect with higher-positioned people (following the “prestige principle” that posits that people prefer to associate themselves with people with higher social status; but also the homophilia principle, as for instrumental actions, actors have to reach other circles).

5. **The strength-of-location proposition:** *the closer the individuals are to a bridge of a network the better social capital they will access for instrumental action.* For Lin, the problem with Granovetter's weak ties is that measures of weak ties may not seize the importance of networks locations such as bridges. So, Lin turns to Burt (1992) and his theory of the structural holes (the divisions between non-redundant contacts). When there is a hole between two ties, there is also a connection with network's benefits. Structural holes and bridges are, nevertheless, different ways of defining network features and the importance of certain locations: "The concept of structural holes focuses on the lack of access between clusters, while bridges emphasize access between clusters over the (nearly empty) holes" (Lin, 2001:71).
6. **The location-by-position proposition:** *the strength of a location (in proximity to a bridge) for instrumental action is contingent on the resource differential across the bridge.* Despite the significance of Burt's structural holes, Lin adds that the importance of a strategic location depends on the resources accessed. Location close to a bridge may not be helpful if the bridge links to nodes with analogous or less valued resources: "access to better social capital tends to occur for an individual actor who occupies a location closer to a bridge that links the actor to those in relatively higher hierarchical positions" (Lin, 2001:72).
7. **The structural contingency proposition:** *the networking (tie and location) effects are constrained by the hierarchical structure for actors located near or at the top and bottom of the hierarchy.* This last proposition emphasizes that structure constrains opportunities and choices: there are effects due to the structure, and due to networking which mean opportunity and choice. For example, an actor near the top of the pyramid has limited opportunity to reach upward, vertically, while an actor in the middle of the pyramid has upper reaches and opportunities to achieve it, and an actor in the lower part of the pyramid is structurally constrained in opportunities to vertical access.

The next figure sums up and connects these different propositions, showing Lin's model of the social capital theory (see figure 2.2).

Figure 2.2
Model of the social capital theory by Lin



Source: Lin, 2001, p.76

2.3.4.4 A “rational” theory of social capital

This theory of social capital is relational (and not individualistic); entwined within a hierarchical structure; and entailing action by the individuals. It is based on theoretical and empirical perspectives but, according to Lin, needs continuous verification and adaptation.

Lin’s theory of social capital is largely based on a theory of rational choice. Trying to deal with some criticisms to the rational choice theory, namely the plausibility of the causal linkage from action to structure (the whole being explained by the sum of its interacting parts), Lin shows theoretically how rational actions can lead to social structure. Three main ideas support his argument. Firstly, rational action has two main motives:

1. Minimization of loss
2. Maximization of gain

The first one, which implies defense and maintenance of resources, is the primary motive for action. It is followed by the second principle, i.e. the maximization of gain. This primacy disputes the exclusive use of the economic profit-maximization as the single basis for human action and social organizations. These two principles are not in opposition, and can be involved in the same action. Interactions are made to achieve both principles, chiefly to maintain the first one. These interactions are based on

recognition of agents' claims to resources (which normally has asymmetrical costs to parties) and profit.

Secondly, these calculations of resources (and the question of succession of these resources) lead to rules of how the resources are transferred, and to the dominance of the primordial group (primary social group, such as the family). When an actor dies, his/her resources may be transferred to another actor/actors (usually to the family). The family/primary group (which promotes noneconomic aspects in the action) brings to question any theory only established on economic calculations. But this does not mean, for Lin, that actions are not rational: "If rationality is defined as the process of reasoning by a way of calculation over choices, then it is clear...that recognition and profit provide rational bases for interaction choices" (Lin, 2001:133).

Thirdly, the usefulness of social capital considerably exceeds that of personal/human capital (resources owned by an actor who can make decisions about its usage). Considering the costs of accumulating social capital, i.e. constraints and resources to maintain relationships and to reciprocate, accumulating personal capital is preferred. However, the accumulation of social capital is faster than the accumulation of personal capital. When interactions outside of one's primordial group are to gain resources, they are used more for accessing social capital than for gaining personal capital.

Facing the scarcity of valued resources, agents extend their interactions outside their primary groups. When these ties and consequent exchanges are arranged (what comes with the willingness to reciprocate in terms of recognition and profit), then specific collective rules come into place. So, "these rules, beyond interacting actors' original intents and interests, constitute the basis for social structure formation" (Lin, 2001:128). A collectivity (i.e. a collection of actors and primordial groups tied to the sharing of social capital) is then formed, with differential obligations and rewards. These different obligations and rewards create a hierarchy among actors, and also different opportunities. The collectivity might produce resources that belong to the collectivity, creating *public capital*. When collective obligations and rewards are defined (social contracts), and fragmentation and free rides are minimized, the collectivity can use education/socialization, campaigns of identification and promotion, and forced compliance to endorse its stability.

Therefore, Lin concludes that a social theory must incorporate individual and structural elements. Lin's theory of social capital also draws from social exchange theory, and the author uses it to explain the interaction level of exchange between actors with high valued resources and actors with low or none valued resource. Social exchange has

been used in the literature sometimes interchangeably to refer to economic exchange (transactional exchange) and social exchange (relational exchange). This happens because there is a “common co-occurrence of both elements” (Lin, 2001:144).

George Homans, founder of social exchange theory, states, “Interaction between persons is an exchange of goods, material and nonmaterial. An incidental advantage of an exchange theory is that it might bring sociology closer to economics – that science of man most advances, most capable of application, and intellectually, most isolated” (Homans, 1958:597 as quoted in Lin, 2001:144). There are considerable differences, nonetheless, between transactional rationality and relational rationality. Transactional rationality is undertaken to gain economic capital, while relational rationality is undertaken to gain reputation through recognition in networks and groups.

As Lin puts it: “Transactional rationality can be seen as a neo-Darwinian theory applied to exchanges – the survival of the fittest individuals...Relational rationality is based on the principle of survival of the fittest group, a group with persisting relationships among its members” (Lin, 2001:155-156). The two rationalities can be complemented or part of a choice, not being mutually exclusive. Reputation or social standing (through recognition) would be the main motive for an actor to be involved in social exchanges with an actor with lower-valued resources. For Lin, relational rationality is a human law based on the rationality of human choice: human beings are generally interested in maintaining enduring and gainful relationships merely at a transactional cost.

Despite the claims that not all human behavior and interaction is economical and rational, Lin cites Homans, Blau, and Coleman to show that motives (whether material or symbolic), such as social approval, attraction, etc., are also rewards, and as long as they represent value (or profit or interest) they are part of rational calculation. Lin also refutes the claim that trust is the basis for interactions and exchanges: “a social order based on trust not grounded in self-interest will be unpredictable and unstable; for this reason, trust is not always functional” (Lin, 2001:149). So the process is considered rational, as long as calculations and choices based on self-interest (or collective interest embedded in self-interest) are made.

For Lin, a comprehensive model of social capital has to analyze three main elements:

1. Investment in social capital (considering structural constraints, and collective assets, such as norms, trust, etc.).
2. Access to and mobilization of social capital.

3. Returns on social capital (instrumental, such as wealth, power, and reputation; and expressive, such as physical health, mental health, and life satisfaction).

In the last point, the instrumental actions (to gain resources) and the expressive actions (to maintain resources) have structural frameworks: instrumental actions provide social interactions that support vertical relationships among individuals with different resources, interests, and lifestyles; expressive actions provide social interactions that support horizontal relationships among individuals with the same resources, interests, and lifestyles. Instrumental actions allow for better social mobility and sharing of resources in society, while expressive actions allow for solidarity and stability of social groups.

Lin's more recent works have been centered on the job search, mainly in China and in the USA (Cf. Lin, 2005; Lin & Ao, 2008). In a study of job mobility in the labor market in the USA, Lin & Ao (2008) show that social capital increases opportunities for job mobility, augmenting the probability of receiving job information in informal exchanges. This was named the "invisible hand of social capital": "the flow of social credentials or reputation and the flow of job information and influence in routines exchanges constitute ways that social capital exerts effects on attainment in the labor market, beyond the more visible job-search or job-recruiting behavior" (Lin & Ao, 2008:113). Social capital was also enhanced by human capital and social participation (Lin & Ao, 2008).

2.3.4.5 Critiques

The main critiques to Lin's work are based on his use of rational choice and social exchanges theories, which were discussed in Coleman's section. Lin adopts both theories, distinguishing between relational and transactional rationalities (bringing a non-economical sense to transaction), and emphasizing the relational aspect of social capital rather than the individualistic one (overcoming the methodological individualism). However, his account is still grounded on a rational calculation of choices and self-interest. As Small (2009:7) explains: "Lin's objective was both to synthesize the work of earlier theorists and to fit the theory formally into social network analysis, something Bourdieu never did and Coleman only began to do. In fulfilling this objective, Lin assumed that actions are not only purposive but also rational". For Lin, people make connections anticipating the gains from it. However, his model does not show or prove that assumption, rather it always departs from seeing connections as a rational investment. And so why people form useful ties become insignificant in his perspective (Small, 2009).

In addition, his heavy focus on the instrumental aspect of social capital left much to say on the expressive aspect of social capital. Recognizing this fact, Lin explores briefly the expressive side of social capital in his Preface; namely its outcomes: physical health, mental health, and life satisfaction (Lin, 2001). Instrumental and expressive actions are complementary, reinforcing each other, but are expected to show different patterns in terms of outcomes. They can also create tensions: disproportionate instrumental actions might risk the loss of group identity and solidarity, whereas disproportionate expressive actions might encourage an extreme group/class consciousness and conflict (Lin, 2001).

Finally, Lin seems to have a more conventional conception of social networks, not exploring the fact that those networks are not always chosen by the individual (as in the case of the family), and are created, maintained, and destroyed in specific social contexts. And so, access and mobilization of social capital are dependent on social contexts. Moreover, connections are not always chosen or created having in mind instrumental or expressive actions – this rational choice model fails to acknowledge the spontaneity and subjectivity of human interaction.

2.3.5 The Great Four in Perspective

By comparing the four authors it is possible to find similarities and also significant differences in the discourse of social capital. The similarities are a common element in their definitions: social connections or social networks. They all concur that social capital is related to the resources people can derive directly from their social connections.

Bourdieu (1980, 1986) and Lin's (2001) definition of social capital centers on resources that are available in social networks. Their analysis is also done within an unequal society, where access to resources is constrained by power and hierarchical structures.

In contrast to the above, Coleman's definition of social capital is vague: for Coleman, any element of the social structure could be part of the concept of social capital. "It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure" (Coleman, 1988:98). Coleman's idea of social capital included three forms: obligations and expectations, information channels, and norms.

Putnam's (1993, 1995a, 1995b, 2000) definition builds on Coleman's approach, but it is framed in terms of democracy and civic engagement. Social capital is defined as social networks, and norms of reciprocity and trustworthiness (Putnam, 2000). Putnam is a

political scientist, which explains his main interest and usage of social capital. Coleman and Putnam analyze social capital as essentially public and a positive good, neglecting any reference or development to power distribution and capital inequality in society (which is commonly perceived negatively in a society).

Although Putnam tries to define social capital in terms less vague than those of Coleman, his account also beckons one to ask some conceptual and theoretical questions: for instance, are norms part of social capital? Is trust part of social capital? Is civic engagement part of social capital? Such questions arise because it is not clear how social capital is theoretically associated with civic engagement, norms, and trust (Cf. Lin & Erickson, 2008). Empirically, studies that measured social capital separately of civic engagement and trust show incomplete or marginal relationships. This seems to suggest that the three concepts are independent concepts (Cf. Bekkers et al., 2008; Miyata et al., 2008; Tindall & Cormier, 2008; Magee, 2008).

The conceptual differences of these four key researchers continue to be evident in the social capital literature. This seems to be a consequence of authors aligning themselves with different proponents, and different goals, according to the discipline in question. So social capital is commonly used as an “umbrella term” (Woolcock & Narayan, 2000; Adler & Kwon, 2002), where each study focuses on a particular approach and dimension or dimensions of social capital.

For example, studies by the political scientist and Nobel laureate of economics, Elinor Ostrom (1994, 2000, 2001, 2002, 2003) focus on the dilemmas of collective actions and social capital (like Putnam). Collective action dilemmas arise when a group of individuals share a common interest, which leads to a conflict between that common interest and the interests of individual's in a group (Cf. Ostrom & Ahn, 2003). For Ostrom (1994), social capital complements other forms of capital (such as natural, physical, and human). All these capitals have a diversity of forms, and social capital is not an exception (Ostrom & Ahn, 2003). Within the study of collective action, Ostrom & Ahn (2003) define three main forms of social capital: trustworthiness, networks, and formal and informal rules or institutions. Social capital is, therefore, “an attribute of individuals and of their relationships that enhances their ability to solve collective action problems” (Ostrom & Ahn, 2003:4).

The social capital literature can be divided into different perspectives: from area of interest (such as the labor market, status attainment, collective action dilemmas, health and well-being, immigration, minorities, among others) to discipline (such as sociology,

economics, political science, management, development studies, and health sciences). Ostrom & Ahn (2001) propose dividing it into three views:

1. The **minimalist view** sees social capital as individual connection. This view is built on the work of Bourdieu, Loury, Burt, and Lin, and part of Coleman's work.
2. The **transitional view** sees social capital as a public good. Coleman's work informs the transitional view, particularly his book *Foundations of Social Theory* (1990), where he most strongly argued his case for social capital as public good. His definition of social capital by function is praised by Ostrom & Ahn (2001) as an effort to overcome the narrowed definition of social capital that was around at the time. For Coleman, social capital allows the achievement of individual goals and also collective (group and societal) goals (Ostrom & Ahn, 2001).
3. The **expansionist view** sees social capital as relating to collective action and public policy. For Ostrom & Ahn (2001), this view acknowledges the roles of social capital in solving collective-action problems and had substantial repercussions to both the theory of collective action and public policy. The work by Putnam on civic engagement, and Ostrom and colleagues on common-pool resources (CPRs) expanded the concept of social capital, framing it within a collective action perspective (Ostrom & Ahn, 2001). Ostrom (1990, as cited in Ostrom & Ahn, 2001) used the social capital concept in the study of appropriators of small-scale common-pool resources, such as forests, irrigation systems, etc. So, trust, shared norms, and patterns of behavior of the appropriators are forms of social capital that can be used to develop institutional arrangements to solve common-pool resource dilemmas (Ostrom & Ahn, 2001).

Ostrom & Ahn (2001) recognized that these three views of social capital are not analytically exclusive. They also acknowledge that their views do not completely exhaust the concept of social capital: "the vast scope of social capital research explains the frustration that many scientists experience as well as the popularity it enjoys" (Ostrom & Ahn, 2001:16). And so, "social capital is a general rubric" (Ostrom & Ahn, 2003:5).

Nevertheless, this division into three visions seems biased towards the interests and discipline of Ostrom & Ahn (2001). Although this expansionist view might seem more holistic, as Fine observes: "Whereas the other capitals are more and more narrow in their range of application, in search of the specificity of the resources, exactly the opposite holds for social capital" (2010:32).

2.4 The Life and Death of Great Social Capital? Addressing criticisms

Regardless of the popularity of social capital as a concept, a significant number of criticisms have been put forward. In this section, I explore these criticisms and show why social capital is not degrading scientific research. I describe eight critiques, using some of the criticisms pointed by Ben Fine (2001, 2010), Fischer (2005), and collected by Paul Haynes (2009) and others that emerged during the literature review.

1. Social capital is not a consensual concept (Haynes, 2009)

Social capital has been largely used in social sciences, but there is no unified or consistent definition. Critics go further stating that social capital is not even a coherent concept (Haynes, 2009:2). I agree with the lack of consensus when addressing the concept – I dealt with this deficit in the first chapter – but is it not the same as other social concepts? Is it possible to have a 100% consensual concept? Even within the same field, different schools of thought have been addressing concepts in a different way for decades: “social structure” is one example, whose meaning varies between sociological theories (structuralism, functionalist, etc.) and macro (ex: stratification, social classes), micro (ex: norms) and meso (ex: social networks, relationships) perspectives. As Sewell describes it:

“Structure” is one of the most important and most elusive terms in the vocabulary of current social science. The concept is central not only in such eponymous schools as structural functionalism, structuralism, and post-structuralism, but in virtually all tendencies of social scientific thought. But if social scientists find it impossible to do without the term “structure”, we also find it nearly impossible to define it adequately (Sewell, 1992:1).

There is no general consensus in the definition of social structure, and attempts to provide a unified definition have been unsuccessful (Marshall, 1994). And so, the concept has been used as an analytical tool (Marshall, 1994).³¹

Moreover, the Aristotelian model of categorization where categories are discrete entities characterized by a set of properties shared by its members, and should be clearly defined, mutually exclusive, and collective exhaustive was challenged by philosophers like Ludwig Wittgenstein. In 1950, Wittgenstein introduced the idea of “family resemblance” (Wittgenstein, 2001). Using the example of games, Wittgenstein

³¹ Other concepts, such as “Culture” have been facing the same problematic – Kroeber & Kluckhohn (1954, as cited in White, [1968], 2009:15) collected 164 definitions of culture (from sociologists, anthropologists, philosophers, etc.), although almost 300 definitions are given in the book as a whole.

explains that card games, board games, ball games, etc. have no single feature in common, but a “complicated network of similarities overlapping and crisscrossing: sometimes overall similarities” (Wittgenstein, 2001:27). Games have a family resemblance, as there is not a single definition that could include everything we consider to be a game. And even though there is not a unified single definition of games, we know what the word game means.

Cognitive psychologists such as Eleanor Rosch also challenged the Aristotelian model. Rosch (1988) studied the Dani people of Papua New Guinea, which had only two basic color names: “light” and “dark”. She compared Dani and American color naming and color recognition memory, and found that even lacking the words, the Dani could nevertheless categorize objects by colors.

Rosch realized that concepts are clear without having clear definitions if they are organized around examples or prototypes, as people categorize by comparison and experience. The social phenomenology of Alfred Schutz already underlined how we are in a constant process of categorization and of trying to draw meaning from what surrounds us (Schutz, 1967).

Definitions set in stone and categorizations are problematic, and expecting an uncontested or unified concept is unrealistic. The quest for perfect concepts is not only impossible, but might be scientifically counterproductive (Cf. Kuhn, 1962). Science advances with the constantly questioning of concepts and indicators (as social reality also evolves). Also, the diverse experimentation on the conceptualization, operationalization, measurement, and theoretical approach to social capital might help to reach a certain understanding of the concept (Akçomak, 2011).

However, recognizing that a clear (and as unambiguous as possible) conceptual definition is essential, all social scientists working with social capital define and operationalize their concepts before hand. This research follows this tradition and necessity.

2. Social capital is not capital (Fischer, 2005)

This criticism is based on the fact that social capital does not behave like economic capital. Fischer mockingly asks, “Where can I borrow social capital? What is the going interest rate?; Can I move some of my capital off-shore?” (Fischer, 2005:157). For the latter social capital is a misleading metaphor (Fischer, 2005). But Fischer

and other critics are mainly considering “economic capital”, praising a narrow and reductionist vision of capital.

In this sense, we could not consider human capital as a valid concept, even if human capital is a widely accepted and consensual concept (Cf. Ostrom & Ahn, 2003).³² As Ostrom & Ahn emphasize “It is also counterproductive to assume that the concept of capital has a fixed set of innate meanings” (Ostrom & Ahn, 2003:12).

If we look at some definitions of capital, according to modern economics, capital is a factor of production, being the others, land, labor, and enterprise (Marshall, 1994). The broad general use of capital it is still rooted in Marx’s (1867) classical definition: capital is the surplus value that can be used to create further profit³³.

Lin (2001:3) views capital as “an investment of resources with expected returns in the marketplace”, while Bourdieu sees capital as accumulated labor, in its objectified or embodied form, “which, when appropriated on a private, i.e., exclusive, basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor” (Bourdieu, 1986:46).

As Bourdieu notes, to address social structure – functioning and practices – capital has to be considered in all its forms and not only the one accepted by economic theory: “Economic theory has allowed to be foisted upon it (capital) a definition of the economy of practices which is the historical invention of capitalism; and by reducing the universe of exchanges to mercantile exchange, which is objectively and subjectively oriented toward the maximization of profit, i.e., (economically) *self-interested*, it has implicitly defined the other forms of exchange as noneconomic, and therefore *disinterested*” (Bourdieu, 1986:47).

An appropriation of the totality of practices can be grasped only if other forms of capital are included in the equation (Bourdieu, 1986). Bourdieu considers three forms

³² “The concept of human capital is today widely accepted. In the earlier stage of its development, the use of capital referring to knowledge and skills embedded in humans was heavily criticized. The exact same thing is happening now with regard to use of the concept of capital in ‘social capital’.” (Ostrom & Ahn, 2003:12).

³³ Using a simple example, Marx explains: “The cotton that was bought for £100 is perhaps resold for £100 + £10 or £110. The exact form of this process is therefore M-C-M', where M' = M + D M = the original sum advanced, plus an increment. This increment or excess over the original value I call “surplus-value.” The value originally advanced, therefore, not only remains intact while in circulation, but also adds to itself a surplus value or expands itself. It is this movement that converts it into capital” (Marx, 1867:79).

of capital: economic, cultural, and social. Other authors add financial (Bourdieu's economic), physical, human, and intellectual (Halpern, 2005; Haynes, 2009).

3. Capital is not social (Haynes, 2009)

For some critics, social capital remains an economic concept, and it has given space for economists to colonize sociologist's subjects (Haynes, 2009; Fischer, 2005). However, reality is multidimensional: saying that a concept is exclusive of a discipline is forgetting the complexity of any given topic. The fear is that adding new forms to capital will erode the meaning of the concept as a whole.

Capturing parts of a subject is, nevertheless, a strategy that enables the study of its different dimensions, without obscuring those differences.

4. Capital is social, so social capital is an oxymoron (Fine, 2001)

For other authors, such as Fine, every capital is social; there is no asocial capital and therefore social capital is an oxymoron (Fine, 2001). This is not a new argument for Sociology (Fine's background is in economics), which has been claiming since its genesis the social dimension of all human aspects.

All forms of capital are, in fact, social and have a social dimension, but capital *per se* (economical or even other forms of capital, such as human, cultural, etc.) cannot specifically grasp the value of social connections and the resources that are available in or through them. In search for this specificity, social capital has emerged as a valid and useful tool to study that value of social connections.

5. Social capital is a renaming of different concepts (Paul Haynes, 2009; Fischer, 2005)

Social capital is for some authors the rebranding of other social concepts, such as community, social networks, social support, membership, trust, family, and sociability (Haynes, 2009; Fischer, 2005). Social capital is, in this view, a redundant umbrella concept.

Social capital can be a collection of different concepts under an appealing name, but it depends how it is defined or/and measured. My approach is based on resources available in social networks, not including trust, membership, or norms. In this sense, social capital rests in social connections but it is more than that.

6. Social capital is not a theory (Haynes, 2009)

Haynes (2009) notes that social capital does not seem to have the features that

would make it a theory (features that he does not define).

A theory in sociology can be conceptualized in three different ways: Firstly, as a generalization/classification of the social world. Secondly, as a theoretical statement that is empirical, measurable, and systematically tested. Thirdly, an explanation of phenomena through the identification of causal processes which, even though it cannot be observed directly, can be seen in its effects (Marshall, 1994).

As we saw previously, social capital has been used as a concept and as a theory: as a concept it corresponds to investment and possession of resources of a particular value in a given society. As theory, it describes a system by which such resources are produced, reproduced, and accumulated (Lin & Erickson, 2008).

Social capital studies have been also complemented by other theories such as rational choice, structural constructivism, social exchange, and neo-capital theory. But more than that, social capital does not have to be a full mature theory. Haynes recognizes that "The concept has value in the way it is used in describing, explaining or reformulating important phenomena, such as the appropriability of social ties rather than a fully formed theory" (Haynes, 2009:9).

7. Social capital cannot be measured (Haynes, 2009)

Once again, this depends on how social capital is operationalized: if it is based on confusing and misleading approaches, its measurement will reflect that. Effects are always hard to measure completely, but that is why triangulation and longitudinal studies are important for the field.

8. Social capital has a problem of causality

This criticism underlines that it is hard to assess the causality direction of changes in social capital and changes in the social network. Similarly critics say social capital might lead to tautological arguments (Cf. Portes, 1998). As Dulauf puts it: "Do trust-building social networks lead to efficacious communities or do successful communities generate these types of social ties?" (Dulauf, 1999:3, as quoted in Haynes, 2009).

Once again, causality is hard to prove in any sociological study and using any type of concept. To be able to prove causality the field needs more longitudinal studies instead of cross-sectional ones (Cf. Lin & Erickson, 2008, pp. 16-17).

In the case of my research, my main goals are not to demonstrate causality or even use social capital as an explanatory variable to account for changes in individuals/communities. My goals are to observe if there is any association between Internet usage and social capital. Therefore, this question does not directly apply to my research (perhaps only indirectly).

Concluding, social capital undoubtedly does have weaknesses. However, I do not support Fine's argument that social capital can be only outright rejected. A clear definition of the concept and a consistent operationalization can be enough to make it a useful tool. Its applicability has shown social capital to be heuristically functional and practical: it links interconnected concepts; it is multidisciplinary, and addresses micro, macro, and meso dimensions. The increase of research on social capital shows that it has a collective credibility in the academy and in other important transnational governmental institutions such as the World Bank and United Nations. It provides a normal approach to problem solving, and it is perceptive enough to be used (Haynes, 2009).

2.5 Conclusion

This chapter summarizes and compares the definition and approach to social capital by its four main contemporary proponents, namely Pierre Bourdieu, James Coleman, Robert Putnam, and Nan Lin. By comparing the four authors it is possible to find similarities and also significant differences in the discourse of social capital. The similarities are a common element in their definitions: social connections or social networks. They all agree that social capital is related to the resources people can derive directly from their social connections. The differences are related to the addition of other elements in their definition (besides social networks), theoretical backgrounds, and research purposes.

For Bourdieu (1980, 1986) and Lin (2001), social capital is defined as the resources that are available in social networks. Their analysis is done within an unequal society, constrained by limited resources and power and hierarchical structures. But Bourdieu's approach is based on a constructivist structuralism perspective, while Lin mainly draws on the rational action theory and exchange theory. For Coleman, social capital is defined by function, including obligations and expectations, information channels, and norms. As Lin, Coleman frames social capital within the rational action choice and social exchange theories. For Putnam, social capital equals social networks, and norms of reciprocity and trustworthiness. Putnam's approach is done within the political science field, focusing on democracy and civic engagement.

These conceptual differences continue to be evident in the social capital literature, as a result of authors aligning themselves with different proponents and different goals, according to the discipline in question. In fact, the critiques of social capital are mainly based on these differences. However, the historical path of the concept of social capital shows how, despite its ambiguity, it has common elements and a collective scientific credibility.

But clarifying one's definition is vital, since there is no unanimous understanding of what social capital is. In order to prevent introducing more complexity and ambiguity to an already overloaded concept, I believe that a definition of social capital needs to be narrowed down in scope. This must be done despite the risk of falling into the trap of "economizing" or "minimalizing" the concept. Without a more concrete definition of social capital, the concept may cease to be useful at all.

Based on this literature review, in the next chapter I present my definition of social capital. The operationalization of the concept and the selected theoretical framework are also discussed.

3 Defining and theorizing social capital

3.1 Introduction

Based on the previous literature review, I present in this chapter my definition, operationalization, and theoretical approach to social capital.

I define social capital as the resources that are potentially available and can be mobilized from our social networks¹ (Bourdieu, 1980, 1986; Lin, 2001; De Graaf and Flap, 1988). These resources are intrinsically connected to the social networks where they can be drawn from, but represent more than the sum of those social networks. For instance, as Lin notes (Lin, 2001), resources can be accessed through direct (e.g. friend or family member) or indirect ties² (e.g. a friend of a friend). Additionally, the mobilization of these resources is socially situated: it occurs in a specific context that involves factors, such as social circumstances, timing, reciprocity, etc. As Granovetter explains: “action is always socially situated and cannot be explained by reference to individual motives alone” (Granovetter, 1990:95-96).

I focus on individual social capital, while reinforcing the relational aspect of it. My conceptual, operational, and theoretical approach to social capital is described and discussed herein.

This chapter ends with a description of the research into social capital that has been conducted in Portugal.

3.2 Definition of social capital

I define social capital as the resources that can be derived from our social networks (resources that are potentially available and can be mobilized from our social connections).³ My definition clearly follows Bourdieu (1980) and Lin’s (2001) approach.

¹ A social network is defined as “a structure composed of a set of actors, some of whose members are connected by a set of one or more relations” (Knoke & Yang, 2008:8).

² Ties are defined as interconnections among actors of a social network: “social structures can be represented as networks—as sets of nodes (or social system members) and sets of ties depicting their interconnections” (Wellman & Berkowitz, 1988:4).

³ In a simplified way, the resources are accessible/available in the social structure (they are a structural element and a relational one – if a relationship changes or even ends, it is assumed that the resource will change or no longer be accessible). These resources can be (if needed) mobilized and capitalized by human action. There is, of course, a duality here (borrowing Giddens’ term), a constant dynamic between structure and action, as both are conditioning each other.

Wellman and Wortley (1990) also emphasize this “resource-getting social capital”, showing that friends and relatives are the main source of resources for individuals and households. These resources that can be derived from our social networks cover several domains of life and are related to human, cultural, financial, political, and physical capital (Van der Gaag & Snijders, 2005). Examples of these resources would be emotional support, financial help, help finding a job, access to important information, etc.

Social capital is, in a broad sense, more than the sum of our social networks. Firstly, as my friends might not have a specific type of resource that I need, they may mobilize their own networks to find me that resource. This might happen through an indirect tie (Lin, 2001) or what Boissevain (1974:147-148) defines as ‘second order resources’⁴. Secondly, a diverse network may not necessarily translate into any real type of support or provide me with any resource or the type of resource I need: “not all community ties are supportive, and not all types of ties provide similar kinds of support” (Wellman & Wortley, 1990:559). And this might happen regardless of the size and hierarchical or occupational diversity of that network.

Factors such as timing, perception, opportunity, and context might affect the accessible and/or the mobilized social capital. As Small (2009) emphasizes: whether, how, and under which conditions people interact, meaning the way people form and sustain their social ties, affects their level of social capital. For instance, regardless of the purposively or nonpurposely reasons to form ties, people are more likely to form ties when they have occasions to interact, when they do so regularly, when they are engaged in some activity, and when they have a motive to cooperate. This context of interaction is also shaped by organizations: “people’s social capital depends fundamentally on the organizations in which they participate routinely, and that, through multiple mechanisms, organizations can create and reproduce networks advantages in ways their members may not expect or even have to work for” (Small, 2009:5).

⁴ In discussing social manipulators, i.e. brokers as entrepreneurs, Boissevain (1974:147-148) explains: “the resources an entrepreneur manipulates are of two distinct types, although they are very often found in combination. The first are resources, such as land, jobs, scholarships funds, specialized knowledge, which he controls directly. The second are strategic contacts with other people who control such resources directly or who have access to such persons. The former may be called *first order resources*, the latter *second order resources*. Persons who dispense first order resources may be called *patrons*. Those who dispense second order resources are *brokers*. A broker is thus a special type of entrepreneur: one who controls second order resources and manipulates these for his own profit. Brokers are thus highly expert network specialists” [Italics Boissevain].

Because social capital equals more than the value of an individual's social connections, it must be measured and explored contextually. When researching social capital, one must take into consideration individuals' perceptions of the resources that are available to them and that can be mobilized from their social networks (if necessary). An individual might realistically have more or less resources than she/he perceives; or their network may undergo sudden fragmentation, as could happen if the person moves to a different country or if there is a natural disaster. However, in my research, I rely on my respondents' perception, because it seems to be a reasonable and available proxy for what their network can provide at some given moment in time.

Furthermore, resources might be available in social networks but they might not be accessible, or might not be accessed by the individual (social structure is different from action). This might happen for different reasons, such as lack of trust, too much pride, lack of opportunity, bad timing, or even a deluded perception that a relationship has more value than it actually does. And so, it is important to analyze access and mobilization using Lin's (2001) terms, or in other words, structure and action. The analysis should consider different types of resources, as particular problems or needs call for specific resources (Cf. Flap, 2002).

My definition and operationalization of social capital does not include trust, norms, reciprocity, or networks of civic engagement. As Lin (2001) points out, we might be confusing independent concepts. Additionally, there is no strong evidence or strong theoretical framework to support the inclusion of norms, reciprocity, trust, etc. in the concept of social capital (Cf. Lin & Erickson, 2008). Of course, these variables might be correlated. If we look at social capital in terms of returns on investments, trust and reciprocity become key components. And abstractly, it is easy to understand why: for instance, trust and reciprocity are essential in human interaction. But so are patience, perseverance, love, etc.

To avoid circular reasoning, it is important to pin down the concept in such a way that it avoids mixing up concepts. Human or physical capital might also be related to trust, and norms, and so on, but they are not included as a dimension of these capitals. Rather, variables such as trust, norms, reciprocity, etc., are analyzed separately as a way of contextualizing the analysis. As Fine humorously asks: "Patience is a virtue – But is it capital?" (Fine, 2001:25).

Hoping to contribute to this discussion, I also measure trust and civic engagement as independent concepts. I also look at reciprocity in the qualitative phase of this research.

My definition of social capital, even if more narrowed than the average definition, is never used without considering social and institutional contexts or as a sole explanatory variable.

3.3 Operationalization of Social Capital

3.3.1 Dimensions of social capital

The literature we have looked at so far defines social capital as a multidimensional concept, consisting of different components. Generally, we can identify the following components of social capital⁵:

- Bonding, also called dense networks or strong ties.
- Bridging, also called dispersed networks or weak ties.
- Linking.
- Civic engagement, also called formal networks.
- Resources.
- Trust and Reciprocity.

In the following pages I examine each of the above.

3.3.1.1 Bonding social capital

Ross Gittel and Avis Vidal coined the dimension “bonding” (Gittel & Vidal, 1998, as cited in Putnam, 2000). It relates to homogeneous and closer groups, such as family or close friends. It is associated with the resources available on an individual’s “strong ties”⁶ or “dense networks”. Strong ties tend to be the ones that are perceived as important in a person’s life: they are confidants, and the source of primary personal interaction, support, and help (Strait, 2000; Hampton, 2011). So, “Bonding social capital refers to trusting and co-operative relations between members of a network who are similar in terms of social identity” (Kawachi et al., 2004:682).

⁵ The *Social Capital Initiative* also distinguishes between “Structural social capital” and “cognitive social capital”: “Structural social capital facilitates information sharing, and collective action and decision making (sic) through established roles, social networks and other social structures, supplemented by rules, procedures, and precedents...Cognitive social capital refers to shared norms, values, trust, attitudes, and beliefs” (Grootaert & Bastelaer, 2001:5). Structural social capital is more objective and observable, while cognitive social capital is more subjective and elusive.

⁶ See table 3.1 for a description of strong ties.

In some of the literature bonding and strong ties are used interchangeably when speaking about social capital (Cf. Glanville & Bienenstock, 2009). But they are different concepts: strong ties are composed of people close to an individual, such as family members and close friends. Whereas bonding social capital is the social capital (resources) that is available and can be mobilized in an individual's close social network. Bonding social capital is more than the sum of close ties: it also assesses the quality of those ties. That is to say, one can ascertain the quality of a close tie through the frequency of contact and through the resources of that tie, which can be mobilized by the individual. Thus, to measure bonding social capital, we have to measure close ties.

Bonding social capital provides social support and plays a role in maintaining resources, i.e. in expressive actions (Lin, 2001). For Coleman (1988), social capital was mainly related to close networks. Notwithstanding the general positive externalities of bonding social capital, it can also have negative outcomes for the individual, for the group, or society: they may be restrictive and cause intolerance, in-group thinking, and group conflict (Cf. Putnam, 2000).

Table 3.1
Differences associated with the strength of ties

<i>Weak ties</i>	<i>Strong ties</i>
<ul style="list-style-type: none"> - Acquaintances, casual contacts, others in an organization - Tend to be unlike each other - Travel in different social circles 	<ul style="list-style-type: none"> - Friends, close friends, co-workers, team-mates - Tend to be like each other - Travel in the same social circles - Experience, information, attitudes & resources, contacts come from same pool
<i>Resource and information exchanges</i>	<i>Resource and information exchanges</i>
<ul style="list-style-type: none"> - Infrequent, primarily instrumental - Share few types of information or support - Low motivation to share information, resources, etc. 	<ul style="list-style-type: none"> - Frequent, multiple types: emotional as well as instrumental - High level of intimacy, self-disclosure - Reciprocity in exchanges
<i>Strength of weak ties</i>	<i>Strength of strong ties</i>
<ul style="list-style-type: none"> - Experience, information, attitudes, resource, and contacts comes from different social spheres 	<ul style="list-style-type: none"> - High motivation to share what resources they have

Source: Haythornthwaite, 2005

3.3.1.2 Bridging Social Capital

Bridging social capital, which was also coined by Ross Gittel and Avis Vidal (Gittel & Vidal, 1998, as quoted in Putnam, 2000), is related to more diverse and heterogeneous groups, such as acquaintances, known as “weak ties” or “dispersed networks” (check table 3.1).

Weak ties were seen for decades as non-useful and even damaging, but Mark Granovetter (1973, 1983) proved otherwise with a random sample of job changers that found a new job through contacts. Granovetter asked this sample how often they saw that contact, and in a significant number of cases, the contact was an acquaintance, someone not very close, only sporadically contacted, like an old college friend or former workmate. So, for finding jobs, weak ties turn out to be more efficient than close ties, because acquaintances have access to information and resources that differ from the ones accessed by the individual’s close networks (Granovetter, 1973). Similarly, more people can be reached out through weak ties.

Granovetter’s paper had major implications for the field: first, it showed that individuals with fewer weak ties will be deprived of information from far-off parts of the social system, being limited to the information and views of their close social networks. This deficit may put them in a disadvantaged position in the labor market. Second, it linked micro and macro levels, indicating that the individual experience of social actors is closely connected to larger-scale aspects of the social structure (Granovetter, 1973; 1983). Thus, “weak ties are asserted to be important because their likelihood of being bridges is greater than (and that of strong ties less than) would be expected from their numbers alone”. (Granovetter, 1983:229). Granovetter’s findings have been supported by recent studies (Cf. Brown & Alison, 2001; Levin & Rob, 2004).

Bridging social capital is mainly based on weak ties: ties that are more crosscutting than strong ties, and that present a lower level of homophily when compared to strong ties (Hampton, 2011). These ties have access to different resources, such as information. Bridging social capital allows individuals to access resources that are not possessed or available in the close social network, being useful to gain resources, i.e. for instrumental actions (Lin, 2001).

But bridging social capital is not the same as weak ties: strong ties can also provide bridging social capital. For example, a close family member can provide the individual with valuable and “outside” information that was acquired through a friend of a friend. But bridging is more likely to come from weak ties, outside the close social network

(Hampton, 2011; Granovetter, 1973). Diversity and heterogeneity of resources comes mainly from the border and not from the core (Cf. Hampton, 2011).

Different types of social capital will provide the individual with different outcomes, and so, the majority of authors in the field, recognize that it is beneficial to have both (Putnam, 2000). Bridging social capital might also be pernicious – in the study of the former German Democratic Republic, Volker & Flap (Volker & Flap, 1999, as cited in Flap, 2002) found that weak ties posed a threat in the communist society. Weak ties could be spies or provide information to the state or the party that would be harmful for the individual. And so, even though the regime tried to create social cohesion with mixed neighborhoods, people would keep themselves very reserved and with a small personal social network.

Bonding and bridging social capital are also named in the literature as informal networks, especially in the field of economics (Cf. Woolcock & Narayan, 2000; Grootaert et al., 2004).

3.3.1.3 Linking social capital

Woolcock (2001) added *linking social capital* to the bonding and bridging concepts. For Woolcock, bridging is a horizontal metaphor, suggesting connections among people with more or less an equal social standing. Linking is the missing vertical dimension, which corresponds to the capacity “to leverage resources, ideas, and information from formal institutions beyond the community, most notably the state is a key function of linking social capital” (Woolcock, 2001:11). Linking refers to ties in positions of authority or key economic institutions (Cf. Grootaert et al., 2004). This dimension of social capital is better defined as “norms of respect and networks of trusting relationships between people who are interacting across explicit, formal, or institutionalized power or authority gradients in society” (Szreter & Woolcock, 2004:654).

But Szreter & Woolcock failed to offer an instrument to measure linking social capital (Cf. Kawachi et al., 2004). And although linking social capital seems conceptually different from civic engagement, it has been mostly measured as such, through group membership (Derose, 2008) or voting (Sundquist et al., 2006). In this last case, the authors justify their operationalization arguing that: “participation in voting is a good

indicator of linking social capital and an important component of people's trust in institutionalized political power" (Sundquist et al., 2006:954).⁷

3.3.1.4 Civic engagement

Civic engagement has been a dimension of social capital before the term "linking social capital" was created (Cf. Putnam, Leonardi & Nanetti, 1993; Putnam, 1995a, 1995b, 2000). Civic engagement is defined as "people's connections with the life of their communities, not merely with politics" (Putnam, 1995b:2). It refers to "citizen's individual and collective involvement in public affairs" (Park & Perry, 2008:238).

Because civic engagement comprises a great variety of forms of political and non-political activities, there has been some theoretical and operational difficulties in defining and measuring civic engagement (Cf. Park & Perry, 2008). Nevertheless, civic engagement has been measured with indicators of associational life, newspaper readership, and electoral turnout (known as the civic community index by Putnam, Leonardi & Nanetti, 1993). Putnam (2000) replaced this civic community index by a general social capital index, which includes measures of community organizational life, engagement in public affairs, community volunteerism, informal sociability, and social trust.

Trying to categorize civic engagement in a more coherent way, Park & Perry (2008) defined four types of civic engagement (see table 3.2). These types are divided by electoral engagement (which includes elections and campaigns) and non-electoral engagement (which includes participation in general politics, government politics, and/or community issues); and by deliberative civic engagement (which refers to an exchange of information or opinions among citizens) and action-oriented civic engagement (which implies action).

⁷ Actually, because of the study framework, Sundquist et al. (2006) operationalized linking social capital as voting in local elections: "The main reason for choosing voting in local government elections instead of national voting was that this choice enabled us to include immigrants without Swedish citizenship in the construction of the neighbourhood-level variable. Refugees and immigrants born abroad—arguably among the country's most powerless residents—may vote in local government elections after a minimum of one year's residence in Sweden. However, voting in national elections requires Swedish citizenship. In some urban neighbourhoods, immigrants constitute between 45% (Flemingsberg in Stockholm) and 83% of the population (Rosengård in Malmö). This implies that if national voting was used instead of voting in local government elections, a high proportion of the inhabitants in some neighbourhoods would be excluded from the construction of the neighbourhood-level variable, i.e. the number of people in the neighbourhood who voted in the 1998 community elections divided by the number of people in the neighbourhood who were entitled to vote" (Sundquist et al., 2006:955).

Table 3.2
Classification of civic engagement by Park & Perry (2008)

	<i>Deliberative Engagement</i>	<i>Action-oriented Engagement</i>
Electoral Engagement	- Talk to people and try to show why they should vote for or against	- Attend rallies and speeches - Give money to a candidate or party
Nonelectoral Engagement	- Talk about politics with family or friends	- Contact government officials to express personal views on public issues - Work with other people to deal with community issues

3.3.1.5 Resources

For Bourdieu (1980, 1986) and Lin (2001), resources are central elements of social capital, being accessible through an individual's network. Moreover, resources are central elements of the social structure (Giddens, 1984).

There are different categorizations of resources (resources and social resources are used interchangeably in the literature). For instance, for Lin (2001) we can define two types of resources an individual can access and use: The first type is personal resources, which can be divided into material goods and symbolic goods. Material goods include things like a computer, a car, a house, etc. Symbolic goods include things like an institutional accreditation. The second type of resources is social resources, which are resources acquired through an individual's social connections. For example, having a friend of a friend put in a good word for a job (Lin, 2001). For Lin (2001), social resources prevail over personal resources in their prospective value for individuals (in terms of quality and quantity), as they represent resources available in certain positions, but also other elements as power, reputation, etc.

Lin (2001) defines three main types of social capital resources – wealth (economic assets), power (political assets), and reputation (social assets). However, there are more than wealth, power, and reputation related resources. Social support is also a main type of resource accessible through social networks. As Flap explains: "Social capital is not a one-dimensional all-purpose resource, but has distinguishable

components with different effects. Some kinds of social capital may be generally useful, while other kinds are goal-specific” (Flap, 2002:11).

Lin (2001) differentiates resources that lead to expressive and to instrumental actions, as social capital can be used to achieve returns in instrumental actions (e.g. finding a job) or to maintain gains in expressive actions (e.g. emotional support). Lin (2001) also distinguishes between available and mobilized resources. As Coleman (1988) already noted, social capital might be available, but people might decide not to use it for a different set of reasons: the actual need for help; other sources of aid/care, like institutions; wealth (that might reduce the aid needed from others); cultural aspects that influence the predisposition to ask/give aid; closure of social networks; etc.

Despite the centrality of resources for the concept, the research on social capital has been mainly focused on social networks and their sizes, neglecting resources and how they are available and accessible to the individual (Flap, 2002).

So, resources are a main element of social capital, and the study of social capital should consider (De Graaf and Flap, 1988, as quoted in Flap, 2002):

1. Number of persons within one’s social network available when the individual needs them
2. Strength of relationship indicating readiness to help
3. Resources of these persons

3.3.1.6 Trust and reciprocity

Sociologists have long recognized the importance of trust in human behavior and social reality – as Émile Durkheim states: “in a contract not everything is contractual” (Durkheim cit. by Marshal, 1994). Trust is a complex concept, but in a simple and broad definition, it is a “bet about the future contingent actions of others” (Sztompka, 1999:27). Trust curbs uncertainty and risk, as it is the “confidence in the reliability of a person or system, regarding a given set of outcomes or events, where that confidence expresses a faith in the probity or love of another, or in the correctness of abstract principles” (Giddens, 1990:34). Trust is, therefore, essential for the establishment of a wide variety of social relationships, while it diminishes transactions costs (Fukuyama, 1995).

Trust implies beliefs and commitment: beliefs in specific actions and outcomes, commitment through action that can take on three forms: anticipatory trust, responsive trust, and evocative trust (Sztompka, 1999).

Anticipatory trust happens when I act toward others, believing that those actions will meet my needs and will generally affect me positively (e.g. voting for a political candidate). Responsive trust occurs when we entrust others with something, an object, a person, etc. (e.g. depositing money in a bank, leaving a child with a babysitter). And finally, evocative trust is a type of commitment when we act on the assumption/belief that the other person will reciprocate with trust (e.g. a boss gives an employee a responsible and high-paid task). As Sztompka (1999) states, these three types of commitment may be one act of trusting, as this separation is artificial and it is done merely for analytical purposes. Moreover, commitment might have various degrees of strength.

Social capital depends on an investment on relationships, and for this investment to occur people need to trust each other and to be able to reciprocate. As Bourdieu (1980) notes, the reproduction of social capital implies a continuous effort of sociability and exchanges in which recognition is incessantly acknowledged and re-acknowledged. This presupposes investing a great amount of energy, time, and money (Bourdieu, 1980). Coleman (1988) also considers that one form of social capital is “obligations and expectations”, which are based on trustworthiness and reciprocity. If someone does me a favor, that person trusts that I will return it in due time. ‘Credit slips’ are therefore pending between us: I have an “obligation” to that person, and that person has an “expectation”.

According to Putnam, trust can be divided into a “thick trust” and a “thin trust”: Thick trust is embedded in strong and close personal networks, while thin trust is related to the “generalized other”, like an acquaintance (Putnam, 2000:136). For the author, thin trust is more valuable than thick trust, because it extends trust beyond the people one knows in person, being more important for a healthy democracy and civic life (Putnam, 2000).

Trust and reciprocity are, for many authors, core elements of social capital (Putnam, 2000; Ostrom & Ahn, 2003; Glanville & Bienenstock, 2009; Sztompka, 1999). For Ostrom & Ahn, trustworthiness is even more critical to the social capital concept: “individuals' intrinsic values are an independent reason for behaving cooperatively and reserve the term trustworthiness primarily to refer to such intrinsic motivation” (Ostrom & Ahn, 2003:7). Similarly for Putnam, “trustworthiness, not simply trust, is the key ingredient” for a community (Putnam, 2000:136).

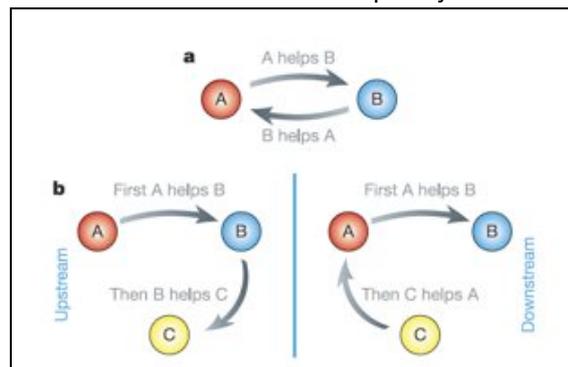
There is an agreement that trust and reciprocity are related, but authors disagree on the “how”. On the one hand, trust motivates reciprocity, as there has to be a social structure that assures that trust is making people feel comfortable to initiate exchanges. On the

other hand, trust is a consequence of reciprocity, because people who risk to exchange and obtain a reciprocal reaction learn to trust that reciprocity (Glanville & Bienenstock, 2009).

There are different types of reciprocity: the most common ones being direct reciprocity and indirect reciprocity (also called “generalized reciprocity”). Direct reciprocity is: A helps B and B helps A; or “You’ll scratch my back, and I’ll scratch yours” (Nowak & Sigmund, 2005:1291). Indirect reciprocity can be translated into “You scratch my back and I’ll scratch someone else’s” or “I scratch your back and someone else will scratch mine” (Nowak & Sigmund, 2005:1291). Indirect reciprocity “refers to a continuing relationship of exchange that is at any given time unrequited or imbalanced, but that involves mutual expectations that a benefit now should be repaid in the future” (Putnam, 1993:172). This last form of reciprocity is used to explain altruism among strangers. Both forms of reciprocity are described visually on the next figure (see figure 3.1).

In this diagram, indirect reciprocity has two possible directions: upstream or downstream. Upstream indirect reciprocity is the result of a recent positive experience: Individual A who was helped by B helps C. In downstream indirect reciprocity, the individual A has helped B and because of that is helped by C. Reputation is the main element of the latter. Both upstream and downstream cases are observed in experiments, and in both “the decision to help can be interpreted as a misdirected act of gratitude. In one case recipients are thanked for what another did; in the other case they are thanked by someone who did not profit by what they did” (Nowak & Sigmund, 2005:1292).

Figure 3.1
Direct & indirect reciprocity



Source: Nowak & Sigmund, 2005

These different types of reciprocity may result in different types of trust. Direct reciprocity may produce only local trust, while indirect reciprocity may generate more generalized trust. However, research in the area, specially in game and social exchange theory, suggests that direct reciprocity may also garner generalized trust, when the experience is constant, frequent with different partners or when other factors might come into play, such as reputation (Glanville & Bienenstock, 2009.)⁸

Although reciprocity is of great importance to social relationships, it has not been considered a main component of social capital, and has not been consistently measured as trust. The reason for this disregard might be related to the assumption that trust creates reciprocity, or that reciprocity is included in trust.

Trust appears to be higher in closed networks since it is easier to reach an agreement and enforce it among stronger ties (Flap, 2002), but it also has to exist to allow relationships to build among weak ties.

3.3.2 Dimensions in and dimensions out

These dimensions of social capital differ from definition to definition. The “unique” common element of all the social capital definitions is the social relationships or social networks. The divergence starts on defining which characteristics of these social networks should be taken into account; characteristics such as density, homogeneity, bridges and structural holes, etc. (Glanville & Bienenstock, 2009). Despite social relationships being central to the social capital concept, interactions with strangers are

⁸ To explain the evolution of cooperation, Robert Trivers (1971) explores the concept of “reciprocal altruism” and its natural selection. As the author explains “Altruism is suffering a cost to confer a benefit. Reciprocal altruism is the exchange of such acts between individuals so as to produce a net benefit on both sides” (Trivers, 2006:68). The list of human reciprocal altruism is actually very close to some outcomes of social capital: helping in times of danger, sharing food, helping the sick and the ones in need, sharing implementations, and sharing knowledge (Trivers, 1971). There is a belief that a higher number of reciprocal relationships will be better for the individual and for society, however, as Trivers notes, relationships might also be exclusive, as it diminishes exchanges with the “others” that are not part of our group or social circles (Trivers, 1971). Despite underlining that selection will favor mechanisms for establishing reciprocal relationships, Trivers (1971) acknowledges the complexity of these relationships, citing research that shows, for instance, that humans may initially act more altruistically to strangers than friends, seeking to achieve specific goals, such as making new friends. In addition, strangers playing iterated games of Prisoner’s Dilemma tend to drop the level of cooperation at the end of the series, knowing that there will be no time to punish each other (Trivers, 1971). More important than all, humans respond to altruistic acts according to their perception of the motifs of those actions (Trivers, 1971). For Trivers, selection may favor what he calls “generalized altruism”, a multiparty altruistic system in which altruistic acts are distributed freely between more than two individuals. This generalized altruism also provides action against the non-reciprocators or cheaters (Trivers, 1971). And this system might have had a surprising impact on human evolution. Moreover, taking into account “the psychological and cognitive complexity that the system acquires – one may wonder to what extent the importance of altruism in humans evolution set up a selection pressure for psychological and cognitive powers which partly contributed to the large increase of the hominid brain size during the Pleistocene” (Trivers, 1971:54).

not considered for social capital, because although people do engage with strangers, random and anonymous encounters are rare, mainly those where resources are gained from (Glanville & Bienenstock, 2009). People are embedded in social structures, so even when two people do not directly know each other, there is a chance that they know someone who knows someone who does – just like the theory of the six-degrees of separation claims (Cf. Milgram, 1967; Watts, 2003; Glanville & Bienenstock, 2009).

The major disagreement appears to be between the approaches that accentuate resources versus trust or reciprocity, what seems to be related to the level of analysis, explicitly micro versus macro (Glanville & Bienenstock, 2009). For Glanville and Bienenstock (2009), resources and trust are both elements of social capital, despite the level of analysis. Thus, social capital can be placed along four continua: dense networks to dispersed networks, level of reciprocity and trust, level of resources, and level of analysis (Glanville & Bienenstock, 2009).

Following my definition and approach to social capital, I consider only three dimensions of social capital: bonding, bridging and resources. I measure bonding and bridging dimensions in general, and then I turn to specific resources in social networks, such as financial aid, emotional support, among others. In the case of resources, I differentiate between available and mobilized resources (Lin, 2001). The resources perceived to be available to the individual are measured in the survey, whereas mobilization is explored in the qualitative interviews.

I do not consider trust, reciprocity, or civic engagement as dimensions of social capital, because it is important to avoid mixing concepts that might be independent: “When it [social capital] is measured using multiple concepts such as memberships, norms and trust, there is a danger of confusing a causal proposition (e.g. networks promote trust or vice-versa) with multiple indicators of the same thing (networks, trust and norms all measure social capital)” (Lin, 2001:211). In addition, there is no strong theoretical or empirical support to treat variables, such as trust, norms, or civic engagement, as dimensions of social capital (Lin, 2001; Lin & Erickson, 2008). Nevertheless, I measure trust, civic engagement, and reciprocity as independent variables. I look at the relationships between these variables and social capital, aiming to contribute to the theory of social capital.

In the case of the linking social capital, this dimension lacks any type of clear operationalization and has been measured through what can be considered as civic engagement. Although the connection to formal institutions and key power and authority

actors is definitely important, I think we can integrate it in the measurement of bridging, resources, and even bonding.

3.4 Theoretical framework

3.4.1 Social capital: concept or theory?

Social capital has been used interchangeably as a concept and a theory. Although “the concept of social capital has been developed not in pure theory but primarily in the context of addressing political and economic problems that real world human communities face” (Ostrom & Ahn, 2003:7), social capital was developed within a capital theory. This was not the classical capital theory, but a neo-capital theory (Cf. Lin, 2001), which includes other forms of capital, such as cultural and human capital. For instance, Coleman (1988) developed social capital in relation to human capital, while Bourdieu (1980, 1986) developed it in relation to cultural capital and economic capital.

Social capital is both a concept and a theory: as a concept, it corresponds to investment and possession of resources of a particular value in a given society; as theory, it describes a system by which such resources are produced, reproduced, and accumulated (Lin & Erickson, 2008).

It is difficult to separate a conceptualization from a theoretical standpoint, as the first chapter proves it. Both are usually intertwined. The conceptualization of social capital has been associated with different theoretical frameworks: for instance, Bourdieu’s work is based on his structural constructivism, while Coleman’s work is based on rational action and social exchange. Interestingly enough, the rational action and social exchange framework persists in the social capital literature, as can be seen in Lin’s work (2001, 2008).

For all the reasons explored above, theories of rational action and social exchange are reductionist and based on rational calculation and self-interest. I am not saying that social capital might not be a conscious strategic investment. It is in various situations. For instance, entrepreneurs often have a clear idea of how important network investments are (Cf. Côté, 2011).

There are also structural contexts that reinforce the investment calculation; for instance, Primo Levi (1970:94-95, as quoted in Flap, 2002:41) recounts in his autobiography (while he was in Auschwitz’s concentration camp):

With the adaptable, the strong and the astute individuals, even the leaders willingly keep contact, sometimes even friendly contact, because they hope to perhaps derive some benefit. But with the musselmen, the men in decay, it is not even worth speaking, because one knows already that they will complain and will speak about what they used to eat at home. Even less worthwhile is it to make friends with them, because they have no distinguished acquaintances in camp, they do not gain any extra ration, they do not work in profitable Kommandos and they know no secret method of organizing. And in any case, one knows that they are only here on a visit, that in weeks nothing will remain of them but a handful of ashes in some near-by field and a crossed-out number on a register.

But the single rational view neglects other important elements such as disinterested action and structural and institutional constraints. For example, specific places and facilities influence not only contact opportunities, but also types of relationships and outcomes, such as in the example of Primo Levi (Cf. Flap, 2002). And so, institutions also influence, positively or negatively, social capital (Flap, 2002).

People may form ties purposively but they also may do it nonpurposely, so “people can make ties when it was their purpose, when they had a purpose other than making ties, when their purpose was nothing but the act itself, and when they had no purpose at all at the time of social interaction” (Small, 2009:13):

- In the first case, I might introduce myself to someone that I want to know to gain a specific connection/resource.
- In the second case, for instance, I am at a bus stop waiting for the bus, when I ask another person waiting at the stop if the bus stops on a particular street. We then start a conversation that ends in changing mobile phone numbers – networking was not my purpose; my purpose was to know if the bus would stop at a particular street.
- In the third case, an expressive act, such as a laugh, might lead to a new tie: for example, I am at the bus stop and a funny dog passes by, I and the other person at the bus stop start laughing and then a conversation ensues. We exchange contacts and we keep in touch.
- In the fourth case, purpose plays no role because the tie results of pre-existing predispositions (habitual actions, following Bourdieu’s conceptualization). For example, I am at the bus stop and I sneeze, the other person at the bus stop

says “bless you” and a conversation follows – the act (the “bless you”) was not expressive (it did not convey a feeling) or had a purpose, it was “blurted out of habit(us)” (Small, 2009:13).

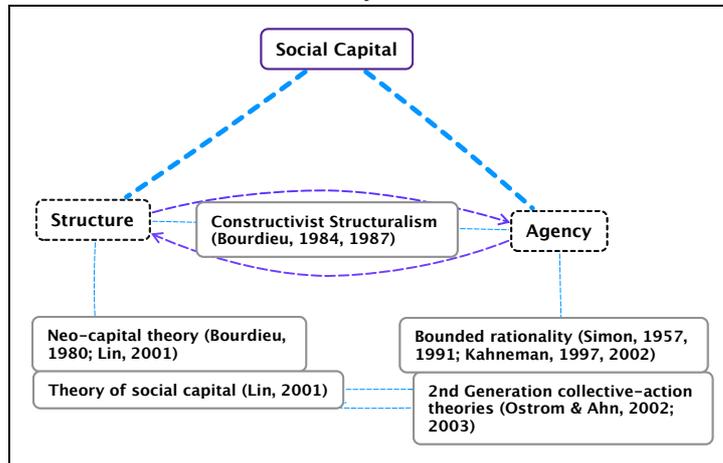
Neuroscience research has been also showing that the rational and the emotional brain are connected. António Damásio (1994, 2010) found that patients whose connection between the amygdala (emotional brain) and neocortex (rational brain) has been damaged display poor decision-making skills. People without access to the amygdala storage of emotions can see alternative paths, but do not know how to assess them, spending hours trying to rationalize choices.

In his 1994 book, *The Error of Descartes*, Damásio describes one of his patients, Elliot, a successful businessman who had a brain tumor surgically removed. As a result of the operation, Elliot’s ventromedial prefrontal cortex was damaged so he lost the ability to feel emotions. While Elliot’s level of IQ and his memories were intact, he could no longer “feel”, which had detrimental consequences: he could not decide between two choices, he would not learn from mistakes, he would take hours to decide what to wear or what to eat, he lost his job and his wife. He suffered a radical change of personality. Damásio’s work (1994, 2005, 2010), based on his study of numerous patients with the same condition and behavior, refutes the Cartesian mind/body rationality/emotion dualism showing that emotions guide decision-making processes and that a “full” rationality is simply not possible. This example from a different field shows how even in a multidisciplinary approach the rational choice theory loses ground.

3.4.2 A multi-theory approach

My approach to social capital is done within a broader theoretical framework. It considers structure and agency, and combines elements from different theories: constructivist structuralism (or structural constructivism), neo-capital theory, theory of social capital, bounded rationality, and second-generation collective-action theories (see figure 3.2).

Figure 3.2
Multi-theory framework



Firstly, my understanding of social capital is based on a dynamic relationship between structure and agency (Constructivist structuralism, Bourdieu, 1985; 1987). Secondly, in this loop I include:

- Neo-capital theory, which considers new forms of capital, besides the economical one;
- the theory of social capital proposed by Lin (2001), which shows how social capital is based on a set of structural, network, interaction, and action postulates;
- the theory of bounded rationality (Simon, 1957; Kahneman, 2002), which I use to dispute and replace the action choice theory of Lin and other authors of social capital, such as Coleman;
- Second-generation collective-action theories (Ostrom & Ahn, 2003), which I draw to emphasize that actions can be purposive or nonpurposive (a clear “egoistic” investment or an “altruist” act).

These theories are discussed in more detail next.

But before discussing these theories, it is important to draw some considerations about structure and agency: both play a crucial role in the production, preservation, and reproduction and mobilization of social capital. Social capital has been, for several authors, an element of the social structure (Coleman, 1990; Lin, 2001; Burt, 1997; 2000). For instance, Coleman defines social capital “as an attribute of the social structure in which a person is embedded, social capital is not the private property of any of the

persons who benefit from it” (Coleman, 1990), but Coleman considers action, at least rational one. Bourdieu (1987) and Lin (2001) also consider agency in their approach to social capital. As a matter of fact, Lin (2001) proposes a theoretical example of how action can lead structure.

Structure has been a core, yet elusive, concept in the social sciences realm (Cf. Sewell, 1992). It is related to a structure that structures a facet of social life, such as class, gender, etc. As Sewell explains “Structure, in normal sociological usage, is thought of as “hard” or “material” and therefore as primary and determining, whereas culture is regarded as “soft” or “mental” and therefore as secondary or derived” (Sewell, 1992:3). Agency (human agents) is defined as human action, i.e. undetermined human action, normally in opposition to the deterministic structure (Marshall, 1994). The concept of structure has been associated with a deterministic view that neglects agency (i.e. human action) and social change (Sewell, 1992).

George Simmel (1903, Translation 1950), Norbert Elias (Cf. *figurational sociology* and the *European habitus*, 1939, Translation 1978), and Talcott Parsons (Shils & Parsons, 1951) had already explored the notion that structure and agency are not in opposition; they interplay. More recently, Pierre Bourdieu (1972, 1984, 1986, 1990) with *habitus* and *field* (already explored in chapter 1) and Anthony Giddens (1976, 1984) with his *duality of structure* have been central authors in transcending this dualism. Anthony Giddens presents structure as a process, a ‘structuration’ based on the theorem of “duality of structure” – “The constitution of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality” (Giddens, 1984:25). Structures shape people’s actions, but those actions also form and reproduce structures:

Structure, as recursively organized sets of rules and resources, is out of time and space, save in its instantiations and co-ordinations as memory traces, and is marked by an “absence of the subject”. The social systems in which structure is recursively implicated, on the contrary, comprise the situated activities of human agents, reproduced across time and space. Analyzing the structuration of social systems means studying the modes in which such systems, grounded in the knowledgeable activities of situated actors who draw upon rules and resources in the diversity of action contexts, are produced and reproduced in interaction (Giddens, 1984:25).

As can be read from Giddens’s definition, structures are composed of rules and resources: rules are “generalizable procedures applied in the enactment/reproduction of social life” (Giddens, 1984:21) and resources are “the media whereby transformative

capacity is employed as power in the routine course of social interaction” (Giddens, 1979:92).

For Bourdieu (1972, 1987, 1990) and Giddens (1979, 1984), the social structure has no reality apart from its instantiation through what Bourdieu calls *practices* (Cf. *theory of practice*, 1972) and what Giddens calls *actions* of human beings. However, structure remains an unclear concept (Sewell, 1992).

In a full-blown analysis of structure, Sewell (1992) advances a conceptualization of structure that bridges structure and agency, without neglecting social change: “structures...are constituted by mutually sustaining cultural schemas and sets of resources that empower and constrain social action and tend to be reproduced by that action. Agents are empowered by structures, both by the knowledge of cultural schemas that enables them to enact schemas” (Sewell, 1992:27).

Schemas are the effects of resources, and resources are the effect of schemas: they both constitute structures as long as they commonly entail and support each other (Sewell, 1992). Agency emerges from the agents’ knowledge of schemas and the capability to apply it: “agency arises from the actor’s control of resources, which means the capacity to reinterpret or mobilize an array of resources in terms of schemas other than those that constituted the array” (Sewell, 1992:20). This capacity is innate to all human beings, what varies is their social milieus, and their control of resources, social interactions, and power (Sewell, 1992). Agents in different social positions will have different knowledge of schemas, different access to resources, and consequently different opportunities for “transformative action” (Sewell, 1992:21).

Now that the definition of structure and agency is clear, I move to Bourdieu’s constructivist structuralism that describes the interplay between structure and agency, between schemas and resources. This theory helps to understand how different types of capital are produced and used. I already explored Bourdieu’s constructivist structuralism in the first chapter, but I summarize it briefly here:

- a. **Constructivist structuralism** is Bourdieu’s (1984, 1987, 1989) attempt to bridge structure and agency:

If I had to characterize my work in two words, that is, as it often done these days, to apply a label to it, I would talk of constructivist structuralism or of structuralist

constructivism, taking the word structuralist in a sense very different from that is given to it by the Saussurean or Lévi-Strauss tradition (Bourdieu, 1987:147).⁹

With structuralism, Bourdieu refers to the objective structures of the social world. These structures are independent of the conscience or desire of the social agents, yet are able to shape practices and representations of social agents (like language and culture). With constructivism, Bourdieu highlights the social origin of systems of perception, thought, and action, what he called *habitus*, and the social structures, particularly what he defined as *field* (Bourdieu, 1987).

Habitus accounts for how, facing the social structure, the individuals mediate and shape their actions and thoughts, for instance, their practices, gestures, etc. *Field* is a structured space of power and struggle, where agents and their social positions are placed (it is the network of social relationships that affects the *habitus* of the agents). Capitals are resources in the social struggles that are carried out in these fields. The theory emphasizes that we have to study the social structures, considering how people perceive and construct their own social world, but without ignoring how perception and construction are constrained by those structures.

Critics, such as Sewell (1992), stress that Bourdieu's theory leaves no space for significant social change from and within structures: "In Bourdieu's *habitus*, schemas and resources so powerfully reproduce one another that even the most cunning or improvisational actions undertaken by agents necessarily reproduce the structure" (Sewell, 1992:15). Bourdieu still gives a determinant role to the objective structures, neglecting the role of social interactions on the construction of the social reality (Corcuff, 1995).

While taking into account this criticism to the constructivist structuralism, I integrate it in

⁹ Translated from the original: "*Si j'avais à caractériser mon travail en deux mots, c'est-à-dire, comme cela fait beaucoup aujourd'hui, à lui appliquer un label, je parlerais de constructivist structuralism ou de structuralist constructivism, en prenant le mot structuralisme en un sens très différent de celui que lui donne la tradition saussurienne ou lévi-straussienne. Par structuralisme ou structuraliste, je veux dire qu'il existe, dans le monde social lui-même, et pas seulement dans les systèmes symboliques. Langage, mythe, etc., des structures objectives indépendantes de la conscience et de la volonté des agents, qui sont capables d'orienter ou de contraindre leurs pratiques ou leurs représentations. Par constructivisme, je veux dire qu'il y a une genèse sociale d'une part des schèmes de perception, de pensée et d'action qui sont constitutifs de ce que j'appelle habitus, et d'autre part des structures sociales, et en particulier de ce que j'appelle des champs et des groupes, notamment de ce qu'on nomme d'ordinaire les classe sociales*" (Bourdieu, 1987:147).

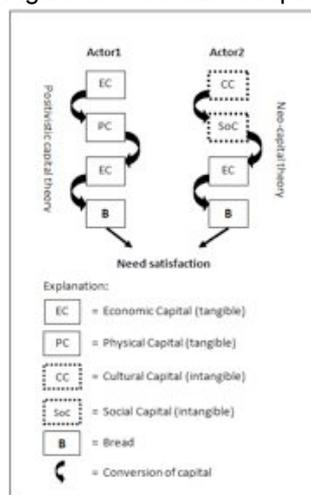
the theoretical framework of this research, because it considers agency and the interplay between structure and agency, allowing to frame social capital (and other capitals) in this interplay. As a matter of fact, Bourdieu's (1986) forms of capital are placed in this theoretical perspective. To complement this constructivist structuralism, I turn to Lin's (2001) theory of social capital that considers how agency can lead to social structure. Lin's theory of social capital can be linked to neo-capital theories that consider different forms of capital.

b. The neo-capital theory is not limited to economic capital, considering other forms of capital, such as cultural and social (Lin, 2001). Bourdieu's forms of capital broke with the traditional economics, leading to a "neo-capital theory", which aims "to break with formerly positivistic capital theory" (Svendsen, Kjeldsen & Noe, 2010:632). The figure 3.3 figure contrasts both theoretical frameworks.

According to Svendsen, Kjeldsen & Noe (2010), the model based on Bourdieu's neo-capital theory is more accurate: to reach the bread, the individual converts intangible and tangible forms of capital. For instance, the individual might use his cultural capital to improve his social capital, which might help him finding a job and get money (economic capital) to buy bread.

This neo-capital theory describes, therefore, a scheme by which different forms of capitals are produced, reproduced, and accrued.

Figure 3.3 - Forms of capital



Source: Svendsen, Kjeldsen & Noe, 2010

c. Within this neo-capital theory, Lin (2001) proposes a **theory of social capital**, which also intersects structure and agency. This theory was already explored in chapter 2, but I describe it briefly here:

Lin's (2001) theory of social capital is based on a set of structural, network, interaction, and action postulates that state that motivated/purposive action lead to interactions, whereas the endeavor of mobilizing resources is controlled by the resource's availability and diversity in the social structures where individuals act. These motivated or purposive actions (taken by collective or individual actors) can be expressive and/or instrumental. Expressive actions are related to the protection of valued resources (e.g. a person complaining about her boss to a friend, seeking emotional support). Instrumental actions are related to gain valued resources (e.g. a person talking to friends, seeking a promotion or a better job).

Lin (2001) argues that agency and structure are both important in a theory of social capital, but proposes a theoretical scenario that puts action leading social structure through the mobilization of social capital. His theory is based on the following theorems:

1. **The social-capital proposition:** *the success of action is positively associated with social capital.*
2. **The strength-of-position proposition:** *the better the position of origin, the more likely the actor will access and use better social capital.*
3. **The strength-of-strong-tie proposition:** *the stronger the tie, the more likely the social capital accessed will positively affect the success of expressive action.*
4. **The strength-of-weak-tie proposition:** *the weaker the tie, the more likely the ego will have access to better social capital for instrumental action.*
5. **The strength-of-location proposition:** *the closer the individuals are to a bridge of a network the better social capital they will access for instrumental action.*
6. **The location-by-position proposition:** *the strength of a location (in proximity to a bridge) for instrumental action is contingent on the resource differential across the bridge.*

7. The structural contingency proposition: *the networking (tie and location) effects are constrained by the hierarchical structure for actors located near or at the top and bottom of the hierarchy.*

This theory of social capital is relational (and not individualistic), entwined within a hierarchical structure, and it entails action (instrumental or expressive) by the individuals to minimize loss and/or maximize gain (Lin, 2001).

The instrumental (to gain resources) and expressive actions (to maintain resources) that lead to returns on social capital have structural frameworks: Instrumental actions provide social interactions that support vertical relationships among individuals with different resources, interests, and lifestyles; expressive actions provide social interactions that support horizontal relationships among individuals with same resources, interests, and lifestyles. Instrumental actions allow for better social mobility and sharing of resources in society, while expressive actions allow for solidarity and stability of social groups.

However, Lin (2001) explains how agency (in this case, rational actions) can lead to social structure: Firstly, rational individuals interact to minimize the loss of resources and to maximize the gain of resources. Secondly, these calculations of resources lead to rules of how resources are transferred among people (e.g. to the family). Thirdly, facing the scarcity of valued resources (and considering that the value of social capital exceeds that of personal capital), the individuals extend their interactions outside their close groups. When “outside” ties and consequent exchanges are arranged (what comes with the willingness to reciprocate in terms of recognition and profit), then specific collective rules and collectivities come into place (Lin, 2001).

While Lin’s theory of social capital presents a wide-ranging framework to social capital, it is based on rational choice and social exchange theories. For Lin (2001), the individual is considered rational, as long as calculations and choices based on self-interest (or collective interest embedded in self-interest) are made. He emphasizes relational rationality, stating that human beings are generally interested in maintaining enduring and gainful relationships merely at a transactional cost. Social exchange is also used to explain the interaction level of exchange between actors with high valued resources and actors with low or none-valued resource – for instance, reputation would be the main motive for an actor to be involved in social exchanges with an actor with lower-valued resources (Lin, 2001).

To replace the central role of the rational action and social exchange theories on social capital, I bring bounded rationality and second-generation collective-action to this theoretical framework.

d. Bounded rationality considers other factors in the “rational” decision-making process (Simon, 1957, 1991; Kahneman, 1997, 2002) and emerged as an alternative to the rational choice theory. It considers that rationally is cognitively limited and that rationalization (utilitarian maximization) is not linear (Kahneman, 1997, 2002). Simon (1957) also introduced the concept “satisficing” or “satisfice” to illustrate that agents have limitations in making a fully rational decision: they have only bounded rationality, having to make decisions by satisficing, i.e. reaching not an optimal or rational decision but one that is good enough, that satisfies them. This theory was explored in more depth in the second chapter.

e. Second-generation collective-action theories complement the other theories, specially bounded rationality. The second-generation theories replaced the first-generation ones, which viewed individuals as fully rational, selfish, and atomized beings (Ostrom & Ahn, 2003). The first-generation theories were a valid opposition to the assumption that individuals with common interests would willingly act to attain those common interests (similar to the romanticized idea of the noble savage). Individuals live in communities and societies, and research has been rejecting the universal selfishness idea (Cf. Ostrom, 1998; Ostrom & Ahn, 2003). Studies in the field and in laboratory settings show that there are individuals who are only preoccupied with their material gain at the expense of others, but there is also a considerable proportion of individuals that have non-selfish utility functions, taking into account other individuals’ interests in their decisions (Ostrom & Ahn, 2003).

Obviously, the universal selfishness postulation cannot be replaced by a universal altruist postulation (Ahn & Ostrom, 2002). Non-selfish individuals also diverge in terms of the entirely selfish motivations. Moreover, choices of individuals in social dilemmas are significantly affected by a great number of contextual factors (Frohlich et al., 2001, as quoted in Ahn & Ostrom, 2002). And so, second-generation theories recognize the existence of multiple types of individuals, while also taking into account institutional structures and context. The second-generation collective action theories still use behavioral and evolutionary game theories to understand human collective action, namely aspects such as social motivations and endogenous preferences (Ahn & Ostrom, 2002).

These main theories inform the theoretical framework of my research on social capital.

Although I am not testing specifically this general multi-approach theory, this is how I approach social capital in this research. Social capital is a form of capital that may be available to the individual and may be mobilized by the individual to achieve specific instrumental outcomes (e.g. finding a job) or expressive outcomes (e.g. emotional support). It is a relational resource whose production, maintenance, reproduction, and usage are conditioned concurrently by structure and agency (by field and habitus). For instance, social interactions are influenced by social predispositions, norms, rules, etc., while types of interaction and social agents also influence social predispositions, norms, etc. This dual dynamic affects social capital.

Social capital is produced, reproduced, and destroyed consciously or unconsciously by individuals, which are simultaneously driven by altruism and self-interest, by purposive and nonpurposive actions, by emotion and reason; individuals that are simultaneously conditioned by structure and agency, by field and habitus. Additionally, context is not forgotten in these theories. A single theoretical framework frequently fails to recognize the complexity of the social reality. Therefore, I felt the need to support my general framework on a more holistic perspective, hence a multi-theory approach.

In the next section, I look at the social capital research in Portugal.

3.5 Social capital research in Portugal

The study of social capital in Portugal has been mainly focused on citizenship and civic engagement (Correia, 2005; Cruz, 2005; Mesquita, 2008), local development (Seixas, 2007; Santos, 2008; Silva, 2008), and immigration (Albuquerque, 2008; Grassi, 2009).

Theoretically, Paiva (2008) proposes a new paradigm and a new analytic instrument for social capital: the New Sociological Theory (NTS) and the Sociological Star Model (MES) that explains social capital in societies through a star model, where each ray corresponds to different social dimensions. However, for Paiva (2008) social capital is defined as social cohesion, which replaces concepts such as society and culture. Her MES would assess social cohesion in groups and in society, through the selection, analysis, comparison, classification, and quantification of social actions and their societal consequences. Although, Paiva (2008) presents an interesting new angle on social capital, mainly drawing on recent neuroscience research, I do not consider social capital to be social cohesion (in addition, social capital is only conceptualized as positive).

A search at the Portuguese National Library database did not match any theses,

dissertations, monographs or books on social capital before 2004 (search from 1935).¹⁰

There are no national social capital studies that can give us a broad national portrayal of social capital in Portugal. Some exceptions are: a special Eurobarometer by the European Commission (2005) that measured social capital in Portugal (which is described below); and the European Social Survey (ESS) that surveys, since 2002 and biennially, two questions that might be used to measure social capital, although they would not be enough to create a social capital variable. The questions are: “How often do you socially meet with friends, relatives or colleagues”, measured in frequency; “Do you know anyone to discuss intimate and personal matters with?”, measured dichotomously with a yes or no. The ESS also measures social trust and civic engagement.

But the majority of studies are micro-localized, addressing a specific neighborhood or locale. With a broader reach, but still focusing in some specific locales, Grassi (2009) conducted a study of 400 young Cape Verdeans and Angolans (18-30 years old) living in Portugal. Her findings show that the social integration of these young respondents is done mainly through what she calls “informal networks” (what I define as bonding social capital)¹¹ rather than “formal volunteering associations or institutions”¹² (what I define as civic engagement) (Grassi, 2009:102-103). For instance, the majority of the working respondents depended on the help of friends to find a job. Complementarily, the majority is not civically engaged and reports a low level of general trust (Grassi, 2009).

A special Eurobarometer by the European Commission (2005) measured social capital in 25 countries of the European Union (EU 25), plus Romania, and Bulgaria¹³. This study gives us a general overview of social capital in Portugal and in Europe. Some of the main findings are summarized next:

¹⁰ Actually, I found theses and books on social capital from 1964, but this “social capital” is what in English is known as “equity capital” or “share capital”, the financial concept related to a company’s equity. In Portuguese, this “equity capital” is known as “capital social”, which translates to “social capital”.

¹¹ The author underlines that the questions related to the informal networks of the participants were based on the concept of network, of “circle of close friends”: people that the respondent feels comfortable to speak with, and that are available in case of need or help (Grassi, 2009:100). The questions that measure social support and resources (social capital) count the number of people available for each resource rather than the tie.

¹² “Associações e Instituições voluntárias formais” (Grassi, 2009:102).

¹³ This Eurobarometer at the time (2005) also measured social capital in two candidate countries, namely Romania and Bulgaria. Romania and Bulgaria became European Union members in 2007. However, the European average is calculated for the 25 European countries. For a list of these countries, visit: http://europa.eu/about-eu/countries/index_en.htm

- Measuring the importance of family and friends for the European respondents, the majority reported that family is very important (86%), being friends very important (61%) and fairly important (34%). 83% of the Portuguese respondents report that family is very important, while 67% report that friends are very important, and 29% report that friends are fairly important.
- In terms of meeting socially with friends, 61% of the Europeans meet socially with friends once a week or more, while 26% meet socially with friends once a month or more. The majority of the Portuguese meet their friends once a week (70%), but also their work colleagues outside of work hours (50% compared with the EU25 average of 20%), and their neighbors (60% compared with the EU25 of 27%).
- Looking at specific situations (resources), the study asked, "In which of the following situations would you be able to rely on friends, work colleagues, neighbors or acquaintances to receive help or support?" It should be noted that the question did not ask about family members. The next table (see table 3.3) presents the results per situation and per country.

As can be seen in the table 3.3, Portugal is below the EU25 average in almost all of the situations, most noticeable in three situations: of help in case of threat, harassment, or assault (23% of Portuguese respondents report having someone to help, compared with 44% of the EU25 average); of help if needs to borrow valuable goods, such as a car (20% of Portuguese respondents report having someone to help, compared with 38% of the EU 25 average); of help if needs to discuss personal problems (40% of Portuguese respondents report having someone to help, compared with 57% of the EU 25 average). Having someone to help with household tasks is the most reported situation by the Portuguese respondents (41%), followed by having someone to discuss personal problems with (40%).

Table 3.3
Help & support in the European Union (EU25 + Romania & Bulgaria)

	Help with household tasks	Occasional care for a dependent member of your household	Personal care including washing, dressing, eating, etc.	Help with paperwork for social benefits, prepare tax returns, etc.	Discuss personal problems	Borrow money	Borrow valuable goods (car, electric drill, etc.)	Help in case you were threatened, harassed or assaulted	None of these	DK
Eu25	48%	32%	17%	32%	57%	29%	38%	44%	12%	3%
BE	56%	32%	21%	37%	52%	21%	38%	50%	14%	0%
DK	68%	55%	30%	53%	74%	43%	70%	68%	3%	2%
D-W	61%	39%	18%	37%	62%	23%	39%	50%	10%	1%
DE	61%	38%	17%	38%	63%	23%	38%	52%	10%	1%
D-E	62%	34%	12%	41%	70%	23%	35%	59%	9%	1%
EL	34%	18%	7%	20%	56%	27%	22%	28%	18%	0%
ES	40%	33%	23%	36%	52%	31%	35%	34%	19%	6%
FR	44%	31%	15%	30%	57%	23%	43%	53%	10%	2%
IE	55%	34%	13%	24%	51%	25%	38%	47%	9%	3%
IT	25%	19%	9%	20%	45%	14%	16%	18%	21%	3%
LU	53%	39%	19%	38%	60%	26%	40%	56%	10%	2%
NL	71%	48%	29%	50%	70%	36%	64%	70%	4%	2%
AT	48%	27%	9%	26%	59%	26%	39%	35%	11%	4%
PT	41%	17%	15%	26%	40%	20%	20%	23%	19%	6%
FI	51%	52%	24%	33%	58%	35%	46%	57%	6%	1%
SE	64%	51%	31%	46%	73%	54%	73%	70%	3%	1%
UK	52%	34%	23%	32%	61%	36%	49%	63%	10%	2%
CY	26%	19%	4%	24%	49%	20%	28%	23%	30%	0%
CZ	55%	34%	14%	26%	57%	40%	46%	54%	5%	3%
EE	49%	22%	14%	18%	60%	44%	25%	31%	9%	6%
HU	39%	8%	5%	14%	60%	20%	29%	15%	17%	1%
LV	60%	38%	24%	34%	61%	47%	33%	44%	3%	6%
LT	47%	24%	14%	22%	49%	42%	25%	40%	6%	4%
MT	44%	22%	11%	17%	41%	7%	9%	24%	25%	2%
PL	50%	37%	13%	32%	55%	47%	33%	34%	6%	3%
SK	53%	35%	15%	34%	69%	39%	38%	43%	4%	2%
SI	76%	48%	25%	55%	73%	45%	55%	69%	4%	1%
BG	42%	19%	8%	19%	57%	54%	25%	33%	9%	3%
RO	49%	14%	8%	14%	58%	50%	12%	28%	13%	2%

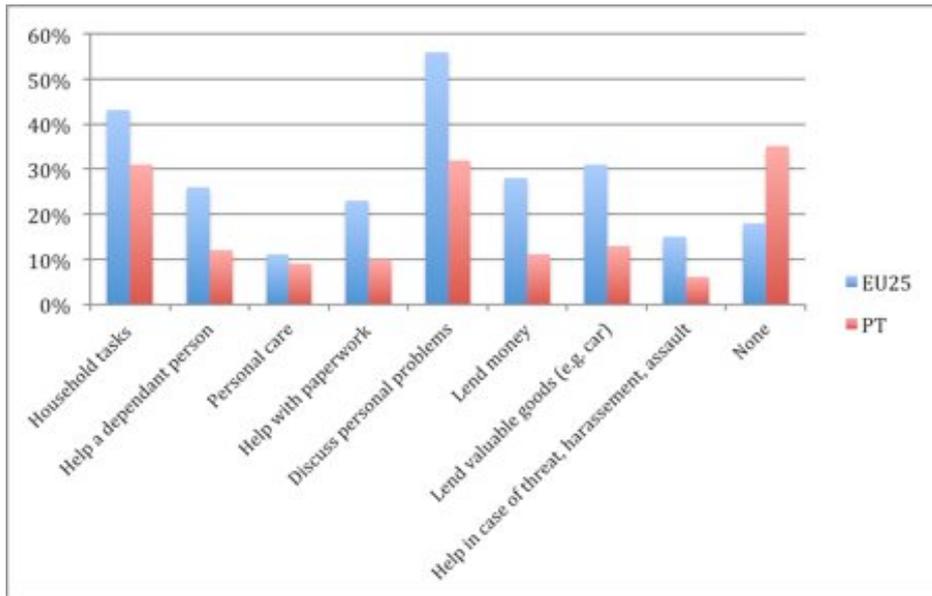
Source: EU, 2005

To ascertain a broad idea of reciprocity, the study also asked respondents if in the past twelve months they helped friends, work colleagues, neighbors or acquaintances with the same situations. Once again, the most reported situations by the Europeans were being available to discuss personal problems with (56%) and to help someone with household tasks (43%). The next graph compares the Portuguese results with the EU 25 average (see figure 3.4). The most reported situations by the Portuguese respondents were none (35%), help to discuss personal problems (32%), and help someone with household tasks (31%).

Figure 3.4

Portugal vs. EU 25

“Which of the following situations did you help or support friends, work colleagues, neighbors or other acquaintances in the past twelve months?”



Source: EU, 2005

The special Eurobarometer (EU, 2005) also measured trust and civic engagement as dimensions of social capital. While I do not consider these variables as dimensions of social capital, I describe the results briefly, taking into account that I am using trust and civic engagement as independent variables in my analysis of social capital.

The majority of Europeans report that “you can’t be too careful in dealing with people” (58%), while 30% of the respondents report that “most people can be trusted”. Portugal is below the European average in terms of “most people can be trusted” (24%) but slightly at the same level in terms of “you can’t be too careful in dealing with people” (60%).

Concerning civic engagement, the special Eurobarometer (EU, 2005) shows that:

- 52% of Europeans are not members of any association. Sport clubs are the main association for those who have any membership (20%). Sweden, Denmark, and

the Netherlands are on top of this ranking with about 90% of membership involvement. Looking at the Portuguese data, 3 out of 4 respondents reported not being member of any association.

- 29% of Europeans participate actively in associations and/or do voluntary work, while Portugal is on the bottom of the ranking with 11% of people reporting positively.
- In terms of discussing politics and current affairs, 21% of Europeans admitted they never talked about politics, 40% in the case of the Portuguese respondents. Only 11% reported discussing politics and current affairs on a daily-basis.
- When asked, "Would you take an active role in a group involved with political issues", 17% of the Portuguese respond yes. The EU 25 average is 17%. The majority of Europeans (81%) responded negatively, suggesting a general disinterest or disaffection with politics.
- Assessing civic and political activities done in the last 12 months, 41% of the European respondents voted in national elections, and 17% signed a petition.

There are also several studies that addressed social capital, even if not specifically focusing on it. One of these studies is the work by Torres et al. (2005), which measures social support in social networks. The results indicate that those who have less economic capital are also those who have less social support: for instance, those with a higher education and income level more often report having asked someone to take care of their children when an unpredicted situation occurred. Similarly, those who are younger, wealthier, and better educated are the ones who report having someone to help them in case of a financial problem (Torres et al., 2005).

For these aforementioned resources, help in case of health problem, and help in case of practical problem, the majority of respondents rely on their close family members, mainly spouses or parents (i.e. on their bonding social capital) (Torres et al., 2005). The authors conclude that there is also a gender effect: firstly, men rely more on their spouses than women; secondly, men rely more on their parents, brothers, friends, and sons, while women rely more on their mothers, sisters, friends, and daughters (Torres et al., 2005).

3.6 Conclusion

Drawing on the literature discussed so far, this chapter presented a definition and operationalization of social capital. My definition is based on the resources that are potentially available and can be mobilized from our social networks. As with definitions, operationalizations (i.e. the dimensions selected to measure social capital) differ considerably in the literature. Once again, the “unique” common element is the social connections or social networks.

While dimensions such as linking, civic engagement, and trust and reciprocity have been extensively used in the social capital field, I do not consider them as dimensions of social capital. There is no strong evidence or strong theoretical framework to support the inclusion of norms, reciprocity, trust, etc. in the concept of social capital (Cf. Lin & Erickson, 2008). My operationalization of social capital considers three main dimensions: bonding, bridging, and resources.

In this chapter, I also laid out the theoretical framework of my approach to social capital. I propose a multi-theory perspective that explains how social capital is produced, reproduced, and destroyed consciously or unconsciously by individuals, which are simultaneously driven by altruism and self-interest, by purposive and nonpurposive actions, by emotion and reason; individuals that are simultaneously conditioned by structure and agency, by field and habitus.

Finally, I provided a brief description of the state of the art in Portugal. Unfortunately, there are no broad national social capital studies that can give us a national portrait of social capital in Portugal. The majority of studies are micro-localized, addressing a specific neighborhood or locale, and they are mainly focused on local development, civic engagement, and immigration.

In the next chapter, I review the literature on social capital and Internet usage. Based on this literature review, I present the research goals, research question, hypotheses, and the analytical model of my study.

4 Social capital and Internet

This chapter reviews studies of social capital and Internet usage. It is important to emphasize that social capital is not a consensual or unified concept, and so a considerable bulk of these studies use different definitions: some studies include social trust and civic engagement as dimensions of social capital, while others are based on concepts such as sociability. Although I review these studies, my focus is on studies that directly (or indirectly, in some cases) consider social capital as resources available in social networks or that address dimensions of social capital, such as bonding or bridging. Based on this literature review, I present the research goals, research question, hypotheses, analytical model, and the locale of this research.

4.1 Social capital and Internet: Literature review

How Internet usage affects social capital and vice versa has been highly debated in the last decade. As Putnam remarks, "Social capital is about networks, and the Net is the network to end all networks" (Putnam, 2000:171). The question that arises is: will this flow of communication foster or have any impact on social capital?

In general, the web's low cost, high speed, flexibility, and ubiquity are promising in terms of production, maintenance, and reproduction of social capital. Computer-mediated communication (CMC) supports the development of personal ties with others, with larger and more fluid groups (without many of the geographic constraints) and communities of interest, allowing for a networked society loosely bounded and sparsely knit (Wellman, 2001). For Wellman (2001), the Internet increases social capital because it increases contact with friends and family members who live close or far.

Furthermore, studies show that people who are socially more anxious and lonely are more likely to feel that they can better express themselves on the Internet than offline (McKenna et al., 2002). Even more interesting is McKenna and colleagues' laboratory experiment (2002), which indicates that the subjects (undergrads) liked each other more following an Internet interaction than a face-to-face initial meeting. CMC also allows for a certain degree of anonymity that might contribute to a more democratic, less hierarchical, and frank space for discussion (Putnam, 2000).

But there are also other issues to consider: digital divide, misrepresentation (mainly using anonymity to cheat and deceive), and homophily and cyberbalkanization (Putnam, 2000). These issues can directly threaten social capital, reducing bridging social capital, reciprocity, and even trust. So, "social capital may turn out to be a prerequisite for, rather

than a consequence of, effective computer-mediated communication” (Putnam, 2000:177). Using a balanced approach, Putnam warns about the inaccuracy of utopianism or dystopianism: “Both the history of the telephone and the early evidence on Internet usage strongly suggest that computer-mediated communities will turn out to complement, not replace, face-to-face communities” (Putnam, 2000:179). What impact computer networks will have on social capital is a major question for Putnam. He suggests that meeting online will not be the same of meeting offline, so he calls for research on the subject (Putnam, 1995a; 2000).

For Lin, *au contraire* of Putnam, social capital has not been declining, but it has been increasing, through the form of social networks in the web, “cybernetworks”, since the 1990s (Lin, 2001). These cybernetworks (social networks in the cyberspace) transcend national and local borders and their effect has to be analyzed in a global framework (Lin, 2001). For Lin, with the advent of cybernetworks, a “revolutionary rise of social capital” happened (Lin, 2001:214). Using the example of the Falun Gong (a Chinese meditation and exercise technique created by Li Hongzhi), Lin shows how their movement based in a strict hierarchical organization used cybernetworks to recruit, train, inform, and mobilize followers, creating a collective social capital (Lin, 2001). The capacity to mobilize millions of followers and the efficient organization represented a threat and one of the biggest challenges to the Chinese Communist Party after Tiananman Square (Lin, 2001). Cybernetworks have the potentiality to equalize opportunities for those in them, but also an unequal distribution of capital, for those who are not in the net (Lin, 2001).

Anabel Quan-Haase and Wellman (2004) define three different approaches to the relationship between Internet usage and social capital:

1. The Internet transforms social capital: the potentialities of the medium would significantly transform social capital and social networks.
2. The Internet diminishes social capital: the entertainment and information search (and even online interaction) of the medium would take people away from their families and friends, creating isolation and addiction, and diminishing social capital (Cf. Kraut et al., 1998; Nie & Erbring, 2000; Nie, Hillygus, & Erbring, 2002).
3. The Internet supplements social capital: the Internet would allow people to maintain social capital, through existing ties and new ones (Cf. Quan-Haase et al., 2002).

Taking into account the goals of this research, I organize this literature review into the following approaches to the relationship between Internet usage and social capital:

- There is no relationship between social capital and Internet usage
- There is a negative relationship between social capital and Internet usage
- There is a positive relationship between social capital and Internet usage

These approaches are explored next.

4.1.1 Social capital and Internet usage are not related

Early assumptions about the Internet effects rested on the belief that the Internet would allow for a new sociability and new forms of community, based on personal interests, without spatial and temporal boundaries (Cf. Wellman, 2001; Lin, 2001; Quan-Haase & Wellman, 2004).

These new communities, specially the interest-based ones, would foster the establishment of new ties. The Internet did allow the so-called “networked individualism”, where the individual and not the household or the group is the primary unit of connectivity (Wellman, 2001). According to Wellman (2001), there has been a shift in connectivity from door-to-door to place-to-place; and now with personal ICT and wireless devices from place-to-place to person-to-person. Moderns societies moved from “densely-knit and tightly-bounded groups to sparsely-knit and loosely-bounded networks” (Wellman et al., 2003).

In addition to these “utopian” assumptions, dystopian assumptions were also advanced: for instance, for Paul Virilio (1999, 2000), the contemporary society was reaching a critical point in terms of acceleration. One of the main concerns of his “dromology” (science of speed) is how technology cultivates the becoming virtual, i.e. the displacement of the physical experience.

However, some research has not been able to find any relationship between Internet usage and social capital. Uslaner (2004) analyzed data from two surveys (a 1998 survey on technology use by the *Pew Center for The People and The Press* and the 2000 *Trust and Privacy Survey* of the *Pew Internet and American Life Project*) to measure the association between Internet usage, trust, and measures of sociability.

Uslaner’s (2004) analysis demonstrates that, in general, the use of the Internet is connected neither to trust nor to sociability. Trust does not determine online frequency,

and frequency of Internet usage does not determine trust. And so: "Most of the time, then, the Net is neutral. It neither creates social bonds nor destroys them. It does not build up trust nor destroy it" (Uslaner, 2004:21). For Uslaner (2004), there is little proof that the Internet fosters new communities, and even less proof that the Internet is moving people away from their social ties or making them less trusting. The Internet is "an additional outlet" for people who already are connected with others (Uslaner, 2004:13).

Similarly, other studies found no significant correlation between Internet usage and time spent in various social activities (In the USA, Cole et al., 2000; Robinson et al., 2000; In the Netherlands, Robinson & de Haan, 2006). A longitudinal data of a random sample of Swiss individuals (1998 and 2001) shows that Internet use is not associated with a reduction of an individual's network size or with the time they spend socializing with friends (Franzen, 2003).

4.1.2 Social capital and Internet usage are negatively related

There is also a small amount of research that points to a negative relationship between Internet usage and social capital. Kraut et al. (1998) studied Internet usage and well-being by following 169 people in 73 households during 1995-1996. The results showed that heavy use of the Internet was associated with declines in participants' communication with family members in the household; declines in the size of their social circle; and increases in levels of depression and loneliness (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay & Scherlis, 1998). This was named the "Internet paradox", as participants used the Internet for communication purposes, which is usually associated with positive effects.

However, several authors voiced criticisms to the study, namely the selection of the participants (Shapiro, 1999; Hamburger & Ben-Artzi, 2000). The selected groups might have lead to biased results, as it had individuals in a life-stage phase associated with a decline of social contact, and youngsters who would leave home in the near future (for university studies, etc.), what would have an impact in their general usage and social connections within their community. Also the Internet users at the time were newbies, still experimenting the new medium, and without many of their ties online.

These results were revisited in a follow-up of the original sample and in a new longitudinal study (Kraut et al., 2002). The 3-year follow-up study analyzed the long-term impact of Internet use on 208 members of the original sample. Findings indicated that the negative effects were no longer observable. The new longitudinal study was based

in a new households sample in the Pittsburgh area (1998-1999), which compares a group of people that had recently bought a television to a group that bought a computer (Kraut et al., 2002). Kraut et al. (2002) also concluded that extroverts tended to benefit the most from Internet use (compared to introverts): frequent users reported less loneliness, higher community involvement, and greater self-esteem, while introverted frequent users tended to indicate greater loneliness and lower self-esteem (Kraut et al., 2002). These findings seem to support the “rich get richer” hypothesis: those who are more sociable benefit the most from media usage (Kraut et al., 2002).

The time diary study of a representative sample of 6,000 Americans (aged 18-64) by Nie, Hillygus & Erbring (2002), also found negative effects in Internet usage. The authors concluded that the more time was spent on the Internet, the less time people spend with friends, families, and colleagues (which is known as the time displacement hypothesis). Internet use at home had a strong negative impact on the time spent with family and friends, while Internet use at work was strongly associated with a decrease time with colleagues, but did not affect time with family and friends (Nie, Hillygus & Erbring, 2002). In addition, the more time was spent on the Internet (even emailing), the more time was spent alone (Nie, Hillygus & Erbring, 2002). Comparing Internet use and TV watching, Nie, Hillygus & Erbring (2002) claim that the TV is more sociable than the Internet: first, because people watch TV in-group, and second, because they are less alone during this activity.

Nie, Hillygus & Erbring’s (2002) emphasis on the face-to-face interaction and the “time displacement” hypothesis – Internet use replaces face-to-face interactions – fails to acknowledge that Internet usage also allows for interaction and engagement with others. The online interaction seems to be characterized as antisocial and leaves no space for other conceptualizations by the authors: "One simply cannot be engaged with others while being engaged on the Internet" (Nie, Hillygus & Erbring, 2002:230).

It is likely that a follow-up study, which includes social networking sites, would probably change the results of Nie, Hillygus & Erbring’s study. Moreover, the claim that the TV is more sociable might be too superficial, since watching TV with others does not mean interaction *per se* (maybe a short change of reactions and feedback) or even a meaningful one. Watching TV also seems to be mainly an individual activity, even if the Internet seems to be more immersive than TV or even the telephone (Wellman, 2001). The short time-diary frame of the study has also been mentioned as one possible limitation of the Nie et al. study (Robinson & Martin, 2010).

More recently, a study conducted in 2010 (February-March) by the International Center for Media & the Public Agenda (ICMPA) asked 200 students at the University of Maryland to be media-free for 24 hours. After the 24 hours, the students were asked to write about their experiences¹. The main findings of the “24 hours unplugged” experiment emphasize that the students used terms of addiction to define their dependence on media and faced serious challenges surviving the unplugged day. One of the students writes:

Although I started the day feeling good, I noticed my mood started to change around noon. I started to feel isolated and lonely. I received several phone calls that I could not answer...By 2:00 pm I began to feel the urgent need to check my email, and even thought of a million ideas of why I had to. I felt like a person on a deserted island.... I noticed physically, that I began to fidget, as if I was addicted to my iPod and other media devices, and maybe I am (ICMPA, 2010).

The study also found that a day without media signified a day without friends and family for the participants:

Texting and IM-ing my friends gives me a constant feeling of comfort, when I did not have those two luxuries, I felt quite alone and secluded from my life. Although I go to a school with thousands of students, the fact that I was not able to communicate with anyone via technology was almost unbearable (ICMPA, 2010).

In addition to reporting some of the negative effects of media usage, the study also shows how these media (mainly ICT) are pervasive and used to supplement social capital. The students would replace the TV and the radio for any ICT.

The “unplugged” experiment was replicated in ten different countries (USA, UK, Lebanon, China (Hong Kong), China (Mainland), Uganda, Argentina, Chile, Mexico, and Slovakia) in September-December 2010 (ICMPA, 2011)². The results of the first study are still evident in this global exercise, independently of cultural and socio-economical factors (ICMPA, 2010b). Students from the 10 countries reported the same addiction terms, and that they felt isolated, lonely, distressed, and bored without media (ICMPA, 2011). The mobile phone, in particular, was perceived as an extension of the participants’ body, and being without it made them feel that they had lost a part of themselves (ICMPA, 2011).

¹ A full report of the study and students’ writings can be found at <http://withoutmedia.wordpress.com/>

² A full report of the study can be found at <http://theworldunplugged.wordpress.com/>

Concluding, the assumption that the Internet diminishes social capital has not yet been proved. The follow-up study of Kraut's et al. reports that the negative effects found in the 1998 study were no longer observable. Nie, Hillygus & Erbring's study neglected to consider that time spent online can also be social. Finally, the "unplugged" experiment seems to support the idea that the Internet supplements social capital (despite having negative effects, such as the sense of addiction).

4.1.3 Social capital and Internet usage are positively related

Research has been mostly supporting the third approach: evidence shows that the Internet has a positive association with social capital. Quan-Haase and Wellman's (2002; 2004) study of a sample of 20,075 North-American adults ("Survey 2000" hosted at the National Geographic Society's web site) concluded that the Internet is adding on to social capital (Quan-Haase & Wellman, 2004)³.

The hypothesis of time displacement – time online would replace time with family and friends and other social activities – (advanced by Nie et al., 2002) has been refuted by various studies:

- In the USA, Katz & Rice (2002a; 2002b) analyzed a set of representative survey samples of Internet users and non-users (from 1995 to 2000) and data from the Pew Internet and American Life Project 2000. The authors concluded that Internet users were considerably sociable (online and offline), being more involved and socially active than non-users. These results were true, even after controlling for levels of offline sociability or personality traits, such as extroversion and introversion. In addition to the "rich get richer" assumption, Katz & Rice also found evidence for the "poor get richer": "even those who tend to be introverted find their social contacts expanded via the information relative to their nonsurfing counterparts" (Katz & Rice, 2002a:264).
- Boase et al. (2006) studied a representative sample of 2,200 adults living in the USA (2004), and concluded that the more people talk online, the more they see each other face-to-face and talk on the phone.
- Robinson & Martin (2008) analyzed the Internet questions of the US General Social Survey (2000, 2002, and 2004) and concluded that Internet usage was

³ However, Castells (2003) found that in Catalonia, Spain, people would use the Internet mainly to contact ties living abroad, preferring instead face-to-face interactions.

not associated with lower use of other personal communications and social activities, such as church attendance or art participation. The opposite was also true: the Internet was associated with an increased use of other media or activities.

- Robinson & Martin (2010) replicated their 2008 study with two data sets: the time-series data from the US General Social Survey (1995-2006) and the 2003-2005 American Time-Use Survey. They found no evidence of time displacement in Internet usage and activities related to social capital, such as socializing and church attendance. Nevertheless, respondents who spend more time on the Internet had fewer social visits with relatives. But this was compensated by more visits with friends, compared to Internet non-users.
- Hampton et al. (2011) analyzed a representative sample of 2,512 adults living in the USA (2008), and concluded that the Internet and the mobile phone do not decrease participation in local communities. Internet users still give support to their neighbors, and the level of face-to-face contact with neighbors is the same for Internet users and for non-users. More, people's use of the Internet and of the mobile phone is associated with larger and more diverse social networks.
- A time-diary study in the United Kingdom (a nationally representative time diary panel study with weekly diaries collected in 1999-2001) concluded that there is only weak evidence for time displacement, and Internet usage is not negatively correlated with sociability (Gershuny, 2003).
- In a comparison of four European countries (Finland, UK, France, and Italy), Kouvo & Räsänen (2005) analyzed the European Social Survey data (2002-2003) and concluded that Internet use was a strong positive predictor of interpersonal involvement, meaning frequency of social activities, such as meeting friends and spending time with family members. Frequent Internet users were more likely to engage in social activities than less frequent Internet users. Nevertheless, they also found that country was a strong predictor of interpersonal involvement. Internet use was the strongest predictor in Finland and in the UK, but not in France and Italy.

Other studies in different countries also dismissed the time-displacement hypothesis; showing in particular that sociability and social capital are actually positively associated with Internet usage (In Canada, Wellman et al., 2006; In China, Lee & Zhu, 2002; Liang

& Wei, 2002; In Japan, Mikami, 2002; Miyata et al., 2008; In Italy, Mandelli, 2002; In Australia, Alessandrini, 2006).

In Portugal, a study based on a national representative sample (2450 individuals aged 15-64) conducted in 2003 confirms the above trends (Conceição et al., 2005). This study replicates the questionnaire used by the Project Internet Catalonia (PIC) directed by Manuel Castells. The results indicate that the only significant difference, in terms of time use, between Internet users and non-users is that users spend less time in domestic tasks. There is no difference on the time spent interacting with family members for Internet users and non-users (Conceição et al., 2005). The time-displacement hypothesis is evident only in the case of domestic tasks.

Despite using the Internet as a communication tool, the Portuguese Internet users still prefer face-to-face contact and phone contact with family and friends (Conceição et al., 2005). In addition, the study (Conceição et al., 2005) shows that:

- Personal encounters and phone contact are more frequent with family members that live nearby.
- The Internet is rarely used to contact parents.
- The Internet is used to stay in contact with relatives that are geographically distant.
- Personal encounters and phone contact are more frequent with friends that live nearby.
- The frequency of Internet contact with friends increases with distance.
- Internet users contact friends by phone more frequently than non-users.

The average number of friends is very similar to Internet users and non-users (Conceição et al., 2005). Compared with non-users, Internet users are also more predisposed to a diversity of online and offline social activities, from talking to friends to visiting family members and going out – the only exception being church attendance (Conceição et al., 2005). Once again, there is no negative association between the use of the Internet and sociability. It is also noteworthy that the Portuguese Internet users of this study (Conceição et al., 2005) report having a lower level of depression and sense of isolation, compared with Internet non-users.

Concluding, of the three approaches, the one that has been systematically and empirically supported is the one that states that Internet usage has a positive relationship with social capital. The same results have been found in Portugal. This does not mean that the Internet has only positive effects on society; in fact, social capital can also be negative, as mentioned before. The Internet is a socio-technical system with positive and negative elements, and so a manicheist perspective is unproductive.

More specifically, in the next section, I explore studies of Internet usage and two dimensions of social capital, namely bonding and bridging.

4.1.3.1 Bonding and bridging: the individual level

As explained previously, bonding and bridging are considered dimensions or types of social capital. Bonding is related to homogeneous and closer groups, such as family, or close friends. Bonding social capital provides, for instance, social support. Bridging is mainly related to more diverse and heterogeneous groups, such as acquaintances, known as “weak ties” or “dispersed networks”. Bridging social capital provides access to different resources, such as information, that are not available in the close social network.

The Internet offers bonding and bridging opportunities, lowering obstacles to involvement with communities and groups. The anonymity, safety, and the sense of proximity that the Internet can provide are some of the ways to lower those obstacles (Stern & Adams, 2010).

Despite some early claims that the Internet was more favorable to the establishment of weak ties (Cf. Best & Krueger, 2006; Haythornthwaite, 2002), the Internet has allowed for maintaining existing ties and creating new ones simultaneously (Wellman, 2001; McKenna et al., 2002; Bargh & McKenna, 2004; Ellison, Steinfield, & Lampe, 2007; Xie, 2008; Norris, 2004).

Concerns regarding the displacing of offline relationships with online ones – that the Internet would replace interaction between friends and family for online interactions with strangers – have been debunked by research: only a small percentage of Internet users actually meet that many new people online (Katz & Rice, 2002). And when they do it and a friendship is created then there is usually a desire to meet in person, especially for those who share similar interests and backgrounds (McKenna et al., 2002; Xie, 2008). In addition, interactions in the physical world help strengthen relationships between the individuals that meet online (Xie, 2008). If a close relationship was established online it tends “to

become integrated into one's non-Internet social life" (McKenna et al., 2002:28). In a survey (1997) and a two-year follow-up (1999), McKenna and colleagues (2008) showed that the relationships established around the time of the first survey were still intact.

Even if the Internet has displaced existing face-to-face relationships, Best and Krueger's study (2006) demonstrates that levels of social capital would not be affected by it, as long as the Internet was used for making new online relationships. Testing elements that the authors consider to be social capital, such as generalized trust, reciprocity, and integrity, it is concluded that these indicators of social capital are positively related to the levels of interaction with people met online (Best & Krueger, 2006).

Another idea that has also been questioned is that online-only ties are not real ties. Haythornthwaite (2005) finds that online-only ties are characterized by the same kinds of interactions of offline ties. She also found that more strongly tied pairs make more use of the available media, which she termed "media multiplexity" (Haythornthwaite, 2005).

As the Internet becomes familiar and pervasive, people integrate it in their daily lives: using it for work and social life (Wellman & Haythornthwaite, 2002). The Internet is not only used to connect with people's social networks (close or distant, strong or weak), but also to put their networks in movement when needed (Boase et al., 2006). The "Strength of Internet Ties" report (Boase et al., 2006) emphasizes how the Internet is actually building social capital through the social connections it supports, but also through the general information and resources that it affords.

Comparing bonding and bridging online and offline in an American sample (N=884), Williams (2007) found that there was more bonding social capital offline and more bridging social capital online. Time spent online was negatively associated with offline bonding and bridging, while time spent online was positively associated with higher levels of online bonding and bridging (Williams, 2007). This means that the displacement hypothesis of Nie et al. (2002) is supported: Internet use relates to a decrease in offline social capital – but that the opposite is also true, as Internet use relates to an increase of online social capital (Williams, 2007).

In both the offline and online social capital, extroverts were more likely to report higher levels of social capital. In the offline social capital analysis, extroversion and a strong friendship network were strong moderators of the effect: the more outgoing people and those with a strong friendship network were inclined for gains in offline bonding and offline bridging social capital. These results support the "rich get richer" claim of Kraut and colleagues.

Gender was also a significant variable for social capital: as the more time online the more women had social capital losses, being the opposite for men (Williams, 2007). Williams also refuted the hypothesis of cyberbalkanization – the idea that the Internet would lead to group atomization, out-group antagonism, and less bridging (Williams, 2007).

Considering specific Internet usage, such as social networking sites (SNS), it has been hypothesized that SNS could enhance significantly weak ties, because of the characteristics of the medium (Donath & boyd, 2004). These characteristics are mainly the convenience, low cost, and easy usage of the service. For instance, Facebook provides information about others, shows connections of friends, etc. and, therefore, it might facilitate new ties and the conversion of latent ties (those ties who are latent but not yet activated, such as a friend of a friend) into real ties (Ellison et al., 2007; Cf. Haythornthwaite discussion of latent tie connectivity and media, 2005). Studies of SNS have supported this idea that SNS afford the development and maintenance of bridging social capital, but also bonding social capital (Ellison et al., 2007; Brandtzaeg et al., 2010).

Surveying a sample of 286 students of the Michigan State University, Ellison, Steinfield, & Lampe (2007) examined the relationship between Facebook use and bridging, bonding, and maintained social capital. Maintained social capital was a measure added by the authors to examine the preservation of existing social capital of these students who had entered university and experienced a crucial life change (as the majority moves away from their hometown, when going to university). It was measured based on the social connections from high school, and evaluated if the participants could get information and any kind of small assistance (small favors) from high school acquaintances (Ellison, Steinfield, & Lampe, 2007).

Ellison, Steinfield, & Lampe (2007) indicate that the intensity of facebook use was a strong predictor of increased levels of the three forms of social capital. Bridging and bonding social capital were also positively associated with satisfaction with life at the university. However, Facebook appears to have less impact on the maintenance and creation of bonding social capital, as the bonding model only accounted for 22% of the variance (versus 46% in the bridging social capital models). Students with lower satisfaction and lower self-esteem would gain in bridging social capital if they used Facebook more frequently (Ellison, Steinfield, & Lampe, 2007). Maintained social capital was also associated with facebook intensity: the ability to stay in touch with high school acquaintances might facilitate the flow of information, resources, and even emotional

support because these students are away from home and from their friends (Ellison, Steinfield, & Lampe, 2007).

A study of Internet users of four SNS in Norway⁴ concluded that peer bonding (bonding with close friends) is more frequent than family bonding (Brandtzaeg et al., 2010). Bridging social capital is also associated with SNS use, even though bonding with friends and family is more important for the respondents (for both sexes). Nevertheless, contacting friends and searching for new friends were the main reasons reported in using a SNS (Brandtzaeg et al., 2010).

Brandtzaeg et al. (2010) also found some gender and age differences. In terms of gender, males were significantly more interested in online bridging capital than bonding family capital, which did not hold for females (Brandtzaeg et al., 2010). Age differences were significant for contact with close friends (peer bonding) between the ages of 20-25 and 31-40, and between 20-25 and 41 and above. This means that the level of contact with friends reached the highest point around 20-25 years of age, and a new height around 31-40 and 41 and above (Brandtzaeg et al., 2010).

Age differences were also significant in online bridging: young people were significantly more active on online bridging than people in their twenties. After the age of 25, people become more active again, and a new peak occurs around the ages of 31 to 40 (Brandtzaeg et al., 2010).

4.1.3.2 The community level

The same question of displacement (Nie et al., 2002) has been transferred from the individual to local communities. But research that focuses on social capital and Internet usage in local communities has also disproved the displacement hypothesis. The "Netville" ethnographic study – a wired suburb in Toronto, Canada – by Hampton & Wellman (2003) showed that high-speed Internet access and a local online discussion group can empower neighboring and local participation. The Internet access allowed for bigger neighborhood networks, neighbor recognition, higher frequency of communication (online and offline), and local participation: compared with the non-wired residents, the wired ones knew and interacted with more neighbors, even with the ones more distant in the area. In Netville, the use of the Internet allowed wired residents to overcome spatial, temporal, and social barriers to community involvement (Hampton & Wellman, 2003).

⁴ Underskog, Nettby, HamarUngdom, and Biip were the most used SNS in Norway at the time of the research.

Hampton & Wellman (2003) concluded that the Internet added on to other forms of communication, but its features and advantages facilitated interactions, through asynchronous communication, provided by email. Internet use did not reduce or replace other forms of social interaction, such as in-person or over the telephone. There was also no evidence that Internet was detrimental to the contact with non-local social networks: non-wired residents had a decrease in their contact with distant social ties, contrary to wired residences that had a small increase in this type of contact. As Hampton & Wellman conclude: "As beneficial as our findings suggest for the state of social capital in North America, surely those with the best access and skills to take advantage of the technology who will reap the most digital dividends" (Hampton & Wellman, 2003:297).

Similar results were found in the longitudinal study of the Blacksburg Electronic Village (BEV), a networked community (Kavanaugh et al., 2005). Education, extroversion, and age explained social involvement within the online community, what also supports the "rich get richer" idea already explored by Hampton & Wellman (2003).

In Europe, Sara Ferlander's study (2003) compared two subsidized computer projects – a Local Net and an Internet Café – in Skarpnäck, a marginalized area of Stockholm. Low levels of social capital, trust, and sense of community characterized this Swedish area. The Internet Café was more successful in creating and supporting social capital, than the Local Net. The Internet Café contributed significantly to a digital and social inclusion of the residents of this area, mainly of disadvantaged groups, such as elderly people, single parents, and immigrants.

Social capital and sense of community were considerably higher among Café users: the Café users had more local friends, were more socially integrated, and reported higher levels of trust and local identity, compared with the non-visitors. Even visitors that had computer and Internet access at home would regularly visit the Café. Those who used the Local Net and the Café indicated that they preferred the public access provided by the Café, because they were afraid to lose the face-to-face contact and community involvement if they used the Internet at home (Ferlander, 2003).

The informality and face-to-face interactions in the Café had a great impact on the local community, reinforcing bonding social capital and creating bridging social capital: it brought together residents from different backgrounds, and for instance, young people helped the elderly people with computer problems and Swedish people frequently helped immigrants with the language. The Local Net failed to increase digital inclusion in Skarpnäck, only

connecting a few inhabitants and those who were traditionally computer users (Ferlander, 2003).

The findings for urban spaces seem to hold in rural spaces as well: rural community members use the Internet to create and maintain social capital, meaning to bond and to bridge glocally, overcoming distance and isolation (Stern & Adams, 2010; Collins & Wellman, 2010). The Internet usage also reinforces a local participation and a collective local sense of identity (Stern & Adams, 2010; Collins & Wellman, 2010). In the study of Chapleau, a rural Canadian area, Collins & Wellman (2010) concluded that despite all the advantages of Internet use for rural communities, rural Internet users are not the same as urban or suburban ones. The Internet is adapted to their social, cultural, and economic contexts. Moreover:

The Internet is unlikely to save rural and remote areas from declining economies and out-migration. A remote community is going to stay remote. However, as much as people use the Internet, they still must satisfy many of their material and social needs physically and locally. Yet, the experiences of Chapleau residents show that high-speed Internet can extend the life of a community by improving the quality of life for residents (Collins & Wellman, 2010:21).

In general terms, Internet usage has been associated positively with civic engagement: Internet users are more likely to engage in civic activities than non-users (Katz & Rice, 2002; Norris, 2004; Kouvo & Räsänen, 2005; Miyata, Ikeda & Tetsuro, 2008; Tolbert & MacDonald, 2008). However, this association is not linear, as types of civic engagement differ. For instance, in an analysis of the 2004 *American National Election Studies* data, Xenos & Moy (2007) concluded that Internet usage has a direct impact on the acquisition of political and civic information, but a contingent impact on acts of civic engagement, such as joining a group, volunteering, or engaging in political discussions. The association between Internet use and civic engagement was stronger for those who were already inclined to engage actively (Xenos & Moy, 2007).

Similarly, Park & Perry (2008) analyzed longitudinal data (1996, 1998, 2000, and 2004) from the *American National Election Studies* and concluded that Internet use is more influential for deliberative non-electoral engagement than for electoral action-oriented engagement.

In a comparison of Finland, UK, France, and Italy, Kouvo & Räsänen (2005) found that there is a positive association between civic engagement and Internet use, but the strength of that association and the effects of socio-demographic controls vary within

country. Country, education, and Internet use were predictors of civic engagement, but education was strongest in Italy and UK, while Internet use was stronger in France and the UK.

Following this general trend, Portuguese Internet users seem to be more civically engaged than non-users:

- Although the majority of Internet users and non-users are not members of any association or club, Internet users report a higher level of membership in associations or clubs than non-users (Conceição et al., 2005).
- More Internet users report having participated or supported a charity event, than non-users (Conceição et al., 2005).
- More Internet users signed petitions or sent letters of protest, than non-users (Conceição et al., 2005).
- Internet users have a more positive view of civic engagement, believing that their engagement can make a difference (Conceição et al., 2005).

4.2 Research goals, research question, and hypotheses

This research has two goals: the first and main goal is to understand if there is any relationship between social capital and Internet usage. This brings me three central challenges: conceptual, methodological, and contextual. The first challenge was explored in chapters 2 and 3, and it is related to the ambiguity and the elasticity associated with the concept of social capital. The second is a consequence of the first challenge, as there is not a single methodological framework. The third is contextual: the idiosyncrasies of the Lisbon inhabitants have to be taken into account, which raises specific inference concerns.

The research question that informs this study is:

Is there any relationship between social capital and Internet usage in Lisbon?

Since this is a cross-sectional study and not a longitudinal one, I am not able to isolate any directional causality, what means that I cannot prove the direction of any effect. I cannot define with certainty if social capital is affecting Internet usage, vice versa, or both. Nevertheless, I use social capital as a dependent variable (DV), and Internet

usage as an independent variable (IV), which conditions *per se* the analysis and the interpretation of the association between the two variables.

Bearing in mind the state of the art, particularly the predominance of the line of research that points for positive supplementary linkages between social capital and Internet usage, my main hypothesis is:

- Perceived social capital is positively associated with Internet usage (H1)

My sub-hypotheses are related to the dimensions of social capital that are used to measure it, namely, bonding social capital, bridging social capital, and resources. My sub-hypotheses are:

- Perceived Bonding social capital is positively associated with Internet usage (Ha)
- Perceived Bridging social capital is positively associated with Internet usage (Hb)
- Perceived access to resources is positively associated with Internet usage (Hc)

These hypotheses are tested statistically, in the quantitative phase of this research, but are also explored qualitatively. In the qualitative phase, I seek to concentrate on a more “localized” and in-depth understanding of how my respondents mobilize their perceived social capital and its association with Internet usage.

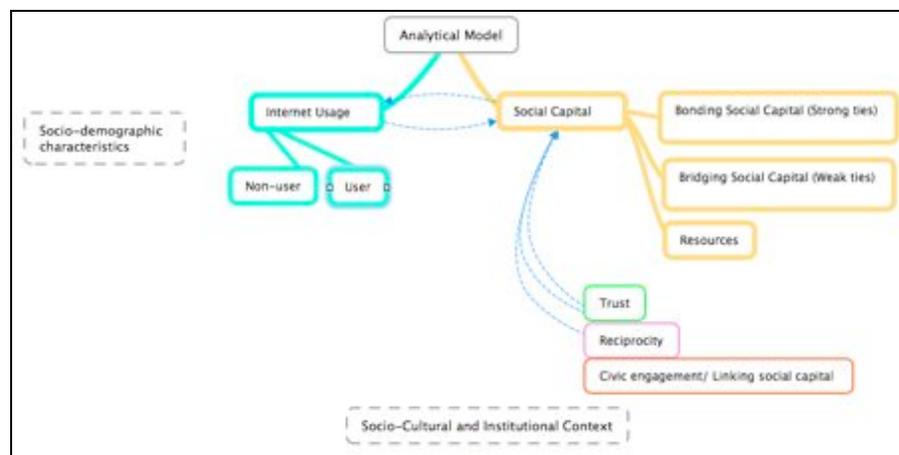
The second goal of this research is to contribute to the discussion on the theory and measurement of social capital, namely on the dimensions of social capital. In addition to the measurement and analysis of the above dimensions – resources, bonding and bridging social capital – I also measure trust and civic engagement, testing them as independent variables. I aim to see if trust and civic engagement are related to social capital. As mentioned before, on the one hand, it is still unclear how social capital is theoretically associated with civic engagement, norms and trust (Cf. Lin & Erickson, 2008). On the other hand, studies that measured social capital without civic engagement and trust show incomplete or marginal relationships. This seems to suggest that trust, civic engagement, and social capital are independent concepts (Cf. Bekkers et al., 2008; Miyata et al., 2008; Tindall & Cormier, 2008; Magee, 2008).

4.3 Analytical model and the “social affordances” perspective

My analytical model provides the variables I used to study the relationship between social capital and Internet usage (see figure 4.1). Social capital as a multidimensional concept is measured through the selected dimensions: bonding, bridging, and specific

resources. Internet usage is measured through frequency of usage, which has been a central indicator in Internet studies. Trust and civic engagement are measured independently (indicators of each variable are described in-depth in the section related to survey measures). While the above variables are measured in the quantitative phase, and then explored in the qualitative phase, reciprocity is only explored in the qualitative phase of this study, through the participants' stories of how they mobilize their resources, and their social capital for others.

Figure 4.1
Analytical model



My theoretical understanding of social capital has been explained in chapter 3, where I describe a multi-theory approach. The linkage of social capital and Internet is explored within a “social affordances” perspective, as defined by Wellman and colleagues (2003)⁵: “A set of current and imminent changes creates possibilities—social affordances— for how the Internet can influence everyday life”. These changes go from broader bandwidth, ubiquitous connection, portability, and personalization to generalized connectivity (Wellman et al., 2003). The Internet has specific features, meaning social affordances, which influence people’s social interaction.

Because Wellman et al.’s paper did not give a definition of social affordances, Hogan (2009:27) later went on to define “social affordances” as “perceptual cues that connote aspects of social structure to individuals, thereby creating a functional difference for the

⁵ The *Journal of Computer-Mediated Communication* did not use page numbers since it was an online journal (until 2006).

individual". This means that a perceptual cue has to make a difference for action; otherwise it is not an affordance. Like in the social world, individuals infer and perceive through cues: for example, I am not sure if my friend is really my friend, but I have some signs that he is. So, social affordances are these "perceptual cues" that help an individual decide on which specific part of the social structure he/she is going to interact with. As Hogan (2009:10) explains:

Having a blue background for one's computer screen versus a green one is not an affordance. However, if the background also gives a real-time update of the number of email messages in one's inbox, that would be an affordance. The real-time update would be a new way to perceive social relations (i.e., knowing that certain people are trying to contact the individual), and create a functional difference (i.e., knowing that there are new messages is the first step to checking and potentially responding to these messages).

As the author emphasizes, this is not a functionalist theory of social action, rather it is an ecological theory of social structure—it suggests particular links between an individual and his/her social environment (Hogan, 2009). This perspective helps us to understand how the Internet, through its social affordances, could have an effect on social capital.

Additionally, two other media perspectives contribute to the understanding of the relationship between Internet usage and social capital: the first is the "media multiplexity" hypothesis advanced by Haythornthwaite (2005), which posits that more strongly tied pairs make more use of the available media. The second is the "latent tie theory" also proposed by Haythornthwaite (2005), which emphasizes that the addition of a new media:

- Creates latent ties, i.e. ties that are technically probable but have not been activated socially (with a new media, individuals will have access to ties that they would not otherwise have access to. For example, Facebook allows people to connect with friends of friends, even suggesting those connections),
- reorganizes weak ties (creating new ones and disrupting old ones),
- has marginal impact on strong ties (those who are strongly tied will maintain their tie through several media).

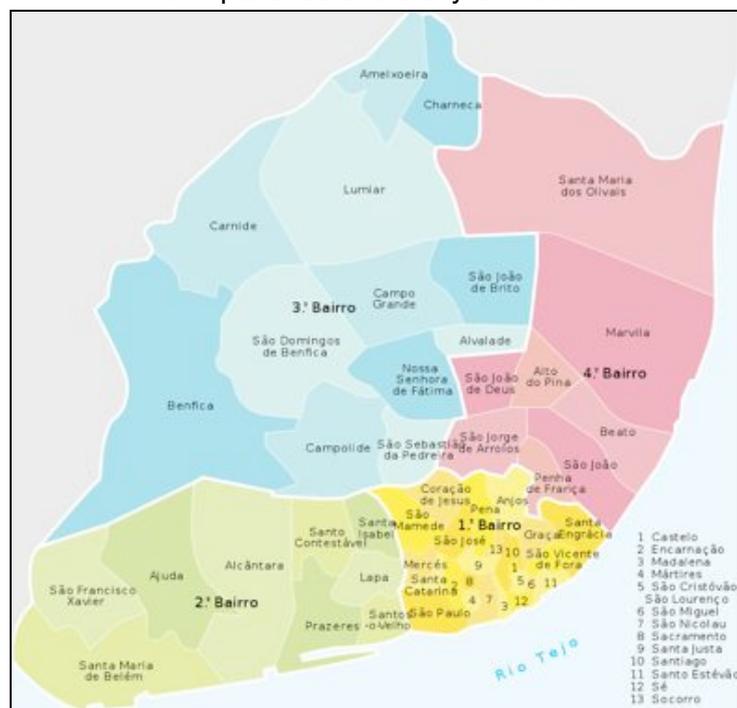
This is a general theory about the role of media in social networks, and while it does not focus specifically on the Internet it is applicable to the medium.

4.4 The Research Site

4.4.1 The city of Lisbon: Locale & Demographics

Lisbon is the capital and the largest city of Portugal. According to the 2001 census, Lisbon had 564,657 inhabitants on a land area of 84,4 km² (INE, 2001). The metropolitan area counts with 2,661,850 inhabitants on a 1,382 km² area (INE, 2001). Administratively, the city of Lisbon is divided in 53 “freguesias”, civil parishes (also denominated municipal parishes), which correspond to the lowest level of local government, below district and county councils (see figure 4.2).

Figure 4.2
Civil parishes of the city of Lisbon



Source: Wikimedia Commons

Lisbon is the wealthiest Portuguese region with a GDP of 104.7% per capita (as of 2007), above the European average of 100% and the Portuguese average of 75.6% (Eurostat, 2010). Considering some basic demographic indicators, in 2009, Lisbon's birth rate was 12.8% (compared with the Portuguese average of 9.4%), while its mortality rate was 15.1% (compared with the Portuguese average of 9.8%). In the same

period, the aging index was 165.9, whereas the Portuguese aging index was 118 (INE, 2010).

Considering other socio-demographic characteristics (see table 4.1), and starting with gender, Lisbon inhabitants are composed of 54.3% female and 45.7% male.

In terms of age, 11.6% of the inhabitants are below 14, 64.8% between 15 and 64, and 23.6% above 64. The elderly group (65+) is underrepresented in Lisbon (-5.7%), compared with the Portuguese average.

In terms of marital status, 53.3% are married, 37.5% are single, 6.5% widowed, and 2.7% divorced or separated. The married group is overrepresented by 5.8% in Lisbon, when compared with the Portuguese average. Other considerable differences between Lisbon and Portugal are visible in the household type, such as one-person household, where Lisbon is underrepresented by 17%, and nuclear family, where Lisbon is overrepresented by 12%.

In terms of education, 26.4% of Lisbon inhabitants have no formal education, 55.4% have less than secondary level education, 11.7% have secondary level education, 6% have a university degree, and 0.4% have post-graduate level education. There are some significant differences (higher than 5%) in education, when comparing Lisbon and Portuguese reality: Lisbon has more 24.6% of inhabitants with no education; less 7.5% with less than secondary education; less 5% with secondary education and less 9.7% with a university degree. Considering professional occupation, Lisbon has 48.1% of employed people, 6.7% unemployed, 18% retired (minus 11.6% than the national average), and 16.3% students (8.2% more than the national average). The regional/national comparison of these socio-demographic indicators is presented in the next table (see table 4.1).

Table 4.1
Socio-demographic characteristics of Lisbon vs. Portugal (2001)

		Portugal	Lisbon	
		%	%	Diff.
Gender	Female	51.7	54.3	2.6
	Male	48.2	45.7	-2.5
Age	0-14	15.9	15	-0.9
	15-24	13.8	13	-0.8
	25-64	53.8	56.3	2.5
	65 &+	16.5	15.7	-0.8
Marital Status	Single	37.5	37.8	0.3
	Married/De facto	53.3	47.5	-5.8
	Divorced/Separated	2.7	5.3	2.6
	Widowed	6.5	9.2	2.7
Household type	One-Person Household	17.3	34.3	17
	Couple without children	22	23	1
	Nuclear family (couple with children)	41	29	-12
	Other	19.7	14	-5.7
Occupation	Employed	48.1	52.2	4.1
	Unemployed	6.7	4.2	-2.5
	Student	16.3	8.1	-8.2
	Retired	18	29.6	11.6
	Housewife	4.7	4.1	-0.6
	Other inactive	6.2	1.8	-4.4
Education	No education	26.4	1.8	-24.6
	Less than secondary education	55.4	62.9	7.5
	Secondary education	11.7	16.7	5
	University degree	6	15.7	9.7
	Master/PhD	0.4	1.5	1.1

Source: Census data (INE, 2001)

4.4.2 Lisbon and Internet usage

Lisbon is the Portuguese region with the highest rate of computer and Internet penetration: in 2010, 68% of the households had a computer, 62% of the households had Internet access, and 59% had broadband connection. There is a fairly significant distance from the Portuguese average of 60% of households with computers, 54% of households with Internet access, and 50% of households with broadband access (INE & UMIC, 2010). Lisbon is also the Portuguese region with the highest rate of computer and Internet usage: in 2010, 68% of Lisbon inhabitants between 16 and 74 years old used computer, and 63% used the Internet. Compared with the Portuguese average indicators, Lisbon is 13% and 12% above the average, respectively (INE & UMIC, 2010).

A socio-demographic profile of the Portuguese computer and Internet user can be found in the next table (table 4.2). Since there does not seem to be any data available per region, it is a national characterization. Nevertheless, regional and national trends seem to move in the same direction – young, employed, and educated males are still the main Internet users, even though the gender difference is becoming less significant (see table 4.2; Cf. WIP Portugal, 2010).

Table 4.2
Profile of computer and Internet users in Portugal (2010)

	Computer	Internet
Total	55.4	51.1
Gender		
Female	50.1	46.2
Male	61	56.2
Age		
16-24	94	89.3
25-34	82.1	79.2
35-44	66.9	62.4
45-54	46.7	40.6
55-64	32	27.7
65-74	12.7	10.4
Education		
Less than secondary education	39.7	34.3
Secondary education	94.3	92.2
Higher education	97	95.7
Occupation		
Students	99.5	95.3
Employed	66.4	61.3
Unemployed	52.6	48
Retired and other inactive	19.7	16.9

Source: INE, 2010

Of those reported to use computers and the Internet, in 2010, three quarters use it daily (76% for the computer, and 75% for the Internet), and mainly at home (91% for computer and 89% for Internet, compared with 44% and 40%, respectively, that use it in the workplace) (INE & UMIC, 2010).

In terms of the type of usage, the Internet is mostly a mean of communication, information, and entertainment, while activities such as e-commerce or user-generated

content are still minor among the Portuguese users (WIP, 2010). In 2010, 10% of individuals bought online products or services, 14% in Lisbon (INE & UMIC, 2010).

Portuguese people mainly use the Internet in the following ways: to send and to receive emails (89.9%), to use instant-messaging services (74.5%), to search for news (68.7%), to surf online with no defined goals (62%), and to use social networking sites (56.45%) (WIP, 2010). Online entertainment activities are more frequent among male users, while communication activities, such as accessing social networking sites, are more frequent among female users (60.7% for women, 52.3% for men). In terms of information search, there is a slight female tendency, especially in the search for health information. However, the search for generic news is essentially a male activity (WIP, 2010).

The majority of the Internet non-users are older, particularly above 64 years of age (INE, 2010, WIP Portugal, 2010). The main reasons to not use the Internet are lack of interest (44.4%), digital illiteracy (26.3%) and lack of a computer and/or Internet (10.2%) (WIP Portugal, 2010). Portugal has an obvious age-based digital divide, being mainly a “cleavage resulting from a society where the necessary knowledge resources are distributed unevenly between generations. Only then we can explain that amongst those born until 1967 we find a part of social actors close to young, in some practical dimensions and sometimes representations. This proximity is visible in the fact that those possessing similar educational abilities are close, for example, in Internet use or their perspective of professional appreciation” (Cardoso, 2008:021).

4.5 Social capital and Internet research in Portugal

Considering social capital and Internet research in Portugal, at the time of writing, I could find only a short conference article about the subject. This article was framed within an Internet audience analysis and tested a social capital scale for the Portuguese context, using William’s (2006) *Internet Social Capital Scale* (Damásio, Morais & Henriques, 2010). The scale was tested with a young sample of 380 Portuguese respondents.

Through exploratory factor analysis and confirmatory factor analysis, the authors defined a Portuguese Internet Social Capital Scale with 4 sub-scales and 32 items, instead of the original 40 (Damásio, Morais & Henriques, 2010). I also use some items of William’s scale in my research, although I raise some questions about this online/offline division in the next chapter (Methods).

Indirectly, the study conducted by Cardoso et al. (2005) gives us some hints into the subject, as they measured Internet usage and social interaction. Similarly, OberCom (2010) conducted a detailed study of the network society in Portugal in 2008; and Cies, LINI, & OberCom conducted, in 2010, a study of Internet usage in Portugal, within the World Internet Project (WIP). Although their data is of utmost importance to frame my analysis and results, they did not have specific questions that I could use to assess social capital and Internet usage in Portugal. The findings of these studies have been explored within the current chapter, namely to describe the Portuguese Internet users.

4.6 Conclusion

This chapter surveyed studies on social capital and Internet usage, showing three main approaches: one that points for a positive relationship between social capital and Internet usage, one that points for a negative relationship, and other that points for no relationship.

The elasticity of the concept of social capital was evident in this literature review, as definitions of social capital differ significantly. Nevertheless, the majority of the research in the field indicates that there is a positive relationship between Internet usage and social capital, or between Internet usage and some dimensions of social capital.

I then introduced the empirical part of this thesis: setting the research goals, research question, hypothesis, and the analytical framework. The main goal of this research is to explore if there is any association between social capital and Internet usage. Based on this literature review, my main hypothesis is that there is a positive relationship between perceived social capital and Internet usage. A secondary goal of my research is to explore the relationship between social capital and civic engagement, and trust. My purpose with this secondary goal is to contribute to the discussion on the dimensions of social capital. As showed in the previous chapters, for some authors civic engagement and trust are dimensions of social capital (Cf. Putnam, 2000), while for others there is still no strong evidence or theoretical standpoint to include them as dimensions of social capital (Lin, 2001; Lin & Erickson, 2008).

If social capital, civic engagement, and social trust are positively and strongly associated, then maybe there is an interconnection between them that needs further research and consideration.

The analytical model describes the variables I use to study the relationship between social capital and Internet: social capital is measured through the selected dimensions,

namely, bonding, bridging, and specific resources, whereas Internet usage is measured through frequency of usage.

To explain how the Internet could affect social capital, I turn to the “social affordances” perspective: through its social affordances, i.e. perceptual cues that help an individual to decide on which specific part of the social structure he/she is going to interact with, the Internet can have an impact on social capital.

This chapter finished with a brief description of the milieu of the research: firstly, outlining the socio-demographic characteristics of the city of Lisbon; secondly, describing the type of Internet usage by its inhabitants; and thirdly, mentioning a few studies conducted in Portugal that touch some of the elements of this research.

In the next chapter, I present and discuss the research methods used to capture and analyze the data of this study.

5 Research Methods & Measures

This chapter presents the different perspectives of measurement of social capital, and discusses the approach that I selected for this study. It also presents the research strategy and the methods used for collecting data. This includes a report on the sample design, the data collection, the measures of social capital, and the composition of the data and its representativeness. Lastly, I address the ethical concerns with the data collection and analysis.

5.1 Measuring social capital

5.1.1 The methodological challenge

In addition to the conceptual challenge, studying social capital also means facing a methodological challenge. If social capital is a difficult concept to grasp, one can imagine how difficult it is to measure it. As with the definitions, measurements are related to the goals of each research, so there is no unique methodological framework. Consider the measuring approaches used by the four main proponents of social capital:

- Coleman (1988) was interested in social capital and educational outcomes, so he measured “family social capital” through variables such as having two parents at home, number of siblings, parents’ expectations for child’s education, and frequency of talking with parents about personal experiences.
- Putnam (2000) was interested in community social capital and civic engagement, so he developed the “Social Capital Index”. This index (see 5.1) combines fourteen significantly inter-correlated indicators, which measure formal and informal community networks¹. Following his definition of social capital, Putnam emphasizes civic participation, combining several measures of civic engagement with social trust and informal sociability.
- Nan Lin (2001, 2008) was more interested in how status attainment and work performance can be explained through a social network analysis perspective.

¹ According to Putnam (2000), of the 91 possible bivariate correlations among the fourteen indicators, 88 were statistically significant at the .05 level or better, in a positive direction. The data comes from three independent survey archives and three different government agencies in the USA. The summary index is the average of the standardized scores on the 14 component measures, being identical to the factor score from a principal components analysis of the 14 variables (Putnam, 2000).

This would include measuring, for example, social network size, composition, and density.

- Notably excluded from the above is Bourdieu, as he did not define any empirical indicators to measure social capital.

In summary, some approaches move towards the measurement of civic participation, cooperation, integration, social cohesion, and trust (Putnam, 2000; Grootaert & van Bastelaer, 2001; Ostrom & Ahn, 2003), while others are focused on the structure, on the network perspective (Burt, 1988; 2000; Lin, 2001, 2008; Flap & Volker, 2005). Different levels of analysis – micro, macro, or meso – also determine the measurement of social capital (Cf. Franke, 2005). This means that there is a lack of standard measurement instruments and that the results of these analyses are fragmented (van der Gaag & Snijders, 2005).

Table 5.1
Putnam's Social Capital Index

Components of Comprehensive Social Capital Index	Correlation with Index
Measures of community organizational life	
Served on committee of local organization in last year (percent)	0.88
Served as officer of some club or organization in last year (percent)	0.83
Civic and social organizations per 1,000 population	0.78
Mean number of club meetings attended in last year	0.78
Mean number of group memberships	0.74
Measures of engagement in public affairs	
Turnout in presidential elections, 1988 and 1992	0.84
Attended public meeting on town or school affairs in last year (percent)	0.77
Measures of community volunteerism	
Number of nonprofit (501[c]3)* organizations per 1,000 population	0.82
Mean number of times worked on community project last year	0.65
Mean number of times did volunteer work in last year	0.66
Measures of informal sociability	
Agree that "I spend a lot of time visiting friends"	0.73
Mean number of times entertained at home in last year	0.67
Measures of social trust	
Agree that "Most people can be trusted"	0.92
Agree that "Most people are honest"	0.84

*A 501(c)(3) is a federal tax-exempted, non-profit association in the USA. It is applied "to corporations, and any community chest, fund, or foundation", "organized and operated exclusively for religious, charitable, scientific, testing for public safety, literary, educational purposes, to foster national or international amateur sports competition, promote the arts, or for the prevention of cruelty to children or animals." (Department of the Treasury, USA, 2008:19), Putnam, 2000.

So, although there are different measurement perspectives, the two generally most followed are the civic participation perspective and the network perspective. From a civic participation perspective, civic membership and political engagement have been the main focus of measurement.

From a network perspective, social networks and their sizes have been the primary concern of the measurement of social capital. Some studies equate social capital with people's social networks, whereas others state that social networks are used as a proxy for social capital, since it is not possible to measure social capital directly (Cf. Finsveen & van Oorschot, 2008). Resources and how they can become available to the individuals have been a secondary concern (Cf. Van der Gaag & Snijders, 2005).

There are several problems with the exclusive measurement of social networks and their sizes: first, size and intensity of a person's networks does not indicate anything about the resources available in those networks. As Finsveen & Van Oorschot (2008) explain, A and B might have the same network size and intensity but there might be considerable differences in resources to meet particular goals and needs. Second, it might lead to an over-estimation of social capital, since it assumes that each measured resource is evenly available to the individual (Van der Gaag & Snijders, 2005). Third, it neglects the fact that even though alters may have a plethora of resources, they have to be willing to give access to those resources (Van der Gaag & Snijders, 2005).

Nevertheless, several studies suggest that a larger network and a higher intensity of a network's contacts are associated with more access to important resources (Cf. Finsveen & Van Oorschot, 2008). For instance, the greater a tie's status and prestige, the more valuable the information and influence will be provided; the greater the size and diversity of a network, the greater one's resources will be (Cross & Lin, 2008; Fiori, Smith, & Antonucci, 2007; Burt, 1992). But the network size and the tie strength composition of networks are not always related with accessed prestige. And networks with higher prestige are not always diverse (Van der Gaag, Snijders & Flap, 2008). Also, structure and function are not always correlated; there are supported and unsupported network types (Cf. Fiori, Smith, & Antonucci, 2007).

For example, through a statistical analysis of the 2001 International Social Survey Programme (ISSP) data, with a sample of 24.932 respondents of 20 Western industrialized countries, Finsveen & Van Oorschot (2008) showed that some characteristics of personal networks, such as contact frequency, number of close friends, and number of active membership in groups/organizations are associated with access to resources in cases when people need to borrow money, to receive help in the

household when having flu, and to have someone to talk to when they are down or depressed. Access to resources is to some extent higher for people who are active member of organizations, have more contact with close family and friends, and have more friends.

But these relationships were statistically weak. To see what part of the explained variance was accounted by country (by people living in different countries) and what part was explained by network characteristics (contact frequency, number of close friends, and number of active membership in organizations), the authors compared both variables. Results showed that these network characteristics in these three situations are very weak predictors of people's access to resources in personal networks (Finsveen & Van Oorschot, 2008).

Finally, causality has also been a critical weakness of the social capital studies. The majority of studies on the subject are cross-sectional, and so causality is not clear. To be able to observe any causal direction, we need more longitudinal studies (Lin & Erickson, 2008).

And what happens when Internet is included in this measurement? The next section explores this issue.

5.1.2 Measuring social capital and Internet usage

Measuring how the Internet affects social capital brings another level of complexity and uncertainty. This is more problematic when models from other media, such as TV, are imported to the Internet realm (Williams, 2006). Can social capital be measured in the same way online?

Approximately the same measurement instruments have been applied to measure offline and online social capital. And so, researchers called for new forms of measurement (Quan-Haase & Wellman, 2004). Williams (2006) developed the *Internet Social Capital Scales* (ISCS) (see table 5.2), which are used with some adaptations in my research. In these scales two dimensions are compared: bridging versus bonding, and online versus offline. These correspond to four subscales – offline bonding, online bridging, offline bridging, online bonding – each with 10 question items with five-point Likert scale responses. The online/offline scales are the same, but applied to online or offline experiences separately (e.g. “There are several people (online/offline) whom I trust to solve my problems”). The different measures of social capital were based on

Putnam's (2000) definitions and other existing scales (Norris, 2002 cit. by Williams, 2006; Cohen & Hoberman, 1983, cit. by Williams, 2006).

For bonding social capital, Williams (2006) used Putnam's definition, identifying four criteria: emotional support; access to limited resources; capacity to mobilize solidarity; and out-group antagonism. Finally, Williams (2006) added the idea of homogeneity, through the connection with people that share similar beliefs and interests. For bridging social capital, Williams (2006) also considered Putnam's dimensions, namely outward looking; contact with a broader range of people; view of oneself as part of a broader group; diffuse reciprocity with a broader community; to which he added meeting new people, as a sign of heterogeneity. It is important to note that these dimensions were not intended to be mutually exclusive or unrelated.

Table 5.2
Internet Social Capital Scales (Williams, 2006)

Bonding Subscale	Bridging Subscale
<ol style="list-style-type: none"> 1. There are several people online/offline I trust to help solve my problems. 2. There is someone online/offline I can turn to for advice about making very important decisions. 3. There is no one online/offline that I feel comfortable talking to about intimate personal problems. (reversed) 4. When I feel lonely, there are several people online/offline I can talk to. 5. If I needed an emergency loan of \$500, I know someone online/offline I can turn to. 6. The people I interact with online/offline would put their reputation on the line for me. 7. The people I interact with online/offline would be good job references for me. 8. The people I interact with online/offline would share their last dollar with me. 9. I do not know people online/offline well enough to get them to do anything important. (reversed) 10. The people I interact with online/offline would help me fight an injustice. 	<ol style="list-style-type: none"> 1. Interacting with people online/offline makes me interested in things that happen outside of my town. 2. Interacting with people online/offline makes me want to try new things. 3. Interacting with people online/offline makes me interested in what people unlike me are thinking. 4. Talking with people online/offline makes me curious about other places in the world. 5. Interacting with people online/offline makes me feel like part of a larger community. 6. Interacting with people online/offline makes me feel connected to the bigger picture. 7. Interacting with people online/offline reminds me that everyone in the world is connected. 8. I am willing to spend time to support general online/offline community activities. 9. Interacting with people online/offline gives me new people to talk to. 10. Online/Offline, I come in contact with new people all the time.

The scales were tested through a sample of 884 participants and analyzed first with exploratory factor analysis and then with confirmatory factor analysis (CFA). The statistical analysis showed that out-group antagonism and homogeneity were not part of bonding social capital, and the CFA allowed for the construction of a 10-item scale for

both bridging and bonding that worked similarly well in online and offline dimensions. The final scales were tested for goodness of fit presenting a reasonable model. The use of these scales is discussed in the survey measures section.

5.1.3 Methodological framework: choices and limitations

Using my definition of social capital and the state of the art, I measured the following dimensions of social capital: bonding social capital, bridging social capital, and resources.

It is nearly impossible to measure a single component of social capital, because “By trying to capture social capital in a single measure we may lose a lot of information and make it nearly impossible to investigate its goal specificity” (Van der Gaag & Snijders, 2005).

But the main purpose of my research is not to exclusively measure social capital, but to understand if there is any association between social capital and Internet usage. So I combined different approaches from Internet studies, social capital studies, and general social network analysis.

In this research, there is no clear-cut way in terms of the measuring perspective. Besides my research question and theoretical framework, I had to consider the contextual challenge: the city of Lisbon. As the studies of the World Bank show, social capital differs with the research site, and the same dimensions are not always significant (Grootaert & van Bastelaer, 2001).

To measure bonding and bridging social capital I used scales validated in the Internet studies field; namely, I adapted some items from the *Internet Social Capital Scales*, developed by Williams (2006). I could have, however, used more specific measures (mainly from social network analysis) such as the *Name Generator/Interpreter* (US General Social Survey on Social Networks); or the *Position Generator* (Lin & Dumin, 1986; Lin, 2001; Erickson, 2005).

The *Name Generator* (NG) asks the respondent to name people that he/she has discussed important matters with in the last 6 months, mapping the ego-centered social network and through that defining a resources inventory. The problem with the NG is that it is extremely time-consuming and complicated when applied to larger networks. It can also produce redundant data and is biased toward strong ties (Lin & Dumin, 1986). Additionally, it measures social relationships and not the resources that are available

through them (Van der Gaag & Snijders, 2005). In addition to that, I have to consider some cultural idiosyncrasies that come into play: in my experience Portuguese people are not inclined to give out personal information, such as names of their networks. Other colleagues that have been working in the social network analysis field have been confirming my experience (Xerez, 2010, personal communication).

The *Position Generator* (PG) is a widely used instrument that asks participants if they know someone in different occupations (e.g. carpenters or lawyers). Through this information on job prestige, the researcher defines the social resources available for each ego. An issue with the PG is that it restricts information on social resources, and focuses on the importance of job prestige and instrumental actions (Van der Gaag & Snijders, 2005). If we are interested in assessing social capital related to expressive actions, such as social support, the prestige-rich positions might be of no use, since there is no evidence that network members in prestigious occupations would give more social support (Cf. Lin, 2001; Van der Gaag, Snijders, & Flap, 2008).

The NG and PG measure the size, density, and diversity of the participant's social network (since diversity of contacts may result in more diverse/higher access to resources), and both have been considered scientifically reliable and valid. However, when comparing the NG to the PG, the latter is easier to administer, more economical and flexible, and less biased towards strong ties and geographic boundaries (Lin & Dumin, 1986).

To measure resources I also do not use the NG or the PG, but the *Resource Generator* (RG) developed by Snijders and Van der Gaag (1999; 2005; 2008). This is a more appropriate instrument for measuring resources. To assess the value of a network, it is not enough to measure size and composition; it is important to look at specific resources that are embedded in that structure (value). Similar networks, in terms of quality (prestige) and quantity (size) do not signify the same or mean that resources are available.

I used the RG to look at resources and their availability (not only if resources are present in the network, but also if they are available to the individual). The RG combines the positive elements of the NG and the PG, such as economy, internal validity, and detailed resource information; and emphasizes specific social resources, while excluding the identification of names (van der Gaag & Snijders, 2005). The RG asks participants about access to a list of 33 resources, which covers different domains of life and represent a wide set of human needs from social support to status, influence, etc., in a "general social capital approach". These resources are organized in four social capital subscales:

1. **Prestige and educational related social capital:** resources of high status individuals with higher educational qualifications, useful for instrumental actions.
2. **Political and financial skills social capital:** network members' political party membership, and their knowledge of governmental regulations, and financial matters.
3. **Personal skills social capital:** communication related activities, such as reading journals, speaking languages, and knowing how to work with computers.
4. **Personal support social capital:** resources connected to instrumental and expressive actions, which include trust and a close relationship such as giving advice, helping with a place to stay if necessary, and so on.

The availability of these resources is measured by the role of the ties that make them available to the ego, such as family members, friends, or acquaintances (van der Gaag & Snijders, 2005).

In a comparison of these three methods (Name, Position, and Resources Generator), van der Gaag, Snijders, & Flap (2008) conclude that each measurement instrument emphasizes particular aspects and should be chosen according to the research objectives: for studies focused on instrumental action, the PG is a good option, while for studies focused on instrumental and expressive actions and goal specificity the RG is a good choice. In this research, since social capital is conceptualized through expressive and instrumental outcomes, I selected the RG. But because of time and practical constraints, which are going to be further addressed in this chapter, I could not use the 33 resources; rather I had to select a smaller number of the listed resources.

Another aspect to consider in the measurement of social capital is access or availability versus mobilization (Cf. Lin, 2001). These are two separate processes, but access precedes its usage. My study examines both: the survey explores the access, while the interviews explore mobilization or use. As Putnam puts it: "social capital is stubbornly resistant to quantification" (Putnam, 2002:11). Putnam's suggestion is to acknowledge the multidimensionality of social capital and how its dimensions have different understandings, while avoiding to exclusively frame questions in terms of more or less quantitative levels of social capital (Putnam, 2002). The focus should be on describing, in a qualitative sense, different forms of social capital and how they evolve in society (Putnam, 2002).

In addition, limitations of time and research scope call for a more narrowed focus. In the case of the survey, the questionnaires could not be longer than 15 minutes, since they are administered face-to-face². My field experience shows that if it is more than 15 minutes, people generally stop answering along the way or decline it altogether. There are also contextual constraints. For example, following the *Connected Lives* survey I included a measure of size, physical distance, and type of interaction with close and somewhat close (weak) ties. These indicators would be part of the bonding and bridging social capital variables.

Close ties were divided into close family members and close friends, and explained as those close relatives/friends that you regularly keep in touch with and trust. Somewhat close was defined as those people that are more than “casual acquaintances” but not “very close”. During the survey pre-test the “somewhat close” question raised continuous doubts by the respondents, and even with further explanation by the interviewer, the large majority of the pre-test participants answered “I don’t know”. What made sense for Canadian respondents, did not make sense for Portuguese respondents. Faced with this difficulty, and considering a lack of a better way to re-phrase it, and that I already had a bridging social capital scale to measure diversity, I decided to take out the “somewhat close” measure. This obviously limits the analysis of the bridging social capital dimension, but I do not think it compromises the construction of the bridging social capital variable.

I also measure trust and civic engagement to test them separately, aiming to contribute to the theory and measurement of social capital.

These and other measures are explained in more detail in the survey measures section.

In the next section, I describe the research strategy and the research design.

² According to my experience and that of my colleagues, the best way to receive results in Portugal is by administering questionnaires face-to-face. This has been the common practice at my university (ISCSP-UTL).

5.2 Research strategy and design

5.2.1 Mixed Methods Approach

This research is based on a *mixed methods* (MM) approach, also known as *multi-strategy research*. This approach combines techniques from qualitative and quantitative methods, at the data collection and analysis level, involving “the selection of units or cases using both probability sampling (to increase external validity) and purposive sampling strategies (to increase transferability)” (Teddlie & Yu, 2007:78). The MM approach allows for creative research, since any technique can be combined to tackle a research question. Furthermore, combining different methodological approaches can contribute to a better understanding of a social phenomena, through triangulation and complementarity.

The MM research emerged as a third methodological movement, after the positivist/quantitative and the constructive/qualitative one (Tashakkori & Teddlie, 2003; Teddlie & Tashakkori, 2009). Merging 19 definitions of mixed methods, R. Burke Johnson et al. presented the following comprehensive definition: “Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration” (Johnson, Onwuegbuzie, & Turner, 2007:123).

Despite being considered a recent research strategy, a great number of sociologists, such as Herbert Gans, Marie Jahoda, Paul Lazarsfeld & Zeisel; and Lynd & Lynd, had been using MM since the early decades of the 20th century (Johnson, Onwuegbuzie & Turner, 2007). In fact, the studies associated with the ‘Hawthorne effect’ were based in a mixed methods approach (Tashakkori & Teddlie, 2003). But it was only during the second half of the last century that Campbell & Fiske’s article (1959) presented the idea of “multiple operationalism” and a “multitrait multimethod matrix”, stating that more than one method should be used to guarantee that *variance* is a result of the phenomenon and not of the used method (Campbell & Fiske, 1959 Cit. by Johnson, Onwuegbuzie & Turner, 2007; Tashakkori & Teddlie, 2003). Of course Campbell and Fiske’s approach is more intended as a measurement and validation technique than a research methodology; nevertheless, their contribution is emblematic.

Webb et al. (1966) build on Campbell & Fiske’s idea, coining the term “triangulation”. This term was later explored more systematically by Denzin (1970) who described how

to triangulate methods, considering data triangulation, investigator triangulation, theory triangulation, and methodological triangulation (Johnson, Onwuegbuzie & Turner, 2007). MM has been extensively used in the social sciences, especially since the 1990s, after the publication of various influential works on mixed methods research (Cf. Tashakkori & Teddlie, 2003). In Portugal, mixed methods strategies have been taught and applied, at least, since the 70s (Cf. Neto & Trindade, 1975; Carmo, 1987; Amaro, 1992).

The main criticisms of MM are related to mixing methods and epistemological and axiological paradigms (Bryman, 2008; Lincoln, 2010). In her new article, Yvonna Lincoln underlines: "Let me state at the outset that I am not against utilizing a variety of methods to accomplish some purpose, and I have said so countless times...What concerns me is mixing paradigms, or metaphysical models..." (Lincoln, 2010:7). In their 1981 book, Guba & Lincoln, famous proponents of qualitative research, state: "There is no reason why both camps should not exploit both qualitative and quantitative techniques..." (Guba & Lincoln, 1981:77 cited by Lincoln, 2010).

Opposing quantitative and qualitative data leads to an oversimplification, because the emphasis is not on the foundational assumptions but on the data (Willis, 2007). Nonetheless, the truth is that, in general, qualitative methods are related to constructivism and phenomenology (types of interpretivism), whereas quantitative methods are related to positivism and postpositivism (Cresswell, 2003).

There is, therefore, "the idea that research methods carry epistemological commitments and the idea that quantitative and qualitative research are separate paradigms" (Bryman, 2004:444). Sociology has different paradigms related to different ontological and epistemological assumptions. The generally accepted paradigms are: positivism, postpositivism, critical theory, and interpretivism (which includes constructivism and phenomenology) (Cf. Guba, 1990; Denzin & Lincoln, 2000; Willis, 2007).

Postpositivism evolves from the positivist approach³ (empiricism), and accepts the idea that you can never do enough research to be absolutely sure if your theory is correct (Willis, 2007). It follows a Popperian "falsificationist approach" (refuting an hypothesis is more definitive than confirming it Cf. Popper, 2002 [1959]): confirming studies do not prove anything, they merely add to the evidence that supports a given theory (Willis,

³Positivism was discredited after World War II, being replaced by postpositivism whose tenets incorporate the value-ladenness of inquiry and of facts, and the nature of reality (Cf. Tashakkori & Teddlie, 2003). The "logical positivism" developed in the 20th century was highly criticized by authors such as Sir Karl Popper who showed that there is always a possibility that the data gathered does not represent reality (Willis, 2007). In his 1959 book, Popper explores these problems in length (Popper, 1959).

2007). Critical theory progresses from a classical Marxist perspective, being concerned with inequalities, oppression, and marginalization (Willis, 2007). Interpretivism, as a reaction to using the same methods and paradigms from natural sciences in social sciences (positivism), follows a rationalist approach: reality is not accessible to us exclusively through direct experience (Willis, 2007). Moreover, “interpretivism proposes that we abandon the search for generalizable truths and laws about human behavior and concentrate on local understanding” (Willis, 2007:61).

There are various flaws with each paradigm, and there is not a better or more accurate view. It is not the purpose of this study to tackle the “antagonism” of qualitative versus quantitative approach and the different epistemological frameworks that support it, particularly because I believe it can be in many ways a forced antagonism. Researchers might be operating from different paradigms, but they might also not consider themselves part of the incompatible duality (rejecting any label or any single view of the nature of reality).

Once again, I use the scientific method to test a theory looking at inferential patterns but I also rely on more “subjective” research to understand the contextual and local aspects of that perceived reality, giving space to individual voices. Also, the incompatibility thesis has been discredited as mixed methods approaches prove to be successful (Cf. Tashakkori & Teddlie, 2003; Hesse-Biber & Leavy, 2011). Extreme polarization might even be unfruitful for science, as it normally falls into unproductive schisms, as the ones between agency and structure, or genes and environment.

Table 5.3 summarizes the postpositivist, interpretative, and mixed methods approaches. While analytically this differentiation is useful, researchers tend to use progressively the third method, without being overly concerned with the so-called foundational assumptions of each approach (Creswell, 2003).

Table 5.3
Qualitative, Quantitative, and MM Approaches

<i>Tend to or Typically</i>	<i>Qualitative Approaches</i>	<i>Quantitative Approaches</i>	<i>MM Approaches</i>
Use these philosophical assumptions	<ul style="list-style-type: none"> - Constructivist, Advocacy, Participatory knowledge claims - Phenomenology, grounded theory, ethnography, case study, and narrative 	<ul style="list-style-type: none"> - Postpositivist knowledge claims - Surveys and experiments 	<ul style="list-style-type: none"> - Pragmatic knowledge claims - Sequential, concurrent, and transformative
Employ these methods	<ul style="list-style-type: none"> - Open-ended questions, emerging approaches, text or image data 	<ul style="list-style-type: none"> - Closed-ended questions, predetermined approaches, numeric data 	<ul style="list-style-type: none"> - Both open- and closed-ended questions, both emerging and predetermined approaches, and both quantitative and qualitative data and analysis
Use these practices of research	<ul style="list-style-type: none"> - Positions himself or herself - Collects participant meanings - Focuses on a single concept or phenomenon - Brings personal values into the study - Studies the context or setting of participants - Validates the accuracy of findings - Makes interpretations of the data - Creates an agenda for change or reform - Collaborates with the participants 	<ul style="list-style-type: none"> - Tests or verifies theories or explanations - Identifies variables to study - Relates variables in questions or hypotheses - Uses standards of validity and reliability - Observes and measures information numerically - Uses unbiased approaches - Employs statistical procedures 	<ul style="list-style-type: none"> - Collects both qualitative and quantitative data - Develops a rationale for mixing - Integrates the data at different stages of inquiry - Presents visual pictures of the procedures in the study - Employs the practices of both qualitative and quantitative research

Source: Creswell, 2003:19

It is important to emphasize that I am not arguing that epistemology is unrelated to method. I am also not claiming that observation does not depend on interpretation. The work of Thomas Kuhn (1970) (and Michael Polanyi⁴) clearly demonstrates that theory testing is not as linear, objective, and straightforward as it seems⁵. The “personal

⁴ Some of Kuhn’s main ideas had been previously explored and debated by Polanyi (Cf. “interpretative framework” of Polanyi versus “paradigm – disciplinary matrix” of Kuhn). They both knew each other and Kuhn attended some of Polanyi’s lectures, before publishing *The Structure of Scientific Revolutions* (1970). Consequently, Polanyi’s supporters disputed Kuhn’s work publicly, and there is even an account of Polanyi accusing Kuhn of plagiarism and Kuhn recognizing that Polanyi had influenced him. Despite this dispute both accepted the similarities in their work, while being critical about each other’s positions (Cf. Moleski, 2006-2007; Scott & Moleski, 2005).

⁵ Kuhn questions the traditional assumption that science is cumulative and states that scientists are blindly committed to the theory they work on, as belief systems come into play: “To be accepted as a paradigm, a theory must seem better than its competitor’s, but it need not, and in fact never does, explain all the facts with which it can be confronted” (Kuhn, 1970:12). According to the author, science has two phases: the “revolutions”, which are rare occurrences that swift paradigms; and “normal science”, where the central assumptions of paradigms are never questioned and there is a scientific routine. Only in times of crisis or revolution – when there are so many anomalies in a paradigm that finally someone calls it into question – there is a period of persistent criticism. As Kuhn explains, “if an anomaly is to evoke a crisis, it must usually be more than just an anomaly. There are always difficulties somewhere in the paradigm-nature fit...The scientist who pauses to examine every anomaly he notes will seldom get significant work done” (Kuhn, 1970:82). But Kuhn goes further, presenting the incommensurability of paradigms:

equation” is also a good example: in astronomy, it was discovered that astronomers making exactly the same observations would report somewhat different values (Schaffer, 1988). We cannot observe ‘facts’ independently of our conceptualizations, but “this ‘theory-dependency’ of observation does not mean that what we see is *determined* by our prior ideas, or that we are free to define what we see in any way we choose” (Buckingham & Saunders, 2004:35).

In addition, the boundaries between paradigms are more blurred than assumed: “The paradigm warriors also too frequently ignore the presence of many intraparadigmatic differences” (Johnson, Onwuegbuzie, & Turner, 2007). Similarly, methods are also not sealed and stagnant. For instance, survey methodology improved significantly with the phenomenological critique: survey researchers acknowledge the importance of framing and testing the meaning of questions for respondents, being aware of the different interpretations that language might have to interviewees and interviewers, and of the problems related to guarantee a certain clarity of meaning when administering a survey (Cf. Buckingham & Saunders, 2004).

My methodological approach is done within a pragmatic knowledge claim. Within this claim, the research problem (and not the methods) is the most important element, and all approaches – quantitative and qualitative – can be used to address the research problem/question. Even though in many different forms, pragmatists, such as Mead and Dewey are not devoted to any single system of thought, sustaining different assumptions and pluralistic approaches (Creswell, 2003; Cherryholmes, 1992). Therefore, pragmatism provides the right “door” for mixed methods research (Creswell, 2003).

“...the proponents of competing paradigms practice their trades in different worlds...Practicing in different worlds, the two groups of scientists see different things when they look from the same point in the same direction. Again that is not to say that they can see anything they please. Both are looking at the world, and what they look at has not changed. But in some areas they see different things, and they see them in different relations one to the other...before they can hope to communicate fully, one group or the other must experience the conversation that we have been calling a paradigm shift. Just because it is a transition between incommensurables, the transition between competing paradigms cannot be made a step at a time, forced by logic and neutral experience. Like the gestalt switch, it must occur all at once (though not necessarily in an instant) or not at all” (Kuhn, 1970:149).

This incommensurability of paradigms is supported by the theory-ladenness of observation, and if all observations and data are tainted by background theoretical positions, then we cannot even compare them, as they will never agree on what is observed. But, revolutions do happen and accepting a theory must be more than a matter of caprice, or science would never advance successfully (Cf. Ladyman, 2002). As Ladyman notes, in his later work Kuhn distances himself from extreme views, namely those who prevented a comparison of qualities of theories within different paradigms (Ladyman, 2002).

Personally, I do not accept Lincoln's claim that "Pragmatism is hiding many a positivist these days" and I am not part of "a larger group seeking to surveil and contain interpretive research" (Lincoln, 2010:7). As stated earlier, both paradigms have flaws and strengths and provide important knowledge. I study social capital and its relationship to Internet usage, but I always emphasize that I am looking at perceived levels of social capital, which is in any case a rough (subjective, tentative, and dependent on human perception) approximation to this social reality. I am testing theory, through quantitative means⁶, but I am also looking at contextual meanings and local understandings.

In other words, I do not only believe in the benefits of conducting both qualitative and quantitative research, through inductive and deductive approaches⁷, as I have been seeing them clearly in my own research (Cf. Neves & Amaro, 2012). Moreover, the "obligation" to choose one of the positions or one of the "labels" might be reductionist. Not only the methodological (and theoretical) triangulation is achievable as it can be highly prolific when possible. I am not claiming, however, that MM is appropriate to every research question and to every subject. Particular research problems call for particular approaches.

Both quantitative and qualitative approaches have a similar weight in this research, but the "representativeness/saturation trade off" principle is evident: "the more emphasis that is placed on the representativeness of the QUAN [quantitative] sample, the less emphasis there is that can be placed on the saturation of the QUAL [qualitative] sample, and vice versa" (Teddlie & Yu, 2007). Bearing this compromise in mind, I designed a two-phase sequential mixed methods study⁸, whose purpose is to obtain statistical results from a sample and then follow up with a few participants to explore the

⁶ *A propos* of the critiques on quantitative research, Payne and colleagues (1981, quoted by Buckingham & Saunders, 2004:36) state: "However erroneous it may be in philosophical terms, sociological practice does go on...we [the sociological profession] implicitly accept that the philosophical paradoxes can only be coping by ignoring them in our own practice...there is a place for systematic empiricism and a kind of generalization and theory which guides sociological analysis of the external world, and which is continuously refined by research, not just by armchair speculation and library critique".

⁷ Most qualitative research follows an inductive approach, but there is also qualitative research following a deductive approach (Cf. Yin, 2011, p.94).

⁸ In terms of typologies of MM studies, Creswell (2003) defines concurrent (the quantitative and the qualitative data are converged – data is collected at the same time or nested), sequential (the findings of one method are explored/expanded by another method – data is collected at different moments and the second method is builds on the findings provided by the first method), and transformative procedures (a theoretical lens is applied to a mixed methods design). Teddlie & Yu (2007) also present sequential MM sampling and concurrent MM sampling, which are defined similarly. However, they add three more types of MM studies: basic MM sampling (mixed sampling, like quota sampling), multilevel MM sampling (with two or more levels or units of analysis), and sampling using multiple MM sampling strategies.

quantitative results and my research question in more depth. With this convergence of quantitative and qualitative data, I hope to be able to better understand my research subject.

The field of social capital research has been dominated by quantitative analysis of survey data, and therefore, contexts, meanings, and motivations to create and sustain social capital are not fully explored. To understand these contexts, meanings, and motivations, I turn to qualitative research. In the first phase, quantitative research addresses the relationship between Internet usage and social capital, through a surveyed stratified random sample of 417 participants, above 17 years of age, living in Lisbon, Portugal. In the second phase, qualitative research, namely semi-structured interviews with 14 participants, is used to explore more in depth the relationship between Internet usage and social capital.

This methodological design is also based on the compromise that I have described previously (“representativeness/saturation trade-off”), that largely depends on the resources that the researcher has available for the research. I could have aimed for a bigger sample size in the survey study or in the interview study, but such decision would affect the investment in the other method. In this sense, I had to define a balancing point, where the requirements for representativeness of quantitative sources and saturation of qualitative sources are met (Cf. Teddlie & Yu, 2007).

More than a MM approach, this research falls into what is defined as a “mixed model study”, because it mixes features of quantitative and qualitative paradigms during other phases of research (Cf. Tashakkori & Teddlie, 1998). Drawing on Patton’s (1990) “methodological mixes” of research phases, Tashakkori & Teddlie (1998) present a model of three dimensions to classify mixed model studies. These dimensions are:

1. Type of investigation (exploratory versus confirmatory)
2. Measurement (qualitative data collection & operations versus quantitative data collection & operations)
3. Analysis (qualitative analysis & inference versus quantitative analysis & inference)

Following this model, the table 5.4 summarizes this study’s approach:

Table 5.4
Mixed methods approach

Type of investigation	Measurement	Analysis
Confirmatory investigation since my hypotheses are based on past empirical and theoretical research.	Collection of quantitative data (stratified random sample of 417 Lisbon inhabitants).	Quantitative analysis through descriptive statistics, Latent Class Models (LCM), and Logistic regression analysis.
Exploratory since the study examines individual and contextualized stories of social capital creation and mobilization, and Internet usage.	Collection of qualitative data (14 semi-structured interviews).	Profiles and thematic analysis.

Besides a MM approach, combining quantitative and qualitative collection and analysis of data, I also used a mixed sample, namely a stratified random sample with selection by quotas. The design of the mixed sample, and both quantitative and qualitative phases are described in more detail in the next section. Before moving into the quantitative and qualitative design, I present my general empirical model.

5.2.2 Empirical model

Based on the conceptual and theoretical framework of this research, I analyze social capital through three dimensions: bonding, bridging, and resources. These dimensions are measured separately in the quantitative phase of the research, and then aggregated to create a single social capital variable, through *Latent Class Model* estimation (LCM). Social capital is a latent variable measured through its proxy dimensions (bonding, bridging, and resources). I will tackle the specifics of the LCM method in the section that pertains to the quantitative data analysis.

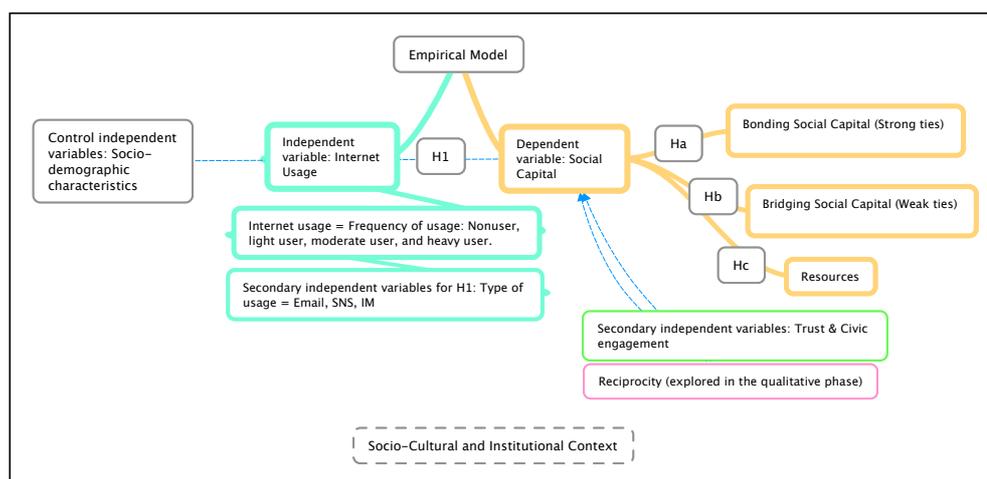
Internet usage is measured through the frequency of usage, and divided into non-users, light users, moderate users, and heavy users:

- Light users correspond to the respondents that use the Internet at least once a month or rarely.
- Moderate users correspond to the respondents that use the Internet 3 or 4 times a week or 1 or 2 times a week.
- Heavy users correspond to the respondents that report using the Internet daily.

Each dimension of social capital and the final social capital variable are the dependent variables, while Internet usage is the main independent variable. In the final analysis of the social capital variable, I additionally introduced three secondary independent variables related to the type of Internet usage: email, instant messaging (IM), and social networking sites (SNS). These three variables are not contemplated in my hypotheses and were not part of my first analytical and empirical model, but as my research evolved, so my interest in testing other specific angles arose. I felt the need to test them, in order to check if, besides Internet usage (frequency), a more social-driven/specific type of Internet usage would have impact on social capital.

Trust and civic engagement are also measured as independent secondary variables, as I aim to test if they associate with social capital. The socio-demographic characteristics of the respondents are considered in the analysis as control independent variables: age, gender, education, occupation, marital status, household composition, and religion. Socio-demographic characteristics, such as age, gender, and education have been strong predictors of Internet usage (Rice & Katz, 2003; Gershuny, 2003; Kouvo & Räsänen, 2005; Neves, Amaro, & Fonseca, 2012) and social capital (Cf. Burt, 1988; Putnam, 2000; Silvey & Elmhirst, 2003; Miyata, Ikeda & Kobayashi, 2008). I added the other mentioned socio-demographic variables, such as marital status and household composition, since they could also affect social capital. Figure 5.1 describes the empirical model of this research, showing the links between the different variables.

Figure 5.1
Empirical Model



Note: H1 = Main hypothesis

The relationship between bonding, bridging, resources, and social capital with Internet usage is analyzed with logistic regression models. In the qualitative phase (through semi-structured interviews), besides looking at the relationship between Internet usage and social capital, I explore mobilization of social capital and reciprocity, without forgetting socio-cultural and institutional contexts. Although not measured directly, the socio-cultural and institutional context is implicit in this study and addressed in the qualitative phase.

The indicators of each of these variables (measured in the survey) and respective categories are presented in depth in the section related to the survey measures.

5.2.3 Level of analysis: Micro versus Macro?

My analysis is done essentially at the micro level, since I am interested in the participants' individual level of (perceived) social capital. The classical definitions of social capital are based on the individual-level tradition (Cf. Bourdieu, 1980; Coleman, 1988). However, it is important to emphasize that although social capital is assessed at the individual level, it is part of a relationship/collective setting between different social actors; it is part of a society. Individual and the collective levels, such as agency and structure, are connected. There is a general idea that the micro-level social capital to which individuals have access to contribute to social capital at the macro level, but macro-level social capital also determines the type of investment done at the micro-level (Cf. Glanville & Bienenstock, 2009). As Coleman notes social capital "constitutes both an aid in accounting for different outcomes at the level of individual actions and an aid toward making the micro-to-macro transitions without elaborating the social structural details through which this occurs" (Coleman, 1988:S101).

Despite this connection, some literature on social capital shows a disagreement on whether social capital is a micro or a macro level concept; or even how we pass from one to the other (Cf. Halpern, 2005; Portes, 1998). However, social capital has been emerging as a multi-level concept: "Both diffuse weak networks and norms at the national, macro-level and strong dense networks and norms at the intimate, family or micro-level fit within broader definitions of social capital" (Halpern, 2005:18).

Simultaneously, a bulk of research has been pointing towards the link between the distribution of micro-level social capital and the type of community social capital: low levels of individual social capital are correlated with less active, less civic, and less peaceful communities (Cf. Glanville & Bienenstock, 2009; Putnam, 2000). But this process between micro and macro structures surely is not a direct or a simple one.

To map the conditions under which micro level social capital can lead to macro level social capital, Glanville & Bienenstock (2009) present an agent-based modeling simulation, based in an evolutionary model of cooperative behavior. In this computational simulation there is a set of agents (population of programmed entities) that interact with each other, and the focus is on the strategies they use to determine whether to act cooperatively when paired. Agents that are able to gather more resources are more successful and reproduce at a higher rate. Social networks are considered as a mechanism to produce reputation (providing a mean of trust) and two degrees of separation are used: friends and acquaintances of friends. The simulation models an encounter between two strangers, where they hope to see if they have any common acquaintances, especially if a transaction is in place.

In the Glanville & Bienenstock's model (2009), agents with seven different strategies (strategies range from -3 to 3, representing the point at which an agent defects depending on the information available about the partner) are paired randomly. Access to information about their partner's behavior is available directly when they have been paired together before; or indirectly, through information received by the agent's social network. All encounters and associational patterns are recorded. To decide to cooperate or defect, the agent is able to rely on social capital (if available) (Glanville & Bienenstock, 2009).

The results of Glanville & Bienenstock's (2009) study show that developing networks that generate and maintain cooperation entails many pairings, because networks are not feasible until cooperative agents have a friend with whom to interact. To have a strategic advantage, cooperators need several friends. A large number of repeated pairings is insufficient to generate a population of cooperators based on direct reciprocity only. Having the possibility of having friends to give information about a former partner's behavior represents an advantage to cooperative strategies. In terms of survival rates of different strategies for the direct reciprocity condition, 'defecting' ones were the least successful, while the 'discriminating' ones were more successful than the 'cooperating' ones. The "cynical" cooperation by the discriminators was not only a successful strategy, as it was important to the population because it emphasized cooperative norms, discriminating defectors (Glanville & Bienenstock, 2009).

For a big population size, the number of ties had to increase, and for a population of 10,000, $140N$ pairings was enough to produce cooperation. In the absence of direct reciprocity and punishment, agents who cooperate earlier in the interaction collect benefits later, while uncooperative agents are punished. These findings suggest that social networks facilitate cooperation and that even indirect reciprocity can produce high

levels of cooperation in communities without tight-knit, strong networks, in large populations. Although this simulation is exploratory and social capital means much more than indirect reciprocity, it was an informative experience for understanding the micro-macro connections (Glanville & Bienenstock, 2009).

Concluding this section, for this study I essentially focused on an individual level. But, as stated earlier, this individual level is connected to a collective level (meso and macro), because social capital is a social concept.

5.3 Data collection and analysis

5.3.1 The Survey

Surveys are valuable instruments to capture quantitative data in the form of self-reported attitudes, beliefs, and behaviors. The main purpose of survey⁹ research is to be able to generalize from a sample to a population, and it has been the primary tool in social capital research. I conducted a cross-sectional survey of a stratified random sample, through face-to-face interviews. The sampling, data collection, and measures are discussed in this section.

5.3.1.1 Sampling and Data Collection

To collect the data, I designed a stratified random sample, drawn out of the 53 municipal parishes (or districts) that form the city of Lisbon. The stratified random sampling was selected because it generates a gain in precision in the estimates of characteristics of the whole population (Cochran, 1977). Using a multistage approach, I defined four strata according to the number of eligible voters per municipal parish. The number of eligible voters is based on figures published yearly by the Portuguese Electoral Registration Entity (DGAI). As the electoral registration is mandatory for citizens above 17 years of age, and updated yearly, the figures of the DGAI provide a fairly reliable representation of the number of inhabitants per municipal parish.

However, the DGAI figures lacked relevant demographic information for inhabitants, (such as age, gender, marital status, family composition, and other socioeconomic indicators), so I needed another dataset to fill in this gap. For this, I turned to the Portuguese census data, which contained the relevant demographic information. I had

⁹ A survey can be defined as “a technique for gathering statistical information about the attributes, attitudes or actions of a population by administering standardized questions to some or all of its members” (Buckingham & Saunders, 2004:13).

the option of using the Census data to define the strata, but at the time of my fieldwork, the most recently released census data was from 2001 – eight years before I conducted my survey. So, I had to combine both sources: DGAI for the number of inhabitants, and the Census data for the demographic information¹⁰.

To define my sample size, I used a random sample formula for an infinite population – there is no need to use the correction formula for finite populations because the sample is less than 5% of the overall population (Cochran, 1977). For a 95% confidence level and an estimated standard deviation of 0.5, I used the following formula (Cochran, 1977:75):

$$n_0 = \frac{t^2 (p)(q)}{d^2}$$

Where:

n₀ is the sample size.

t is the value for the selected alpha level, e.g. 1.96 for (0.25 in each tail) a 95 percent confidence level.

p is the estimated proportion of an attribute that is present in the population.

q is 1-p.

(p)(q) are the estimate of variance.¹¹

d is the acceptable margin of error for proportion being estimated, so the confidence interval, in decimals.

As the majority of my variables are categorical, I used Cochran's formula for categorical data. So, for a 95 percent confidence level at a 5% precision:

$$n_0 = \frac{t^2 (p)(q)}{d^2}$$

$$n = \frac{(1.96)^2 (.5)(.5)}{(.05)^2} = 384.16$$

¹⁰ Comparing both sources for inhabitants above 17 years old, in 2001 and according to the Census data, there were 481,240 inhabitants in Lisbon (INE, 2001); in 2009 according to the electoral registration data, there were 531,102 inhabitants in Lisbon (DGAI, 2009).

¹¹ The values "**p**" and "**q**" are also usually expressed as P_y and P_n and represent the proportion of respondents who answered "yes" or "no." P_y and P_n are normally defined at (.50)(.50) respectively for the most conservative estimate, and these are an estimate of the percent of responses to a dichotomous variable. And even though I also use multiple-response variables and Likert scales, as I am taking the most conservative approach, the risk of error is minimized.

From the formula, the minimum number of questionnaires to have a representative sample at the 95% level is 384.

From previous experience in applying surveys, I knew that a small percentage of questionnaires would be applied incorrectly. To be safe, I decided to round up to 400 questionnaires. In fact, Cochran, for instance, rounds up t^2 to 4 (instead of 3.8416), which gives a total of 400 (Cochran, 1977:76).

To design the stratified random sample, I followed a multistage stratification, dividing the population into four mutually exclusive subpopulations of similar demographic dimension, namely:

- Stratum I: Civil parishes with more than 20.000 inhabitants
- Stratum II: Civil parishes with 10.000 – 20.000 inhabitants
- Stratum III: Civil parishes with 5.000 – 9.999 inhabitants
- Stratum IV: Civil parishes with less than 5.000 inhabitants

Demographically, the smaller civil parishes correspond to the older part of the city, with fewer inhabitants, while the more peripheral ones correspond to the newest areas of the city, with a higher level of population. In all strata, I only considered participants over 17 years of age.

After the strata are defined, the questionnaires are distributed per stratum through a proportional weighting of the population of each stratum and the sample size. The same is done for the civil parishes of each stratum. This procedure allows the sample within each stratum to equate to its population. Then, with the help of a random generator, I selected the civil parishes to compose the sampling points, only selecting civil parishes where at least ten interviews could be done.

In the final phase of the sample design, I used quota sampling by gender and age to select the individuals, following the demographic structure of the city of Lisbon (see table 5.5) Quota sampling is a form of stratified sampling where the strata are sampled in a non-random way, i.e., individuals are selected to match some particular characteristics such as age, ethnicity, etc. (Buckingham & Saunders, 2004).

Quota sampling predetermines the number or quota of people to interview, in a particular category. If I had not defined these specific quotas, I would probably get a biased sample, as there are groups more available and prone to answer this type of survey; namely people above 64 years of age and women (Cf. Hogan, 2009). Therefore, this quota approach should have given me a reasonable level of comparability with the Lisbon population. Moreover, quotas can occur at the strata level without affecting representativeness (due to the data being weighted), as long as the sampling within each stratum is random, procedure that was respected (Driml & McLennan, 2010).

This sampling technique has been used and validated by a number of scientific studies conducted by the Institute of Social and Political Sciences, and supervised by Professor Fausto Amaro (Cf. Amaro et al., 2004).

To help me administer the questionnaires, I trained nineteen undergraduate students of social sciences from the Institute of Social and Political Sciences, Technical University of Lisbon. The students had completed classes in methods, and the majority had previous experience administering questionnaires. They were all personally instructed by me on how to administer the questionnaire, and trained to become familiar with the questionnaire and interviewing techniques. I also gave a short lecture on important aspects related to the interviewing process, addressing interpretation and the negotiation of reality by interviewers and interviewees, impression management (Goffman, 1959), and interview/interviewer bias. Each interviewer applied, on average 15 questionnaires, and I applied the remaining ones.

As I predicted, while collecting the data, some quotas were not meticulously followed. In some cases, it was due to human error (interviewers), in others, because a specific quota was too difficult to obtain within the timeframe of the data collection. Consequently, I had to reapply some questionnaires or, when it was not possible, adjust the distribution. For instance, the municipal parish “Campo Grande” was not included in the sample. However, as a student applied questionnaires by mistake in that area, and the quotas for the area were perfectly adjusted to its class, I decided to include the extra valid questionnaires in the sample. The differential between the estimated and the observed questionnaires by age, gender, and municipal parish, can be seen in table 5.5.

At the end, we collected 417 questionnaires. The survey was conducted between March and September of 2010. The questionnaires were applied face-to-face in the interviewees’ homes, and only one person per household was interviewed. To select the households I used the random route technique and a table of random numbers (developed by Fausto Amaro, 1980) that provides the house and floor number, when

applicable (random route map and random number table in the appendix). The survey provides information about social support, social capital, social networks, social trust, civic engagement, media usage, and Internet usage, as I will explore in the next section.

Table 5.5
Distribution of questionnaires per municipal parish, age group, and gender
First are the estimated numbers, followed by the observed ones (if applicable).

Strata	Municipal Parish "Freguesia"	Age Group				Gender		Total
		18-34	35-44	45-64	65 +	Female	Male	
I	Benfica	7	4	8	8	15	12	27
I	Lumiar	6	5	7	4	12	10	22
I	Marvila	5	4	8	8	13	12	25
I	Santa Maria dos Olivais	7	6	11/10	8/9	17/18	15/14	32
I	São Domingos de Benfica	6	5	7	4	12	10	22
II	Ajuda	3	2/1	4	3/4	7	5	12
II	Alcântara	3	2	4	3	7	5	12
II	Alto do Pina	2	1	4	3	5	5	10
II	Beato	2	1	4	3	5	5	10
II	Campolide	2/4	2/1	4	3	6	5/6	11/12
II	Carnide	2	2	4	3	6	5	11
II	N. Sra. de Fátima	3	2	4	3	7	5	12
II	Penha de França	2/5	1	4	3	5/7	5/6	10/13
II	Santo Condestável	3	2	4	4	7	6	13
II	São João	3/4	2	4/2	3/4	7/8	5/4	12
II	São João de Brito	2	1	4	3	5	5	10
II	São João de Deus	2	1	4	3	5	5	10
II	São Jorge de Arroios	3	2	5	4	8	6	14
III	Ameixoeira	3	2	5	4	8/7	6/7	14
III	Santa Maria de Belém	3/4	2/1	5	4	8	6	14
III	Santa Engrácia	2	1	4	3	5/4	5/6	10
III	Alvalade	3	2/3	5/4	5/6	8	7/8	15/16
III	S. Sebastião da Pedreira	2/4	1/2	4/2	3/2	5	5	10
III	Lapa	3	2	5	4	8	6	14
III	S. Francisco Xavier	2	1	4	3	5	5	10
III	Campo Grande (Not included in the original sample design)	0/3	0/2	0/4	0/3	0/7	0/5	0/12
IV	Mercês	3	2	5	5	8	7	15
IV	São Paulo	2	1	4	3	5	5	10
IV	Castelo e Santiago	3	2	4	4	7	6	13
		89	61	139	111	216	184	400
	Differential	+13	0	-3	+7	+10	+7	+17
	New Total	102	61	136	118	226	191	417

5.3.1.2 Survey Measures

Social capital is a multidimensional concept that can be assessed only through a set of different measures. The measures used in this research were selected from different sources, taking into account:

- First, my approach to the social capital concept.
- Second, my research question and hypotheses.
- Third, the context of this research, namely the Portuguese setting.

The variables of this analysis can be grouped into five groups:

1. Social capital,
2. Internet usage and “online social capital”,
3. Trust,
4. Civic engagement,
5. Socio-demographic characteristics.

The selected measures and general issues regarding validity, reliability, and transferability are briefly discussed below. More specific issues related to measures, and a detailed composition of each variable are explained in more depth in the chapters 6, 7, and 8 (results):

1. Social capital

Social capital is operationally defined as the resources that can be drawn from our social relationships. It has three main components: bonding social capital, bridging social capital, and resources. I follow Flap’s claim (1988, 2002) that to measure social capital, we need to measure:

1. Number of persons within one’s social network available when the individual needs them
2. Strength of relationship indicating readiness to help
3. Resources of these people

a. Bonding social capital

To measure bonding social capital, I used items from the “Offline Bonding Sub-scale” (Williams, 2006), measured with a five-point Likert scale (from 1, strongly disagree, to 5, strongly agree):

I do not know people well enough to get them to do anything important. (reversed)
When I feel lonely, there are several people I can talk to.
If I need any help to solve my problems, I know several people available to help me.

Because of questionnaire limitations (time, mainly) I could not use all the items proposed by Williams (2006). I therefore chose the ones that made more sense in the structure and context of the survey, as well as the ones that had higher factor loadings in the scale analysis (Cf. Williams, 2006).

I also added to this bonding dimension the description of close family members and close friends, through the number of members and frequency of contact. First, the respondents were asked about how many close family members and close friends they had. The “closeness” of these relationships was described as ties you can confide and rely on, and feel more close to. This description is consistent with the research on the difference between friends and close friends: close friends are more likely to be regarded as confidants, intimate ties, and a source of emotional support (Cf. Fehr, 1996). Close friends are also the ones that people interact with the most (Fehr, 1996).

So, in a second set of questions, the participants were asked about the frequency of contact (face-to-face, by telephone, by mobile phone, and by Internet) with those close family members and with those close friends. The frequency of contact is important, because as Flap underlines contact between persons is the fundamental requirement for the creation and use of social capital, since “without meeting there will be no mating” (Verbrugge, 1977, as quoted in Flap, 2002:39). Frequency of contact has been a strong proxy to describe the strength of a relationship: studies show that the more two people

interact, the closer they become, and the more they trust each other (Small, 2009; Homans, 1958). Frequency of contact has been used as a common measure to reveal people's level of bonding social capital (Brandtzaeg et al., 2010).

b. Bridging social capital

The measurement of bridging social capital has been less standardized than bonding, mainly because there are less empirical tools to measure bridging weak ties. Enumerating weak ties might be unfruitful, since not all weak ties equal bridging, and size does not necessarily mean diversity (Hampton, 2011).

To measure bridging social capital, following the claim that diversity and heterogeneity will lead to a more diverse social capital, I used items from the "Offline Bridging Sub-scale" (Williams, 2006), measured with a five-point Likert scale (From 1, strongly disagree, to 5, strongly agree):

Interacting with people makes me interested in different ideas.
Interacting with people makes me feel connected to the bigger picture.
Interacting with people makes me want to try new things.

Once again, because of questionnaire limitations, I could not use all the items proposed by Williams (2006). I chose the items that made more sense in the structure and context of the survey, as well as the ones that had higher factor loadings in the scale analysis (Cf. Williams, 2006).

I also used two other measures:

1. Social diversity – "I'm interested in people with different lifestyles", measured with a five-point Likert scale (adapted from a bridging social capital battery by Pajak, 2006).

2. Social participation – “In the last month, I went out socially with my friends” (Special EuroBarometer, EU, 2005; Sabatini, 2009), measured by frequency (daily; at least once a week; at least once a month; rarely/never).

c. Resources

To measure resources, I combined the *Resources Generator* (RG) of Snijders and Van der Gaag (1999; 2005) with one resource indicator of the *Connected Lives* project (Wellman et al., 2006), and other created by me to measure access to public institutions. The general question was if the respondent knew anyone who could help/give access to the item. If yes, the respondent had to indicate whom – family, friends, neighbors, co-workers or acquaintances.

Do you know anyone who...?
1. Can help with small jobs around the house*
2. Can provide a place to stay if you have to leave your house temporarily*
3. Can give advice on matter of laws/regulations*
4. Can help you if you need to find a job (adapted)*
5. Can help you if you need to use a computer/go online**
6. Can help you if you need anything from the municipal parish/local government***

* Van der Gaag & Snijders, 2005; ** Wellman et al., 2006; ***My own

I also used two “perceived social support” measures, taken from the British “Social Capital Survey Matrix” (UK National Statistics, 2003):

<p>7. Imagine you are sick at home and need help. Is there anyone you could ask for help? If yes, who?</p>	<p>8. Imagine you are in a financial crisis situation and need to borrow 100€. Who could you ask for it? If yes, who?</p>
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These eight items are combined to construct a resources variable, including resources related to prestige and education (e.g. item 3), political and financial skills (e.g. item 6), personal skills (e.g. item 5), and personal support (e.g. item 7) (van der Gaag and Snijders, 2005; 2008).

2. Internet usage and “online social capital”

To measure Internet usage, I measured frequency of Internet usage. The users were categorized as:

- Non-users: respondents claim not to use the Internet at all.
- Light users: respondents that use the Internet at least once a month or rarely.
- Moderate users: respondents that use the Internet 3 or 4 times a week or 1 or 2 times a week.
- Heavy users: respondents that report using the Internet daily.

I also measured the type of usage: most frequent online activities and participation in specific applications/social media, such as email, chats, and social networking sites. I also included frequency of consumption of different types of media (TV, Computer, Internet, Telephone, Mobile telephone, Newspapers/Books).

To have a general view on the perceived impact of the Internet on my respondents’ daily life, I added a set of measures adapted from the *Connected Lives* project (NetLab, 2005). These measures ask about how much the Internet has affected the following: staying in touch with close family and friends; staying in touch with other family members and friends; meeting new people; getting useful information; and the way the respondents study/work.

Lastly, I used the *Internet Social Capital Scales*, the *Online Bonding Sub-scale* and the *Online Bridging Sub-scale* (Williams, 2006). In the case of these scales I had to make a slight adaptation of the online/offline dimensions. As stated earlier, considering that the majority of online contacts are also offline and that the two dimensions are intertwined – which I could corroborate during the pretest phase of the survey – I had to make a clear

separation between online and offline ties, so that people would not answer to both scales thinking in exactly the same ties. Therefore, to prevent data redundancy, for the online dimension, I considered people that my respondents exclusively knew online. It was measured with a five-point Likert scale (From 1, strongly disagree, to 5, strongly agree):

Do you agree or disagree with the following, considering people that you only know online:

Online Bonding Sub-scale	Online Bridging Sub-scale
I do not know people online well enough to get them to do anything important. (reversed)	Interacting with people online makes me interested in different ideas.
When I feel lonely, there are several people online I can talk to.	Interacting with people online makes me feel connected to the bigger picture.
If I need any help to solve my problems, I know several people online available to help me.	Interacting with people online makes me want to try new things.
If I need an emergency loan, I know someone online that can help me.	

3. Trust

To measure social trust, I used the standard social trust questions from the “Social Capital Eurobarometer” (E.U., 2005). It includes a measure on general social trust, trust in the police, and trust in the government (measured with a five-point Likert scale from 1, strongly disagree, to 5, strongly agree):

Most people can be trusted
You can't be too careful when trusting people
I can trust the government
I can trust the police

This variable was created with a LCM estimation, aggregating the two first indicators as social trust, and the two last indicators as institutional trust. The idea was to create two levels/variables of trust.

4. Civic Engagement

To measure civic engagement as an independent variable I used different measures developed by Putnam (2000) and other scholars (Park & Perry, 2008; Bullen & Onyx, 1998; Sabatini, 2009). I considered the following measures:

- Measures of civic participation: engagement in actions to solve a local problem (UK National Statistics, 2003);
- Measures of civic awareness: talking about politics, and watching a political debate (Park & Perry, Sabatini, 2009);
- Membership and volunteering: participation in associations, volunteering, and philanthropy (giving money for charities or associations) (Bullen and Onyx, 1998; Putnam, 2000);
- Measures of political participation: membership in a political party, and turnout in local and in presidential elections (Putnam, 2000; "Social Capital Community Survey", Saguro Seminar, 2006).

5. Socio-demographic characteristics

The state of the art has indicated that socio-demographic characteristics, mainly age, gender, and education significantly affect Internet usage (Rice & Katz, 2003; Neves, Amaro, & Fonseca, 2012). Basic demographics such as age and gender also have impact on social capital (Cf. Burt, 1998; Putnam, 2000; Silvey & Elmhirst, 2003; Miyata, Ikeda & Kobayashi, 2008). In this sense, Silvey & Elmhirst (2003) call for the attention of gendered-based social capital, revealing the different ways gender is positioned within social networks. There is a gender power dynamic in social capital that implies different access to resources for men and women, and what may be positive social capital for men might be a social constraint or a negative social capital for women (Silvey & Elmhirst, 2003).

Studying Internet, social capital, and gender, Miyata et al. (2008) found that different kinds of Internet use have different effects on social capital and on gender – participation in online communities develops the diversity of contacts for men, but only at the same-gender level (not at cross-gender), while the same does not happen for women (at the same or cross-gender level).

Therefore, I included in my analysis, age, gender, and education, but also other indicators that could affect social capital, namely:

- Marital status,
- Household composition,
- Occupation,
- Religion.

These socio-demographic indicators are described in the next section, where I present the demographics of my survey sample and its representativity.

5.3.1.3 Representativity and demographics of the survey sample

In this section, I compare some basic demographics from the 2001 Portuguese census and the survey. Even though the survey is marginally biased on some characteristics, it shows a reasonable level of comparability with the Lisbon population. It is important to emphasize again that I am comparing data from 2001 with a survey conducted in 2010, so there might be differences that I cannot account for. Regular structural data might change after eight years, especially employment status, since Portugal was significantly affected by the global financial crisis of 2008.

Considering the personal characteristics of the survey respondents (N=417), 54.1% are female, 45.7% are male. Mean age is 50.06 (S.D. 19.484; Median 49), and participants range from 18 to 93 years of age. Comparing my sample with the Census data for Lisbon, it is clear that the differences of gender are practically insignificant (see table 5.6), being only noticeable in the age distribution, namely in the 18-34 group, but still less than 3%. These differences are based on the fact that I added more questionnaires than originally defined, as explained before.

Table 5.6
Personal characteristics (gender and age) of Lisbon (INE, 2001) and of the sample

Individuals above 17 years old		Lisbon %	Sample %	Diff.
Gender	Female	54.3	54.1	-0.2
	Male	45.7	45.7	0
Age	18-34	26.9	24.4	-2.5
	35-44	14.3	14.6	0.3
	45-64	31	32.5	1.5
	65 &+	27.7	28.2	0.5

Comparing other data, such as the household characteristics, namely marital status and family composition, it is clear in the next table (see table 5.7) that single people are underrepresented (-9.5), while married/de facto couples are overrepresented (6.6). The same happens with the type of household, where one-person household are underrepresented (-17.3), whereas couples with children are overrepresented (13.3). A possible explanation for this variance might be that one-household individuals are more transient and not as easy to find at home, as nuclear or extended families.

Table 5.7
Household characteristics of Lisbon and of the sample

		Lisbon	Sample	
		%	%	Diff.
Marital Status	Single	38	28.5	-9.5
	Married/De facto	47.5	54.1	6.6
	Divorced/Separated	5.3	6.2	0.9
	Widowed	9.2	11	1.8
Household type	One-Person Household	34.3	17	-17.3
	Couple without children	23	24.2	1.2
	Nuclear family (couple with children)	29	42.3	13.3
	Other	14	16.3	2.3

Source: Census data (2001) versus the survey sample

Comparing socioeconomic indicators, occupation and education (see table 5.8), the sample underrepresents retired people (-3.5), while overrepresents employed people (3.8). It is interesting to observe that the percentage of unemployed people equals the Census and the sample. This was an unexpected result, since one would assume that the international financial crisis would have skewed the data.

In terms of education, there is a slight underrepresentation in all categories, except in “secondary education” (6.7) and Master/PhD (1.4). The considerable difference in the “secondary education” might be related to a set of public educational programs developed by the Portuguese government, especially since 2005, to improve the level of education of young people and adults. These programs, mainly the “New Opportunities” initiative (“Novas Oportunidades”) was created to improve the level of education of Portuguese people (Ministério do Trabalho e da Solidariedade Social, Ministério da Educação, 2005).

To clarify, from 2000 to 2006, 44.192 adults were certified; while from 2007 to July 2010, the program certified globally 304.037 adults. From 2007 to July 2010, 67.136 adults finished secondary level education. The majority of these adults are between 25 and 44 years old, and 23.8% come from the Lisbon region (Agência Nacional para a Qualificação, 2010). In other words, since the 2001 Census a significant number of Portuguese people were qualified for secondary education, which might explain why this group is comparatively overrepresented in my sample.

Table 5.8
Socioeconomic indicators of Lisbon and of the sample

		Lisbon	Sample	
		%	%	Diff.
Occupation	Employed	52.2	56	3.8
	Unemployed	4.2	4.1	-0.1
	Student	8.1	9.6	1.5
	Retired	29.6	26.1	-3.5
	Housewife	4.1	2.9	-1.2
Education	No education	1.8	1.7	-0.1
	Less than secondary education	62.9	57.9	-5
	Secondary education	16.7	23.4	6.7
	University degree	15.7	13.6	-2.1
	Master/PhD	1.5	2.9	1.4

Source: Census data (2001) versus the survey sample

The biases in my survey are mainly in the marital status, family composition, and occupation. And while these biases have to be taken into account, the purpose of my analysis is to understand the impact of Internet usage on social capital. Therefore, this variation should not interfere with my conclusions, and whenever appropriate these variables will be included in the analysis.

In an extensive analysis of datasets, Brehm (1993) found that statistically correcting for demographic biases in sample composition had little impact on the substantive implications of correlational analyses. Moreover, the state of the art shows that gender, age, and education are the main predictors of Internet usage (Rice & Katz, 2003). Finally, while there are inevitable sample biases, particularly when using a mixed sample, I should be able to make claims about the correlations between the surveyed variables, without fearing spurious findings.

5.3.1.4 Data Analysis

The quantitative data were analyzed using Latent GOLD 4.5, a latent class and finite mixture software, and IBM SPSS Statistics 18.0, a statistical analysis software. To create a single variable for each dimension of social capital (bonding, bridging, and resources) and for social capital, I used Latent Class Models (LCM). Latent class modeling offers a probabilistic method for clusterization, based on indicators or observed variables (Fonseca, 2009). LCM is used to find latent classes (or subtypes) from multivariate data: it identifies the latent classes necessary to explain the associations between a set of observed variables, and then distributes the observations among those classes (Fonseca, 2009).

LCM comprise a subset of the general class of Latent Structural Models that include, for instance, factor analysis models, latent trait models, among others (Clogg, 1995). Lazarsfeld & Henry (1968) introduced LCM, based on the assumption that the latent variable is categorical (Fonseca, 2009; Magidson & Vermunt, 2004). This way of modeling broadened the application of Latent Structural Models, as LCM was in contrast with factor analysis that assumes that latent variables are continuous (Magidson & Vermunt, 2004). LCM are model-based approaches to clustering, which connect clustering with classical statistical estimation methods, while assuming that observations in a sample occur in different segments of unidentified proportions (Fonseca, 2009).

The LCM estimation finds out the smallest number of latent classes that is adequate and sufficient to explain the relationships observed among the variables. If the baseline model ($S = 1$) – only with one class – provides a good fit to the data, then there is no need to carry out a LCM estimation, because there is no relationship among the variables to be explained. If, on the contrary, there is more than one class to explain the data, LCM will add classes until the best model is found (Fonseca, 2009).

Social scientists have been increasingly using LCM, because of its advantages over traditional techniques to cluster; to factor; to perform segmentation; and to analyze neural networks (Magidson & Vermunt, 2004). LCM does not rely on conventional modeling assumptions (that in the majority of cases are violated), such as linear relationship, normal distribution, homogeneity, etc. Therefore, LCMs are less prone to biases related to non-conformance with conventional statistical assumptions (Magidson & Vermunt, 2004). LCM provides a more accurate clustering, and a simultaneous assessment of latent classes and external variables (such as socio-demographic variables) with the identification of classes (Magidson & Vermunt, 2004). The need for a

discriminant analysis, which would relate the clusters/segments with socio-demographic and other external variables, is consequently eliminated (Magidson & Vermunt, 2004).

Other advantages of LCM are:

- provides means to select the number of classes or segments,
- works with different levels of measurement,
- is extremely effective in estimating probabilistic typologies that can predict behavior, based on exogenous variables (Fonseca, 2009).

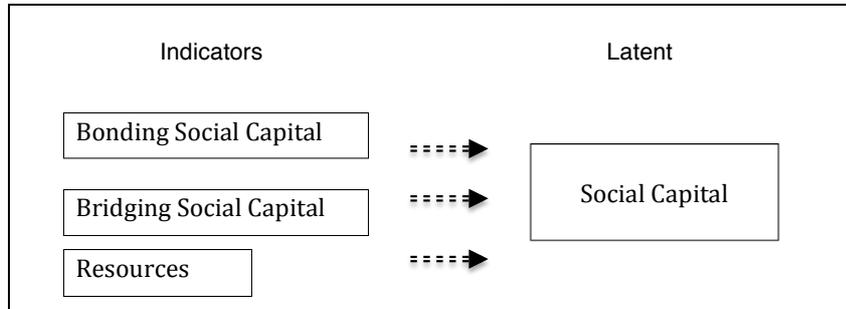
LCM seemed to be the most appropriate method for my analysis for two main reasons:

1. Social capital cannot be measured directly: it has many facets, and so it is a latent variable.
2. I wanted to find one single variable to define social capital.

I have a set of questions to measure each dimension of social capital but I do not have a single response variable on social capital to use as a dependent variable. Social capital is the latent variable I want to measure, through the dimensions of social capital, which are the multiple *observable indicators*.

To accomplish this goal, firstly, I define with LCM each dimension of social capital (each dimension also had a set of variables that had to be combined into only one variable). Secondly, when the dimensions of social capital correspond to one single variable, they are used as indicators to define the main latent variable: social capital (see figure 5.2) LCM defines classes with the indicators – the respondents that show similar attributes/behaviors are grouped in one class. The different classes correspond to the heterogeneity/differentiation of respondents' attributes/behaviors.

Figure 5.2
LCM for social capital



Source: Adapted from Fonseca, 2009.

LCM was also carried out to define other two variables: trust and civic engagement, which are used independently in the analysis.

All the LCM estimations were done using Latent GOLD 4.5 software.

IBM's SPSS Statistics software was used for the remaining descriptive and inferential analysis. For descriptive statistical analysis, I used frequency distributions for categorical variables, and the mean and standard deviation for continuous variables. For inferential statistical analysis, namely to measure the association between Internet usage and social capital (and considering that the main dependent variables are categorical and dichotomous), I carried out binary logistic regressions. For categorical and multinomial dependent variables, I selected multinomial logistic regression. Logistic regression has become the analytical technique of choice for the multivariate modeling of categorical dependent variables (DeMaris, 1995). Results with a *p*-value lower than .05 were considered statistically significant.

5.3.2 The qualitative interviews

5.3.2.1 Semi-structured interviews

Considering the limitations of survey data, I designed a follow-up interview on the topics included in the survey. I wanted to explore more in-depth situations where social capital was mobilized, and if there was any qualitative relation to Internet usage. I also explored reciprocity, aiming to see if the participants had mobilized their own resources to provide others with social capital. I followed what can be defined as an advanced process of "qualitizing", which enhances the researcher's understanding of quantitative data by

placing it in a qualitative context (Tashakkori & Teddlie, 1998; Hesse-Biber & Leavy, 2011).

With the help of qualitative interviews, I explored and contextualized the quantitative findings. The qualitative interviewing is done to understand the stories of others, their experience, but also what it means for them (Cf. Rubin & Rubin, 1995). To understand that meaning, the behavior must be put in context. To hear individual stories and their meanings, I administered semi-structured interviews to fourteen respondents of the survey sample. Semi-structured interviews are “qualitative data gathering techniques, designed to obtain information about people’s views, opinions, ideas, and experiences” (Arksey & Knight, 1999: 96). This type of qualitative interviews combines characteristics of structured and unstructured (in-depth) interviews, mixing closed and open questions (Arksey & Knight, 1999).

This model of interview allows researchers to collect qualitative data in a more versatile way, making possible to adjust the interview to each interviewee, while having at the same time a certain degree of structure (not as strict as the structured interview, and not as free as the in-depth one). The semi-structured guide is attached in the appendix, but it is not a set in stone guide, as it changed or it was adapted to each interviewee. The transcripts of the fourteen interviews are also in the appendix – I use pseudonyms to protect participants’ real identities but kept socio-demographic characteristics to contextualize their experiences and to help craft their individual profiles.

5.3.2.2 Selection of participants and the interviewing process

The selection process of the interviewees was done with the help of the survey. After the questionnaire was completed, a note asked respondents whether they would be willing to participate in a follow-up interview. This “procedure” is not a regular practice among Portuguese researchers, due to confidentiality issues. This can also be seen as a cultural idiosyncrasy, as in my experience, Portuguese people are normally not open to share this type of information. However, acknowledging these obstacles and risks, I decided to follow this practice, which has been done successfully by my co-advisor Barry Wellman and his team. So I included this request in the survey. Surprisingly, 57 of the 417 respondents left their personal contact. This represents 14% of the total sample, and while it might look extremely modest for the North-American context, it was significant for the Portuguese context.

Of these 57, some respondents were not available for the interview or didn’t answer my calls or emails. In the end, I interviewed 14. Even though the objective of this qualitative

phase is not about inference but understanding, I tried to interview people from different age groups, occupations, and levels of Internet usage, trying to diversify the sample as much as possible. The number of interviews was defined by four criteria:

1. The interviewees I had available;
2. The “representativeness/saturation trade-off” principle;
3. The “sufficiency” principle that can be answered by the question “Are there sufficient numbers to reflect the range of participants and sites that make up the population so other outside the sample might have a chance to connect to the experiences of those in it?” (Seidman, 2006);
4. The “saturation of information” criterion that consists in a moment in the study where the interviewer begins to hear the same information (Seidman, 2006).

Having these four criteria in mind (and also considering time constraints), the 14 interviews seemed to be reasonable enough for this study. Yet, my sample lacks low Internet users. None of the respondents that left their contacts were a low Internet user, and I didn’t want to change the procedure of the respondents’ selection. So, I only interviewed non-Internet users, moderate Internet users, and heavy Internet users.

I interviewed eleven Internet users and three non-Internet users, from January to March 2011. Actually, I interviewed four non-Internet users, but I had to interrupt one of the interviews due to the respondent’s frail condition. As with the survey, I included Internet users and non-users for comparison. The interviews of the Internet users lasted an average of 45 minutes, while the interviews of the Internet non-users lasted an average of 25 minutes. Of the 14, 12 were done face-to-face (at ISCS, at the respondents’ house, or in a cafe/park of Lisbon), one was done online (through Skype, with audio and video option, so I could see the interviewee and the interviewee could see me), and the other was done through the telephone. This last interview was done by the telephone, because the interviewee requested it for health reasons. The interviewee expressed great will to participate in the study, and so I did the telephone interview.

I personally prefer face-to-face interviews (when possible), because there are significant advantages of in-person interviewing versus telephone interviewing, such as the reduction of the social distance between the interviewee and the interviewer (Shuy, 2001), and the opportunity to read non-verbal language. However, the literature shows that telephone interviewing has become extremely popular in social sciences, not only for the cost-efficiency factor but also because it reduces the interviewer effects and allows for a greater uniformity in the interview delivery (Shuy, 2001).

Having had some experience as an interviewer (since my first undergraduate year I participated in projects as an interviewer for qualitative and quantitative studies), I'm familiar with the need for good conversational skills and the need for building up good relationships (developing trust and rapport)¹². I'm also familiar with the importance of listening more than talking, and of knowing how to follow up and ask for more, while allowing for silences and non-verbal cues. But every interview is a challenge and so I kept a memo with a self-assessment of my "performance", which I would write immediately after the interview. This procedure helps me to improve my interviewing skills but also to refine different approaches for the remaining interviews. I usually share these assessments with colleagues, looking for alternative interpretations.¹³ I follow the same procedure when I'm listening and transcribing the interviews, writing down moments that I could have improved during the interviewing process.

Another significant aspect in the interviewing process is the interviewer/interviewee bias and how much the interaction between the interviewer and the interviewee affects what is being said and what it "means". The Goffmanian "impression management" is one of the examples of what comes into play during an interview (and any interaction):

During the period in which the individual is in the immediate presence of the others, few events may occur which directly provide the others with the conclusive information they will need if they are to direct wisely their own activity. Many crucial facts lie beyond the time and place of interaction or lie concealed within it. For examples, the 'true' or 'real' attitudes, beliefs, and emotions of the individual can be ascertained only indirectly, through his avowals or through what appears to be involuntary expressive behavior. Similarly, if the individual offers the others a product or service, they will often find that during the interaction there will be no time and place immediately available for eating the pudding that the proof can be found in. They will be forced to accept some events as conventional or natural signs of something not directly available to the senses. In Ichheiser's terms, the individual will have to act so that he intentionally or unintentionally *expresses* himself, and the others will in turn be *impressed* in some ways by him (Goffman, 1959: 13-14).

¹² As a side note, I believe that I was able to create that good relationship because all the interviewees were very appreciative at the end of the interview. I got the feeling that they also had "gain" something with the interview. The interviewees that I have met in a café (five, three men and two women) would insist to pay for my consumption, and despite my initial refusal I would end up agreeing to not sound rude or to avoid awkward social dynamics. Upon reflection, these attitudes might signify that gain; that the interviewees felt that they had gained something positive with the interaction.

¹³ For this particular study, I shared my "self-assessment field notes" with Professor Fausto Amaro, who gave me very interesting insights on it.

But “only by recognizing that interaction and affirming its possibilities can interviewers use their skills to minimize the distortion that can occur because of their role in the interview” (Seidman, 2006:23). As will be shown, these aspects are considered in the collection and analysis of my data.

Finally, the interviews were tape-recorded with a recording device (after authorization by the interviewee) and the transcripts were available for the interviewees.

5.3.2.3 Data analysis

I followed the “verbatim principle” (Spradley, 1979) to transcribe the interviews (full transcription). But I also made note of nonverbal signs (such as laughs, pauses, sighs, etc.), and paralinguistic aspects (such as intonation, pitch, etc.) when they visibly affected the meaning of what was being said. This process, although time-consuming, gave me a way of tackling the “missing context” (King & Horrocks, 2010:146) of the transcribed spoken words, and a more holistic account of the communication modalities used throughout the interview. Having both conducted and transcribed the interviews, I was very familiar with their contents, which facilitated the analysis and the coding process.

The collection and analysis of this type of data is tied to a continuous interpretation: during the interviewing and the transcription phase there is a simultaneous process of analysis and interpretation. I had some *a priori* categories (originated from the quantitative phase) that I wanted to explore, but I was also open for new ideas. I also tried to separate the first interpretative impressions during the interviews from the ones emerging in the reading and analysis of the transcripts. For that I kept memos: during the interviews, I kept a memo for nonverbal cues and my insights in the interviewing process, and during the analysis and the interpretation process I kept “memo-ing”.

In the first exploration phase of the transcripts, I marked passages that were helpful to address my research topic and to understand participant’s views, experiences, and perceptions. I then looked specifically at individual profiles and thematic analysis. In the individual profiles analysis, I crafted profiles of each interviewee, which “allows us to present the participant in context, to clarify his or her intentions, and to convey a sense of process and time, all central components of qualitative analysis” (Seidman, 2006:119). In the thematic analysis, I looked for themes/categories, patterns, and connections, trying to find a balance between within-case and cross-case analysis (as suggested by King & Horrocks, 2010, p.150).

The qualitative data was analyzed and coded with NVivo 9, a qualitative data analysis software.

5.4 Ethical conduct

The Technical University of Lisbon (ISCSP, UTL) does not have an ethics committee (an Institutional review board-IRB, an Independent ethics committee-IEC or an Ethical review board-ERB), but it has an official institutional code of conduct and good practice¹⁴. This study (its design, sampling, implementation, analysis, and dissemination of data) complies with the UTL code of conduct, and with the ethical guidelines of the *Portuguese Sociology Association* and the *International Sociological Association (ISA)*. My research follows sections A and B of the *Portuguese Sociology Association* deontological code¹⁵, related to the practice of Sociology and collection of data. Likewise, I also follow the code of ethics of the *International Sociological Association*¹⁶ (ISA), namely sections 1, 2, 3, and 4, related to the practice of Sociology, research procedures, publication and communication of data, and extra-scientific use of research results.

In a general ethical assessment, this research can be justified, does not harm those who participate in it, adopts the principle of informed consent, and respects the anonymity and the confidentiality of the respondents. More specifically, in the data-gathering phase, the survey and the interviews respected the anonymity and the privacy of the respondents. In the survey:

- The introduction to the questionnaires explained the purpose of the research; issues of anonymity and confidentiality; the volunteering characteristic of the survey; had a clear identification of the main researcher (it had my contacts and affiliation); and informed the respondents that they could ask for the final data/report.
- At the end of the questionnaires a note asked respondents whether they would be willing to participate in a follow-up interview. Those who agreed and left their contacts were contacted directly by me. The contacts were saved in a secure and password-protected file.

In the interview process:

¹⁴ The UTL code of conduct and good practices (“código de conduta e de boas práticas”) can be found at: http://www.google.no/url?sa=t&source=web&cd=1&ved=0CBsQFjAA&url=http%3A%2F%2Fwww.utl.pt%2Fadmin%2Fdocs%2F1068_564_533_Codigo%2520de%2520Conduta%2520e%2520Boas%2520Praticas.pdf&ei=7UqITz4F8j04QTz3JHJDw&usq=AFQjCNE_DKZsStAIWdJ73BCV60Eqhfr_oA

¹⁵ The “Código Deontológico” can be found at <http://www.aps.pt/?area=000&marea=001#3>

¹⁶ ISA ethics code can be found at http://www.isa-sociology.org/about/isa_code_of_ethics.htm

- The respondents that agreed to be interviewed defined the place and time for the interview.
- The informed consent was obtained in advance, before the interview. The participants read a cover story with the research information and signed an informed consent form (in the appendix).
- The interviews were recorded with the authorization of the participants. I explained in advance that they could request to stop the recording device any time (and how many times) they wanted during the interview.
- The interviews were recorded with pseudonyms (chosen by the interviewees) and transcriptions sent to the respondents who required it. In this case, of the 14 participants, only one required the transcript. All the information that could be easily identifiable in the interviews was eliminated or replaced by different names/spaces/titles, as full transcripts are placed in the appendix of this dissertation. Nevertheless, age, gender, and occupation remained in its original form, for analytic and idiosyncratic purposes. All the other personal information was kept confidential.

Finally, I did not pay for the survey or the interviews, and the research was done according to a volunteering principle, following ISA's 2.3.2 ethical guideline:

"Payment of informants, though acceptable in principle, should be discouraged as far as possible and subject to explicit conditions, with special regard to the reliability of the information provided."

5.5 Conclusion

The first part of this chapter discussed the different measurements of social capital, and presented the general methodological approach of this study. The main research question calls for a mixed methods study: combining quantitative and qualitative techniques allows me to infer and generalize the results, but also facilitates a deeper understanding of my research subject. Both quantitative and qualitative approaches have a similar weight in this two-phase sequential mixed methods study, which uses survey research and qualitative interviews. I also discussed the epistemological and axiological assumptions of a mixed methods study.

The second part of this chapter presented the design, collection, composition, and socio-demographic characterization of the stratified random sample of 417 individuals, as well as the statistical and qualitative techniques used to analyze the data. The second part ended with a description of the ethical conduct of this research.

The next three chapters constitute the empirical part of this thesis. Chapter 6 presents a descriptive analysis of Internet usage by the survey sample, and the statistical analysis of the dimensions of social capital (bonding, bridging, and resources). Chapter 7 looks at the “online social capital”, a dimension that was originated from the data analysis, and not defined *a priori*. Chapter 8 introduces the statistical analysis of the variable social capital and the analysis of the qualitative data.

6 Internet usage and the dimensions of social capital

This chapter starts by presenting the descriptive results of Internet usage of my survey sample. Then I present and discuss the composition of each dimension of social capital: bonding, bridging, and resources. Each dimension is turned into a single variable through Latent Class Model (LCM) estimation. Finally, I test my research hypotheses: the association between each dimension and Internet usage using logistic regression analysis.

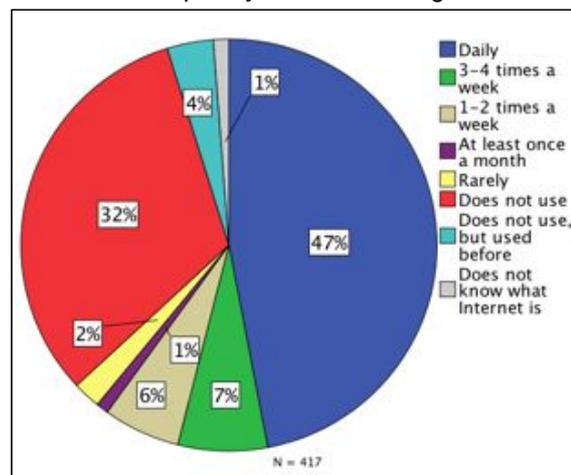
As the basic socio-demographic characteristics of the survey sample were already described in the chapter 5, in the first section of this chapter I focus on Internet usage and related measures.

6.1 Internet usage – descriptive results of the survey

6.1.1 Descriptive statistics

Among the 417 survey participants, 37% are Internet non-users and 63% are Internet users. Looking specifically at frequency of Internet usage, 47% of the respondents use it daily, whereas 32% does not use the Internet (see figure 6.1). This last percentage is added by 1% that “does not know what Internet is”, and 4% that “used the Internet before but do not use it now” to totalize the 37% of non-users.

Figure 6.1
Frequency of Internet usage



Internet usage was categorized into four groups:

- non-users,
- light users,
- moderate users,
- and heavy users.

To enrich my investigation about the association between social capital and Internet use, I divided the respondents into four groups, rather than following a simple binary categorization. Non-users, obviously, do not use the Internet. Light users correspond to the respondents that use the Internet at least once a month or rarely; moderate users correspond to the respondents that use the Internet 3 or 4 times a week or 1 or 2 times a week; and heavy users corresponds to the respondents that report using the Internet daily. Therefore, the 63% Internet users are divided into: 3.1% of light users, 12.9% of moderate users, and 47% of heavy users.

Non-users are mainly above 64 years of age (62%), whereas Internet users are concentrated around the younger groups: 18-34 years old, which is equal to 39% of users and 0.6% of non-users. The next table contrasts the profile of Internet users and non-users of my sample (see table 6.1), using some basic socio-demographic characteristics.

The gender distribution of the sample is proportional to the gender distribution of the inhabitants of Lisbon. This means that the sample has more women than men: 54% are women, 46% are men, as explained in the Methods chapter. Considering other basic demographics such as marital status, the majority of Internet non-users are married/de facto (67%), although 27% are widowed, comparing to 47% of married/de facto Internet users and 2% of widowed Internet users. Internet non-users are mainly retired or inactive (65%) and have less than secondary level education (85%). Looking at the education levels of the Internet users of my sample: 43% have less than secondary education, 32% have secondary education, and 26% have higher education. The majority of Internet users are employed (71%).

Table 6.1
Profile of Internet users and non-users of the survey sample (%)

	Users	Non-users
Total	63	36.9
Gender		
Female	53	57
Male	48	43
Age		
18-34	38.4	0.6
35-44	20.9	3.9
45-64	31.9	33.8
65+	8.7	61.7
Marital Status		
Single	43	3.9
Married/De facto	46.8	66.9
Divorced/Separated	8.4	2.6
Widowed	1.9	26.6
Household Composition		
One-Person Household	15.2	20.1
Couple without children	12.9	43.5
Nuclear family (couple with children)	55.1	20.8
Other	16.7	15.6
Education		
No education	0	4.6
Less than secondary education	42.6	85
Secondary education	31.9	9.2
Higher education	25.5	1.3
Occupation		
Students	15.3	0
Employed	70.5	33.1
Unemployed	5.4	2
Retired and other inactive	8.8	64.9

The Internet non-users of my survey sample are older, mostly retired or inactive, and relatively less educated. These characteristics are not only consistent with the worldwide description of Internet non-users (Norris, 2001; Rice & Katz, 2003), as they are consistent with Portuguese research on the subject (Cardoso et al., 2005; WIP Portugal, 2010; INE & UMIC, 2010). Age is a main predictor of Internet usage (Rice & Katz, 2003; Neves, Amaro, & Fonseca, 2012), creating a “grey digital divide” (Millward, 2003). Therefore, it is not surprising to observe that in my study, Internet usage (frequency of usage) is negatively correlated with age ($r_s(417) = -0.707$, $p = 0.000$), but positively correlated with education ($r_s(416) = 0.483$, $p = 0.000$). But there is no significant correlation between Internet usage and gender ($r_s(417) = 0.049$, $p = 0.323$). This finding validates the decrease of a gender divide, already suggested by other Portuguese studies (WIP, 2010; Obercom, 2010).

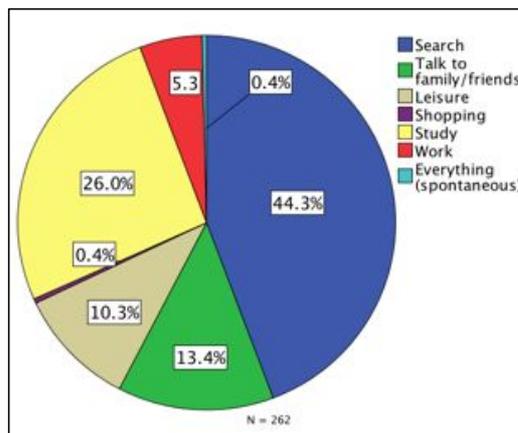
The main reasons to not use the Internet are lack of interest (40%), lack of functional literacy to use a computer (14% do not know how to use the Internet and 11% say the Internet is complicated), and lack of a computer or Internet (11.7%). Among other reasons are: 7% state not having time, 3% don't know what the Internet is, 0.7% are afraid of using it, 9% point to other reasons, such as it is for their offspring or grandchildren to use, and 3% doesn't know/did not answer. The main reasons to not use the Internet by my respondents are the same as the ones indicated by the World Internet Project Portugal (WIP) in their 2010 study: lack of interest (44%), digital illiteracy (26%) and lack of a computer or Internet (10%) (WIP, 2010).

The principal reasons to use the Internet are:

- to search (44%),
- to study (26%),
- and to talk to family and friends (13%) (see figure 6.2).

There are some differentiations of age in these results: for instance, 40% of the respondents in the 18-34 range indicated the search option, while the same occurs for 81% of the respondents above 64 years old. However, the search option is the most selected by every age group. In addition, age and reasons to use the Internet are not significantly correlated ($r_s(262) = -0.094, p = 0.129$). The same with gender: there is no significant correlation between gender and reasons to use the Internet ($p > 0.05$).

Figure 6.2
Main reasons to use the Internet



Social activities are not a dominant reason to use the Internet, but when we consider the main online activities (multiple-response question), the most selected options were to send/receive emails (29%), to browse websites (28%), to use instant messaging services or similar services (16%), and to use social networking sites (11%). Other options were: downloads (6%), watch videos/listen to music (4%), play games (3%), read blogs (3%), and maintain a blog (1%). Although browsing websites is a main activity, emailing is reportedly done more often (even if slightly more often), which is largely a social activity. Once again, these results are similar to those reported by the World Internet Project Portugal in 2010: send/receive emails are on the top of the activities done by the Portuguese Internet users, followed by instant messaging services or similar services, and news search.

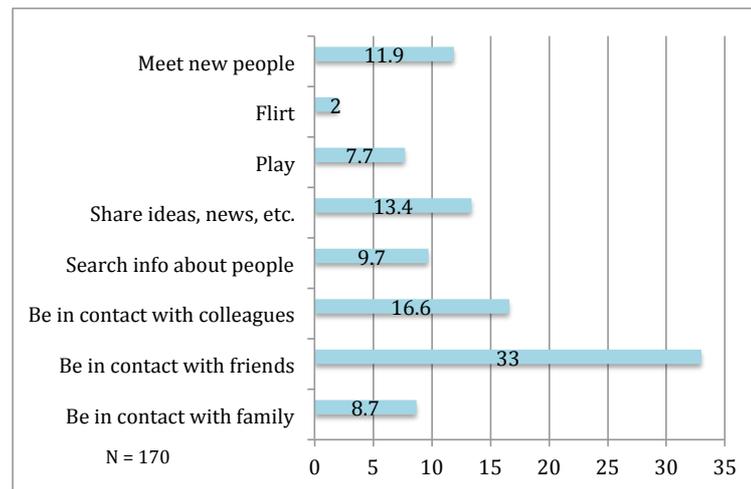
Internet users report sending emails mainly to friends (53%), coworkers/colleagues (27%), and family members (7%). Only 7% of Internet users report not sending emails. Of the 73% of respondents that use instant messaging services, such as *Microsoft Messenger*, 63% use it mostly to talk to friends and 5% to talk to family members. According to the Spearman's rho, there is no statistically significant correlation between using emails and age, but there is a strong correlation between instant messaging services and age ($r_s(263) = 0.266, p = 0.000$). Once again, gender does not correlate with emailing or instant messaging ($p > 0.05$).

Considering social networking sites (SNS), 65% of Internet users have a profile in these sites, being Facebook the most used one (77%), followed by Hi5 (47%). Only 8% of the Internet users of my sample have a twitter profile, a social networking and micro-blogging service.¹ According to the Spearman's rho, age and having a profile in a SNS are strongly correlated ($r_s(260) = 0.411, p = 0.000$). 86% of the Internet users of the 18-34 year-old range have a profile in a social networking site, while the same happens for 24% of the Internet users above 64 years of age (% within age group).

More than half (66%) uses social networking sites on a daily basis (54% daily and 11% more than once a day), 17% use it three or four times a week, 9% once or twice a week, 6% at least once a week, and 3% rarely. The principal uses of social networking sites are: to be in contact with friends (33%), to be in contact with colleagues (14%), and to share ideas, news, etc. (13%) (see figure 6.3).

¹ www.facebook.com, www.hi5.com, www.twitter.com

Figure 6.3
Reasons to use SNS (%)

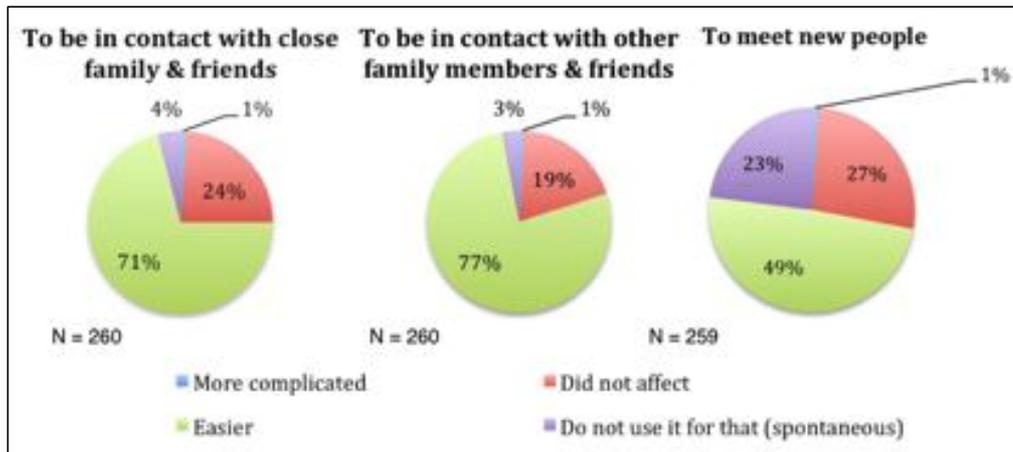


When questioned about meeting people online, 44% of Internet users report having met new people online. Age is strongly correlated with meeting new people online ($r(263) = 0.296, p = 0.000$), but not with gender. Of those respondents that met new people online, 38% say that they have met them offline as well, and 34% say they have met offline some of those online ties. The majority (66%) reports not having developed a close relationship with those online connections that became offline connections as well.

More than half of the Internet users (53%) indicate that if they could not access the Internet they would miss it very much, 29% would miss it a little, 10% would not miss it that much, and 8% would not miss it.

The respondents reported that the Internet has a positive effect on different aspects of their lives. The respondents perceive that the Internet has a positive effect on their social life by making it easier to be in contact with family and friends, to be in contact with not so close family members and friends, and even to meet new people (see figure 6.4). It is worth noticing that the Internet also positively affected their professional life: the Internet made work/study easier, according to 85% of the respondents. The highest impact goes for the search of information: 95% of the respondents claim that the Internet made this activity easier than before.

Figure 6.4
Impact of Internet on contact with family, friends, and meeting new people (%)



6.1.2 Summary

To sum up, the main characteristics of my sample are:

- The Internet users are younger, mainly single or married/de facto, and employed.
- The non-Internet users are older, mostly married/de facto, mainly retired or inactive, and less educated than the Internet users.
- The main reason to use the Internet is to search. But the main online activity is to send/receive emails, followed by using instant messaging services or similar.
- The main reasons to not use the Internet are lack of interest, digital illiteracy, and lack of a computer and/or Internet.
- Internet usage (frequency of Internet usage) is correlated negatively with age, but positively with education.
- Internet usage is not correlated with gender.
- More than half of the respondents have a profile in a social networking site and use it daily, mostly Facebook.

- The main reason to use a social networking site is to be in contact with friends.
- Less than 10 percent have a profile on twitter.
- Age is correlated with using instant messaging services and social networking sites, but not with using email.
- Gender is not correlated with using instant messaging services, social networking sites, or email.
- More than half report having never met new people online.

These descriptive results give us a general profile of the Internet user and non-user of my sample. The majority of these results are consistent with other studies carried out in Portugal, namely the ones by the World Internet Project Portugal (WIP, 2010) and Obercom (2010).

In the next section, I analyze the dimension bonding social capital.

6.2 Bonding social capital

Bonding social capital is a main dimension of social capital. It is related to close family members and close friends, and it is mostly a source of social support and other expressive resources (for more on this check chapter 3, dimensions of social capital). In this section, I present and discuss the composition of the variable bonding social capital: Firstly, I show the indicators used to measure bonding social capital and its descriptive results. Secondly, I create the bonding social capital variable through Latent Class Model (LCM) estimation. The created bonding social capital variable is dichotomous, categorized as low or high. Thirdly, I test the association between the created bonding social capital variable and Internet usage, carrying out a binomial logistic regression. I control for socio-demographic variables and for an interaction term between Internet and age. As could be seen in the previous section, age is strongly correlated with Internet usage.

Considering this dimension of social capital, it is hypothesized that as Internet usage increases, the likelihood of having a high level of bonding social capital also increases (Hypothesis a). The results of the logistic regression show that Internet usage and age are significant predictors of bonding social capital. The odds ratio are smaller than one

in relation to Internet usage and age, and so it is less likely to have a higher level of bonding social capital when people use the Internet less or when people get older.

6.2.1 Indicators of bonding social capital

6.2.1.1 Description and analysis

To measure bonding social capital, I used the following variables:

1. 3 items of the <i>Offline Bonding Sub-scale</i> (Williams, 2006):	
	- I do not know people well enough to get them to do anything important. (reversed) (Bonding1)
	- When I feel lonely, there are several people I can talk to. (Bonding2)
	- If I need any help to solve my problems, I know several people available to help me. (Bonding3)
2. Number of close relatives	
3. Frequency of contact:	Face-to-face/Telephone/Mobile phone/Internet
4. Number of close friends	
5. Frequency of contact:	Face-to-face/Telephone/Mobile phone/Internet

The selection of these variables was already explained in the methods chapter. The first three items, taken from Williams' Internet Social Capital Scales, have the following frequencies (%):

Table 6.2
Frequencies of bonding items (%)

	Bonding 1 (Reversed)	Bonding 2	Bonding 3
Strongly disagree	3.6	1.4	.5
Disagree	17.3	19.2	7.9
Neither agree, nor disagree	10.1	20.6	5.8
Agree	61.4	51.1	74.6
Strongly Agree	7.7	7.7	11.3

As can be seen from the table, the “agree” has a higher percentage than the remaining answers, what points to a higher bonding social capital. The variable bonding 1 was reversed, meaning that these frequencies correspond to the inverted direction of the item “I do not know people well enough to get them to do anything important”. More than half of the respondents report having a “high” or a “positive” bonding social capital.

It is important to state that I am not constructing a scale with these items. To construct a single bonding social capital variable I’m using LCM estimation, where these items and others are introduced simultaneously. The LCM estimation will show if groups can be estimated with the selected variables, taking into account reliability and assuming that the latent variables completely account for the relations between the observed variables (assumption of local independence).

But to give an indication of the reliability of the items, I calculated Cronbach’s alpha ($\alpha = .635$) that shows an acceptable reliability (a good reliability would be $\alpha = .7$ or above). Cronbach’s alpha measures how well each item in a scale correlates with the sum of all the items, measuring internal consistency. I also calculated Spearman’s rho, which shows that the variables are strongly correlated. The correlation coefficients are presented in the next table (see table 6.3).

Table 6.3
Spearman’s rho with bonding items

		Bonding 1R	Bonding 2	Bonding 3
Bonding 1R	Correlation Coefficient	1.000	.301**	.407**
	Sig. (2-tailed)		.000	.000
	N		417	417
Bonding 2	Correlation Coefficient		1.000	.461**
	Sig. (2-tailed)			.000
	N			417
Bonding 3	Correlation Coefficient			1.000
	Sig. (2-tailed)			
	N			

** $p < 0.01$

Looking at the interplay of two main socio-demographic variables, such as gender and age, the Pearson chi-square indicates that there is no significant association between any of the items and gender and age ($p > 0.05$).

Considering the number of close family members, it ranges between 0 and 40, with a mean of 8.07 (SD = 5.173; Median = 8). Interesting enough, the number of close friends

also ranges between 0 and 40, with a mean of 8.28 ($SD = 6.572$; Median = 6). As the Pearson chi-square indicates, there is no significant association between gender and number of close family members ($C^2(3, N = 417) = 0.071, p = 0.995$), and between gender and close friends ($C^2(3, N = 388) = 5.009, p = 0.165$). Age has also no significant relationship with the number of close family members or with the number of close friends ($p > 0.05$).

Comparing non-Internet users and Internet users, there is a small difference between them: the mean number of close family members for non-users is 8.18 ($SD = 5.052$; Median = 8), while it's 8.02 for Internet users ($SD = 5.251$; Median = 7); the mean number of close friends for non-users is 7.65 ($SD = 6.822$; Median = 6), while for Internet users the mean number of close friends equals 8.65 ($SD = 6.409$; Median = 7). The average of number of close family members is slightly higher for non-users, while the average number of close friends is slightly higher for Internet users. However, there is no correlation between the number of close relatives and Internet usage ($r(417) = .015, p = 0.761$). Similarly, there is no correlation between the number of close friends and Internet usage ($r(388) = .073, p = 0.150$).

In terms of frequency and types of contact, the next two tables (see table 6.4) show the percentages for family members and close friends:

Table 6.4a
Frequency of contact face-to-face and telephone for close family and friends (%)

	Face-to-face Family	Face-to- face Friends	Telephone Family	Telephone Friends
Daily	62.1	42.9	25.9	7.7
At least once a week	22.5	36.5	41.0	23.5
At least once a month	10.3	11.0	5.5	14.1
Rarely/Never	3.8	2.9	26.6	48.0

Table 6.4b
Frequency of contact by mobile and Internet for close family and friends (%)

	Mobile Family	Mobile Friends	Internet Family	Internet Friends
Daily	59.2	28.5	9.4	23.7
At least once a week	20.9	36.7	12.0	17.0
At least once a month	4.6	9.8	4.3	3.1
Rarely/Never	14.1	18.0	73.1	49.2

These descriptive results indicate that the survey respondents prefer daily face-to-face contact with close family members and close friends. Contact by mobile phone is also mainly done on a daily basis for family members. Daily online contact is very low for close family members (9.4% do it daily comparing to 73.1% that answered rarely/never). And even though daily online contact is higher for close friends (23.7%), the option rarely/never also gathers a significant amount of answers (49.2%).

But these are the results of my total sample, which include non-Internet users and Internet users. When I differentiate between the two, the online contact results change: 15% of Internet users contact daily their close family members online, 19% do it once a week, but still 60% do it rarely or never. Considering the online contact with close friends: 40% of Internet users contact daily their close friends online, 28% do it once a week, 5% of it once a month, and 28% do it rarely or never. As the Pearson chi-square indicates, frequency of Internet usage is associated with online contact, but also with mobile phone for both close family members and friends ($p < 0.05$).

Correlating the number of close family members with type and frequency of contact (see table 6.5), the Spearman's rho shows that the number of close family members is negatively correlated with frequency of face-to-face contact and frequency of mobile contact ($p < 0.01$). The higher the number of close family members the less people seem to meet face-to-face or to talk on the mobile phone.

Table 6.5
Spearman's rho correlation for number of close family members & frequency/type of contact

		Number of close family	Frequency face2face	Frequency telephone	Frequency mobile	Frequency online
Number of close family	Corr. C.	1.000	-.182**	-.070	-.302**	-.002
	Sig. (2-tailed)	.	.000	.000	.000	.967
	N	417	412	413	412	412
Frequency face2face	Corr. C.		1.000	.147**	.317**	-.121*
	Sig. (2-tailed)		.	.003	.000	.014
	N		412	412	411	411
Frequency telephone	Corr. C.			1.000	.192*	.031
	Sig. (2-tailed)			.	.000	.524
	N			413	412	412
Frequency mobile	Corr. C.				1.000	.137**
	Sig. (2-tailed)				.	.000
	N				412	412
Frequency online	Corr. C.					1.000
	Sig. (2-tailed)					.
	N					412

** $p < 0.01$ * $p < 0.05$

Frequency of face-to-face contact is also correlated positively with telephone and mobile phone contact ($p < 0.01$), but negatively with online contact ($p < 0.05$). The more people meet face-to-face with close family members, the more they seem to talk on the telephone or mobile phone and vice versa. People use a variety of ways to connect with close relatives – which Haythornthwaite (2005) coined as media multiplexity. Telephones and mobile phones might even be used, for instance, to coordinate people's physical encounters. The more people meet face-to-face with close family members, the less they seem to meet online. The descriptive data has shown that the Internet is not frequently used to contact close family members. It might be used, nonetheless, to contact family members that are not so close emotionally or geographically.

Frequency of mobile phone with close family members is also correlated with online contact, but positively ($p < 0.01$). The more people use the mobile phone to contact their close relatives, the more they seem to use the Internet for the same effect.

Correlating the number of close friends with type and frequency of contact (see table 6.6), the Spearman's rho shows that the number of close friends is negatively correlated with mobile phone contact and with online contact ($p < 0.01$). The higher the number of close friends the less people seem to talk on the mobile phone or online with close friends. This follows the same pattern as the number of close family members and

mobile phone. But, contrary to the close family results, the face-to-face contact correlation is no longer significant for close friends, while the online contact is.

Table 6.6
Spearman's rho correlation for number of close friends & frequency/type of contact

		N. close friends	Frequency face2face	Frequency telephone	Frequency mobile	Frequency online
N. close friends	Corr. C.	1.000	-.081	.073	-.206**	-.235**
	Sig. (2-t)	.	.116	.157	.000	.000
	N	388	378	378	377	377
Frequency face2face	Corr. C.		1.000	-.066	.229**	.061
	Sig. (2-t)		.	.194	.000	.232
	N		389	389	388	388
Frequency telephone	Corr. C.			1.000	.028	-.029
	Sig. (2-t)			.	.580	.571
	N			389	388	388
Frequency mobile	Corr. C.				1.000	.574**
	Sig. (2-t)				.	.000
	N				388	388
Frequency online	Corr. C.					1.000
	Sig. (2-t)					.
	N					388

** ** $p < 0.01$

Frequency of face-to-face contact with close friends is positively correlated with mobile phone contact with close friends ($p < 0.01$). The more people meet their close friends, the more they seem to contact them by mobile phone and vice versa. Once again, mobile phones might be used to schedule face-to-face encounters, as a continuation of the face-to-face interaction, or both.

Frequency of mobile contact with close friends is also positively correlated with online contact with close friends. The more people talk on their mobile phones with close friends, the more they seem to contact them online, and vice versa. The same happens with close family members, what might suggest a connection between the usage of mobile phone and the Internet.

Looking at socio-demographic variables, such as age and gender, the frequency of telephone contact with close family members is the only significantly associated with gender ($C^2(3, N = 413) = 20.262, p = 0.000$). However, all the frequencies of types of contact with close family members, except face-to-face contact, are related with age:

- Telephone contact = C^2 (9, N = 413) = 33.550, $p = 0.000$
- Mobile contact = C^2 (9, N = 412) = 42.151, $p = 0.000$
- Online contact = C^2 (9, N = 412) = 71.567, $p = 0.000$

Once again, for the number of close friends, frequency of telephone contact is the only one significantly associated with gender (C^2 (3, N = 389) = 17.929, $p = 0.000$). In both situations (with close friends and close family members), women use significantly more often the telephone for contact. This might be explained by different factors (only tentative at this point) from gender specificities, to what is perceived as specific female tasks, such as the coordination of the families' schedules and extended care, to the affordances of the telephone (new promotional campaigns by Portuguese telephone companies allow the client to call for free to a defined set of numbers).

Similar to the number of close family members, the frequency of contact by telephone, mobile, and online with close friends is associated with age (but not face-to-face contact):

- Telephone contact = C^2 (9, N = 389) = 27.480, $p = 0.001$
- Mobile contact = C^2 (9, N = 388) = 140.925, $p = 0.000$
- Online contact = C^2 (9, N = 388) = 169.695, $p = 0.000$

The frequency of face-to-face contact is the only type that is not statistically associated with age, both for close family members and close friends. This might be related to the fact that face-to-face contact is the preferred form of contact for my survey respondents, and therefore, its importance subsists independently of age. Other studies in Portugal have shown the same: Portuguese people favor face-to-face encounters (Cf. Cardoso et al., 2005). This might be, of course, a cultural idiosyncrasy.

6.2.1.2 Summary

This section presented the descriptive statistics of the variables used to measure bonding social capital:

- In terms of the bonding items, more than half of the respondents report having a 'high' or 'positive' level of bonding social capital. The bonding items were not statistically associated with gender or age.
- In terms of the number of close ties, the number of close family members reported ranges between 0 and 40, with an average of 8.07 and a median of 8.

The number of close friends reported also ranges between 0 and 40, with an average of 8.28 and a median of 6. Age and gender are not statistically associated with the number of close family members or with the number of close friends. Likewise, the frequency of Internet usage is not statistically associated with the number of close family members or the number of close friends.

- In terms of frequency and type of contact with close ties, the majority of the respondents meets their close family face-to-face on a daily basis, and uses the mobile phone to contact them daily. Slightly less than half of the respondents meet their close friends face-to-face on a daily basis, and slightly more than a quarter use the mobile phone daily to contact their close friends. The frequency of Internet usage is not associated with the frequency of personal encounters; but it is associated with the frequency of mobile phone contact. The more people talk on their mobile phones with close family members and close friends, the more they seem to contact them online.
- Of the Internet users, 15% contact their close relatives online daily, while 60% do it rarely or never; 40% of the Internet users contact their close friends online daily, whereas 28% report doing it rarely or never.
- The more people meet their close family members face-to-face, the more they seem to talk with them on the telephone and on the mobile phone. The more people meet face-to-face with close family members, the less they seem to meet them online. But the more people use the mobile phone to contact their close family members, the more they seem to use the Internet for the same effect. For close friends, the more people meet them face-to-face the more they seem to contact them by mobile phone, whereas the more people talk on their mobile phones with close friends, the more they seem to contact them online. It seems that there is a clear connection between the usage of different media, which supports the idea of *media multiplexity*, i.e those more strongly tied use more media to interact (Haythornthwaite, 2005).
- The frequency of face-to-face contact with close relatives and close friends is not statistically associated with age. The frequency of telephone, mobile phone, and online contact with close relatives and close friends is statistically associated with age.
- The only variable significantly associated with gender is the frequency of telephone contact with close family members and close friends. Possible

explanations for this association were explored in this chapter, particularly focusing on gender representations.

In the next chapter, I construct the bonding social capital variable to test my first sub-hypothesis, namely the association between bonding and Internet usage.

6.2.2 The bonding social capital variable

To create the bonding social capital variable I carried out a latent class analysis. As explained previously, the Latent Class Model (LCM) technique will allow me to find the latent variable “bonding”, through a probabilistic clustering based on the five indicators described above.

The results for the model selection of the LCM estimation are presented in the next table:

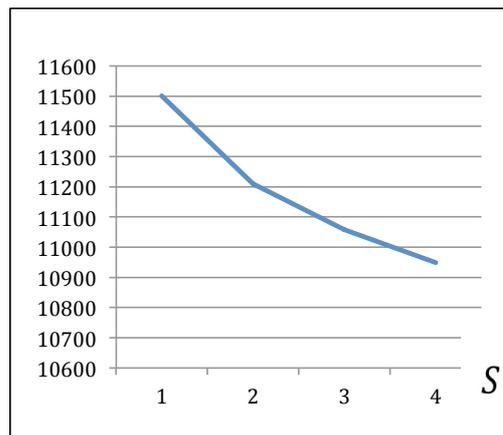
Table 6.7
BIC and AIC values for model selection

		LL	BIC	AIC
Model 1	1-Latent class	-5669.1	11817.8	11500.2
Model 2	2-Latent class	-5511.7	11574.1	11209.4
Model 3	3-Latent class	-5423.8	11469.4	11057.6
Model 4	4-Latent class	-5357.2	11407.2	10948.3

The LCM estimation presents four models. The main aim of LCM is to determine the smallest number of latent classes S (also known as clusters) to fit the data, which means selecting the optimal number of classes that are sufficient to explain the relationships observed among the variables (Fonseca, 2009). The goal is to find a parsimonious model, knowing that complex models will have a higher number of parameters and can be harder to interpret.

So, to determine the best number of classes, the AIC family gives us the relative goodness of fit of the model – for categorical or mixed variables (Fonseca, 2010; 2011). When this measure is minimized from one class to the other, the best clustering point is found and it is possible to determine the best number of classes. As it does not happen in this case, the graphical display of AIC informs the decision of the selection of classes.

Figure 6.5
Graphic display of AIC for bonding social capital



As it is visible in the graph, there is a kind of elbow that occurs at class 2. And so AIC selects a model with $S = 2$. This means that two classes are the best solution to explain the relationships observed among the variables.

Having defined the model, it is now possible to fit the data in those two classes. This estimation allows me to define the bonding variable, but also to understand different levels of bonding. The results are presented in the next table (for length reasons the table is broken up in two parts). The first class accounts for 52% of the data, while the second class accounts for 48% of the data.

Table 6.8
Bonding social capital by model parameters' estimates

Overall Probability	CLASS 1	CLASS 2
Class Size	0.5231	0.4769
BONDING1		
Strongly Disagree	0.0207	0.0054
Disagree	0.2619	0.1174
Neither disagree, nor agree	0.2256	0.1742
Agree	0.4403	0.5852
Strongly Agree	0.0515	0.1178
BONDING2		
Strongly Disagree	0.0049	0.0002
Disagree	0.1154	0.0139
Neither disagree, nor agree	0.0851	0.0303
Agree	0.7371	0.7768
Strongly Agree	0.0574	0.1788
BONDING3		
Strongly Disagree	0.0514	0.0111
Disagree	0.227	0.0883
Neither disagree, nor agree	0.1186	0.0835
Agree	0.555	0.7067
Strongly Agree	0.0479	0.1104
CLOSEFAM		
1	0.0595	0.0472
2	0.0616	0.0505
3	0.0955	0.0807
4	0.0771	0.0672
5	0.1126	0.1013
6	0.0583	0.0541
7	0.0356	0.0341
8	0.0512	0.0506
9	0.0292	0.0298
10	0.1151	0.1211
11	0.0541	0.0587
12	0.076	0.0852
13	0.0499	0.0577
14	0.0466	0.0557
15	0.0338	0.0416
16	0.0071	0.0091
17	0.0117	0.0153
18	0.0046	0.0062
19	0.0023	0.0031
20	0.0066	0.0096
21	0.0022	0.0032
22	0.0021	0.0033
25	0.002	0.0034
26	0.002	0.0034
30	0.0018	0.0036
40	0.0015	0.004
FACE2FACE (Fam.)		
Daily	0.5978	0.6597
At least once a week	0.2366	0.2183
At least once a week	0.2366	0.2183
At least once a month	0.1204	0.0928
Rarely/Never	0.0452	0.0291
MOBILE (Fam.)		

Daily	0.4499	0.7658
At least once a week	0.2461	0.1798
At least once a month	0.0757	0.0237
Rarely/Never	0.2283	0.0307
At least once a month	0.0335	0.0588
Rarely/Never	0.9129	0.5222
CLOSEFRI		
0	0.0066	0.004
1	0.0389	0.0248
2	0.0824	0.0558
3	0.1237	0.0891
4	0.0966	0.0739
5	0.0648	0.0526
6	0.1405	0.1213
7	0.0726	0.0666
8	0.0679	0.0661
9	0.0237	0.0246
10	0.1126	0.1238
11	0.0149	0.0174
12	0.0313	0.0388
14	0.0113	0.0158
15	0.0479	0.0712
17	0.0061	0.0102
18	0.0078	0.0139
20	0.0253	0.0509
21	0.0017	0.0037
24	0.0061	0.0157
25	0.0059	0.016
26	0.0014	0.0041
27	0.0027	0.0083
30	0.0047	0.0173
33	0.001	0.0045
37	0.0008	0.0047
40	0.0007	0.0048
FACE2FACE (Fri.)		
Daily	0.3796	0.528
At least once a week	0.4246	0.3719
At least once a month	0.1569	0.0865
Rarely/Never	0.0389	0.0135
MOBILE (Fri.)		
Daily	0.0679	0.5775
At least once a week	0.3975	0.396
At least once a month	0.1853	0.0216
Rarely/Never	0.3493	0.0048
INTERNET (Fri.)		
Daily	0.0215	0.516
At least once a week	0.0689	0.3123
At least once a month	0.0345	0.0296
Rarely/Never	0.8751	0.142

In this table we have two kinds of probabilities: first, the ordinary probabilities or proportions of mixture, i.e. the probabilities of belonging to class 1 and class 2, 0.52 and 0.48 respectively. Second, the conditional probabilities: for instance, 0.0207 and 0.0054 are the probabilities of answering *Strongly Disagree* in the variable bonding1 given that the individual belongs to class 1 or to class 2.

Table 6.9
Profile of bonding social capital

	Low (52%)	High (48%)
BONDING1	Strongly Disagree; Disagree; Neither disagree, nor agree	Agree; Strongly agree
BONDING2	Strongly Disagree; Disagree; Neither disagree, nor agree	Agree; Strongly agree
BONDING3	Strongly Disagree; Disagree; Neither disagree, nor agree	Agree; Strongly agree
CLOSEFAM	1-10	11-40
FACE2FACE (Fam.)	At least once a week; At least once a month; Rarely/Never	Daily
MOBILE (Fam.)	At least once a week; At least once a month; Rarely/Never	Daily
INTERNET (Fam.)	Rarely/Never	Daily; At least once a week; At least once a month
CLOSEFRI	1-10	11-40
FACE2FACE (Fri.)	At least once a week; At least once a month; Rarely/Never	Daily
MOBILE (Fri.)	At least once a week; At least once a month; Rarely/Never	Daily
INTERNET (Fri.)	At least once a month; Rarely/Never	Daily; At least once a week

This table 6.9 gives us the results of the clustering of the data. The five-point Likert-scale (the five possible answers from Strongly disagree to Strongly agree) of variable **Bonding1** (the first variable in the table) are distributed in two classes: the “strongly disagree”, the “disagree”, and the “neither agree nor disagree” are placed in class 1, while the “agree” and the “strongly agree” are placed in the class 2.

For the other two bonding variables (**Bonding2 & Bonding3**), the same distribution occurs: the “strongly disagree”, the “disagree”, and the “neither agree nor disagree” are placed in the first class, while the “agree” and the “strongly agree” are placed in the

second class. For now, it is possible to conclude that the “agrees”/“strongly agrees” are related to the second class – what might suggest a higher level of bonding social capital.

For the labeling of the two classes, I’m not following a dichotomous yes/no bonding social capital. I’m assuming that there are two different levels (low/high), as I cannot conclude that my respondents have no level of bonding social capital.

Continuing the analysis, the close family variable (number of close family members) is divided in the following way: 1 to 10 family members go to the class 1; 10 and above go to class 2. The individuals with higher number of family members are placed in the class that seems to be related to a higher level of bonding social capital. The more the merrier it seems. Having more than 10 close friends does not mean *per se* that it is better than having less than 10 close friends (this also explains why I can’t assume that the classes correspond to having or not having bonding social capital). But it might mean more resources and diversity, since the number of ties to access resources is bigger (a bulk of research has been proving the importance of diversity mainly in weak ties, Cf. Lin & Erickson, 2008).

Frequency of contact with those close family members and close friends are also used as an indicator of the strength of a relationship. It is more than just a number of ties, as it points to the quality of the interaction with those ties – as a higher frequency of contact is usually established with closer ties (Cf Small, 2009). Considering close family members, the LCM estimation in table 6.9 shows that “daily” face-to-face contact and mobile phone contact are placed on class 2, whereas other frequencies (“at least once a week”, “at least once a month”, and “rarely/never”) are placed on class 1. With Internet, the clustering changes: the first three frequencies (“daily”, “at least once a week”, and “at least once a month”) correspond to class 2, and “rarely/never” corresponds to class 1.

The same distribution is visible in the bonding linked to close friends (also defined as peer-bonding). The individuals with higher number of friends (10-40) are placed in the class that seems to be related to a higher level of bonding social capital (class 2). The frequency of face-to-face contact and mobile phone also follows the same estimation: daily contact is placed on class 2, whereas other frequencies (“at least once a week”, “at least once a month”, and “rarely/never”) are placed on class 1. The only variation is on the frequency of contact online, where “daily” and “at least once a week” are on class 2, and at “least once a month” and “rarely/never” are on class 1. In my data, online contact is done more frequently with close friends than with family members, what might explain this small variation. Yet again, the class 1 is consistent with a lower level of social capital and the class 2 with a higher one.

These estimates of conditional probabilities, meaning the distribution of the data in the two classes, allow us to differentiate between a lower bonding social capital and a bonding higher social capital. The lower social capital corresponds to class 1 and the higher social capital corresponds to class 2. This low and high are defined according to the clustering of my data. These are “qualitative” or categorical differentiations, as I cannot quantify how much is low social capital and how much is high social capital. However, as Putnam states, it is hard to quantify social capital, being more fruitful to look at it in a qualitative sense (2002).

Finally, it is important to mention that I had to remove two variables from this model: frequency of contact by telephone for family, and frequency of contact by telephone for close friends. I had to remove them, because the estimates of probabilities of these two indicators were going in the opposite direction. What I mean is that the probabilities of higher frequency of contact with family by telephone was in the “low” bonding class, instead of on the “high” class (like the other types of contact). The same occurred with the frequency of contact with friends by telephone. This might have happened for several reasons (besides the possibility of error in the data collection):

- People who use telephone to talk to their families/friends more frequently don't have a strong bonding level (comparing to face-to-face, mobile, and Internet), which theoretically goes against the frequency of contact rationale.
- People who used a telephone to contact family and friends in my sample were mainly from the 4th age group (65 and +), which might mean that because of their age and life cycle stage they may have lower levels of bonding, even though they contact their networks through telephone.
- Women used the telephone to contact family and friends significantly more than men. The Pearson chi-square shows that there is a significant gender difference in contacting family members by telephone, $C^2(3, N = 413) = 20.262, p = 0.000$. The same for contacting friends by telephone, $C^2(3, N = 389) = 17.929, p = 0.000$. This might be related to levels of social capital and gender distribution (Cf. Lin & Erickson, 2008; Miyata et al., 2008; Burt, 1998). It is worth mentioning, however, that the Pearson chi-square analysis for gender was not significant for any of the other forms of contact. So, maybe there is a specific relationship with telephone.

These are, of course, some tentative reasons for this data deviation that have to be properly tested (which falls outside of the scope of my research, mostly because of time

constraints). For homogeneity and reliability reasons, I removed these two variables from the model.

Now that I have a bonding social capital variable, I'm able to: first, test its relationship with Internet usage; second, combine it with other variables (bridging and resources, which are estimated in the next sections) to constitute a single variable of social capital. Next, I analyze statistically if there is any association between Internet usage and bonding social capital, testing my hypothesis a (Ha): perceived bonding social capital is positively associated with Internet usage.

6.2.3 Bonding social capital and Internet usage

6.2.3.1 Results

To measure the impact of Internet usage on bonding social capital, I carried out a binary logistic regression. I estimate the effects of Internet usage on the odds of having a low/high level of bonding social capital. It is hypothesized that as Internet usage increases, the likelihood of having a high level of bonding social capital also increases (Ha).²

For the binary logistic regression, I used the SPSS *Forward:LR* method that enters variables one at a time and uses likelihood ratio estimates to determine which variables will add most to the regression equation (Cf. Marôco, 2010). The independent variable, Internet usage, is categorized into four groups: non-users, light users, moderate users, and heavy users. Light users correspond to the respondents that use the Internet at least once a month or rarely; moderate users correspond to the respondents that use the Internet 3 or 4 times a week or 1 or 2 times a week; and heavy users corresponds to the respondents that report using the Internet daily.

² I started this analysis with an ordinal regression model. The bonding social capital variable is an ordinal dependent variable: its categories are ordered *low* or *high*, even if I cannot define the real distance between the categories. The ordinal regression analysis uses a link function to describe the effect of the independent variables on the ordered dependent variables, not requiring assumptions of normality and constant variance (Chen & Hughes, 2004). However, the ordinal regression model assumes that the relationships between the independent variables and the logits are the same for all the logits, which results in a set of parallel lines – one for each category of the dependent variable (Norusis, 2005). But when I was fitting the ordinal regression model, the SPSS could not define the test of parallel lines (regardless of the link function). This way I could not validate one of the main assumptions of the ordinal regression. Faced with this difficulty, I carried out a binary logistic regression instead. This is similar to ordinal regression, but it does not assume that there is an order in the categories of the dependent variable. So, the dependent variable is considered nominal and not ordinal, which is perfectly acceptable in this case.

The analysis also controlled for socio-demographic variables, such as age, gender, education, occupation status, marital status, religion, and household composition.³

Because age and Internet usage are strongly correlated, as can be seen in the first part of this chapter, I added an interaction term to the model (Age.Internet). The effect of Internet usage on social capital might differ per age. So, I'm testing an interaction effect between these two independent variables (a continuous and a categorical predictor). If these two explanatory variables, age and Internet usage, are involved in a significant interaction we can no longer talk of the effect of age without fixing the level of Internet usage and vice versa.

The binary logistic regression revealed that only Internet usage ($p = 0.000$) and age ($p = 0.000$) had a statistically significant effect on the Logit of the probability of bonding social capital. The model with age and Internet usage (and not the model with the interaction term) was the most significant ($G^2(4) = 223.378$; $p = 0.000$). The model also fits well the data, according to the Hosmer and Lemeshow test ($\chi^2_{HL}(8) = 9.075$, $p = 0.336$) and to the pseudo R-squares ($R^2_N = 61\%$; $R^2_{CS} = 46\%$). The next table summarizes the coefficients and its significance in the model.

Table 6.10
Logit Coefficients of the Logistic regression model of bonding social capital

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Internet			51.149	3	.000			
Internet(1)*	-2.818	.461	37.400	1	.000	.060	.024	.147
Internet(2)**	-3.469	1.134	9.362	1	.002	.031	.003	.287
Internet(3)***	-1.522	.376	16.340	1	.000	.218	.104	.457
Age	-.056	.011	24.359	1	.000	.946	.926	.966
Constant	3.675	.517	50.507	1	.000	39.435		

*Internet(1) = Non-user; **Internet(2) = Light user; ***Internet(3) = Moderate user; Baseline = Heavy user.

In the logit scale, the model is described by the following formula:

³ Age is a continuous variable; Gender: 0= male, 1= female; Education: 0= no education, 1= less than secondary education, 2= secondary education, 3= undergraduate degree, 4= postgraduate degree; Occupation status: 1= employed, 2= unemployed, 3= retired, 4= student, 5= housewife; Marital status = 1 single, 2= married/de facto, 3= divorced/separated, 4= widowed; Religion: 0= no religion, 1= other religion, 2= catholic (non-practicing), 3= catholic; Household composition: 1= one person household, 2= couples without children, 3= couples with children, 4= other household types.

$$\text{logit}(\pi) = \beta_0 + \beta_1 X_1 + \dots + \beta_p X_p$$

Therefore, the fitted (estimated) model is:

$$\text{logit}(\hat{\pi}) = 3.675 - 2.818\text{Internet}(1) - 3.469\text{Internet}(2) - 1.522\text{Internet}(3) - 0.056\text{Age}$$

As can be seen in the table 6.10, Internet(1) (“non-user”) ($p = 0.000$), Internet(2) (“light user”) ($p = 0.002$), and Internet(3) (“moderate user”) ($p = 0.000$) are statistically significant, comparing to the baseline category “Heavy Internet users”:

- Comparing to heavy Internet users, non-Internet users (Internet1) have lower odds of having a higher level of bonding social capital multiplicatively by a factor equal to $e^{(-2.818)} = 0.060$, or by 94% $[(0.060 - 1) \times 100]$.
- Comparing to heavy Internet users, low Internet users (Internet2) have lower odds of having a higher level of bonding social capital by $e^{(-3.469)} = 0.031$, or 96.9%.
- Comparing to heavy Internet users, moderate Internet users (Internet3) have lower odds of having a higher level of bonding social capital by $e^{(-1.522)} = 0.218$, or 78.2%.

In terms of age, when age increases ($b_{\text{age}} = -0.056$), the probability of high bonding social capital decreases. Per each unit of age (per one year) the odds of having a higher level of bonding social capital decrease by $[0.946 - 1] \times 100$, i.e. by 5.4%.

To sum up, because odds ratios are less than one, having a higher level of bonding social capital is less likely to occur, both with Internet usage (less than Heavy usage) and age.

Finally, this fitted model classifies correctly 83% of the cases: sensitivity is 86% (the model classifies correctly 86% of the cases with high bonding social capital), and specificity is 80% (the model classifies correctly 80% of the cases with low bonding social capital). This measure shows that the correct classification of this fitted model was proportionally higher than a classification obtained by chance. To complement this sensitivity/specificity report, I calculated the ROC curve. The area under the ROC curve is a measure of how well a parameter can distinguish between the two groups (low/high bonding social capital). The ROC curve represents the tradeoffs between sensitivity and

specificity. The ROC curve analysis of this model presents an excellent discriminant capacity (ROC $c = 0.093$; $p < 0.001$).

6.2.3.2 Discussion

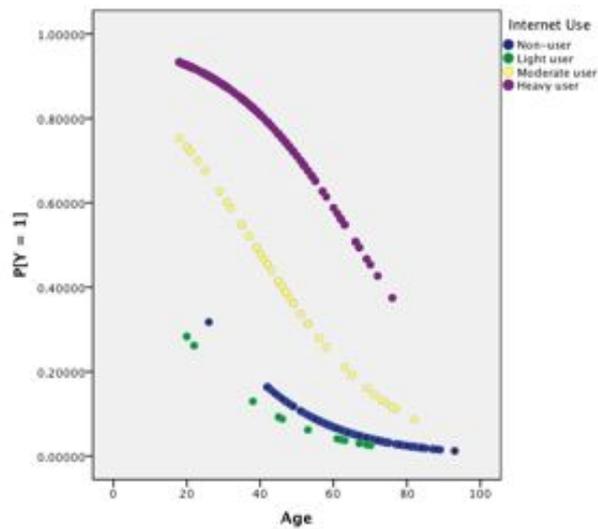
Internet usage and age have a significant effect on the likelihood of having (low or) high bonding social capital. In this case, I can corroborate my hypothesis a (H_a) that states that there is a positive association between Internet usage and perceived bonding social capital: as Internet usage increases, the likelihood of having a higher level of bonding social capital increases.

a. Heavy Internet users are more likely to have a high level of bonding social capital

The next figure (check figure 6.6) illustrates graphically the probability of having a higher level of bonding social capital, by Internet usage and age.

The figure 6.6 shows four distinct groups and their relationship to the probability of having a higher bonding social capital and age. The probability of having a high level of bonding social capital increases with Internet usage (the heavy users are up in the graph and the non-users down in the graph). A higher Internet usage seems to be related to a higher level of interaction with close ties, and/or to an efficient production, preservation, and strengthening of bonding social capital. These findings suggest that the Internet allows users to be more frequently in touch with their close ties, maintaining and reinforcing their relationships and social capital. In addition, the Internet might be serving as a tool every time the respondents need to access and mobilize their social capital. Several studies have been indicating a positive association between Internet usage and bonding social capital (Williams, 2007; Ellison et al., 2007; Brandtzaeg et al., 2010).

Figure 6.6
Probability of having high bonding social capital ($y = 1$), by Internet usage and age.



The figure also makes visible a slight advantage of the Internet non-users comparing to the light users in the probability of having a higher level of bonding. The chances of both groups are very close, but are different: non-users have lower odds of having a high bonding by 94.8%, while light users have lower odds of having a high bonding by 96.8% (always comparing to the reference category, which is heavy Internet users). In the analysis of the remaining dimensions I will explore if this is a significant pattern.

b. Younger people are more likely to have a high level of bonding

As can be seen graphically in figure 6.6, bonding social capital decreases with age. Older people are less likely to have a high level of bonding social capital: even if an Internet non-user, a 20 years old has higher odds of having a higher bonding social capital than a 40 years old non-user.

Per each year difference in age, a person is 0.946 ($e^{-0.056}$) times less likely to have a higher level of bonding social capital. For instance, a 60 year-old is 0.11 times or 89% less likely to have a high level of bonding than a 20 years old ($\exp(b)^{40}$).

The decrease of a higher bonding social capital with age might be related to the characteristics of specific life courses, as close relationships change throughout a

person's life-cycle stages and span. For instance, older people would have less close ties to drawn resources, due to loss of family members or close friends, and particular life changes, such as widowhood, retirement, etc. On the one hand, older people might have a stable network of close relatives (Cf. Tilburg, 1998), which will decrease with death of a member, disease, or other social circumstances. On the other hand, the number of friends and the extent of friendship participation tend to decline with age (Blau, 1961; Tilburg, 1998; Stevens & Tilburg, 2011). Looking specifically at the influence of age in personal networks, Ajrouch, Blandon, & Antonucci (2005), concluded that older age was associated with older networks (for both men and women).

Several studies have been showing that there are structural constraints for close relationships and sociability in old age (Blau, 1961; Rawlins, 1992; Stevens & Tilburg, 2011), besides personal choice or relational skills (Stevens & Tilburg, 2011). For example, different social network types, such as the general family-focused, friend-focused, and restricted types, have a considerable influence on close relationships and social capital (Litwin & Shiovitz-Ezra, 2011; Fiori, Smith & Antonucci, 2007).

In the next chapter, I examine other dimension of social capital: bridging social capital.

6.3 Bridging social capital

Bridging social capital is a main dimension of social capital. It is related to weak ties and it is primarily a source of instrumental resources, such as information (for more on this check chapter 2, dimensions of social capital). Bridging social capital is not the opposite of bonding social capital. They are complementary. Bridging social capital can also be reached through close ties – for instance, through a friend of a friend, but it is mainly accessible through weak ties.

In the first part of this section, I present and discuss the composition of the variable bridging social capital: Firstly, I show the indicators used to measure bridging social capital and its descriptive results. Secondly, I create the bridging social capital variable through Latent Class Model (LCM) estimation. The created “bridging” variable is categorized as low, medium, and high. Finally, I test the association between the created bridging social capital variable and Internet usage, carrying out a multinomial logistic regression. I estimate the effects of Internet usage on the odds of having bridging social capital. I control for socio-demographic variables (such as age, gender, education, occupation status, marital status, religion, and household composition), and for an interaction term between Internet usage and age.

I hypothesize that as Internet usage increases, the likelihood of having a high level of bridging social capital increases (Hypothesis b). The results validate this hypothesis: heavy Internet users are more likely to have a high level of bridging, than non-Internet users, light users, and moderate users.

6.3.1 Indicators of bridging social capital

6.3.1.1 Description and analysis

To measure bridging social capital, I used the following variables:

1. Three items of the *Offline Bridging Sub-scale* measured with a 5-point Likert scale from strongly disagree to strongly agree (Williams, 2006):
 - i. - Interacting with people makes me interested in different ideas. (Bridging1)
 - ii. - Interacting with people makes me feel connected to the bigger picture. (Bridging2)
 - iii. - Interacting with people makes me want to try new things. (Bridging3)
2. "Social diversity" measured with a 5-point Likert scale from strongly disagree to strongly agree (Special EuroBarometer, EU, 2005):
 - "I'm interested in people with different life styles"
3. "Informal networks" measured by frequency – daily; at least once a week; at least once a month; rarely/never (Sabatini, 2009):
 - "In the last month, I went out socially with my friends"

The rationale for the selection of these variables (based on diversity) was already explained in the methods chapter.

The first three items, taken from Williams' Internet Social Capital Scales, have the following frequencies (%):

Table 6.11
Frequencies of bridging items (%)

	Bridging 1	Bridging 2	Bridging 3
Strongly disagree	1.4	1.0	1.4
Disagree	4.8	17.5	7.9
Neither agree, nor disagree	13.2	38.4	24.7
Agree	69.8	37.2	55.9
Strongly Agree	10.8	6.0	9.8

As can be seen in the table, the “agree” has a higher percentage than the remaining answers in bridging 1 (“Interacting with people makes me interested in different ideas”) and bridging 3 (“Interacting with people makes me want to try new things”), which points to a higher bridging social capital. However, bridging 2 (“Interacting with people makes me feel connected to the bigger picture”) has a higher percentage in the “neither agree, nor disagree” option (38.4%). The option “agree” follows very tightly with 37.2%. This result might be related to the question itself, as upon reflection it might sound ambiguous or too abstract to pin down.⁴

Looking at the interplay of two main socio-demographic variables, such as gender and age, the Pearson chi-square indicates that there is no significant association between any of the items and gender and age ($p > 0.05$).

Considering the social diversity indicator, the following table presents its frequencies:

⁴ It is important to state, once again, that I am not constructing a scale with these items. To construct a single bridging social capital variable I’m using LCM estimation, where these items and others are introduced simultaneously. The LCM estimation will show if groups can be estimated with the selected variables, taking into account reliability and assuming that the latent variable completely account for the relations between the observed variables (assumption of local independence). But to give an indication of the reliability of the items, I calculated Cronbach’s alpha ($\alpha = .683$) that shows an acceptable reliability (a good reliability would be $\alpha = .7$ or above). Cronbach’s alpha measures how well each item in a scale correlates with the sum of all the items, measuring internal consistency. I also calculated Spearman’s rho, which shows that the variables are strongly correlated (see table 6.14).

Table 6.12
Frequencies of social diversity (%)

	"I'm interested in people with different life styles"
Strongly disagree	0.7
Disagree	7.9
Neither agree, nor disagree	20.9
Agree	63.5
Strongly Agree	7.0

In this case, the majority of respondents are interested in people with different life styles (63.5%). The option "neither disagree, nor agree" is the most selected next with 20.9%. As the Pearson chi-square indicates, there is no significant association between this variable and gender and age.

In terms of the last indicator, "In the last month, I went out socially with friends", 46.3% did it at least once a week and 19.7% did it daily (see table 6.13). Gender has no significant relationship with this variable ($C^2(3, N = 416) = 6.808, p = 0.078$), but age does ($C^2(9, N = 416) = 45.311, p = 0.000$).

Table 6.13
Frequency of social participation (%)

	"In the last month, I went out socially with my friends"
Daily	19.7
At least once a week	46.3
At least once a month	14.9
Rarely/Never	18.9

I also calculated Spearman's rho, which shows that the variables are strongly correlated, except for bridging 2 and social participation. The correlation coefficients are presented in the next table (see table 6.14):

Table 6.14
Spearman's rho with bridging variables

		Bridging1	Bridging2	Bridging3	Social diversity	Social participation
Bridging1	Correlation C.	1.000	.324**	.575**	.391**	-.185**
	Sig. (2-tailed)	.	.000	.000	.000	.000
	N	417	417	416	417	416
Bridging2	Correlation C.		1.000	.392**	.270**	.000
	Sig. (2-tailed)		.	.000	.000	.993
	N		417	416	417	416
Bridging3	Correlation C.			1.000	.397**	-.128**
	Sig. (2-tailed)			.	.000	.009
	N			416	416	415
Social diversity	Correlation C.				1.000	-.122*
	Sig. (2-tailed)				.	.013
	N				417	416
Social participation	Correlation C.					1.000
	Sig. (2-tailed)					.
	N					416

** $p < 0.01$ * $p < 0.05$

6.3.1.2 Summary

To sum up, the majority of the respondents report a “high” or “positive” level of bridging social capital in two of the three items of the bridging scale. More than half agrees with the social diversity statement, namely “I’m interested in people with different life styles”. In terms of social participation, slightly less than half reports going out socially with friends at least once a week, while almost a quarter do it on a daily basis.

There is no significant association between any of these bridging indicators and gender or age, with the exception of the last one: frequency of social participation is associated with age. It is expected that younger people are more likely to go out with friends more often.

In the next section, through LCM estimation I aggregate all these bridging indicators to create the variable bridging social capital.

6.3.2 The bridging social capital variable

To create the bridging social capital variable I carried out a latent class analysis. The results of the LCM estimation are presented in the next table:

Table 6.15
BIC and AIC values for model selection

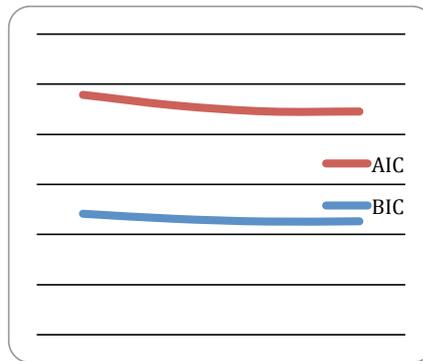
		LL	BIC	AIC
Model1	1-Latent Class	-2358.7987	4832.1347	4755.5975
Model2	2-Latent Class	-2238.7954	4628.2977	4527.5907
Model3	3-Latent Class	-2166.8162	4520.509	4395.6323
Model4	4-Latent Class	-2154.2672	4531.5808	4382.5345

The LCM estimation presents four models: from model 1, based on the homogeneity assumption (one-latent class) to model 4 (four-latent classes). The main aim of LCM is to determine the smallest number of latent classes S to fit the data, which means selecting the optimal number of classes that are sufficient to explain the relationships observed among the variables (Fonseca, 2009).

As explained previously, to determine the best number of classes, the AIC family gives us the relative “goodness of fit” of the model for categorical or mixed variables (Fonseca, 2010; 2011). When this measure is minimized from one class to the other, the best clustering point is found and it is possible to determine the best number of classes.

In this case, as it happened with the bonding variable, I had to display graphically the AIC values, which selects a model with $S = 3$. The following graphic (see figure 6.7) displays the criteria BIC and AIC, indicating a model with three classes. The BIC criterion attains a minimum at $S = 3$; similarly, the AIC criterion forms an elbow at $S = 3$.

Figure 6.7
Graphic display of AIC & BIC for bridging social capital



The first class accounts for 63% of the data, the second class accounts for 27% of the data, and the third class accounts for 10% of the data. In the next table (see table 6.16, divided in two parts), I present the model parameters' estimates.

Table 6.16
Model parameters' estimates of bridging social capital

Part 1	Class 1	Class 2	Class 3
Class Size	0.6291	0.2676	0.1032
Bridging1			
Strongly Disagree	0	0.054	0
Disagree	0.0001	0.1709	0
Neither disagree, nor agree	0.0172	0.4547	0
Agree	0.9401	0.3202	0.2096
Strongly Agree	0.0426	0.0002	0.7904
Bridging2			
Strongly Disagree	0.0052	0.0238	0
Disagree	0.1419	0.3143	0.0012
Neither disagree, nor agree	0.4136	0.4421	0.0443
Agree	0.4138	0.2134	0.5432
Strongly Agree	0.0256	0.0064	0.4112
Bridging3			
Strongly Disagree	0.0002	0.0535	0
Disagree	0.0101	0.2643	0
Neither disagree, nor agree	0.1884	0.4844	0.0003
Agree	0.7779	0.1972	0.1869
Strongly Agree	0.0234	0.0006	0.8128

Social diversity			
Strongly disagree	0.0007	0.0254	0
Disagree	0.0265	0.2344	0.0008
Neither disagree, nor agree	0.1713	0.3607	0.0282
Agree	0.7422	0.3724	0.6738
Strongly agree	0.0593	0.0071	0.2972
Mean	3.8328	3.1014	4.2674
Social Participation			
Daily	0.233	0.1074	0.2158
At least once a week	0.4935	0.3898	0.487
At least once a month	0.1358	0.1838	0.1429
Rarely/Never	0.1377	0.319	0.1543
Mean	2.1783	2.7144	2.2358

In this table we have two kinds of probabilities: first, the ordinary probabilities or proportions of mixture, i.e. the probabilities of belonging to class 1, class 2, or class 3: 0.63, 0.27, and 0.10 respectively. Second, the conditional probabilities: for instance, 0, 0.054, and 0 are the probabilities of answering “Strongly Disagree” in the variable bridging1 given that the individual belongs to class 1, class 2, or class 3. This shows that the “Strongly disagree” is a characteristic of class 2. The next table presents the profile of bridging social capital, based on these conditional probabilities (see table 6.16).

Table 6.17
Profile of bridging social capital

	Medium (63%)	Low (27%)	High (10%)
Bridging1	Agree	Strongly Disagree; Disagree; Neither disagree, nor agree	Strongly agree
Bridging2	Agree	Strongly Disagree; Disagree; Neither disagree, nor agree	Strongly agree
Bridging3	Agree	Strongly Disagree; Disagree; Neither disagree, nor agree	Strongly agree
Social diversity	Agree	Strongly Disagree; Disagree; Neither disagree, nor agree	Strongly agree
Social participation	Daily; At least once a week		At least once a month; Rarely/Never

As can be seen in the table, there is a consistent distribution among the four first variables: the “strongly disagrees”, “disagrees”, and “neither disagree, nor agree” are

placed in class 2; the “agrees” are placed in class 1; the “strongly agrees” are placed in class 3. This segmentation points for a low, medium, and high bridging social capital: Class 1 points for a medium level, class 2 for a low, and class 3 for a high.

The last variable, social participation (going out socially with friends) is only distributed in two classes: daily and at least once a week are on class 1, and at least once a month and rarely/never are on class 3. None of its categories are placed in class 2, which corresponds to a high level of bridging. Going out socially with friends might be considered as a potential way of meeting weak ties, but does not seem to have the same significance of the other variables. To exemplify, I might go out socially with my friends but just socialize with them in a closed group.

These estimates of conditional probabilities allow us to differentiate between a lower, medium, and higher level of bridging social capital. Once again, these are “qualitative” or categorical differentiations, as I cannot quantify how much is low, medium, or high bridging social capital.

In the next section, I test my hypothesis b (H_b) analyzing statistically if there is any association between Internet usage and bridging social capital

6.3.3 Bridging social capital and Internet usage

6.3.3.1 Results

To measure the impact of Internet usage on bridging social capital, I carried out a multinomial logistic regression. The bridging variable has three classes (low, medium, and high), and so the multinomial model is the best fit. The analysis was done controlling for socio-demographic variables, such as age, gender, education, occupation status, occupation, marital status, religion, household composition⁵, and an interaction term between age and Internet usage.

The multinomial logistic regression was used to estimate the probability of each category of bridging (1 = low; 2 = medium; 3 = high) relative to the independent variables. The results show that only Internet usage ($p = 0.012$) and age ($p = 0.048$) had

⁵ Age is a continuous variable; Gender: 0= male, 1= female; Education: 0= no education, 1= less than secondary education, 2= secondary education, 3= undergraduate degree, 4= postgraduate degree; Occupation status: 1= employed, 2= unemployed, 3= retired, 4= student, 5= housewife; Marital status = 1 single, 2= married/de facto, 3= divorced/separated, 4= widowed; Religion: 0= no religion, 1= other religion, 2= catholic (non-practicing), 3= catholic; Household composition: 1= one person household, 2= couples without children, 3= couples with children, 4= other household types.

a statistically significant effect on the Logit of the probability of bridging social capital. Although the model was statistically significant⁶, the SPSS warned about a problem with the Hessian matrix. There were some unexpected singularities with the Hessian, which means I was uncertain about the validity fit of the model. The Hessian matrix (with the partial second derivatives of the parameter values) guides the convergence process of the data, and so when the Hessian matrix is singular the logistic regression is unsuccessful.

Faced with this problem, I decided to use a LCM estimation to cluster the data with the same covariates. In this case, I had to introduce the bridging variables again, as indicators, as well as the covariates. The estimation is done simultaneously. Once again, the BIC and AIC criteria indicate a model with three classes. The BIC criterion attains a minimum at $S = 3$; similarly, the AIC criterion forms an elbow at $S = 3$.

The first class accounts for 63% of the data, the second class accounts for 27% of the data, and the third class accounts for 10% of the data. In the next table (see table 6.18a & b, divided in two parts), I present the model parameters' estimates.

⁶ The multinomial logistic model was statistically significant ($G^2(8) = 54.199$; $p = 0.000$). The goodness-of-fit measures, namely the Pearson chi-square and the Deviance were also significant $X^2(766) = 793.622$, $p = 0.237$; $D(766) = 617.519$, $p = 1.000$. It should be noted that these measures are considered obsolete to evaluate the fit of the model and only used for big samples, where the cells without observed values are minor (Maroco, 2010). Although I report them here, because they are shown in the SPSS output, they should be used with caution. The pseudo R-squares are low ($R^2_N = 15\%$; $R^2_{CS} = 13\%$; $R^2_{MF} = 0.8\%$), which indicates that the proportion of the variation explained by the model is low (although the quality and validity of the pseudo R-squares can't be comparable to the R-square).

This fitted model classifies correctly 66.1% of the cases. Although it fails to predict correctly any of the high bridging cases and only predicts 4.2% of the low bridging cases, it predicts correctly 98.9% of the medium bridging cases. While the overall classification is not very high, it is proportionally higher than a classification obtained by chance, which is 50% (this percentage is calculated using the marginal percentages of each bridging category, i.e. $0.237^2 + 0.658^2 + 0.105^2 * 100 = 50\%$).

To complement this classification report, I used the ROC curve analysis. The area under the ROC curve is a measure of how well a parameter can distinguish between the groups (low, medium, and high bridging). The ROC curve analysis of this model presented an excellent discriminant capacity (ROC $c = 0.093$; $p < 0.001$).

Table 6.18a
 Three-class latent model parameters' estimates (Part 1)

	Class1	Class2	Class3
Class Size	0,6291	0,2676	0,1032
Social diversity			
Strongly disagree	0,0007	0,0254	0
Disagree	0,0265	0,2344	0,0008
Neither disagree, nor agree	0,1713	0,3607	0,0282
Agree	0,7422	0,3724	0,6738
Strongly agree	0,0593	0,0071	0,2972
Social participation			
Daily	0,233	0,1074	0,2158
At least once a week	0,4935	0,3898	0,487
At least once a month	0,1358	0,1838	0,1429
Rarely/Never	0,1377	0,319	0,1543
Bridging 1			
Strongly Disagree	0	0,054	0
Disagree	0,0001	0,1709	0
Neither disagree, nor agree	0,0172	0,4547	0
Agree	0,9401	0,3202	0,2096
Strongly Agree	0,0426	0,0002	0,7904
Bridging 2			
Strongly Disagree	0,0052	0,0238	0
Disagree	0,1419	0,3143	0,0012
Neither disagree, nor agree	0,4136	0,4421	0,0443
Agree	0,4138	0,2134	0,5432
Strongly Agree	0,0256	0,0064	0,4112
Bridging 3			
Strongly Disagree	0,0002	0,0535	0
Disagree	0,0101	0,2643	0
Neither disagree, nor agree	0,1884	0,4844	0,0003
Agree	0,7779	0,1972	0,1869
Strongly Agree	0,0234	0,0006	0,8128

Table 6.18b
Three-class latent model parameters' estimates (covariates) (Part 2)

	Class1	Class2	Class3
Class Size	0,6291	0,2676	0,1032
Internet usage			
Non-user	0,3246	0,5694	0,1161
Light user	0,0224	0,0644	0,0003
Moderate user	0,1281	0,1279	0,1251
Heavy user	0,525	0,2384	0,7586
Education			
No education	0,0054	0,0502	0
Less than secondary	0,594	0,6497	0,3195
Secondary education	0,2311	0,1847	0,3774
University degree	0,1429	0,0975	0,2073
Master/PhD	0,0265	0,0089	0,0958
Household composition			
One-person households	0,155	0,2116	0,1643
Couples without children	0,2191	0,3021	0,2396
Couples with children	0,4675	0,3108	0,4294
Other household types	0,1584	0,1755	0,1667
Religion			
No religion	0,1716	0,1265	0,2843
Other religion	0,0578	0,0473	0,0618
Catholic (non-practicing)	0,4675	0,4161	0,4369
Catholic	0,2886	0,3988	0,1944
Gender			
Female	0,5485	0,5239	0,5508
Male	0,4515	0,4761	0,4492
Age			
Until 39	0,6367	0,4162	0,9010
40 - 52	0,1958	0,2415	0,0241
53 or more	0,1676	0,3423	0,0749
Occupation status			
Employed	0,5785	0,4767	0,6774
Unemployed	0,0342	0,0636	0,0237
Retired	0,2378	0,3945	0,0718
Student	0,118	0,0225	0,1564
Housewife	0,0238	0,0251	0,0469
Marital status			
Single	0,3166	0,1404	0,4616
Married/De facto	0,5397	0,5777	0,4648
Divorced/Separated	0,0603	0,0645	0,0722
Widowed	0,0834	0,2174	0,0015

After the analysis of the three classes (already done previously for the bridging variables), we can now analyze the effect of the covariates. The next table shows the profile of bridging social capital analysis (already categorized as medium, low, and high bridging social capital) with the covariates, based on the conditional probabilities of the LCM estimation (see table 6.19).

Table 6.19
Profile of bridging social capital & covariates

Bridging social capital	Medium (63%)	Low (27%)	High (10%)
Internet usage	Moderate user	Non-user Light user	Heavy user
Education		No education Less than secondary	Secondary education University degree Master/PhD
Household composition	Couples with children	One-person household Couples without children Other household types	
Religion	Catholic (non-practicing)	Catholic	No religion Other religion
Gender		Male	Female
Age		40 – 52 53 +	Until 39
Occupation status		Unemployed Retired	Employed Student Housewife
Marital status		Married/De facto Widowed	Single Divorced/Separated

As can be seen in the table 6.17, the moderate Internet users influence the most the first class, which corresponds to a medium level of bridging social capital. Then the non-users and the low users are placed in class 2, which correspond to a low level of

bridging social capital. Finally, the heavy Internet users influence the third class, namely the high bridging social capital.

If we look at the conditional probabilities (presented in table 6.18) of belonging to the third class, i.e. to high bridging social capital: the non-users have a probability of 0.1161, the low users have a probability of 0.0003, the moderate users have a probability of 0.1251, and the heavy users have a probability of 0.7586.

Considering education, those with lower educational levels affect more decisively the second class, while those with higher education levels affect more decisively the third class: those with higher education levels are more likely to have a high bridging social capital.

In terms of household composition, couples with children are mainly placed in the first class (medium bridging social capital), whereas the other types of household composition (e.g. one-person household, couples without children, and other household types) are mainly placed in the second class (low bridging social capital). It seems that no particular type of household affects the high level of bridging social capital.

Looking at religion, the (non-practicing) Catholics influence the first class (medium bridging social capital) the most, the Catholics influence the second class (low bridging social capital) the most, and those with no religion or other religions influence the third class (high bridging social capital) the most.

In terms of gender, males are mainly placed in the low bridging social capital, whereas females are mainly placed in the high bridging social capital.

Considering age, the younger respondents (until 39) belong to the high bridging social capital, while the older respondents (40-52 and 53+ range) belong to the low bridging social capital.

The unemployed and retired are mainly placed in the second class (low bridging social capital), and the employed, students, and housewives are mainly placed in the third class (high bridging social capital).

The married/*de facto* mostly influence the second class (low bridging social capital), whereas the single and the divorced/separated mostly influence the third class (high bridging social capital).

6.3.3.2 Discussion

As with bonding social capital, heavy Internet users are more likely to have a high level of bridging social capital. I can, therefore, corroborate the hypothesis related to bridging (Hb = There is a positive association between Internet usage and perceived bridging social capital): as Internet usage increases, the likelihood of having a higher level of bridging social capital increases.

a. Heavy Internet users are more likely to have a high level of bridging social capital

The LCM estimation showed that heavy Internet users are more likely to have a high level of bridging, comparing to non-users, light users, and moderate users. The Internet seems, therefore, to be facilitating bridging social capital: the social affordances of the medium seem to be allowing users to contact or to be in touch more often with their weak ties or even to meet new people online, which would allow them to maintain, reinforce, and even produce social capital. For instance, the Internet might be providing users with more information exchange (among weak ties), allowing them to access more instrumental resources. The Internet might also be a tool to mobilize social capital.

On the opposite direction, non-users and light users are more likely to have a low level of bridging. There is a visible difference between non-users and light users: light users are more likely to have a high level of bridging, when comparing to Internet non-users. These results reveal a complex pattern that needs further analysis. It is worth noticing that this pattern was found in the bonding dimension, although with a smaller variation.

Besides the underrepresentation of light users in my sample (3.1%), which might be skewing the results, some possible explanations might be related to personality traits (e.g. non-users might be more sociable or extroverted than light Internet users, being able to reach more weak ties and more resources) or to other specific social and personal circumstances (e.g. light users might be caught between two worlds, not being able to fully grasp the social affordances of the medium, which limits their bridging social capital or light users might be using the Internet for more individual activities, such as search, viewing sites, etc.).

b. Younger people and females are more likely to have a high level of bridging social capital

Once again, younger people are less likely to have a low bridging social capital, and

more likely to have a high level of bridging social capital.

In the discussion section of the bonding analysis, I proposed that a person's life course and specific life cycles generally affect personal relationships and social resources, such as instrumental and expressive support. With age the number of friends diminishes, especially the not so close friends (Tilburg, 1998; Stevens & Tilburg, 2011). So, it is expected that these circumstances affect directly, and particularly, the bridging dimension. In a description of the transition from midlife to later adulthood, Rawlins (1992:225) states:

Typically, their wide networks of instrumental acquaintances and agentic friendships associated in midlife with enhancing careers and assuming positions of responsibility in their communities dwindle in later adulthood with stabilized occupational and civic accomplishments. By the time they retire, they usually have a shrinking network of work-based acquaintances, a few closer friends developed during their middle years, and their wives as their best friends.

Female respondents are also more likely to have a high level of bridging social capital than males. This finding confirms the idea of a "gendered social capital" (Cf. Erickson, 2004; Miyata et al., 2008; Burt, 1998) or at least of different social capital profiles by gender (Lowndes, 2004). While some research has showed that men tend to have a more friend-based network, women tend to have a larger number and diversity of kin ties in their personal networks (Moore, 1990). Similarly, in a study of social networks and political participation in Italy, Gozzo & D'Agata (2010) concluded that women are more likely to have more ties than men, but their ego-networks are more kin-centred (Gozzo & D'Agata, 2010). These results seem to indicate that women would be more associated with bonding than with bridging social capital. But, if on one hand:

It would be tempting to suggest that women may be richer in what Putnam and others have called 'bonding social capital': ties with relatives and intimate friends whose sociological niche is like one's own (...) Even if we assume that women's contacts are mostly with other women, we should beware of assuming that 'women' are a homogeneous group. Women meeting in an ante-natal group, for instance, may vary significantly in relation to class or ethnicity. If they stay in touch after the birth of their babies, they may exchange information and contacts regarding future employment, childcare or health issues that cut across the assumptions and experience of any one social group (Lowndes, 2004:52).

On the other hand, women seem to be more “embedded in neighborhood-specific networks of informal sociability” (Lowndes, 2004:52). These networks would allow higher levels of bridging social capital. Considering that women have more contact with relatives and friends than men (Lowndes, 2004), it might also be the case that these ties are actually weak ties or they might be close ties facilitating a higher level of bridging social capital. Bourdieu (2002:133-134) also notes that women are responsible for reinforcing the “family social capital” through organizing events, such as lunches, dinners, visits, etc., which involve close and not so close ties (i.e. the husband’s family members).

Other important aspect to add to this discussion is the fact that men tend to have more sex homophilious networks than women (McPherson, Smith-Lovin, & Cook, 2001; Ibarra, 1992, 1997). For instance, studying a network of men’s and women’s interaction in an advertising firm, Ibarra (1992) discovered that men were more likely to form homophilious ties and to have stronger homophilious ties; whereas women would get social support and friendship from women, but more instrumental resources from men.

The impact of gender on social capital has to be more thoroughly investigated. These results might be related to specific characteristics of the Portuguese society, as for example, women have less social capital than men in Taiwan, Japan, and other Asian countries (Lin & Erickson, 2008; Miyata et al., 2008).

c. People with high-education levels, the employed, students, and housewives are more likely to have a high level of bridging social capital

People with higher education levels are also more likely to have a high level of bridging social capital. These results are consistent with research in the field: Putnam (2000) showed that education was a strong predictor of social capital. Education is related to social status and social standing, and so people with higher education would have a bigger and more diverse network to draw resources from.

Those who are employed would benefit from a more extended network of weak ties, than those who are unemployed, mainly considering co-workers, clients, etc. Students are usually young people, implying already a bigger network of weak ties (as been showed before, age correlates with the number of ties and types of social networks). In the case of the housewives, more time available for social interaction would be a possible explanation for this association with bridging social capital. This is, of course, a tentative suggestion that needs careful analysis: this assumption might be flawed, because it assumes that housewives have more free time. This might be an erroneous

assumption as housewives do extensive housework. But they might have more time or be better placed for interaction with neighbours and acquaintances, for instance. Most of the time, a complex myriad of factors explain a phenomenon rather than a single factor.

d. Single people or divorced/separated people are more likely to have a high level of bridging social capital

Single people are more likely to be young, and therefore, to have a more extended social network or networks of weak ties where they can draw resources from.

Considering the divorced/separated people, as family ties tend to change after divorce/separation, it might be that the divorced/separated start to rely more on weak ties than close ties for their social capital. It might also be that these divorcees re-connect with old ties, such as friends and acquaintances.

While most divorcees experience network losses after the divorce, for some it brings network gains in the long term (Terhell, van Groenou, & Tilburg, 2004). Additionally, in a cross-sectional survey data from the Netherlands, Kalmijn & van Groenou (2005) indicate that divorcees report more friendship contacts and are more involved in alternative forms of participation (e.g. “new age” meetings, such as new age spirituality groups) when compared to married people.

e. People with no religion or other religions (other than Catholicism) are more likely to have a high level of bridging social capital

Catholics are less likely to have a high level of bridging social capital, even less likely than non-practicing Catholics. This was an unexpected finding, because the literature points for a positive connection between religion and social capital (Putnam, 2000; Wuthnow, 2002). Putnam (2000) shows the important role of religion, mainly Catholic, Evangelic, and Protestant, on social capital; claiming that faith-based communities, where people worship together, “are arguably the single most important repository of social capital in America” (Putnam, 2000:66). Similarly, Wuthnow (2002) finds in a large representative sample of the US adult population that religious involvement is a predictor of bridging social capital, but that the frequency of religious attendance is unrelated to social capital.

In contrast, the non-practising Catholics (i.e. do not go to church, are not involved in religious celebration, etc.) of my sample were more likely to have a moderate level of bridging, while practising Catholics were more likely to have a low level of bridging social capital. It might be that Catholicism, in the particular Portuguese setting, is more inward

looking, than other types of religion or of non-religion. It might also be that these Catholics engage in more restricted and isolated activities that would provide their members with bonding social capital, but would not promote bridging social capital. Or, these findings might be supporting some of the criticisms to Putnam's work, namely the excessive importance he gives to traditional organizations without considering the conformist, oppressive, and even exclusionary nature of the some of these organizations. Once again, more research is needed in this area.

In the next section, I examine the remaining dimension of social capital, namely resources.

6.4 Resources

Taking into account my approach to social capital, resources are considered a main dimension of social capital (for more on this check chapter 2, dimensions of social capital). In this section, I present and discuss the composition of the variable *resources*: Firstly, I show the indicators used to measure resources and its descriptive results. Secondly, I create the resources variable through a LCM estimation. Finally, I test the association between the created resources variable and Internet usage, carrying out a binary logistic regression. I control for socio-demographic variables, and for an interaction term between age and Internet usage.

It is hypothesized that as Internet usage increases, the likelihood of having resources also increases (Hypothesis c). The results show that there is a statistically significant association between resources and age, and gender, but not with Internet usage.

6.4.1 The resource generator and other measures

6.4.1.1 Description and analysis

To measure resources, I used items from the resource generator (Snijders, 1999; Van Der Gaag & Snijders, 2005, 2008), combined with other measures (Boase & Wellman, 2004; UK National Statistics, 2003).⁷ The general question was if the respondent knew anyone who could help /give access to the item. If yes, the respondent had to indicate whom – family, friends, neighbors, co-workers or acquaintances.⁸

⁷ The selection of these variables was already explained in the methods chapter.

⁸ To these five categories, I added "other" and "nobody" in the analysis, as the respondents indicated them. "Other" includes other people and associations/institutions of charity, etc.

Do you know anyone who...?

1. Can help with small jobs around the house*
2. Can provide a place to stay if you have to leave your house temporarily*
3. Can give advice on matter of laws/regulations*
4. Can help you if you need to find a job*
5. Can help you if you need to use a computer/go online**
6. Can help you if you need anything from the municipal parish/local government***
7. Can help if your sick at home and need help****
8. Can help you if you are in a financial crisis situation and need to borrow 100€****

* Van Der Gaag & Snijders, 2005; ** Boase & Wellman, 2004; ***Mine; **** UK National Statistics, 2003

Considering first a descriptive analysis of these resources, the majority of the respondents report having access to these resources. The next table summarizes these results (see table 6.20):

Table 6.20
Frequencies of resources (dichotomized) (%)

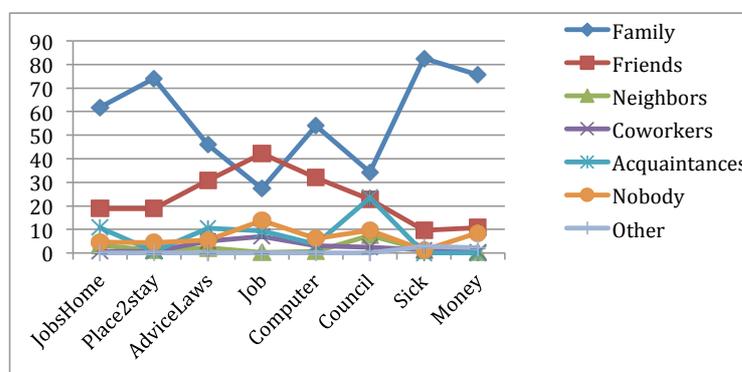
	Yes	No
1. Can help with small jobs around the house	95.4	4.6
2. Can provide a place to stay if you have to leave your house temporarily	95.4	4.3
3. Can give advice on matter of laws/regulations	95.5	5.5
4. Can help you if you need to find a job	86.1	13.7
5. Can help you if you need to use a computer/go online	93.5	6.2
6. Can help you if you need anything from the municipal parish/local government	90.6	9.4
7. Can help if you're sick at home	98.1	1.2
8. Can help you if you're in a financial crisis situation and need to borrow 100€	89.5	8.6

The resource 7 – help if you're sick at home – is the resource with the lowest negative value (1.2% report not having access to this resource). The resource 4 – help to find a

job – has the highest negative value (13.7% report not having access to this resource). It seems that the resources related to expressive actions (such as social support) are slightly more available than the resources related to instrumental actions (such as getting a job).

The frequency of the resources by tie can be seen graphically in the next figure (see figure 6.8).

Figure 6.8
Frequency of resources by tie



The family is the primary source for all the resources, with the exception of “finding a job”. To get help to find a job (instrumental action) people rely more on friends (42.2%) than family (27.3%). Friends might have access to different information and be more capable of bridging for this kind of resources. Acquaintances get a higher value than friends at getting help with any business at the municipal council/local government (23.5% vs 22.8%), even though family is still the highest one (34.3%). Once again, the bridging option can be suggested as an explanatory factor to clarify this occurrence: to access specific institutions people may have to rely on acquaintances, meaning mainly on weak ties.

Looking at the interplay between these resources and two main socio-demographic variables, such as gender and age, the Pearson chi-square reports that there is only a significant association between gender and the resource number one (help with small jobs around the house; $C^2(5, N = 417) = 25.892, p = 0.000$). This might be because, according to the frequencies of this resource, women tend to ask for help to substantially more family members than friends: 70.8% of women (percentage within gender) asks for help of family members, comparing to 12.4% that asks for help of friends; while 51.3% of

men (percentage within gender) asks for help of family members and 26.2% asks for help of friends.

In terms of age, there is a statistically significant relationship between age and four resources:

- Resource 2 – place to stay: $C^2 (15, N = 417) = 68.937, p = 0.000$;
- Resource 3 – advice on matter of laws/regulations: $C^2 (15, N = 417) = 32.748, p = 0.005$;
- Resource 4 – finding a job – $C^2 (15, N = 417) = 58.218, p = 0.000$;
- Resource 5 – use a computer/go online – $C^2 (15, N = 417) = 130.536, p = 0.000$.

Specific life cycles might affect the availability of these resources and/or the ties to access these particular five resources. This assessment was done with four age groups:

1st age group = 18-34

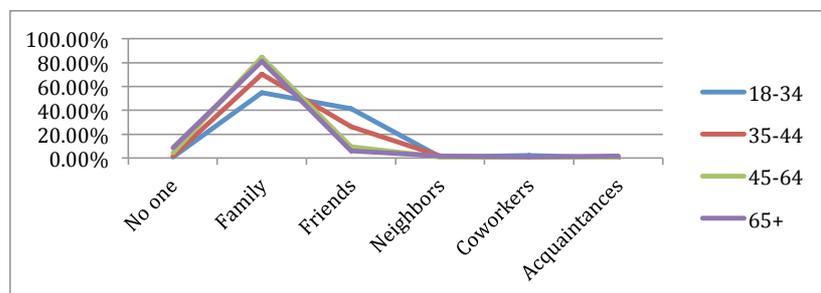
2nd age group = 35-44

3rd age group = 45-64

4th age group = 65 and more

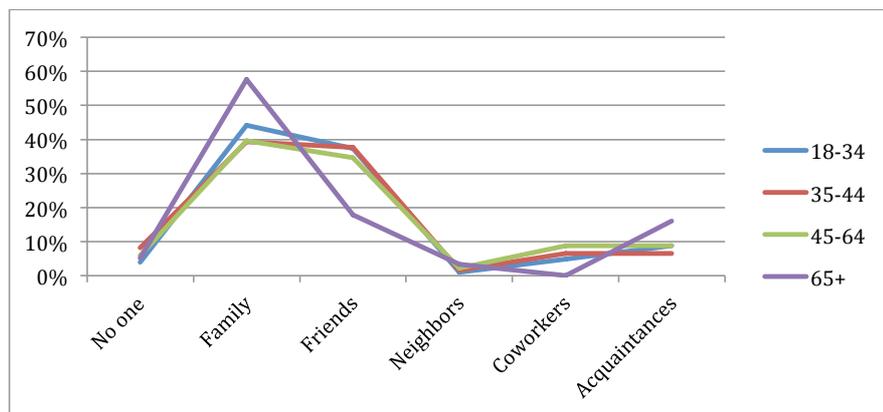
In the case of the resource “place to stay”, the age group 18-34 years old counts less with family (54.9% within age group) comparing to the other three age groups (35-44 = 70.5%; 45-64 = 84.6%; 65+ = 81.2%). But counts more with friends than the remaining age groups (41.2% within age group, comparing to 26.2% of the 35-44 age group; 9.6% of the 45-64 age group; and 6% of the 65+ age group). The next figure displays graphically this data (see figure 6.9):

Figure 6.9
Resource “place to stay” by age group (% within age group)



Considering the resource “advice on matter of laws/regulations”, as can be seen in the next graph (see figure 6.10), the oldest age group counts more with family than the remaining age groups.

Figure 6.10
Resource “advice on matter of laws/regulations” by age group (% within age group)



The oldest age group is also the one that counts less with friends than the remaining age groups: 37.3% within the first age group (18-34 years old) report turning to friends if they need help with this resource; 37.7% within the second age group (35-44 years old); 34.6% within the third age group (45-64 years old); and 17.8% within the fourth age group (65+). But the oldest group counts more with acquaintances than the other groups.

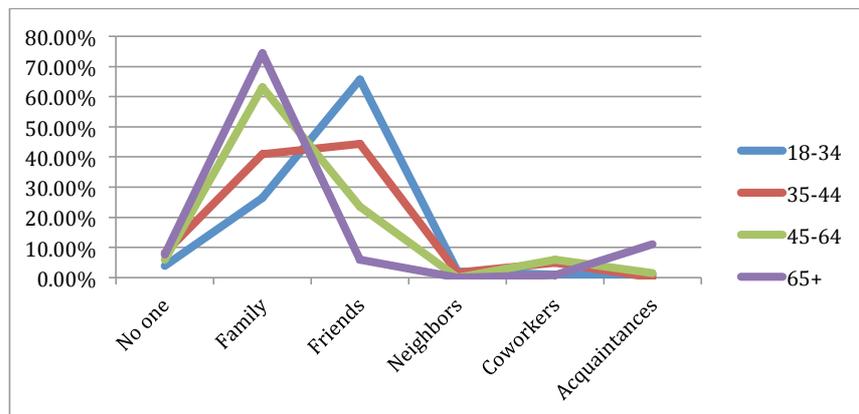
In terms of the resource “finding a job”, the same trend is visible:

- The fourth age group (65+) relies significantly more on family than any other age group (42.7% within age group comparing to 22.5%, 24.6%, and 19.1%).
- The first age group (18-34) relies more on friends than any other age group (55.9% within age group comparing to, for instance, 22.2% of the fourth age group).

The only difference is that the second (35-44) and third age (45-64) groups count more with co-workers for this resource than the other two groups (11.5% and 10.3% comparing to 5.9% of the first age group and 1.7% of the fourth age group).

The resource “help with computer and/or Internet” follows the same trend, as well. The fourth age group relies more on family than any other group, while the first age group relies more on friends than any other group (see figure 6.11).

Figure 6.11
Resource “help with computer and/or Internet” by age group (% within age group)



The Spearman’ rho correlation shows that there is a positive linear relationship between all the resources, with the exception of “help if need 100\$” and a “place to stay”; “advice on laws/regulations” and “help if sick”; “help finding a job” and “help if need 100\$”; “help with computer/Internet” and “help if sick”, and “help if need 100\$” (see table 6.21):

Table 6.21
Spearman's rho correlation coefficients (r) of resources

		Small jobs around the house	Place to stay	Advice on laws/regulations	Find a job	Help with computer / Internet	Help at council	Help if sick	Help if need 100\$
Small jobs around the house	r	1.000	.109 [*]	.261 ^{**}	.211 ^{**}	.165 ^{**}	.132 ^{**}	.204 ^{**}	.124 [*]
	p	.	.026	.000	.000	.001	.007	.000	.011
Place to stay	r		1.000	.130 ^{**}	.236 ^{**}	.359 ^{**}	.120 [*]	.113 [*]	.054
	p		.	.008	.000	.000	.014	.021	.268
Advice on laws/regulations	r			1.000	.368 ^{**}	.248 ^{**}	.309 ^{**}	.048	.127 ^{**}
	p			.	.000	.000	.000	.329	.009
Find a job	r				1.000	.332 ^{**}	.265 ^{**}	-.112 [*]	-.026
	p				.	.000	.000	.022	.591
Help with computer/	r					1.000	.179 ^{**}	.082	-.004
	p					.	.000	.097	.928
Help at council	r						1.000	.156 ^{**}	.157 ^{**}
	p						.	.001	.001
Help if sick	r							1.000	.379 ^{**}
	p							.	.000
Help if need 100\$	r								1.000
	p								.

*Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

6.4.1.2 Summary

To sum up, the majority of the respondents report having access to this list of eight resources, which combines expressive and instrumental resources. The family is the main source for all the resources, except for finding a job where people seem to rely more on friends than family. Similarly, to get help at the local or municipal council, and although family is still the main source of this resource, acquaintances come in second place, right before friends.

These descriptive results seem to support the bonding and the bridging rationale, or two main social capital propositions as indicated by Lin (2001):

- First, the availability of resources from close relationships is stronger as we could see by the primary place of family in this list of resources.
- Second, the weaker the tie the more likely a person will have access to instrumental resources. Friends were the main source for an instrumental resource, i.e. finding a job, while acquaintances were also highly indicated to have access to institutions such as the municipal council. It also seems that the resources related to expressive actions (such as social support) are slightly more available than the resources related to instrumental actions (such as getting a job).

There was a gender association with only one of the resources, namely “help with small jobs around the house”, which might be explained by the fact that women rely significantly more on family members than friends. Considering age, I found a statistical significant relationship between age and four resources (place to stay; advice on matter of laws/regulations; finding a job; use a computer/go online): older people seem to rely more on family than younger people; younger people seem to rely more on friends than older people.

In the next section, I present the variable resources, which is an aggregation of this list of resources.

6.4.2 The Resources variable

To create the resources variable I carried out a latent class analysis, with the eight indicators described above.⁹ The results of the new LCM estimation are presented in the next table, from 1-latent class (homogeneity assumption) to a 3-latent class model.

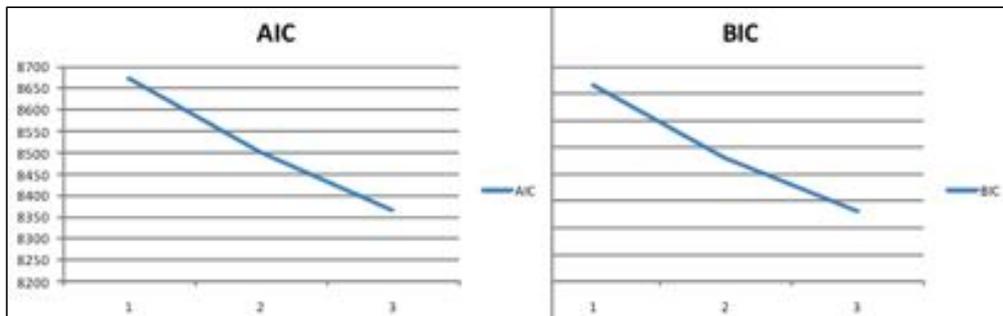
⁹ The first LCM estimation of the variable resources (by ties) created three classes, but the data distribution per class was not clear enough. In some resources, family was in one class; while in other resources family would be in a different class. The same happened to friends, acquaintances, and neighbors. This means that it was difficult to interpret the classes, because I could not find consistency among them. This does not mean that the clusterization was not valid; it means that I could not make sense of it. For this reason, and aiming for a more consistent and parsimonious model, I decided to dichotomize this variable (having or not having these resources).

Table 6.22
BIC and AIC values for model selection

		LL	BIC	AIC
Model 1	1-Class	-4287,68	8864,823	8671,35
Model 2	2-Class	-4193,25	8730,247	8500,498
Model 3	3-Class	-4115,99	8630,01	8363,984

Because AIC and BIC do not minimize from one class to the other, I had to use the following graph (see figure 6.12) to select the best number of classes for the model. The graph shows an elbow at $S = 2$, both for AIC and BIC, which means that two classes are the best solution for this model.

Figure 6.12
Graphic display of AIC and BIC for resources



The results of the data estimation are presented in the next table (see table 6.21). The first class accounts for 85% of the data, while the second class accounts for 15% of the data.

Table 6.23
Resources by model parameters' estimates

Overall Probability	CLASS 1	CLASS 2
Class Size	0.8462	0.1538
Resource 1		
No	0.0031	0.2874
Yes	0.9969	0.7126
Resource 2		
No	0.0001	0.2559
Yes	0.9999	0.7441
Resource 3		
No	0.0093	0.2852
Yes	0.9907	0.7148
Resource 4		
No	0.0307	0.6481
Yes	0.9693	0.3519
Resource 5		
No	0.0099	0.3297
Yes	0.9901	0.6703
Resource 6		
No	0.0329	0.3957
Yes	0.9671	0.6043
Resource 7		
No	0.0052	0.0513
Yes	0.9948	0.9487
Resource 8		
No	0.0576	0.2276
Yes	0.9424	0.7724

As can be seen in the results of this clusterization, the *no* belongs to class 2 and the *yes* to class 1 in all the items. To label these two classes, it only made sense to define a dichotomous yes/no (see table 6.24).

Table 6.24
Profile of resources

	Yes (85%)	No (15%)
Resource 1	Yes	No
Resource 2	Yes	No
Resource 3	Yes	No
Resource 4	Yes	No
Resource 5	Yes	No
Resource 6	Yes	No
Resource 7	Yes	No
Resource 8	Yes	No

Once again, the probability of an individual answering that he/she has no access to the resource 4 (finding a job) is the highest in this estimation, being of 0.65 (bold in table 6.21). The probability of an individual answering that he/she has no access to the resource 7 (help if you're sick at home) is the lowest in this estimation, being of 0.05 (bold in table 6.23).

In the next section, I examine the relationship between the variable resources and Internet usage.

6.4.3 Resources and Internet usage

6.4.3.1 Results

To estimate the effects of Internet usage on the odds of having/not having these resources, I carried out a binary logistic regression, using the *Forward:LR* method. This method enters variables one at a time and uses likelihood ratio estimates to determine which variables will add most to the regression equation (Cf. Marôco, 2010).

It is hypothesized that as Internet usage increases, the likelihood of having resources increases (Hypothesis c). The analysis was done controlling for socio-demographic variables, such as age, gender, education, occupation status, marital status, religion, and household composition, as well as for an interaction term between Internet usage and age.¹⁰

¹⁰ Age is a continuous variable; Gender: 0= male, 1= female; Education: 0= no education, 1= less than secondary education, 2= secondary education, 3= undergraduate degree, 4= postgraduate degree; Occupation status: 1= employed, 2= unemployed, 3= retired, 4= student, 5= housewife; Marital status = 1

The binary logistic regression revealed that gender ($p = 0.016$) and age ($p = 0.000$) could significantly predict the dependent variable resources.

The model is statistically significant ($G^2(2) = 22.273$; $p < 0.001$), but the pseudo R-squares are very small ($R^2_N = 9\%$; $R^2_{CS} = 6\%$), which means that the fraction of the variance explained by the model is very low.

The adjusted model classifies correctly 82.2% of the cases: sensitivity is 100% (the model classifies correctly 100% of the individuals that have resources), but specificity is 0, as the model does not classify correctly any of individuals that do not have resources. Nonetheless, to explore this sensitivity/specificity report, I calculated the ROC curve. The area under the ROC curve is a measure of how well a parameter can distinguish between the two groups (low/high bonding social capital). The ROC curve represents of the tradeoffs between sensitivity and specificity. The ROC curve analysis of this model was significant, which shows that the model has a discriminant capacity (ROC $c = 0.758$; $p < 0.001$).

The next table summarizes the coefficients and its significance in the model.

Table 6.25
Logit Coefficients of the Logistic regression model of resources

	B	S.E.	Wald	df	Sig.	Exp(B)
Gender(1)*	.658	.273	5.788	1	.016	.518
Age	-.029	.007	15.223	1	.000	.971
Constant	3.392	.468	52.623	1	.000	29.729

*Gender(1) = Female; Baseline = Men

In the logit scale, the model is described by the following formula:

$$\text{logit}(\pi) = \beta_0 + \beta_1 X_1 + \dots + \beta_p X_p$$

Therefore, the fitted (estimated) model is:

$$\text{logit}(\hat{\pi}) = 3.392 + 0.658\text{Gender} - 0.029\text{Age}$$

singe, 2= married/de facto, 3= divorced/separated, 4= widowed; Religion: 0= no religion, 1= other religion, 2= catholic (non-practicing), 3= catholic; Household composition: 1= one person household, 2= couples without children, 3= couples with children, 4= other household types.

As can be seen in the table 6.13, Gender(1) (female) ($p = 0.016$) is statistically significant at the alpha level 0.05, comparing to the baseline category (male). Comparing to men, women have higher odds of having resources, multiplicatively by a factor equal to $e^{(0.658)}$, i.e. by 0.518 or 48.2%.

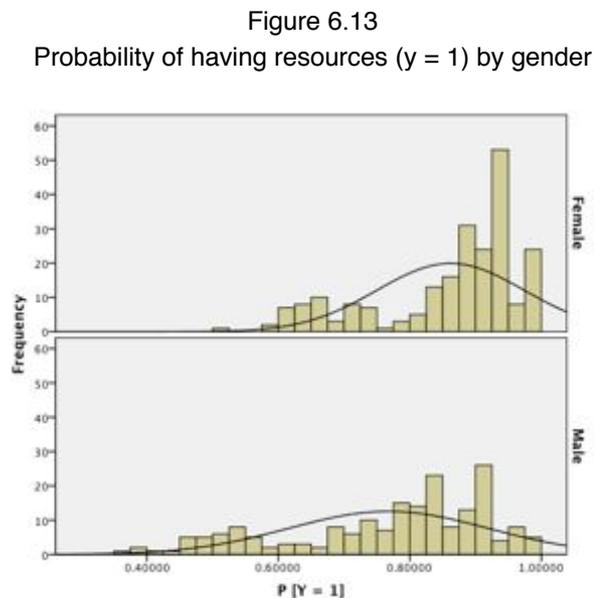
In terms of age, when age increases ($\beta_{age} = -0.029$), the probability of having resources decreases. Per each unit of age (per one year) the log of the odds of having resources decreases by -0.029, on average (or 2.8% in the odds scale).

6.4.3.2 Discussion

Gender and age have a significant effect on the likelihood of having resources. Internet usage was not significant in this model ($p = 0.421$), so I cannot reject the null hypothesis. The hypothesis (H_c) that Internet usage increases the likelihood of having resources was not validated in this analysis.

a. Women are more likely to have resources than men

The results show that women comparing to men have a higher chance of having resources. In the histogram (see figure 6.13) it is clear that the probability of having resources ($y=1$) is lower for men.



These findings reinforce the idea of a “gendered social capital” (Cf. Erickson, 2004; Miyata et al., 2008; Lowndes, 2004; Burt, 1998), already explored in the bridging section. What is interesting to note is that gender was not a significant predictor of bonding social capital, but it was present in the bridging analysis and now in the resources analysis. These results show that women have more probability of having resources, but might also signify different realities: it might not mean that men have fewer resources but that there are other factors conditioning it, for instance, men might rely more (or perceive so) on their own to achieve particular goals (resources) than women.

Looking individually at each resource, the Pearson chi-square shows (as described before) that there is only a significant relationship between gender and one resource, mainly the number one (help with small jobs around the house). Women tend to ask for help to substantially more family members than friends. However, gender is significant in this logistic model, when the resources are all combined in one variable. The variable resources combined resources that lead to instrumental and expressive action, what means that the results might vary if the resources are assessed separately.

Once again, the explanation for this gender variance might be related to specific social networks by gender, and to the fact that women tend to have more ties than men what would allowed them to potentially have more social capital. For example, in terms of mobilized social capital, a study in Portugal shows that women report asking more for help with their offspring (taking care of kids) than men (Torres et al., 2005). This might suggest that women feel more need to mobilize practical resources like this what could have two effects: first, it would make them maintain and invest more strongly in their social capital; second, it would make them more aware of the social resources they have available.

I did not measure the gender of the ties available for each resource, which would be interesting information for this analysis. Some studies have been showing that people generate more same-gender than cross-gender ties: men know more men, and women know more women (Miyata et al., 2008).

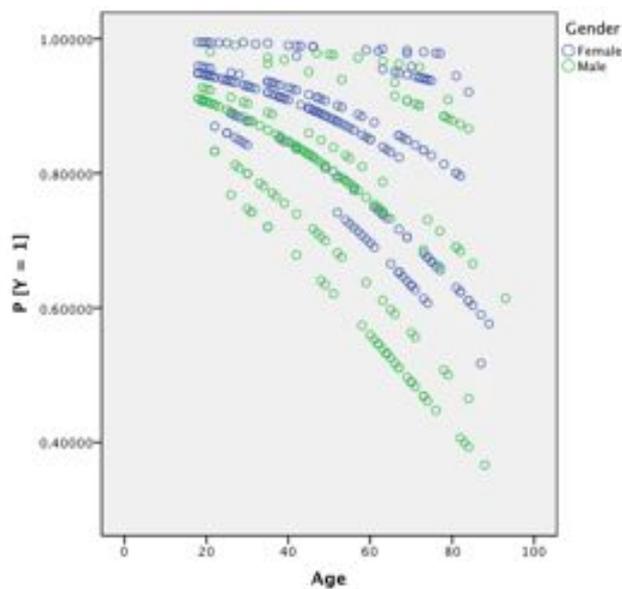
b. The older, the less likely to have resources

Age has been a constant predictor in the three dimensions of social capital: bonding, bridging, and now resources. It has also consistently shown a negative association: when age increases, the three dimensions of social capital decrease. The decrease of the dimensions of social capital with age might be related to the characteristics of specific life cycles, as people get older, they would have less ties to access resources

(due to loss of family members and/or close friends, changes in life course, etc.), as explored previously.

The next figure (check figure 6.14) illustrates graphically the probability of having resources, by age and gender.

Figure 6.14
Probability of having resources ($y = 1$), by age and gender



Once again, it is clear that the probability of having resources decreases with age. Per each year difference in age, a person is 0.971 ($e^{-0.029}$) times less likely to have resources: a 40-year difference makes a person being 0.313 times less likely to have resources. E.g. a 60 years old is 0.313 times (or 69%) less likely to have resources than a 20 years old.

6.5 Conclusion

This empirical chapter presented the analysis of the three selected dimensions of social capital and Internet usage. It started with a report on the descriptive statistics of the variables that compose each dimension. It is followed by a description of the LCM estimation carried out to aggregate those variables and create each dimension. Bonding

is a dichotomous variable, categorized as high and low; bridging is categorized as high, medium, and low; and resources is a dichotomous variable categorized as yes or no. Each dimension is then tested with Internet usage, while controlling for socio-demographic variables and for an interaction term between Internet usage and age.

The results of the statistical analysis carried out in this chapter allowed me to corroborate two hypotheses (Ha and Hb) and to reject a third (Hc): the bonding and bridging hypotheses were validated, while the resources hypothesis was not. Internet usage had a statistically positive relationship with bonding and bridging social capital, but had no statistic relationship with resources:

- a. Starting with the bonding dimension, the binary logistic regression shows that Internet usage and age are strong predictors of bonding social capital: heavy Internet users are more likely to have a high level of bonding, when comparing to non-users, light users, and moderate users; younger people are more likely to have a high level of bonding social capital. These findings suggest that the Internet is allowing users to be more frequently in contact with their close ties, maintaining and reinforcing their relationships and bonding social capital. The Internet might as well be used as a tool to directly mobilize social capital.

In terms of age, the decrease of a higher bonding social capital per year might be related to specific life courses and structural constraints, since close relationships change throughout a person's life-cycle and span. Older people would have less close ties to access resources from, due to loss of family members or close friends, and particular life changes, such as widowhood, retirement, etc. In addition, as several studies have been showing that the number of friends and the extent of friendship participation tend to decrease with age (Blau, 1961; Rawlins, 1992; Tilburg, 1998; Stevens & Tilburg, 2011).

- b. Considering the bridging dimension, due to a problem with the Hessian matrix, I could not carry out a multinomial logistic regression. A LCM estimation was used instead to test for the covariates, i.e. Internet usage and the socio-demographic variables. The results of the LCM estimation for bridging social capital indicate that heavy Internet users are more likely to have a high level of bridging, comparing to non-users, light users, and moderate users.

The Internet seems to be facilitating bridging social capital: the social affordances of the medium seem to be allowing users to contact or to be in touch more often with their weak ties or even to meet new people online, which would allow them

to maintain, reinforce, and even produce social capital. For example, the Internet might be providing users with more information exchange among weak ties enabling them to access more instrumental resources. As with the bonding dimension, the Internet might also be a tool to mobilize bridging social capital.

Additionally, younger people, females, people with high-education levels, the employed, students, housewives, single people, divorced/separated people and people with no religion or other religions (other than Catholicism) are more likely to have a high level of bridging social capital. The findings related to gender and religion were surprising: women have more chances of having a high bridging than men; and Catholics have lower chances of having a high bridging social capital. Possible explanations for the gender variance might be related to specific social networks by gender, and to the fact that women tend to have more ties than men; this would allowed them to potentially have more bridging. In terms of religion, it might be that the Portuguese practicing Catholics are more involved in inward group activities, promoting more bonding than bridging.

- c. Internet usage is not a significant predictor of the resources dimension. Only gender and age have a significant effect on the likelihood of having resources. Therefore, the hypothesis (Hc) that Internet usage increases the likelihood of having resources was not corroborated in this analysis. Older people have less probability of having resources, which is consistent with the findings of the other two dimensions of social capital. Females have more probability of having resources, which is also consistent with the bridging findings and support the idea of a “genderized social capital”, which needs further research (Erickson, 2004; Miyata et al., 2008; Burt, 1998).

Besides the gender difference, another surprising finding was the differential between non-Internet users and light users: non-Internet users are more likely to have a high level of bonding or bridging than the light Internet users. I described some exploratory explanations for this variation, from personality traits to specific structural circumstances, but that need further investigation, being beyond the scope of this research.

The descriptive and inferential findings allowed me to examine the type of Internet usage of my sample, their level of social capital, and the relationship between Internet usage and the three dimensions of social capital (bonding, bridging, and resources).

In the next chapter, I describe a “dimension” that was originated *a posteriori* from the data analysis, namely the online social capital.

7 Online Social Capital

To measure bonding and bridging I used the *Internet Social Capital Scales* developed by Williams (2006). These scales comprise an offline and an online dimension. However, I had to make a small addition to the online dimension, as explained previously on the Methods chapter. The problem that I've encountered with the application of the online scales was that in the pretest phase of the survey people would raise doubts concerning the online dimension, asking if I meant only "online people" or people that they know offline and interact online too. In fact, most of online contacts are also offline contacts, and the online is progressively embedded in the offline and vice versa.

Nonetheless, I added the sentence "people that you only know online" to the set of questions. This way, I was trying to avoid data redundancy, preventing people from answering to both offline and online dimensions with the same ties in mind. To make it clear, the online bonding and bridging scales refer to people/interactions my respondents only knew online.

I did not define any *a priori* hypothesis for the online social capital, because I did not plan to create this variable: my idea was to first, create a bonding and a bridging dimension with both offline and just online dimensions; second, to create a social capital variable with both offline and just online social capital. Upon reflection even the conceptualization of "just offline" brings some pressing doubts as Internet users tend to interact with their ties both offline and online. But the differentiation would be between the "just online ties" and the remaining ties. However, my sample only has 27.8% of respondents that know only online people. Consequently, this reduces significantly the LCM estimation to a smaller number of cases (116 instead of 417). Faced with this analytic difficulty, I decided to create an "online social capital" variable and analyze it independently. Therefore, online social capital is related to the resources that can be derived from online ties.

In this chapter, I present and discuss the composition of the variable online social capital: Firstly, I show the indicators used to measure online bonding and online bridging, and its descriptive results. Secondly, I create the online social capital variable using Latent Class Model (LCM) estimation. Thirdly, I look at the association between the created online social capital variable and Internet usage, carrying out a binary logistic regression. I control for socio-demographic variables, for social trust, and for civic engagement. I test the variables social trust and civic engagement, aiming to observe if they are in any way associated with social capital, accomplishing the secondary goal of

this research that is to contribute to the measurement and theory of social capital, namely of its dimensions.

It is expected that as Internet usage increases the likelihood of having a high level of online social capital also increases. The results of the binary logistic regression show that only education and marital status can significantly predict online social capital.

7.1 Indicators of online bonding and online bridging

To measure online bonding and online bridging I used the following variables (adapted to Portuguese):

Four items of the *Online Bonding Sub-scale* (Williams, 2006):

- If I need any help to solve my problems, I know several people online available to help me. (Bonding1)
- When I feel lonely, there are several people online I can talk to. (Bonding2)
- I do not know people online well enough to get them to do anything important. (reversed) (Bonding3)
- If I need an emergency loan, I know someone online that can help me

Three items of the *Online Bridging Sub-scale* (Williams, 2006):

- Interacting with people online makes me interested in different ideas.
- Interacting with people online makes me feel connected to the bigger picture.
- Interacting with people online makes me want to try new things.

These items have the following frequencies (%):

Table 7.1
Frequencies of online bonding and online bridging items (%)

	O.Bonding1	O.Bonding2	O.Bonding3 (reversed)	O.Bonding4	O.Bridging1	O.Bridging2	O.Bridging3
Strongly disagree	6	11.2	6	43.1	4.3	6.9	6
Disagree	23.3	20.7	52.6	43.1	10.3	22.4	14.7
Neither agree, nor disagree	12.1	32.8	12.1	3.4	10.3	35.3	20.7
Agree	52.6	33.6	23.3	9.5	70.7	34.5	50.3
Strongly Agree	6	1.7	6	9	4.3	9	4.3

Starting with the online bonding items, as can be seen from the table, the “agree” has a higher percentage than the remaining answers in the first and second items. The third item is reversed and describes an opposite direction: the majority of respondents report not knowing anyone online well enough to get them to do anything important. The results of this third item seem to be contradictory when compared to the first item. However, several reasons might be used to explain this difference: Firstly, the third item specifically emphasizes “knowing well” and “something important”, while the first item is more abstract and mentions problems in general. Secondly, it might also be the case that the reversed characteristic of the question confused the respondents (even though this question was repeated by the interviewers more than once to prevent such confusion).

But the fourth item sheds some light on this situation, as it follows the same path of the third item: the majority of respondents “strongly disagree” (43.1%) and “disagree” (43.1%) with knowing someone online that can help them with an emergency loan. Asking for an emergency loan is an instrumental action, while the other items (1 and 2) were related to expressive actions. The same might be happening with the “asking for something important”. This suggests that the online bonding might be more expressive than instrumental.

Comparing these results to the “offline” scales presented in chapter 6, the “agree” response category of the bonding offline scale obtains higher values: the bonding 1 gets 75% of the respondents’ answers, the bonding 2 gets 51% of answers, and the bonding

3 gets 62% of answers. The bonding 4 was not contemplated in the offline scale, but it was measured separately with different response categories. It seems, therefore, that the “offline” scale (or the scale that does not consider people that my respondents just know online) gets higher or more “positive” values than the online one. It might be that the online bonding dimension is weaker than the bonding dimension.

In terms of the online bridging items the “agree” has a higher percentage than the remaining answers in the first and third item. The second item gets a higher percentage in the “neither agree, nor disagree” (35.3%) followed closely by the “agree” (34.5%). Just like with the offline bridging scale, this second item might be too abstract to pin down by the respondents. The same was felt with the “offline” scales. Comparing to the “offline” bridging scale, the “agree” gets slightly lower values in the offline scale: 70% for bridging 1, and 56% for bridging 3. The “neither agree, nor disagree” gets 38% on the offline scale.

Once again, I am not constructing a scale with these items. To construct an online bonding, an online bridging, and an online social capital variable I’m using LCM estimation, where these items are introduced simultaneously. The LCM estimation will show if groups can be estimated with the selected variables, taking into account reliability and assuming that the latent variables completely account for the relations between the observed variables (assumption of local independence).

But to give an indication of the reliability (internal consistency) of the items I calculated Cronbach’s alpha: online bonding gets an acceptable reliability ($\alpha = .635$), while online bridging gets a high reliability ($\alpha = .837$).

Looking at the interplay of these items with two main socio-demographic variables, such as gender and age, the Pearson chi-square indicates that there is no significant association between any of the online bonding or online bridging indicators and gender and age ($p > 0.05$).

In the next sections, I present the online bonding, online bridging, and the online social capital variables.

7.2 The online bonding variable

To create the online bonding variable I carried out a latent class analysis. The results for the model selection of the LCM estimation are presented in the next table:

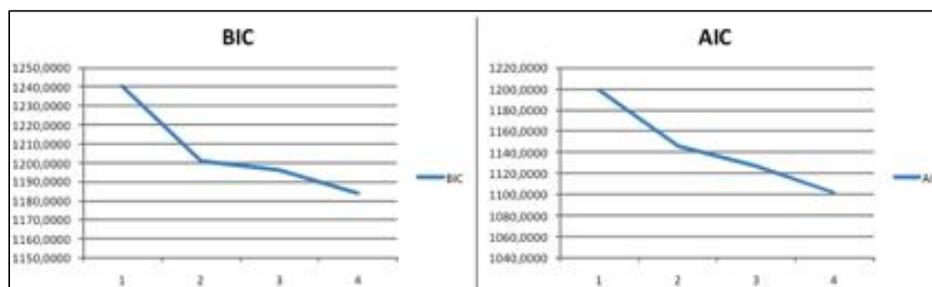
Table 7.2
BIC and AIC values for model selection

		LL	BIC	AIC
Model 1	1-Latent class	-584.4261	1240.1561	1198.8522
Model 2	2- Latent class	-552.8494	1200.7707	1145.6989
Model 3	3- Latent class	-538.7493	1196.3383	1127.4986
Model 4	4- Latent class	-520.6481	1183.904	1101.2963

The LCM estimation presents four models. The main aim of LCM is to determine the smallest number of latent classes S (also known as clusters) to fit the data, which means selecting the optimal number of classes that are sufficient to explain the relationships observed among the variables (Fonseca, 2009).

To determine the best number of classes, the AIC family gives us the relative goodness of fit of the model – for categorical or mixed variables (Fonseca, 2009). When this measure is minimized from one class to the other, the best clustering point is found and it is possible to determine the best number of classes. As it does not happen in this case, the graphical display of AIC informs the decision of the selection of classes:

Figure 7.1
Graphic display of BIC & AIC for online bonding



As it is visible in the graph, there is a kind of elbow that occurs at class 2, for both BIC and AIC. This means that two classes are the best solution in order to explain the relationships observed among the variables ($S = 2$).

Having defined the model, it is now possible to fit the data in those two classes. This estimation allows me to define the online bonding variable but also to understand different levels of online bonding. The results are presented in the next table (see table 7.3). This table presents the 2-classes model parameters' estimates, which correspond to two types of probabilities: first, the ordinary probabilities or proportions of mixture, i.e. the probabilities of belonging to class 1 and class 2, 0.58 and 0.42 respectively. Second, the conditional probabilities: for instance, 0.0187 and 0.3624 are the probabilities of answering "strongly disagree" in the variable online bonding1, given that the individual belongs to class 1 or class 2 respectively.

Table 7.3
Online bonding by model parameters' estimates

	CLASS 1	CLASS 2
Class Size	0.5777	0.4223
ONLINEBONDING1		
Strongly disagree	0.0187	0.3624
Disagree	0.3493	0.5837
Neither disagree, nor agree	0.3511	0.0505
Agree	0.281	0.0035
ONLINEBONDING2		
Strongly disagree	0.0445	0.2045
Disagree	0.143	0.2943
Neither disagree, nor agree	0.3389	0.3121
Agree	0.4473	0.1843
Strongly agree	0.0263	0.0048
ONLINEBONDING3R		
Strongly disagree	0.0224	0.1123
Disagree	0.3929	0.7078
Neither disagree, nor agree	0.1418	0.0917
Agree	0.3444	0.08
Strongly agree	0.0985	0.0082
ONLINEBONDING4		
Strongly disagree	0.1229	0.8526
Disagree	0.6387	0.1469
Neither disagree, nor agree	0.0594	0.0005
Agree	0.1641	0
Strongly agree	0.0149	0

The next table (see table 7.4) gives us the profile of the online bonding, according to the clusterization of the data.

Table 7.4
Profile of online bonding

	High (58%)	Low (42%)
ONLINEBONDING1	Neither disagree, nor agree; Agree	Strongly Disagree; Disagree
ONLINEBONDING2	Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree; Disagree
ONLINEBONDING3R	Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree; Disagree
ONLINEBONDING4	Disagree; Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree

The “neither disagree, nor agree”, the “agree”, and the “strongly agree” are all placed in class one, while the “strongly disagree” and “disagree” are placed in class two. It is important to note that the third item is reversed, but it follows the same directional pattern. There is, nonetheless, one exception to this pattern: the “disagree” in the online bonding4 is placed in class one. As noted before, during the descriptive analysis of this item, asking for an emergency loan is something the majority of respondents would not do with an online tie. And this might be the reason for this class differentiation. As the remaining responses of this item had the same directionality of the other variables, I decided to keep it in the model.

The labeling of these two classes follows the same rationale of the dimensions of social capital: I’m not following a dichotomous yes/no online bonding, but I’m assuming that there are two different levels (low/high), as I cannot conclude that my respondents have no level of online bonding social capital. The lower online bonding corresponds to class 2 and the higher online bonding corresponds to class 1. So, my sample has 116 respondents with online bonding: 42% with high, and 58% with low.

7.3 The online bridging variable

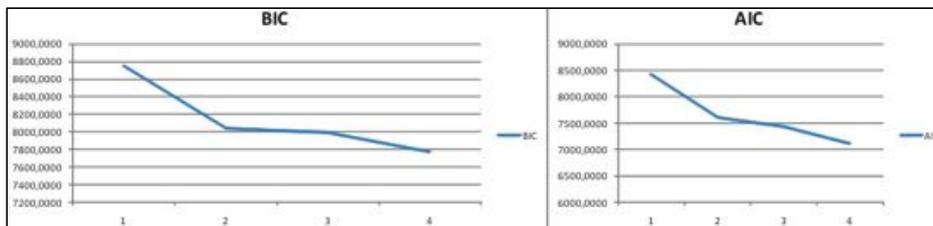
Similarly, to create the online bridging variable I carried out a latent class analysis. The results for the model selection of the LCM estimation are presented in the next table:

Table 7.5
BIC and AIC values for model selection

		LL	BIC	AIC
Model 1	1-Latent class	-408.8846	874.8123	841.7693
Model 2	2- Latent class	-364.1996	804.4566	760.3992
Model 3	3- Latent class	-352.0366	799.1451	744.0732
Model 4	4- Latent class	-331.9022	777.8905	711.8044

Once again, as the AIC and BIC do not minimize from one class to the other, we need to look at the graphical display of AIC to select the classes:

Figure 7.2
Graphic display of BIC & AIC for online bridging social capital



As it is visible in the graph, there is a kind of elbow that occurs at class 2. And so AIC & BIC selects a model with $S = 2$. This means that two classes are the best solution to explain the relationships observed among the variables.

Having defined the model, it is now possible to fit the data in those two classes. The next table (see table 7.6) presents two types of probabilities: first, the ordinary probabilities or proportions of mixture, i.e. the probabilities of belonging to class 1 and class 2, 0.67 and 0.33 respectively. Second, the conditional probabilities: for instance, 0.0001 and 0.1322 are the probabilities of answering “strongly disagree” in the variable online bridging1, given that the individual belongs to class 1 or class 2 respectively.

Table 7.6
Online bridging by model parameters' estimates

	CLASS 1	CLASS 2
Class Size	0.6743	0.3257
ONLINEBRIDGING1		
Strongly disagree	0.0001	0.1322
Disagree	0.0035	0.3105
Neither disagree, nor agree	0.0409	0.2329
Agree	0.8923	0.323
Strongly agree	0.0632	0.0015
ONLINEBRIDGING2		
Strongly disagree	0.0094	0.1924
Disagree	0.1148	0.4505
Neither disagree, nor agree	0.3849	0.2884
Agree	0.4783	0.0685
Strongly agree	0.0126	0.0003
ONLINEBRIDGING3		
Strongly disagree	0	0.1853
Disagree	0.0027	0.4445
Neither disagree, nor agree	0.1415	0.3424
Agree	0.7919	0.0278
Strongly agree	0.0639	0

The next table (see table 7.7) gives us the profile of online bridging, according to the clusterization of the data.

Table 7.7
Profile of online bridging

	High (67%)	Low (33%)
ONLINEBRIDGING1	Agree; Strongly agree	Strongly Disagree; Disagree; Neither disagree, nor agree;
ONLINEBRIDGING2	Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree; Disagree
ONLINEBRIDGING3	Agree; Strongly agree	Strongly Disagree; Disagree; Neither disagree, nor agree;

The “agree” and the “strongly agree” are all placed in class one, while the “strongly disagree” and “disagree” are placed in class two. The “neither disagree, nor agree” is mainly placed on class two, with the exception of the item online bonding 2.

So, once again, we can differentiate two low/high classes: the low online bridging corresponds to class 2 and the high online bridging corresponds to class 1.

7.4 The online social capital variable

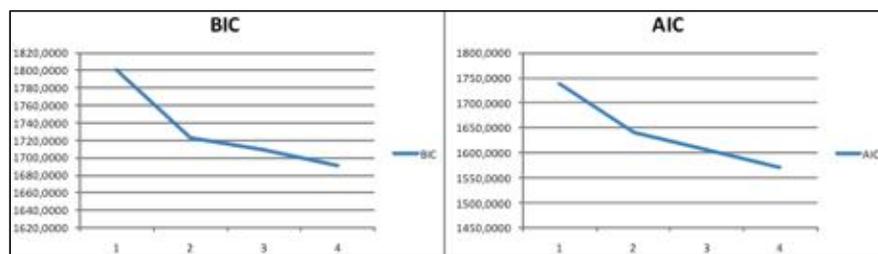
To create the online social capital variable I carried out a latent class analysis combining the online bonding and the online bridging variables. However, as the LCM estimation was unable to estimate classes (resulting in negative degrees of freedom) I added all the items of both variables, one by one, instead of the final online bonding and online bridging variables. The results of the model selection of the LCM estimation are presented in the next table:

Table 7.8
BIC and AIC values for model selection

		LL	BIC	AIC
Model 1	1-Latent class	-845.8347	1801.002	1737.6694
Model 2	2- Latent class	-790.3174	1723.2425	1640.6348
Model 3	3- Latent class	-766.445	1708.7727	1606.8899
Model 4	4- Latent class	-741.226	1691.6099	1570.452

As the AIC and the BIC do not minimize from one class to the other, we need to look at the graphical display of these measures to select the classes:

Figure 7.3
Graphic display of BIC and AIC for online social capital



As it is visible in the graph, there is a kind of elbow that occurs at class 2, which means that the BIC and the AIC selects a model with $S = 2$. Having defined the model, it is now possible to fit the data in those two classes. The next table (see table 7.9) presents two types of probabilities: first, the ordinary probabilities or proportions of mixture, i.e. the

probabilities of belonging to class 1 and class 2, 0.79 and 0.21 respectively. Second, the conditional probabilities: for instance, 0.1149 and 0.3423 are the probabilities of answering “strongly disagree” in the variable online bonding 1, given that the individual belongs to class 1 or class 2 respectively.

Table 7.9
Online social capital by model parameters' estimates

	CLASS 1	CLASS 2
Class Size	0.7851	0.2149
ONLINEBONDING1		
Strongly disagree	0.1149	0.3423
Disagree	0.4326	0.5056
Neither disagree, nor agree	0.2536	0.1163
Agree	0.1988	0.0358
ONLINEBONDING2		
Strongly disagree	0.0663	0.2793
Disagree	0.1762	0.3190
Neither disagree, nor agree	0.3440	0.2676
Agree	0.3923	0.1311
Strongly agree	0.0211	0.0030
ONLINEBONDING4		
Strongly disagree	0.4184	0.4773
Disagree	0.4345	0.4183
Neither disagree, nor agree	0.0359	0.0292
Agree	0.1017	0.0697
Strongly agree	0.0095	0.0055
ONLINEBRIDGING1		
Strongly disagree	0.0020	0.1932
Disagree	0.0273	0.3818
Neither disagree, nor agree	0.0844	0.1730
Agree	0.8321	0.2496
Strongly agree	0.0542	0.0024
ONLINEBRIDGING2		
Strongly disagree	0.0025	0.3119
Disagree	0.1210	0.6011
Neither disagree, nor agree	0.4273	0.0836
Agree	0.4383	0.0034
Strongly agree	0.0110	0.0000
ONLINEBRIDGING3		
Strongly disagree	0.0015	0.2754
Disagree	0.0435	0.5230
Neither disagree, nor agree	0.2176	0.1677
Agree	0.6825	0.0337
Strongly agree	0.0549	0.0002

The next table (see table 7.10) gives us the profile of the online social capital, according to the clusterization of the data.

Table 7.10
Profile of online social capital

	High (79%)	Low (21%)
ONLINEBONDING1	Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree; Disagree;
ONLINEBONDING2	Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree; Disagree;
ONLINEBONDING4	Disagree; Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree;
ONLINEBRIDGING1	Agree; Strongly agree	Strongly Disagree; Disagree; Neither disagree, nor agree;
ONLINEBRIDGING2	Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree; Disagree
ONLINEBRIDGING3	Neither disagree, nor agree; Agree; Strongly agree	Strongly Disagree; Disagree;

According to this profile, we can differentiate between two low/high classes: the low online social capital corresponds to class 2 and the high online social capital corresponds to class 1. There are, nevertheless, some small exceptions, i.e. the changes of the “neither disagree, nor agree” from class 1 to 2 in different items, and the “disagree” of the online bonding 4 in class 1. In the first case, because of the nature of the response item (neither disagree, nor agree) it does not have a great impact on the overall model. In the second case, as reported before, asking for an emergency loan (online bonding 4) is something the majority of respondents would not do with an online tie, what might explain this class differentiation. As the rest of this item’s responses had the same directionality of the remaining variables it was kept in the model.

For homogeneity and reliability reasons, I had to remove the item *online bonding 3R* from this model, because the estimates of probabilities of this indicator were going in the opposite direction of the general pattern. The reasons for this data deviation have to be

properly tested, which falls outside of the scope of my research mostly because of time constraints.

7.5. Online social capital and Internet usage

7.5.1 Results

To measure the impact of Internet usage on online social capital, I carried out a binary logistic regression. I estimated the effects of Internet usage on the odds of having a low/high level of online social capital. It is expected that as Internet usage increases, the likelihood of having a high level of online social capital will also increase. But first, I analyzed each dimension (online bonding social capital and online bridging social capital) independently.

For the binary logistic regression, I used the SPSS *Forward:LR* method that enters variables one at a time and uses likelihood ratio estimates to determine which variables will add most to the regression equation (Cf. Marôco, 2010). The independent variable, Internet usage, is categorized into four groups: nonusers, light users, moderate users, and heavy users. Light users correspond to the respondents that use the Internet at least once a month or rarely; moderate users correspond to the respondents that use the Internet 3 or 4 times a week or 1 or 2 times a week; and heavy users correspond to the respondents that report using the Internet daily.

The analysis also controlled for socio-demographic variables (such as age, gender, education, occupation status, occupation, marital status, religion, and household composition)¹, and an interaction term between age and Internet. I also controlled for social trust and for civic engagement. The secondary goal of this study was to analyze if trust and civic engagement were associated with social capital. So, I test these two variables with online social capital and with the final social capital variable. Trust is a dichotomous variable (low and high) created with LCM estimation (based on the indicators presented in the methods chapter, p. 171) For civic engagement, I created two variables: an associational life variable (which combines participation in leisure groups, volunteering, and associational membership), and a more broad civic

¹ Age is a continuous variable; Gender: 0= male, 1= female; Education: 0= no education, 1= less than secondary education, 2= secondary education, 3= undergraduate degree, 4= postgraduate degree; Occupation status: 1= employed, 2= unemployed, 3= retired, 4= student, 5= housewife; Marital status = 1 single, 2= married/de facto, 3= divorced/separated, 4= widowed; Religion: 0= no religion, 1= other religion, 2= catholic (non-practicing), 3= catholic; Household composition: 1= one-person household, 2= couples without children, 3= couples with children, 4= other household types.

engagement variable (which combines associational life with civic participation, civic awareness, and political participation). The indicators used to measure these variables are presented in page 172. The associational life variable is categorized in low and high, while the civic engagement variable is categorized in low, medium, and high. The results of the LCM estimation of these variables can be found in the appendix.

I also added later in the analysis, in two different blocks (with Internet usage and without), three secondary independent variables related to the type of Internet usage: email, instant messaging (IM), and social networking sites (SNS). These are dichotomous variables, categorized into using or not using these services. My goal was to test if besides general Internet usage (frequency) a more social-driven/specific type of Internet usage would have impact on social capital.

7.5.1.1 Online bonding social capital

The binary logistic regression showed that education and trust were the only significant predictors of online bonding social capital ($p < 0.05$).² The model is statistically significant ($G^2(4) = 16.302$; $p = 0.003$) and fits well the data, according to the Hosmer and Lemeshow test ($\chi^2_{HL}(4) = 1.816$, $p = 0.769$). Nonetheless, the pseudo R-squares are low ($R^2_N = 18\%$; $R^2_{CS} = 14\%$). So nor Internet usage, nor none of the three variables related to the type of Internet usage (use email, use social networking sites, use IM) were significant predictors of social capital ($p > 0.05$).

The adjusted model classifies correctly 65.8% of the cases: sensitivity is 90.9% (the model classifies correctly 90.9% of the cases with high online bonding social capital), and specificity is 28.9% (the model classifies correctly 28.9% of the cases with low bonding social capital). Despite the low specificity of the model, the fitted model correct classification is proportionally higher than a classification obtained by chance. Additionally, the ROC curve analysis of this model presents an excellent discriminant capacity (ROC $c = 0.674$; $p = 0.001$).

The next table summarizes the coefficients and its significance in the model.

² As with bonding and bridging dimensions, I started the analysis of online bonding social capital with an ordinal regression. But because of unexpected singularities in the Fischer information matrix, the SPSS warns about the uncertainty of the validity of the model fit. Therefore, I carried a logistic regression instead.

Table 7.11
Logit Coefficients of the Logistic regression model of online bonding social capital

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
*Education			8.093	3	.044			
Education(1)	-1.036	1.261	.674	1	.412	.355	.030	4.205
Education(2)	-1.285	1.273	1.019	1	.313	.277	.023	3.353
Education(3)	-3.325	1.484	5.024	1	.025	.036	.002	.659
**Trust(1)	-1.474	.574	6.605	1	.010	.229	.074	.705
Constant	2.167	1.352	2.568	1	.109	8.734		

*Education(1) = Less than secondary ed.; Education(2) = Secondary ed.; Education(3) = Undergraduate degree; Baseline = Post-graduate degree. **Trust(1) = low; Baseline = high

As can be seen in the table 7.11, Education(3) (Undergraduate degree) is the only category of education that is statistically significant ($p = 0.025$), comparing to the reference category (Post-graduate degree). Comparing to people with a post-graduate degree, people with an undergraduate degree have lower odds of having a high level of online bonding social capital multiplicatively by a factor equal to $e^{(-3.325)} = 0.036$, or by 96.4%.

Trust is also a significant predictor ($p = 0.010$): comparing to people with a high level of social trust, people with a low level of social trust are less likely to have a high level of online bonding social capital. Having a low social trust decreases the odds of having a high online bonding social capital by 77% ($[0.229 - 1] \times 100$).

7.5.1.2 Online bridging social capital

The binary logistic regression revealed that none of the independent variables had a statistically significant effect on the Logit of the probability of online bridging social capital ($p = > 0.05$).

7.5.1.3 Online social capital

The binary logistic regression revealed that only household ($p = 0.048$) had a statistically significant effect on the Logit of the probability of online social capital. The model is statistically significant ($G^2(6) = 20.569$; $p = 0.002$) and fits well the data, according to the Hosmer and Lemeshow test ($\chi^2_{HL}(6) = 5.064$, $p = 0.536$). Once again, the pseudo R-squares are low ($R^2_N = 17\%$; $R^2_{CS} = 25\%$).

The fitted model classifies correctly 79.3% of the cases: sensitivity is 97.6% (the model classifies correctly 97.6% of the cases with high bonding social capital), and specificity is 27.6% (the model classifies correctly 27.6% of the cases with low bonding social capital). Despite the low specificity of the model, the fitted model correct classification is proportionally higher than a classification obtained by chance. In addition, the ROC curve analysis of this model presents an excellent discriminant capacity (ROC $c = 0.326$; $p < 0.001$).

The next table summarizes the coefficients and its significance in the model.

Table 7.12
Logit Coefficients of the Logistic regression model of online social capital

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Household			7.886	3	.048			
Household(1)	1.422	.794	3.209	1	.073	4.147	.875	19.662
Household(2)	-.329	.849	.150	1	.699	.720	.136	3.800
Household(3)	1.332	.666	3.998	1	.046	3.789	1.027	13.982
Education			4.641	3	.200			
Education(1)	22.422	22074.033	.000	1	.999	5.469E9	.000	.
Education(2)	21.699	22074.033	.000	1	.999	2.654E9	.000	.
Education(3)	20.974	22074.033	.000	1	.999	1.285E9	.000	.
Constant	-21.658	22074.033	.000	1	.999	.000		

*Household(1) = One-person households; Household(2) = Couples without children; Household(3) = Couples with children; Baseline = Other household types.

As can be seen in the table 7.12, Household(3) (Couples with children) is the only category of household that is statistically significant at the α 0.05 level ($p = 0.046$). The logistic model selected the variable education based on the LR method, but none of its items are significant. However, it is common practice to keep covariates in the model, if they are selected and even if they are not significant. Comparing to people with other household types (reference category), couples with children have higher odds of having a high level of online social capital multiplicatively by a factor equal to $e^{(1.332)} = 3.789$, or by 278.9%.

Once again, nor Internet usage nor a specific social driven Internet usage (such as using emails, social networking sites, or instant messaging) could significantly predict online social capital.

7.5.2 Discussion

The results show that Internet usage is not a significant predictor of any of the online variables. So, the assumption that Internet usage affects the likelihood of having online social capital was not corroborated by the data. This finding is unexpected; because there is a kind of underlying assumption that Internet usage has to be associated with online social capital, since it is only possible online. Because of these findings I decided to add three secondary independent variables related to the type of Internet usage: email, instant messaging (IM), and social networking sites (SNS). My goal was to test if a more social-driven/specific type of Internet usage would have impact on social capital.

But maybe this form of social capital is not associated with any frequency of usage (not being important if people use it once a month or daily) or with any type of usage in particular. It might be that the online social capital is created online, but maintained more often through other media, such as the mobile phone. Or that none of the specific types of usage considered (email, SNS, IM) have an impact on its own – they might have impact altogether, but not individually. It might also be that this form of social capital overcomes the medium itself. For instance, people with pen pals (more common before the Internet, but being revived, specially with the written letters format), pals that they never met personally, might had been able to develop close relationships and have the same type of “online” bonding social capital.

For online bonding, education (only one response category: undergraduate education in relation to post-graduate education) and trust were the significant predictors, whereas for online social capital the household composition (only one response category: couples with children in relation to other household types) was the significant predictor. For online bridging, none of the independent variables were significant predictors.

Starting with the online bonding dimension, the higher chance of having a lower online bonding for people with an undergraduate degree, when comparing to people with a post-graduate degree may be related to specific social contexts. Maybe this difference in education is also connected with other factors, such as time, professional circumstances, or specific networks that escape my analysis. However, the significance of trust in this equation seems to present a more clear rationale: people with a low level of social trust are less likely to have a high online bonding, because they do not trust the users (or the

medium) enough to develop a close relationship or even to take the online ties more seriously. It is important to re-iterate that this online bonding dimension refers solely to online ties (that the respondents only know online).

Considering online social capital, education or trust had no significant predictive power, but household composition had. Once again, only one response category of household composition has a significant effect: comparing to people with other household types (reference category), couples with children are more likely to have a high level of online social capital. This might be because couples with children have less time to interact socially on a daily basis, using the Internet for it. For example, while children are sleeping it is easier to go online than to go out. Considering that the majority of Portuguese parents work full-time, working on average 9 hours per day and still have the home/family load (OECD, 2010; Torres, 2006; Torres et al., 2005), it is expected that their time for social interaction outside the household and work is limited. The Internet offers that facility and ubiquity, which might be used to meet people online and to derive social capital from it. These are some tentative explanations; there is an obvious need for further research.

7.6 Conclusion

This chapter presented the online social capital variable. This variable was generated from the *Internet Social Capital Scales*, which combines online and offline bonding and bridging dimensions (Williams, 2006). My original intention was to construct a social capital variable that would combine both dimensions, however I encountered some problems with the scales:

- During the survey pretest, the respondents were confused with the “online” dimension, as they interact with (the same) ties both online and offline. To avoid data redundancy, I had to add a sentence to the online scales stating that it applied to people that the respondents only knew online.
- During the data analysis, I realized that only 28% of the respondents reported knowing people online (just online), which reduced significantly the LCM estimation carried out to define the variable social capital: it would only compute 116 cases instead of 417.

So, I decided to create an online bonding, an online bridging, and an online social capital variable and analyze it independently.

Considering the online bonding variable, the descriptive results showed that this online dimension seems to be more expressive than instrumental: while slightly half of the respondents reported having someone online to help them solve problems in general, the majority reported not having someone online to help them with an emergency loan. Comparing the online bonding with the bonding variable (data from the same scales), the bonding variable had higher positive values than the online bonding variable. This might be because the bonding dimension is stronger than the online bonding dimension.

Education and social trust were the only significant predictors of the online bonding social capital. People with an undergraduate degree have a lower probability of having a high online bonding, when compared to people with a post-graduate degree. Possible explanations might be related to specific social and professional circumstances or networks that would allow post-graduates to have a higher online bonding.

People with a higher level of social trust have more probability of having a high online bonding, which would make sense when we consider that the online ties started as “strangers”. The majority of my respondents reported not knowing people exclusively online, and social trust might be an important factor to explain the low number of online ties.

In terms of the online bridging dimension, a comparison with the bridging dimension (data from the same scales) showed that the online dimension had slightly more positive values. It might be that it is easier to bridge with online ties, because of the perceived emotional or physical distance, than with the other ties. None of the independent variables used could significantly predict online bridging.

The online social capital variable is only predicted by household composition: couples with children are more likely to have a high level of online social capital when compared to people with other household types.

When we look at the Portuguese context, we see that the majority of parents work full-time and have extensive daily working hours (OECD, 2010; Torres, 2006). In these working hours, they still have to account for the household time. This might elucidate why couples with children rely more on the Internet for social interaction and social capital. The proliferation of parenting websites and online forums might also contribute to explain these results.

Rather unexpected was that none of the online variables could be predicted by Internet usage or by the different types of usage (using email; using social networking sites,

using instant messaging services or similar). Several tentative reasons can be considered:

- The online bonding or the online social capital might be created online but then maintained through other media;
- None of the specific types of Internet usage (email, SNS, IM) have an impact on its own, but they might impact altogether with other forms of Internet usage;
- This form of social capital might overcome the medium itself: for example, people with pen pals, pals that they never met physically but that became strong ties, might have the same form of social capital.

Yet again, these are speculative explanations that need appropriate research.

In the next chapter, I present and analyze the main variable of this research: the social capital variable.

8 Social capital and Internet usage

This chapter presents the composition of the variable *social capital* and its analysis: Firstly, I create the social capital variable through Latent Class Model (LCM) estimation. Secondly, I test the association between the created social capital variable and Internet usage, carrying out a binary logistic regression. I control for socio-demographic variables (such as age, gender, marital status, household composition, education, and religion), and for an interaction term between Internet usage and age.

Considering social capital, it is hypothesized that as Internet usage increases, the likelihood of having a high level of social capital also increases (Hypothesis 1). The results of the logistic regression show that Internet usage and age (interaction term) are significant predictors of social capital.

In a final regression analysis of the social capital variable, I added three secondary independent variables related to the type of Internet usage: email, instant messaging (IM), and social networking sites (SNS). These are dichotomous variables (using or not using). Although these variables are not defined in my research hypotheses or in my analytical model, I felt the need to test them in order to check if besides Internet usage (frequency) a more social-driven/specific type of Internet usage would have impact on social capital. However, none of the three variables could significantly predict social capital.

I also test the variables social trust and civic engagement, aiming to observe if they are in any way associated with social capital, accomplishing the secondary goal of this research that is to contribute to the measurement and theory of social capital, namely of its dimensions.

This chapter also presents the results of the interviews, and a general discussion connecting the quantitative and the qualitative data analysis.

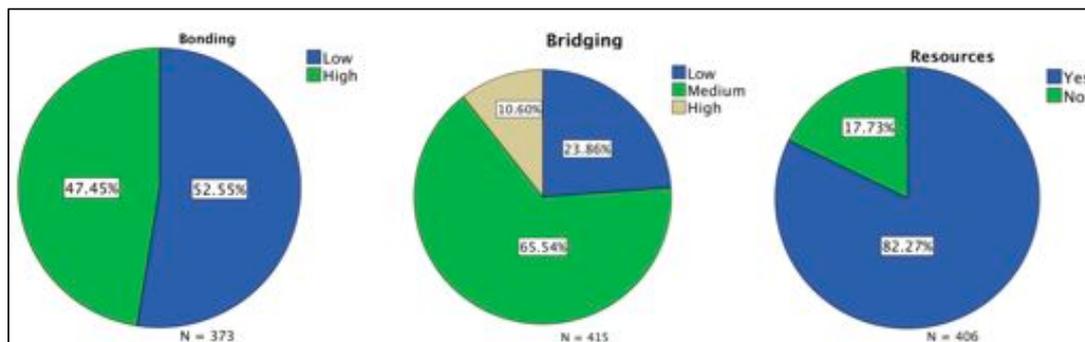
8.1 Quantitative findings

8.1.1 The social capital variable

To create the social capital variable I carried out a latent class analysis, using the previously created dimensions of social capital: bonding, bridging, and resources. The Latent Class Model (LCM) allows me to find the latent variable “social capital”, through a probabilistic clustering based on these three indicators. But first, to clarify

the data allocation per dimension, the next figure compares the frequencies (%) of the dimensions of social capital:

Figure 8.1
Frequencies of bonding, bridging, and resources (%)



These frequencies show that 48% of the respondents perceive having a high level of bonding social capital, 66% a medium level of bridging (11% have a high level), and that the majority (82%) perceives having resources available in their social networks.

To create the social capital variable I combined these three dimensions. It is important to reiterate that in my attempt to add the online dimensions and the online social capital I verified that it reduced significantly the cases for estimation (116 instead of 316, because of the missing values). The nature of the questions to measure the online dimensions (Likert-scale) would make the dichotomization lose its significance: I would not be able to differentiate between a low or a high level within the variable, because I would have to re-code all the 5-item Likert responses into a “yes”, and all the non-respondents (people that have no “only” online ties) into a “no”.

This dichotomization procedure would bring me some analytical issues, especially with the “Neither disagree, nor agree” category; does this response category mean that there is no online social capital or that the respondents were not sure about the question itself? Dichotomization of these types of scales reduces statistical power and often skews (unnecessarily) the results. So, social capital was estimated with the three dimensions: bonding, bridging, and resources.

The LCM estimation was carried out through three models, which are presented in the next table:

Table 8.1
BIC and AIC values for model selection

		LL	BIC	AIC
Model 1	1-Latent class	-710,715	1444,986	1429,431
Model 2	2- Latent class	-693,784	1434,68	1403,569
Model 3	3- Latent class	-693,038	1456,743	1410,076

Once again, the main aim of LCM is to determine the smallest number of latent classes S (also known as clusters) to fit the data, which means selecting the optimal number of classes that are sufficient to explain the relationships observed among the variables (Fonseca, 2009). The goal is to find a parsimonious model, knowing that complex models have a higher number of parameters and can be harder to interpret.

To determine the best number of classes, the AIC family gives us the relative goodness-of-fit of the model – for categorical or mixed variables (Fonseca, 2010; 2011). When this measure is minimized from one class to the other, the best clustering point is found and it is possible to determine the best number of classes.

In this case, we can see that the AIC is minimized in model two: in model one the AIC is 1429.431, while in model two is 1403.569, increasing in model 3 (1410.076). Therefore, AIC selects a model with two classes ($S = 2$). This means that two classes are the best solution to explain the relationships observed among the variables.

Having defined the model, it is now possible to fit the data into those two classes. This estimation allows me to define the social capital variable but also to understand different levels of social capital. The results are presented in the next table (see table 8.2). The first class accounts for 70% of the data, while the second class accounts for 30% of the data.

Table 8.2
Social capital by model parameters' estimates

Overall Probability	CLUSTER 1	CLUSTER 2
Cluster Size	0.6985	0.3015
BONDING		
Low	0,4517	0,5483
High	0,964	0,036
BRIDGING		
Low	0,346	0,654
Medium	0,7683	0,2317
High	0,9334	0,0666
RESOURCES		
Yes	0,7576	0,2424
No	0,3766	0,6234

This table gives us two kinds of probabilities: first, the ordinary probabilities or proportions of mixture, i.e. the probabilities of belonging to class 1 and class 2, which is 0.70 and 0.30. Second, the conditional probabilities: for instance, 0.4517 and 0.5483 are the probabilities of having “low” in the variable bonding given that the individual belongs to class 1 or class 2, respectively. The clustering of the data gives us the profile of the social capital variable, allowing us to differentiate between a lower social capital and a higher social capital (see table 8.3):

Table 8.3
Profile of social capital

	High (70%)	Low (30%)
BONDING	High	Low
BRIDGING	Medium; High	Low
RESOURCES	Yes	No

The distribution of the conditional probabilities in the two classes follows a visible pattern: the “high” (and “medium”) and “yes” are placed in the first class, while the “low” and the “no” are placed in the second class. As with the dimensions of social capital, to label these two classes I’m not following a dichotomous yes/no social capital, rather I’m assuming that there are two different levels (low/high), as I can not conclude that my respondents have no level of social capital.

Therefore, class 1 corresponds to high social capital and class 2 to low social capital. Again, these are “qualitative” or categorical differentiations, as I cannot quantify how

much is high social capital and how much is low social capital. It is hard to quantify social capital, so it is more fruitful to look at it in a qualitative sense (Putnam, 2002). Now that I have a single variable of social capital, I'm able to test my main hypothesis: there is a positive association between perceived social capital and Internet usage. Next, I analyze statistically this association.

8.1.2 Social capital and Internet usage

8.1.2.1 Results

To measure the impact of Internet usage on social capital, I carried out a binary logistic regression. It is hypothesized that as Internet usage increases, the likelihood of having a high level of social capital also increases (H1).¹

For the binary logistic regression, I used the SPSS *Forward:LR* method that enters variables one at a time and uses likelihood ratio estimates to determine which variables will add most to the regression equation (Cf. Marôco, 2010). The independent variable, Internet usage, is categorized into four groups: non-users, light users, moderate users, and heavy users. Light users correspond to the respondents that use the Internet at least once a month or rarely; moderate users correspond to the respondents that use the Internet 3 or 4 times a week or 1 or 2 times a week; and heavy users corresponds to the respondents that report using the Internet daily.

The analysis also controlled for socio-demographic variables (such as age, gender, education, occupation status, marital status, religion, and household composition)². Because age and Internet usage are strongly correlated I also added an interaction term to the model (Age.Internetuse).

Considering the secondary goal of this research, namely to analyze the association between social capital, social trust, and civic engagement, I added social trust, and two additional variables of civic engagement to the regression model.

¹ I started this analysis with an ordinal regression model. The social capital variable is an ordinal dependent variable: its categories are ordered *low* or *high*, even if I cannot define the real distance between the categories. However, the ordinal regression analysis was encountering problems with the Fischer information matrix, and so I carried out a binary logistic regression instead. This is similar to ordinal regression, but it does not assume that there is an order to the categories of the dependent variable. So, the dependent variable is considered nominal and not ordinal, which is perfectly acceptable in this case.

² Age is a continuous variable; gender = 0 male, 1 female; education = 0 no education; 1 less than secondary education; 2 secondary education, 3 undergraduate degree, 4 postgraduate degree; occupation status = 1 employed, 2 unemployed, 3 retired, 4 student, 5 housewife; marital status = 1 single, 2 married/de facto, 3 divorced/separated, 4 widowed; religion = 0 no religion, 1 other religion, 2 catholic (non-practicing), 3 catholic; household composition = 1 one person household, 2 couples without children, 3 couples with children, 4 other household types.

- First, the social trust variable is based on the social trust questions presented in the methods chapter. It was created with the indicators of social trust and with the indicators of institutional trust. The original idea was to create two levels of trust, and test it separately. Unfortunately, the LCM estimation could only estimate a single variable with the four indicators (and not the two variables of trust). It is a dichotomous variable (low and high) created with LCM estimation.
- Second, the associational life variable combines participation in leisure groups, volunteering, and associational membership – what Putnam (2000) defines as measures of community organizational life and measures of community volunteerism in his social capital index. It is a dichotomous variable (low and high) created with LCM estimation.
- Third, the broad civic-engagement variable combines measures of civic participation, civic awareness, membership and volunteering, and political participation (check the methods chapter for a full description), i.e. what Putnam (2000) defines as measures of community organizational life, measures of community volunteerism, and measures of engagement in public affairs. It is categorized in low, medium, and high. The results of the LCM estimation of each of these variables can be found in the appendix.

So, the first civic engagement variable focuses on community organization and association (e.g. to be part of an association, to volunteer, etc.). The second combines it with political awareness and engagement (e.g. to vote, to talk about politics, etc.), following the operationalization of Putnam (2000) and other scholars working on civic engagement (Putnam, Leonardi & Nanetti, 1993; Park & Perry, 2008).

I decided to create two variables of civic engagement, because I wanted one to have a predominant emphasis on social participation (i.e. membership and volunteering). Sociologically speaking, it seems that these social activities are different from voting or watching a political debate. Membership and volunteering imply social interaction, whereas voting or watching a political debate are mainly individual endeavors.

I also added, in two different blocks (with Internet usage and without), three secondary independent variables related to the type of Internet usage: email, instant messaging (IM), and social networking sites (SNS). These are dichotomous variables, categorized into using or not using these services. My goal was to test if besides general Internet usage (frequency) a more social-driven/specific type of Internet usage would have impact on social capital. However, none of the three variables were significant predictors of social capital ($p > 0.05$).

The binary logistic regression revealed that there is a significant interaction effect between age and Internet usage ($p = 0.015$). An interaction effect exists “when the effect of an independent variable on a dependent variable differs depending on the value of a third variable, commonly called a “moderator”” (Jaccard, 2001:12). This means that the effect of the independent variable age on the dependent variable social capital is different at different levels of the independent variable Internet usage or vice versa. So, we need to consider the effect of age on the odds of having a high social capital for a fixed level of Internet usage. This interaction makes the interpretation of the model more complicated, but if not included it can lead to distorted results. Marital status ($p = 0.020$), household ($p = 0.001$), and associational life ($p = 0.001$) also have a statistically significant effect on the Logit of the probability of social capital.

The model is significant ($G^2(10) = 90.240$; $p = 0.000$) and fits well the data, according to the Hosmer and Lemeshow test ($\chi^2_{HL}(8) = 9.838$, $p = 0.277$). The pseudo R-squares are relatively small: $R^2_N = 39\%$, $R^2_{CS} = 24\%$. However, it should be noted that these are pseudo R-squares and are not equivalent to the R-squares of the linear regression (Cf. Menard, 2002). This fitted model classifies correctly 85% of the cases: sensitivity is 97.4% (the model classifies correctly 97% of the cases with high social capital), and specificity is 26.7% (the model classifies correctly 27% of the cases with low social capital). This measure shows that the correct classification of this fitted model was proportionally higher than a classification obtained by chance.

Despite the low correct classification of the specificity of the model, the ROC Curve analysis of this model presents an excellent discriminant capacity (ROC $c = 0.849$; $p < 0.000$). The area under the ROC curve is a measure of how well a parameter can distinguish between the two groups (low/high social capital), representing the tradeoff between sensitivity and specificity.

The next table (see table 8.4) summarizes the coefficients and its significance in the model.

According to the analysis, the fitted model in the logit scale is:

$$\begin{aligned} \text{Logit}(\tilde{\pi}) = & 4.079 - 0.017\text{Age} * \text{Internet}(1) - 0.046\text{Age} * \text{Internet}(2) - 0.012\text{Age} * \\ & \text{Internet}(3) + 3.500\text{MaritalStatus}(1) + 0.033\text{MaritalStatus}(2) + \\ & 1.169\text{MaritalStatus}(3) - 2.399\text{Household}(1) - 0.957\text{Household}(2) - \\ & 0.098\text{Household}(3) - 1.818\text{AssociationalLife} \end{aligned}$$

Table 8.4
Logit Coefficients of the Logistic regression model of social capital

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Age * Internet			10.477	3	.015			
Age by Internet(1)	-.017	.007	5.958	1	.015	.983	.971	.997
Age by Internet(2)	-.046	.016	7.911	1	.005	.955	.924	.986
Age by Internet(3)	-.012	.011	1.322	1	.250	.988	.966	1.009
Marital status			9.832	3	.020			
Marital status(1)	3.500	1.188	8.680	1	.003	33.112	3.227	319.276
Marital status(2)	.033	.851	.001	1	.969	1.033	.195	5.473
Marital status(3)	1.169	.885	1.747	1	.186	3.319	.569	18.225
Household			15.431	3	.001			
Household(1)	-2.399	.691	12.052	1	.001	.091	.023	.352
Household(2)	-.957	.778	1.514	1	.219	.384	.084	1.764
Household(3)	-.098	.773	.016	1	.899	.906	.199	4.125
Associational life (1)	-1.818	.564	10.380	1	.001	.162	.054	.491
Constant	4.079	.937	18.950	1	.000	59.107		

*Internet(1) = Non-user; **Internet(2) = Light user; ***Internet(3) = Moderate user; Baseline = Heavy user.

**Marital status(1) = Single; Marital status(2) = Married/De facto; Marital status(3) = Divorced/Separated; Baseline = Widowed.

***Household(1) = One-person households; Household(2) = Couples without children; Household(3) = Couples with children;

Baseline = Other household types.

****Associational life(1) = low, Baseline = high.

Analyzing the coefficients of the model (see table 8.4), the interaction term age*Internet has two significant response categories: age by Internet (1), which corresponds to the non-user category and the age by Internet (2), which corresponds to the light user category. These two categories are statistically significant ($p = 0.015$ & $p = 0.004$), comparing to the reference category heavy Internet users. This interaction effect means that the effect of age on social capital is different for different values of Internet usage, namely for non-users, light users, moderate users, and heavy users. Considering the statistically significant categories in this model:

- Per each unit of age (per one year) the odds of having a higher level of social capital decreases for Internet non-users (comparing to heavy users) multiplicatively by a factor equal to $e^{(-0.017)} = 0.983$, or by 1.7% ($[1 - 0.983] \times 100$).
- Per each unit of age (per one year) the odds of having a higher level of social capital decreases for Internet light users (comparing to heavy users) multiplicatively by a factor equal to $e^{(-0.046)} = 0.955$, or by 4.5% ($[1 - 0.955] \times 100$).

So, this means that a 20 years old will be 0.709 times or 29.1% less likely of having a high social capital if a non-user, and 0.398 times or 60% less likely of having a high

social capital if a light user. In the next table (see table 8.5), I compare the odds of having a high level of social capital by age*Internet usage (odds scale model).

Table 8.5
Odds of having high social capital by age*Internet usage (%)

Years of age	Non-user	Light user
20	-29%	-60%
30	-40%	-75%
40	-47%	-84%
50	-58%	-90%
60	-64%	-94%
70	-70%	-96%
80	-75%	-97%
90	-79%	-98%

The next interaction plots (see figure 8.2 & 8.3) show the estimated probabilities of social capital classified by age and Internet usage. As the plot with age is not very clear for interpretation, I added a plot with four age groups for better readability. We can see that the lines presented in the plots are not parallel, which means that they interact.

Figure 8.2
Mean predicted probabilities of social capital by age and Internet usage

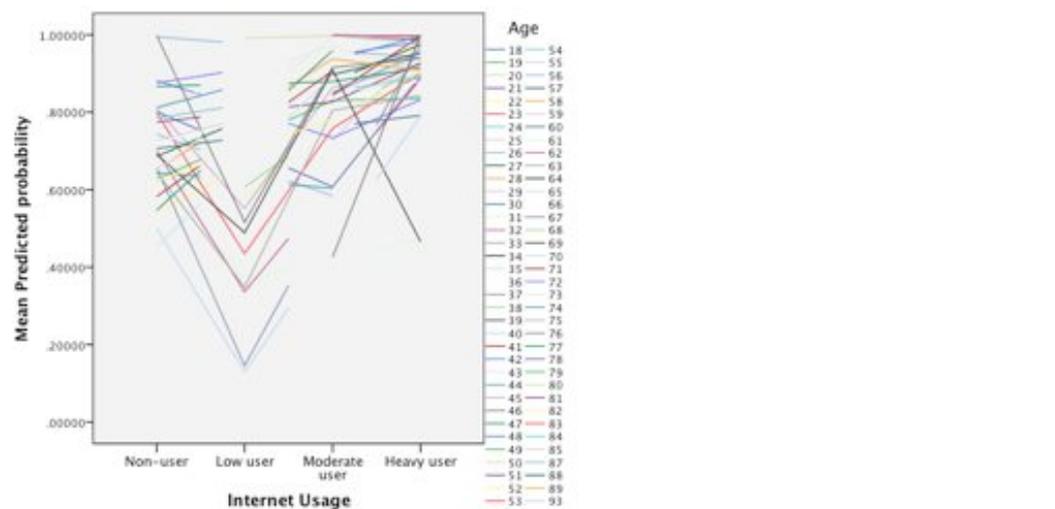
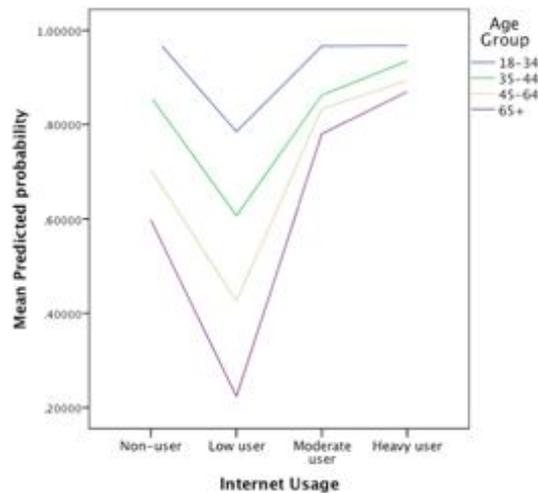


Figure 8.3
 Mean predicted probabilities of social capital by age group and Internet usage



As visible in figure 8.3, the youngest group has more probability of having high social capital for any of the types of usage, whereas the oldest group has less probability of having social capital for any of the types of usage. Again, it is particularly noticeable the case of light users: no matter the age, the light users have less probability of having high social capital than non-users, moderate users, and heavy users. However, young light users have more probability of having a high level of social capital than old light users. These findings with light users have been consistent throughout the statistical data analysis.

The heavy users have more probability of having a high level of social capital for all the age groups, although in the case of the 18-34 age group the difference between the moderate and the heavy users is not as significant as for the remaining age groups. In fact, it seems that for this first age group there is a consistent line from the moderate to the heavy users. Similarly, the difference between the non-users and the moderate users is greater for the two older groups (45-64 and 65+), which suggests that the impact of the Internet is even greater for people above 45. The differentiation between the non-users and the moderate users for the 18-34 and 35-44 group looks rather small. However, it is important to emphasize that only the categories age*non-users and age*low users (comparing to the reference heavy users) were statistically significant, which means that the remaining results are merely indicative and not predictive.

Other significant predictors of social capital are marital status, household composition, and civic engagement. Only one response category is significant in marital status and household composition:

- Response category *single* is a significant predictor of social capital – Comparing to widowed people (reference category), single people have higher odds of having a higher level of social capital multiplicatively by a factor equal to $e^{(3.500)} = 33.112$.
- Response category *One-Person households* is a significant predictor of social capital – Comparing to people with other household types (reference category), people that live alone have lower odds of having a higher level of social capital multiplicatively by a factor equal to $e^{(-2.399)} = 0.091$, or 90.9%.

Associational life, but not civic engagement or social trust, is a strong predictor of social capital. Comparing to people with high associational life, people with low associational life have lower odds of having a high level of social capital by 83.8% ($[1 - 0.162] \times 100$).

8.1.2.2 Discussion

The findings show that the interaction term between age and Internet usage has a significant effect on the likelihood of having (low or) high social capital. In this case, the data validated the hypothesis that there is a positive association between Internet usage and perceived social capital (H1). Even though the Internet usage might be seen as a moderator, as Internet usage increases, the likelihood of having a high level of social capital increases. Interesting enough, when the logistic regression is performed without the interaction term, Internet usage (and not age) is a significant predictor of social capital.

a. Heavy Internet users and younger people are more likely to have a high level of social capital

In my analysis, there has been a visible pattern with these two independent variables: Internet usage is a significant predictor of bonding and bridging dimensions (positive relationship), whereas age is a significant predictor of the three dimensions of social capital: bonding, bridging, resources (negative relationship). Internet might be allowing daily users to maintain and reinforce their ties and social capital, while the age effect might be connected to specific life courses, as relationships and social

resources change throughout a person's life-cycle stages and span³. But for the social capital variable, these two variables are only significant together, while interacting, although with the same direction (social capital increases with Internet usage and decreases with age).

The probability of having a high level of social capital increases with Internet usage, but decreases with age. The results indicate that the likelihood of having a high social capital decreases differently per each unit of age according to the type of Internet user: per year, Internet non-users have less chance of having a high level of social capital by 1.6%, while per year, Internet light users have less chance of having a high level of social capital by 4.6%. For instance, a 60 year-old Internet non-user is 0.503 times (-47%) less likely to have a high level of social capital than a 20 year-old. But a 60 year-old Internet light user is 0.159 times (-84%) less likely to have a high level of social capital than a 20 year-old. However, it seems that the Internet is compensating for the age decrease: older heavy Internet users have more probability of having a high social capital than older non-users or light-users.

As with the bonding and bridging dimensions, light Internet users are less likely than non-users to have a high degree of social capital. These results pose at least a question about the justification for this variation: Why is it that moderate and heavy Internet users will have more probability of having a high level of social capital when compared to Internet non-users, while light Internet users will have less probability of having a high level of social capital when compared to Internet non-users?

I have already advanced some possible explanations in the previous chapter, namely:

- Personality traits: non-users might be more sociable or extroverted than light Internet users, being able to reach and maintain more ties and more resources;
- Specific social circumstances: light users might be caught between two worlds, not being able to fully grasp the social affordances of the medium, suffering from a mild anomic state, or not having a lot of their ties available online (such like the early Internet users of Kraut's et al. study, 2001). These situations would limit their social capital.
- Online activities: light users might be using the Internet for more individualistic activities, such as search, viewing sites, etc. In fact, *search for information*

³ For more on age and social capital check the discussion of the bonding and bridging dimension on the 6th chapter.

was the most reported reason to use the Internet in my sample, i.e. 44.3%.

- Underrepresentation of light users in my sample (3.1%), which might be skewing the results.

b. Single people are more likely to have a high level of social capital (comparing to widowed people)

Comparing to widows, single people have higher odds of having a higher level of social capital. This is probably related to the characteristic of this life course event that considerably affects people's lives: a widowed person would likely lose a very strong tie and see, at least, its bonding social capital weaken. Widows are also more likely to be older people, which would also contribute to a general lower level of social capital *per se*. Single people are likely to be younger and have a higher number of social ties and social capital.

c. People that live alone (One-person households) are less likely to have a high level of social capital (comparing to people that live in other household types)

Comparing to people with other household types (reference category), people that live alone have lower odds of having a higher level of social capital. This might be explained by the fact that other types of households include households with a higher number and/or diversity of ties. It can be suggested that bigger or more diverse households would mean more availability of resources for the individual.

d. Members of associations or volunteers are more likely to have a high level of social capital

Associational life is also a strong predictor of social capital: comparing to people with high associational life, people with low association life have lower odds of having a high level of social capital. This might be because active members of organizations (clubs, groups, etc.) and people that volunteer are more likely to meet more people, to form more ties, and to create more social capital (Cf. Putnam, 2000).

As a side note, I should add that I also tested separately the three dimensions of social capital (bonding, bridging, and resources) and associational life, controlling for the same socio-demographic variables (regression outputs are in the appendix). Associational life was only associated with the variable resources ($p = 0.04$): people with a higher associational life were more likely to have resources.

These findings support Putnam's (1993, 1995, 2000) work on the connection between social capital and community volunteerism and organization. It might be that these people are able to acquire or cultivate a more diverse or supportive network of ties, as a result of their social participation in associations. It might also be that these people are more aware of the importance of social capital, and so more skilled to develop those networks. We definitely need more research in this area, to be able to explain in-depth this connection.

Regardless, I still see associational life as independent of social capital: it contributes to social capital, but it is still hard to see it as a component of social capital – at least, bearing in mind, my definition of social capital, as the resources that are embedded in our social networks. Maybe if we analyzed specifically the organizations that these people belong to, we would be able to understand if there is any level of organizational social capital that is allowing them to create, maintain, and reinforce their social capital (Cf. Small, 2009).

e. Civic engagement and social trust are not associated with social capital

The results of my research seem to indicate that civic engagement and social trust were not significantly associated with social capital. They were not significant either with the bonding and the bridging dimensions (regression outputs in the appendix). With resources, only one of the categories of civic engagement was significant but in a negative way: people with moderate levels of civic engagement were more likely to have resources than those with high levels of civic engagement.

These results do not support Putnam's (1993, 1995, 2000) findings on the close connection between social capital, civic engagement, and trust. Of course this might be related to the particularities of my sample, specially considering that it is a Portuguese and not an American sample. It might also be related to the measures I used, even though there are mainly the same, or at least, very similar to Putnam's measures (check methods chapter).

Another possible explanation is that maybe only the associational part (social-driven part) of civic engagement is actually having any impact on social capital. When I tested independently for other single variables of civic engagement, such as talking about politics and voting, there was still no association to report. But as it could be seen before, associational life was a strong predictor of social capital.

When I just analyze social capital, civic engagement, social trust, and associational life (without controlling for the socio-demographic variables), I get the same results: only associational life was a predictor of social capital. Even though the model was significant, it was not very robust ($G^2(1) = 6.240$; $p = 0.012$, the Hosmer and

Lemeshow test was zero, and the pseudo r-squares: $R^2_N = 3\%$, $R^2_{CS} = 1.8\%$), which might also reinforce the marginal relationship between these variables. These results validate Lin's and colleagues (2001; Lin & Erickson, 2008) approach to social capital, which discards civic engagement or trust from its core.

8.2. Qualitative findings

The semi-structured interviews included 11 Internet users and three non-Internet users. Of the Internet users, six were women and five were men. The age ranged from 26 to 75, with an average age of 50.7. Four had secondary education, five had undergraduate education, and two had a postgraduate degree.

Seven of the interviewees (three men and four women) were heavy Internet users (use the Internet daily), while four (two men and two women) were moderate Internet users (use the Internet 3 or 4 times a week or 1 or 2 times a week). The age of the heavy users ranged from 26 to 67, while the age of the moderate users ranged from 39 to 75 years. Of the moderate Internet users, two had secondary level education and two had undergraduate education.

Of the non-Internet users, two were women and one was a men. I interviewed another female non-Internet user, but because of frailty the interview had to be interrupted and it is not consider in this analysis. The age ranged from to 68 to 85 years of age, with an average age of 77.5. In terms of education, two had less than secondary education, and one had secondary level education. The next table (see table 8.6) shows the demographic profile of the interviewees:

Table 8.6
Demographic profile of the interviewees (pseudonyms)

		Gender	Age	Education	Occupation
Heavy	Guinaldo	M	63	Undergraduate degree	Lawyer
	Clara	F	60	Graduate degree (Ph.D.)	Pediatrician
	Susete	F	54	Secondary education	Housewife
	João Nuno	M	67	Secondary education	Retired (former IT technician)
	Francisca	F	31	Graduate degree (Ph.D.)	Lecturer
	Cassandra	F	26	Undergraduate degree	Artist
	Daniel	M	31	Undergraduate degree	Journalist
Moderate	Paulo	M	75	Secondary education	Retired (former bank clerk)
	Pedro Lopes	M	45	Undergraduate degree	Flight attendant
	Maria	F	67	Undergraduate degree	Retired (former jurist)
	Marina	F	39	Secondary education	Assistant in a day care center
Non users	Irene	F	85	Secondary education	Retired (former public servant)
	Sara	F	74	Primary education	Retired (former housewife)
	Fernando Jorge	M	83	Primary education	Retired (former construction worker)

Following the profiling procedure suggested by Seidman (2006), I created profiles for each interviewee based on the interview transcripts. I present these as a series of profiles grouped around topics, which are, in this case, the themes or the categories related to the thematic analysis of the interviews, namely:

1. Interaction with close ties
2. Mobilization of social capital
3. Reciprocity
4. Type of Internet usage
5. Internet impact on close ties
6. Internet impact on weak ties
7. Online ties
8. General assessment of the Internet

Through these categories I explore social capital and the relationship between Internet usage and social capital.

For this series of profiles embedded in categories, I use the first person, because “In creating profiles it is important to be faithful to the words of the participants” (Seidman, 2006:121). As a system of notation, I use squared brackets “[...]” to add information that was not in the interview (to clarify a passage or to facilitate the reading of a particular sentence), and ellipses when omitting material. It is important to note, however, that the interviews were done in Portuguese, and while I try to be accurate in my translation, there are some subtleties that are hard to get across for a non-trained translator. I also use pseudonyms and not numbers to refer to the interviewees, because I believe that the frequent practice of using numbers instead of names dehumanizes interviewees. The interviewees chose these pseudonyms and I kept them, not only to be faithful to their individual choices, but also to allow the interviewees to easily identify themselves in this work if they ever read it.

To facilitate a better comparison with each interviewee, I divide them in heavy Internet users, moderate users, and non-users. As explained earlier in the methods section, none of the light-users left a contact for the follow-up interview and I did not want to change the procedure of the participants’ selection. Moreover, only 3.1% of my survey sample corresponds to light users.

Not all the three types of respondents (heavy, moderate, and non-Internet users) talk about the eight analytic themes, because non-Internet users cannot talk about their type of Internet usage or its impact in their lives. Nonetheless, I asked non-Internet users about their perceptions of the Internet, in general. The next table (table 8.7) shows which themes are explored by each group of respondents.

Table 8.7
Themes and groups of respondents

	Heavy Internet users	Moderate Internet users	Non-Internet users
Interaction with close ties	✓	✓	✓
Mobilization of social capital	✓	✓	✓
Reciprocity	✓	✓	✓
Type of Internet usage	✓	✓	
Internet impact on close ties	✓	✓	
Internet impact on weak ties	✓	✓	
Online ties	✓	✓	
General assessment of the Internet	✓	✓	✓

8.2.1 Interaction with close ties

a. Heavy Internet users

All the interviewees say that primarily they interact personally with their close relatives and close friends. Most of them state that they prefer personal contact. In the case of the interviewees that have close family members living abroad (two participants had offspring living abroad, and one participant had a son living in Azores), the Internet is the main channel of communication.

The frequency of the personal encounters with family members and close friends is different: the face-to-face interaction with close friends is not as frequent as with close relatives. The interviewees also extensively use telephone and mobile phone to contact both close ties.

The Internet is also increasingly used to interact with family members and close friends, besides the three interviewees that contact their offspring mainly through the Internet (because they are living abroad):

- One interviewee uses the Internet more for family interaction than for interaction with close friends.
- One interviewee uses the Internet more for interaction with friends than for interaction with close relatives.

- Three interviewees use the Internet for interaction with both close family members and close friends.
- Two interviewees interact face-to-face and/or by telephone/mobile phone with their close relatives, but use the Internet to interact with their close friends.

In the first case, Francisca (31, lecturer) explains:

"[With close friends] is more personally, because with friends I don't feel that need to be contacting them all the time, and so it's more done at the face-to-face level. Also, once in a while, there's contacts made through telephone and email. Sometimes, Skype too. But not with the same high frequency as with family."

In the second case, Clara (60 years old, pediatrician) says:

With my family, I rarely use the Internet. But my grandchildren are on Facebook and have Farmville and cityville [online games on Facebook] and so, they are always calling me saying that they will have an exam and ask me to go and harvest something (...). So I have some connection with them [grandchildren] online, through Facebook...but because of Farmville and those things...With my close friends, [I interact] also in person, but much less, because life is complicated. I call them rarely, but I talk to them a lot through the Internet, through email.

But Clara's perception of Internet usage to contact close family members differs during the interview, as she later adds:

(...) So, during my working day, I use the Internet to contact essentially here, with my collaborators and other national and international institutions. Then I communicate with my family, not with my husband, he's a neurosurgeon but he doesn't know how to send an email, or a text message...so with him I don't contact [online] at all, because it's a disgrace. (...) But then I communicate with the rest of my family. With the rest, I always have the email open and I have an ipod that tells me that I have a new email, etc...this is an addiction, it must happen to you too (...) I use a lot the Internet too, I don't know, my daughters are always online, one is a physician, the other is a lawyer, but they normally have the computer and the Internet on and, so a lot of times, I'm here working and we talk online (...) I don't know, if I need to buy shirts for the kids or pay for the music lessons or whatever.

It seems, therefore, that while Clara's perception is that she uses the Internet more to contact her close friends than her close family members, during the description of her day she gives plenty examples of constant contact with close relatives, even if for little or more practical interaction, such as coordinating schedules or quick check-ups.

In the third case, Guinaldo (63 years old, lawyer) adds:

(...) I've started to have a hard time interacting with people that don't know how to use a computer (laugh). I have, I can say he is my friend, a colleague (...) and I have a hard

time interacting with him, because by phone things are never well spoken, well clarified. If we write [an email] people have time to read, think, digest, and then answer. He [the colleague] says he has no age for that (...) he also had a stroke (...) But I know of two cases (...) one is the mother-in-law of my friend, not this Christmas, last Christmas, her offspring gave her a computer – she is 86 years old – because she lives with her youngest daughter (...) and they had big fights with the grandson because of the computer, so they offered her a computer. The father of a friend, that died eight days ago, with 82, also bought a computer. So, I think that computers are not a “big bug” and that it is an excellent way of communication.

In the last case, Cassandra (26 years old, artist) clarifies:

[With my close relatives, I interact by] mobile phone, mobile phone...mobile phone (laugh). I don't live with my close relatives; I live with my boyfriend in a different city, and with those relatives my interaction is not that personal, because of the physical distance.

b. Moderate Internet users

Two of the moderate users (Paulo and Maria) have offspring leaving abroad or in a different city, and so the Internet (Skype or Messenger) and telephone are the used forms of interaction. For the close family living in the same city or in the same house, the interaction is done at the face-to-face level. Maria (67 years old, former jurist) says:

My son that is far away...is the one that I have a grandson from. And so, I use Messenger a lot to talk to him. I don't go as often as I wanted to see them, although I go practically every month. But, it's a way of seeing him grow, right? He's two little years and he's still a baby.

The other two interviewees report mainly interacting personally with their relatives, but also through telephone and mobile phone. For these two interviewees, the Internet is not used (or rarely used) to interact with relatives. For instance, Pedro Lopes (45 years old, flight attendant) explains:

I prefer the personal interaction, but also communicate a lot through the telephone. Not so much through the Internet. It's not a way to communicate, I mean, it's not that it can't be useful, I don't know...I also don't use Facebook for that, I don't know, I'm a grown up, sometimes I think about it, but then I see my mother in law, that is more than 60 years old and she uses Facebook more than her kids. (...) I live some seasons in Brazil and, without doubt, on that time is very useful. I also have some cousins in France and I could be more in contact, but I don't like it...I prefer personal or through telephone.

But this interviewee also shows several examples of using the Internet to interact with relatives, especially when he is abroad.

The remaining interviewee, Marina (39, assistant in a day care center) lives with her mother, her closest relative, and so the Internet is mainly used to interact with her close friends.

Considering interaction with close friends, two interviewees (Maria, 67, former jurist; and Marina, 39, assistant in a day care center) say they interact mainly through the Internet, mobile phone/telephone and personally (in this order). For instance, Marina says:

[I interact with my close friends] through the Internet, by Messenger or Facebook. I also use the mobile phone. And I talk to them every time I can, when I get out of work and I have a little time, there are times when you can't, but when you can, I get home and turn on the Internet.

The other two interviewees say they interact with their close friends personally and through telephone/mobile phone.

c. Non-Internet users

The non-Internet users mainly contact their close relatives face-to-face or through the telephone. This contact - face-to-face, telephone, or both - is done on a daily basis for two of the interviewees (Sara, 74, former housewife; Irene, 85, former public servant), and whenever is possible for the remaining interviewee (Fernando Jorge, 83, former construction worker). The same with close friends: friends visit or are visited at least once a week, for the two female interviewees. For the male interviewee, close friends are not very present in his life. At least during the interview, it did not seem that he interacts frequently with them.

8.2.2 Mobilization of social capital

To explore this category, I have asked participants if in the last year they had any situation where they needed the help of family members, friends, or acquaintances. As examples, I added financial or emotional support, help finding a job, taking care of kids, etc. Of the 11 Internet users, six remembered a situation where they needed help from their family members, friends, or acquaintances.

Although the mobilization of instrumental resources (e.g., getting financial help) is evident in two of the interviewees account, expressive resources (e.g., getting practical daily help) seem to be mobilized more often (five of the six interviewees mention emotional and social support). Recalling the difference between instrumental and expressive resources: resources that lead to instrumental actions are used to gain resources, while resources that lead to expressive action are used to maintain resources (Lin, 2001).

a. Heavy Internet users

Of the seven heavy Internet users, four remembered a situation (in the last year) where they needed help from their family members, friends, or acquaintances:

- Susete (54 years old, housewife):

My uncle died last year (...) it was a complicated period for me. And my family members and friends were present to give me emotional support.

- Francisca (31 years old, lecturer):

In the last year, so much happened (...) I finished my PhD in January and one of my many urgencies was related to my work, namely some requests to review my texts and things that I needed at the moment. I relied a lot on the help of my friends and family...

- Cassandra (26 years old, artist):

I was working in a company/workshop and things didn't turn out that well. I didn't really like the experience and when I left, that day, I was a bit apathetic, all day. And it was a disappointment, because I thought my [professional] path could be following a more specific route and then, no. Once again, it was one more error in my life, and especially in my professional career. And that night, I was in the garage with my boyfriend and I had a panic attack, I started to see...my peripheral vision made that the ground and the ceiling were united. And then I had a horrible scene in the elevator, some tremors and I couldn't control them and then I went to the ER, but they didn't have a psychiatrist so they took me to another hospital. My boyfriend helped me and then I stayed with my parents for a month and a half, in #, to recover.

When I asked if Cassandra's close friends were with her during that period, helping her, she answered that she ran away from her closer friends, and so she was only with her family.

- Daniel (31 years old, journalist):

I bought a house and at the time I didn't have enough money to pay part of the house contract, I asked my mother for a small help, a loan.

b. Moderate Internet users

Of the four interviewees, two (Paulo, 75, former bank clerk; Pedro Lopes, 45, flight attendant) did not remember of any situation, where they needed help from family, friends, or acquaintances. The other two explain:

- Maria (67, former jurist):

My father passed away and I needed emotional support. I went through a very hard situation (...) I had the support of my friends and some relatives, although I only have few relatives here [in Portugal]; I have my kids and my mother. My family members are almost all in Brazil (...).

- Marina (39, assistant in a day-care center):

I had to ask for a loan for some works in my house and it was through my mother, i.e, it was through a friend of my mother. And then emotional support we always need, in any way.

c. Non-Internet users

Only two of the three interviewees (Sara and Irene) mention that they mobilized their social capital in the last year, through social and emotional support. Sara (74, former housewife) says:

We always need help, specially now with a certain age. Through talking a little bit with family and friends. Financially no, because those who could help can't anymore, my daughter is unemployed and the other that could help me, passed away. So, it's more for emotional support, talking and other things, like taking me to the doctor, and so on.

8.2.3 Reciprocity

Reciprocity is not explored directly, but through a proxy: I have asked participants if in the last year there was any situation where their relatives, friends, or acquaintances needed their help. As examples, I added financial or emotional support; help finding a job, etc. Interestingly enough, not all of the interviewees had an example of self-mobilization or access of social capital, but they all had an example of helping others, through expressive or instrumental resources. Once again, although the mobilization of instrumental resources is visible in some of the interviewees account (e.g., help with finding a job), expressive resources, (e.g., social support) are the most referenced ones.

a. Heavy Internet users

All of the heavy Internet users had a story to share. They all gave emotional, financial or more practical help to family members or friends, in the last year:

- Guinaldo (63, lawyer):

I gave a bit of support to Guilherme, because he had kidney cancer. I also gave a bit of support (...) to my "compadre" [joint father, godfather] that also had a cancer, but in both kidneys (...) So I gave them some moral support. I visited them and went to their houses. With Guilherme, I went to pick him up in Lisbon to take him to Algarve (...) And all my

friends and acquaintances call me, I don't know, at least once a week, because they have a problem with their landlord, because they have problems with their job, because they have problems with their wives or husbands (...) and ask for my support. My friend that doesn't know how to use a computer, he is a lawyer, is the one that calls me the most. He looks great now, after the stroke, he even had two wives, but he was a bit affected. He repeats himself a lot, etc. And he's always calling me, asking how do you do this, how do you do that (...) But I like it. I don't get annoyed by that.

- Clara (60, pediatrician):

My daughters, once in a while, have some emotional or financial urgencies and normally we use the Internet for that, because as everybody works and the telephone interrupts a lot (...). Now, with the mobile phone, it seems that on the other side no one is doing anything, we are always waiting to be answered. So, I use a lot the Internet to, I don't know, my daughters are always online, one is a physician, the other is a lawyer, but they normally have the computer and the Internet on, so a lot of times, I'm here working and we talk online. I don't know... if I need to buy shirts for the kids or pay their music classes.

My family and friends also ask for my help through the Internet, especially because I'm a physician. And as a physician, I work with the patients, in this case, as I'm a pediatrician, with the patients' parents through the Internet. So, I have two emails, and two mobile phones, one just for the parents. (...) And it's very funny because frequently the couples have a certain embarrassment of asking questions, or because they think they are wasting our time or because the questions are ridicule or the problems aren't important. And if they write an email, they write a full email with 20 or 30 lines and then I answer directly in the email text in red or yellow: "yes, no, maybe...give him the syrup, etc." And they get very happy, because they can rest. And one thing that I do a lot with parents and with my daughters, when my grandchildren have any problem, like if one is full of blemishes in the face or something like that, they take a picture and send it to my email and I make a lot of diagnosis through the pictures.

- Susete (54, housewife):

Normally, it's my daughter (laugh). In every single aspect...In the financial aspect, she just moved to a new house and needs more stuff, and emotionally, she doesn't live here but comes a lot during the week (...) and anything is always the mother. If she's bored at the office, she calls me. Or she comes by, maybe also because I taught her that it is always better to get together and talk personally.

- Francisca (31, lecturer):

A friend asked me to review texts of things she was writing. My mother asks frequently for my help with the computer and the Internet, and that's something that has been increasing lately.

- João Nuno (67, former IT technician):

I helped a family member that needed some help. It was a person that was caught in the alcohol addiction. And then with time it got worst, he was married, and he needed a treatment, and he went to do that treatment in Spain. At the time, the husband and wife, asked for my company, to help them in their trip to Spain. And I was in Spain, two or

three days with hem, at the time. Thank God the thing worked out well, because in fact, he overcame the problem.

Cassandra gave emotional support to a cousin, and Daniel says he gave emotional support to his friends.

b. Moderate Internet users

The four moderate Internet users also report helping a family member or friends last year:

- Paulo (75, retired, former bank clerk):

Generally, it's family members. For example, my daughter that lives in Bragança has a small toddler and sometimes she needs me to go there and help her. For example, next month, I'm going to be there for two weeks, because she needs to go abroad and she needs me to help care for my granddaughter.

- Pedro Lopes (45, flight attendant):

Yes, I helped a friend. It's a friend that is more than 40 years old and didn't decide to settle down yet. And so he has some jobs, he lived for a season in Holland and then he came back and he got used to it...because it's easier to stay at home than to look for a job. And at a certain time, close to Christmas, he needed some money and called me and I lent it to him. I gave him financial support, but I also give him a lot of emotional support.

- *Maria (67, former jurist):*

Normally, I help my children. Financially and emotionally, which is normal. And friends too because there are always those situations...I have a very long friendship with a lot of the colleagues, whom I worked with and the situation of getting retired (...) because we had the conditions to do it since 2005 and we talked a lot, because it's always a hard situation, when we like what we do. And so, we supported each other and we ended up retiring practically at the same time. We have retired, four, and there's one that submitted the papers and she's waiting...So, we had an informal agreement and then what are we going to do? Are we going to keep working outside? Etc. We are still deciding what to do, although I don't believe I will continue to work outside, we're going to play a little bit, to keep our head healthy. What is very important, one has a very demanding activity and then suddenly doesn't have any obligation, our head stops, right?

- *Marina (39, assistant in a day-care center):*

A friend lost her job and we tried to help in any way, because salaries are also very little. But we try to help in any way, with goods or whatever is possible. And we're also helping her to find a new job.

c. Non-Internet users

Of the three non-Internet users, two report having provided help to someone last year. This help was given mainly to close relatives, such as offspring. Fernando Jorge (83, former construction worker) helped financially his daughter, and Sara (74, former housewife) helped her daughter with domestic work. Sara also helped friends with knitting techniques. Irene says she did not help anyone last year, because of her age and health-related problems. However, she noted that when her daughter in law got sick, she went to her house to help her to recover and to take care of her.

8.2.4 Type of Internet usage

a. Heavy Internet users

The majority of the interviewees use the Internet for mainly communication purposes (for personal and professional reasons), followed by checking websites (for personal and professional reasons), online services (e.g. online banking services), and entertainment (e.g. online games). Email is the most used tool for communication purposes, followed by instant messaging services and applications such as Skype, and social networking sites, such as Facebook. For example, Guinaldo (63, lawyer) says:

[What I do the most online is] interact with people. Then information. I subscribed for free to this website of newspapers and magazines, so every day I see the main titles and some news with development. And then related to my professional area, sites related to law, justice (...) Then videos. I like to see a few amount of videos and general information, biographies, etc. (...) I see a lot of Jazz music, so then I can buy, etc. Normally the videos have some music and give us some ideas, so we don't buy it blindly.

Similarly, Clara (60, pediatrician) says:

I use the Internet as a communication medium. I do a lot, a lot of scientific research and I then use it for other type of research. I had to buy a folding screen for my mother, because she wanted one, and so I went online to search for it, and one puts "folding screen" and they appear everywhere. I almost every day ask myself (I mean I'm oldie, so I'm from the pre-Internet era), how did we survive before? I did my PhD, I started in 89 and ended in the 90s, but I had helped in the 60s and 70s other superiors that I worked with at the University, with their PhDs. And the bibliographic research was done in these medical indexes, huge books. We had keywords and we would go there marking with the finger and we would take the reference by hand, because we didn't even have computers. And then, we would have to go to the embassies, because the articles were American, or French, or British, the majority of these journals were not available in Portugal, we would have to pay for it and it would take one month or two [to get the articles]...it wasn't possible! (laugh). (...) So, I use the Internet for regular research, scientific research, to see something I need to buy, to order books, to buy toys for the kids and...ah, to check the weather.

(...) Then I communicate with my family, not with my husband, he's a neurosurgeon but he doesn't know how to send an email, or a text message...so with him I don't contact [online] at all, because it's a disgrace. (...) My husband is older than me, and thinks he can't learn, but it's laziness. Someday, he retires and then loses his secretary. And he didn't understand yet the potentiality of the Internet, because asking the secretary to look for something up is no the same as when we search it ourselves, because we go here, and there, etc. (...) But then I communicate with the rest of my family. With the rest, I always have the email open and I have an ipod that tells me that I have a new email, etc....this is an addiction, it must happen to you too.

All of the interviewees had an account on a social networking site, namely on Facebook. But one, Susete (54, housewife) had an account that was not directly used by her:

I have a Facebook account, but it's not me who's using it (laugh) (...) My husband is crazy about Farmville and so for him to have two farms he created a [Facebook] profile for me (laugh). So, my friends thought it was me and would tell me "but you're on Farmville" and I would say "Not me" (laugh).

Of the seven, four were not active social users, using it only for the entertainment features (such as Farmville, an online game on Facebook) or to "lurk". For instance, Clara (60, pediatrician) says:

I use it for my Farmville, because I have six Farmvilles, one is mine and the other five belong to my grandchildren, because sometimes I have to take care of theirs too. I'm a bit addicted to Farmville, because I think it's very funny.

Other users, such as Francisca and Daniel, point for the "lurking" activity:

- Francisca (31, lecturer):

I have a profile on Facebook and on LinkedIn. I use Facebook the most, but I'm not very active. It's more to check what's going on, to peek on what friends are saying, and then of course, there's that situation of finding people or of being aware of situations that wouldn't be possible otherwise.

- Daniel (31, journalist) adds also the professional aspect of using Facebook:

I go [on Facebook] so I won't be left behind; I rarely write. Essentially, to see what friends are saying, a good part of our current life is done on the social networks and so, I don't want to be left behind. And being a journalist, the media are all represented on the social networks and it's an easy platform to follow up things.

a. Moderate Internet users

The moderate Internet users say they use the Internet mainly to check news, to search, to communicate, and to work. For instance, Paulo (75, former bank clerk) explains:

On the Internet, I normally check the news, check information and, for instance, book my doctor appointments online (...) I also check my bank account balance, for services, money transfers (...) I have email, but I don't usually send a lot of emails. There's some days that I'm online everyday, other days no. It depends. I have phases. I don't have an account on a social networking site. I also use the Internet for that [to communicate with my family members], through Skype.

Only one of the four interviewees (Marina, 39, assistant in a day care center) had an account on a social networking site, namely on Facebook, but reports using Microsoft Messenger the most. Of the four, only one moderate user says he uses rarely the Internet as a communication medium:

- Pedro Lopes (45, flight attendant):

I try to use the Internet the less possible for that [for social interaction]. It's not that I have anything against it, I see all the advantages of the Internet, but I prefer personal contact.

8.2.5 Internet impact on close ties

To understand if the Internet was having any perceived impact on social interaction, I asked the participants if the Internet had affected their interaction with close ties. Nine of the interviewees said it affected positively, three said it did not affect it. Their views, experiences, and perceptions are explored next.

a. Heavy Internet users

Of the seven heavy Internet users, all, except one (Daniel, 31, journalist) said that the Internet had affected positively their interaction with close ties (close relatives and close friends). The main reasons for this positive impact of Internet is related to its social affordances, and to the easy, cheap, and ubiquitous characteristics of this communication medium. The majority of the participants indicate that they all communicate more now, which helps to maintain their relationships. For instance, Guinaldo (63 years old, lawyer) states:

Before the Internet, I would go a lot of time without seeing people (...) and that wouldn't break up, but would loosen up ties. This way, we communicate everyday, and it's a way of maintaining those [close] ties.

Clara (60 years old, pediatrician) adds:

Before the mobile phone, we talked very little with our family and friends and that changed with the mobile phone. (...) But for instance, my grandchildren don't have a mobile phone, and don't like to spend money, but always have the computer on and so it's easier through the Internet and doesn't bother so much. The Internet changed in a certain way, because now I use more the Internet than the mobile phone.

Concerning the social part, friends that I go a long time without seeing, in my first marriage, I was married to a Madeirense [an inhabitant from Madeira island] and I have lots of friend in Madeira that I would go for months without seeing (...) Now we exchange emails and I know much more about them than before. And this doesn't mean I don't meet them, yesterday one of those friends sent me an email saying he was coming to Lisbon and tomorrow we're having lunch together. So, I think the Internet facilitates the social part, the social interaction."

Reinforcing Clara's idea of an increased replacement of the mobile phone by the Internet, Susete (54 years old, housewife) emphasizes the affordable characteristic of the Internet, when comparing to other ICT, such as mobile phones:

Now I probably communicate more, because, as I told you, I'm not going to make individual calls...normally, I use the mobile phone to say congratulations or happy birthday...like that, quick things. For the rest, if I want to tell someone something or want to know if the family is sick, etc. I probably use the Internet more. But I think it's a matter of costs.

Similarly, Francisca (31 years old, lecturer) states:

I think [the Internet affected my interaction with my close ties] in a positive way. Because it [the Internet] facilitates, and we don't have to be thinking systematically about the costs. In my case, I have an online connection, I pay x per month and then I can use it unlimitedly, which facilitates the interaction a lot. Then, we're also a bit invaded, because when we show we're online, like I do, we contact the other person. That's an option, because we can be invisible. Even my grandmother uses Skype, who is 82 years old (...) And it's very funny to hear her say "I was online with a, b, or c" (laugh).

Besides being an easy and cheap medium of communication, the Internet allows for multi-interaction (being able to communicate to more than one person at the same time), multi-tasking (being able to do more than one thing at the same time), and facilitates some spontaneity in the interaction. As Cassandra (26, artist) puts it:

I can be in two spaces at the same time, I can talk to my friends, and maybe it's not anything scheduled, maybe they come up in a more spontaneous way, we'll talk online, without any commitment. If I had to go and have a coffee with someone and if I had to be at the café, I had the commitment of having to be 100% dedicated to that person or those people. In the case of the Internet, I can be dedicated not only to a person, but also to another space, I can be watching TV, I can be talking to another person...

This is clearly perceived as a positive feature of the Internet for the interviewee. Also, Clara (60, pediatrician) shows, in her interview, examples of this multi-interaction and multi-tasking in her daily life.

b. Moderate Internet users

Three of the moderate Internet users state that the Internet had a positive effect on their interaction with close ties, because they are able to speak (and to see) their family members living abroad or in a different city; and they communicate more with close friends. One of the interviewees, Pedro Lopes (45, flight attendant), says it did not affect his interaction with close ties that much, because he prefers personal contact. However, he says that the Internet has brought some tension into his life. Pointing to a negative aspect of the Internet's impact on his matrimonial sphere, Pedro Lopes explains:

Not really. Plus, my wife and I, we fought sometimes because of that. She stays sometimes for too long online and neglects other things; she doesn't think she does, I think she does. But I also understand that there are people that have more necessity of being always in contact with family members and friends, not me, until now I didn't feel that need. (...) I prefer personal contact.

But immediately after explaining the negative aspect of the Internet, the interviewee recognizes a positive aspect of Internet usage in his life:

But the Internet also comes very handy sometimes (...) my wife was in Lisbon last week, and I was working in Venezuela. My wife needed to contact me and it wasn't really easy there and I didn't have mobile phone network. So, it was through a mobile phone of a friend. My daughter got sick and as we needed to be in contact, the way we managed to do it was her sending emails to the inn where I was staying and I had to use the inn's computer to answer. If this happened some time ago, we would probably be without communication or we would communicate in a very expensive way, because making a phone call there, through a mobile phone, that is like 3 euros per minute, it would be a fortune...

Later, in the interview, Pedro Lopes adds:

Once my kid talked about it and I was...I wouldn't say shocked...because he commented that his mother was always online and I was a bit mad about it. And I feel, because I'm not always at home and I'm not sure how things work when I'm not. And I get that idea, that my wife takes advantage of the situation when I'm not at home.

This interviewee also explains that as his wife is a flight attendant, "(...) we don't have a normal family life, I mean "normal", because I don't know if there are normal family lives (...) and if we take advantages of the days we're together, if each one of us gets into a computer doing their own stuff, then there's no time for being together."

So, it seems that Pedro Lopes is dealing with two conflicts: first, the fact that his wife is a heavy Internet user and he is not, which affects their time together (while he tries to understand her need to use it); second, the tension between not wanting to rely too much on the Internet but the usefulness and the convenience of that usage. When I asked the interviewee if he had a kind of resistance to the Internet, he answered that

yes, that he sees all the utility and advantage of it, but he still does not feel the need to use it (and that his daughter is the same). He feels the same about the mobile phone: There is a clear preference for personal interaction and for what the interviewee sees as a more meaningful interaction. For example, he states,

And when I'm abroad, I only call home if I really strongly need it. I only call when our kids stay alone, with the nanny, someone we trust. Now, when my wife is at home, I don't even need text messages saying that everything is OK. And my daughter also gets annoyed with that, when I ask her [to text me] she says: But what do you want me to tell you, that we had dinner already, that we're going to beddy now (laugh) and so I don't insist as well. I don't feel that need.

8.2.6 Internet impact on weak ties

a. Heavy Internet users

Of the seven heavy Internet users, all, except one (Daniel, 31, journalist) said that the Internet had affected positively their interaction with weak ties (with not so close relatives and friends, and acquaintances). According to the interviewees' perception, the Internet facilitates this interaction, allowing them to keep more frequently in touch with weak ties.

As Clara (60, pediatrician) says: "I know more news about them."

Similarly, Susete (54, housewife) adds:

"It affected positively, because maybe with some I communicated less or almost nothing, and now as I have their emails, I send emails too...or sometimes I see that someone is online and also use it to send a little message or say hi."

Two respondents mention that the Internet (mainly social networking sites, such as Facebook) allowed them to find old friends and acquaintances that they lost contact with:

Francisca (31, lecturer):

I have some friends in the US. And it helps immensely to keep in contact. And so I keep in contact with people that are not so close to me on a daily basis; or that were childhood friends. Or those people that come into our life, but then end up moving away a bit - and Facebook was the vehicle [to reunite with these people].

Cassandra (26, artist):

It's a strange thing, you know...re-uniting with people that I've met before, but that I haven't seen in ages. People from school, that I ended up finding and talking online. It does not necessarily mean that I'm going to meet those people offline, but at least I

have a more regular contact (...) If Facebook didn't exist I wouldn't have the opportunity of re-uniting with old friends.

It seems, therefore, that the impact of the Internet on weak ties is not only positive, as it happens in two dimensions: firstly, it allows people to maintain their not so close relationships and to contact weak ties more frequently (at least for these heavy users); secondly, it allowed people to find or re-unite with old acquaintances that they had lost track of during the years.

b. Moderate Internet users

Of the four moderate Internet users, two state that the Internet did not have any impact – positive or negative – on their interaction with weak ties (Paulo, 75, former bank clerk and Pedro Lopes, 45, flight attendant). The other two respondents emphasize a positive impact, but are not as enthusiastic about it as with the interaction with close ties. For instance, Maria (67, former jurist) states at first that no, that there is no impact with weak ties, but then adds:

I mean it has in this aspect, people that I haven't seen in a while, and that I'm not in permanent contact with, I mean weekly, I get once in a while an email asking how am I doing and I also send [an email back]. We send an email that we think it's funny, so there's always a hello, things like it was a letter. Before, we would write postcards, we would travel and send a postcard and say hi, and now the Internet serves for that (...)

8.2.7 Online ties

Only two heavy Internet users reported meeting people online. None of the moderate Internet users reported meeting people online. I got the feeling throughout the interviewing process and through the analysis of the transcripts that there is a visible apprehension or a sense of inappropriateness or embarrassment of meeting people online or at least of recognizing that they have done it. The respondents would answer negatively with visible nonlinguistic signs of disapproval or would add expressions such as "I'm being honest. I haven't met anyone online" (Marina, 39 years old, assistant in a day care center). There was an idea of a mild "moral panic" or fear: of being bad and/or wrong to talk to strangers, even online strangers. Since I was a child I was taught to never talk to strangers, so it might be that this view is part of a wide spread feeling among my respondents.

For instance, Clara (60, pediatrician) says:

I never met new people online, my grandchildren have a filter and I don't accept anyone. I just go on Facebook to go to Farmville. But they [my grandchildren] have friends and sometimes go home and say that a friend of the same age (9/10) was

online and that they encountered strangers, etc...which is always a matter of concern. And I have in my office some serious cases. The parents don't have notion yet...I have a girl [patient] that met a boyfriend online and it brought her lots of problems... (Clara couldn't describe more in-depth these cases because of doctor-patient confidentiality)

When I asked Clara if her grandchildren had any type of online education/literacy to use the Internet, Clara answered, "they have a filter and so everything is trapped and they know if something comes up, they know how to cancel it..."

Considering the respondents that say they met people online,

João Nuno (67, former IT systems administrator) says:

Recently, [I met online] a person from the African continent, I lived in Africa for some years, and I normally say no, that I'm not interested, but this time I decided to say yes (...) it was an absolutely unexpected contact.

I then asked João Nuno what type of relationship was he maintaining with that person, to which he answers:

Of friendship. I even helped this person with little things. And at the same time, it gave me the possibility of making an analysis of the type of living that these people have. So, she's from the African Continent, but her origin is British. I speak English with some difficulty, with a translation software by my side...but anyway I ended up being able to help her with one or other situation, concerning her child. I don't know, sometimes an advice might be enough for a person to change the path that she's following. And in this case, it was something like that.

Cassandra also met a person online, a poker friend (she used to play online poker), but that turned out to be a friend of a friend. So, even these two respondents only account for meeting one online person.

When I tried to understand if all Facebook friends, for instance, were all offline contacts, Guinaldo (63, lawyer) explains:

I know everybody on Facebook, sometimes by sight. Or they are public figures, like Francisco Louça [Portuguese politician] he says he's my friend, isn't it?...I mean I have a lot of acquaintances. New people online, I never met anyone.

Similarly, Daniel (31, journalist) says:

Sometimes what happens is that first very superficial contact of a friend of a friend, of a first conversation, more formal, and then me or he/she invites to be part of the same social networking site. But, then it does not go on to a more close level.

Hence, it seems that the great majority of the online friends or contacts of the respondents are also offline contacts.

8.2.8 General assessment of the Internet

a. Heavy Internet users

For the heavy Internet users, the positive aspects of the Internet usage, in their lives and in general, are:

- Easy and quick access to information,
- Facilitates interaction,
- Source of entertainment,
- Online services, such as online banking and online shopping.

As Guinaldo (63 years old, lawyer) states:

Positive [elements of the Internet] are the access to information and the maintenance of relationships. And entertainment, too.

Equally, Francisca (31 years old, lecturer) adds:

In my daily life, besides the communication easiness, the quickness of getting any information we need to obtain. In the other day, (...) I needed to read a thesis that was not online, but anyway, I contacted a person that contacted the author and in ten minutes I had the thesis in my mailbox, from California.

Cassandra (26, artist) emphasizes the interaction aspect, saying that:

To be closer to people. Even for you to know someone, you need an amount of factors, like being in 'the right place, at the right time'. With the Internet, you don't need those types of 'miracles'; quickly you can meet someone, without those factors. Maybe you don't have the same availability; as if you meet that person personally...I don't know.

In terms of online services, Daniel (31, journalist) underlines:

Another positive element is to be able to shop online, it's warmer at home, and it's cheaper that way.

Considering the negative aspects of Internet usage in their lives, two of the heavy Internet users say it has no negative aspects, as they are not enslaved by it, while five of the interviewees point for loss of time, and two of those five also add a feeling of email overload.

In terms of loss of time, for instance, Cassandra (26, artist) states:

I lose too much time online and on Facebook. It seems we live in two dimensions, more in the virtual than in the real one. And sometimes, it's hard to stop. I, for example, was addicted to Farmville and I was living there for 70% of my time. I decided to stop playing because I was wasting a lot of time and no one was paying me to dig (laugh). I still like it, but I try to avoid it. Now, I dream of having a real farm (laugh).

But this feeling of loss of time or wasted time is not only visible for the interviewees that use the Internet for entertainment or personal interaction, but also for those who use it for professional activities, as Clara (60 years old, pediatrician) says:

The first one [negative aspect] is the easiness in which we send an email, in my work, I get 100 to 120 emails a day, some with a lot of responsibility (...).

Similarly, Francisca (31, lecturer) adds:

Negative is the time I lose. (...) because we, wanting or not, a lot of times try to focus and concentrate, but between that feeling of responsibility or whatever it is, we're always systematically checking if we have a new email, with something important (...) we answer, and then there's something else that wasn't that important but that makes us lose some hours at the end of the month.

More than an email overload, there is also a sense of a constant checking of emails by the interviewees, which can be a sign of a sort of addiction or dependence (this is of course, speculative, only research can prove this idea), a habit (habitual actions that are already interiorized, and that are related to what Bourdieu calls "habitus"), or even a sign of a specific social context or norm, because as Clara (60 years old, pediatrician) explains:

But a lot of times people send another email saying they sent me an extremely important email previously and I didn't answer. This is awful, because sometimes we get lost in the quantity of emails we get (...)

Considering the negative elements of Internet usage in general, some of the interviewees indicated the following aspects:

- Addiction/Alienation (if the Internet usage is not a balanced one) – Daniel (31, journalist) explains: "Like everything, the [negative aspect is] a abuse, a misuse. In the case of social networks, one transports life, while I try to live the real life and the closer and important relationships, I don't transport that to the virtual life. I see people around me that do otherwise. Maybe they prefer to stay at home to talk to friends...worse, as it happens in my work, people that waste a lot of time on social networks, instead of working. There are people that just can't control themselves."

Guinaldo also emphasizes:

Negatives, as I normally say, if I'm on a diet with a lot of healthy things, such as boiled fish, boiled veggies, seasoned with extra-virgin olive oil, it's an exceptional diet, but if I eat three codfish filets with a kilo of broccolis and with half of a liter of olive oil,

of course I'll get sick. And these are all very good (...) With the Internet, it is the same (...) if I'm all day glued to the computer obviously I would get schizophrenic, I would create a side dimension (...) So it's like everything in life, the excesses are always bad. If we know how to create a balance point, perfect.

- Informality – Clara (60, pediatrician) says: “the “informality”, an email is not the same as a letter (...) And there is a difference between exchanging an email with a friend or with a professional contact. And even me, sometimes, without wanting it, I send a very colloquial email and in these situations, between professionals, where there are hierarchies, the formality, is sometimes, important.”

Trying to understand if this suggested a need to reinforce power structures and formal hierarchies or if this was related to a cultural aspect of the Portuguese society or even a personal choice, I asked the interviewee if this was a cultural element, giving the example of the informality of the Nordic countries and their ranking positions in terms of productivity and quality of life. Clara clarifies her position, saying that “What I mean is the way people put things (...) for example I request one of my collaborators to get an official opinion, he/she sends it to an expert, then the official opinion comes back and my collaborators send it to me, without a proper analysis, that is his/her job. The emails facilitate this. If it was an official letter he/she would have to say something about the opinion, if agrees, if disagrees, etc. I have to send it back and ask for the analysis. And sometimes the emails are so colloquial and informal, that we don't even realize if there's anything very important (...)”

- Superficiality of interaction – Clara (60, pediatrician) adds: “(...) the superficiality of dialogues, that I see, for instance, on Facebook...”
- Decrease of physical interaction – Francisca (31 years, lecturer) explains: “maybe it's the decrease of personal contact, because as we do a lot through the Internet, people find themselves occupied with the Internet and have less time, less availability, and less need to be with others, of doing things in public spaces and of contributing in any way to society. Because they end up being in their own nests.”

I then asked Francisca what was the difference between the offline and the online interaction, since the interview was being done online, and she could see me and hear me. Francisca answered: “Right, that's a good question. It's true, but maybe we are not sharing a hug, we are not sharing a movie or a concert. We don't share those types of moments. I think there's some complicities that are created in presence, that are harder to happen in the digital contact.”

- Lack of privacy/Frauds/Spam – João Nuno (67, former IT technician) says that: “Systematic search to interfere with our live, with suggestions, I don't know, even provocations. If a person is not strong enough, morally strong, it's very complicated. And so you hear, from pedophilia to other things (...)”

Therefore, according to the interviewees' perception, the main general negative aspects of the Internet are: a misuse of the Internet, which is described as an

abusive use or a major preference for an online interaction; a certain informality at the work place that conceals what is important and leads to laxity or leniency; some superficiality of interaction; time displacement, which means the replacement of offline interaction with online activities; and lack of privacy, frauds and spam.

b. Moderate Internet users

The moderate Internet users also report the communication features of the Internet as a main positive element. Other central positive elements are the facility of information search and the existence of online services. For instance, Maria (67, former jurist) states:

It is very positive because of the openness that it brings to people, because people are not isolated, they don't get lonely, because they always have that [the Internet] possibility...I don't use it for that, but there are people that even meet online, I have one friend and she got two big friendships through the Internet and then they met, a man and a lady, and now they left the Internet and interact face-to-face. I think it has a lot of advantages in every aspect, in the daily life aspect, in the professional aspect, in the research aspect, of new knowledge or needs (...)

Maria's description underlines what research has been showing about the passage from online ties to offline ties (Cf. Xie, 2008).

Considering the negative aspects of Internet usage in their lives, only one of the three moderate Internet users indicates experiencing loss of time, excess of information, and even some stress. Pedro Lopes (45, flight attendant) says:

Sometimes we create some stress, because we have a slow computer and sometimes that enervates you. Or we even get anxious, when we have too much information.

Considering the negative aspects of Internet usage in general, the interviewees talk about an excess of Internet usage (Pedro Lopes, 45, flight attendant), viruses (Marina, 39, assistant in a day care center), and frauds (Paulo, 75, former bank clerk). In this last case, Paulo clarifies:

Negatives, there are always negative aspects, but what you need is to know how to use the Internet. Frauds, there are a lot of frauds (...) I mean is not that the Internet caused it, but it facilitated it.

Two of the interviewees (Marina and Maria) also talk about the dangers for children and teenagers, namely of contacting strangers. For instance, Maria (67, former jurist) says:

(...) there is one thing that worries me, those things “you won, click here”, if people believe in it, it can bring them a lot of inconvenience, but the biggest danger is for the youngsters, of being captivated by bad people (...) It can also happen in the street, but it is easier through the Internet (...) Small children do not walk alone in the street, but when they're online they are in the safe home environment, and have access that a lot of the time is not supervised.

When I asked Maria about how could we control that “danger”, she replied that maybe through filters and education. But she adds:

This is by phases, there was a time where my worst concern was drugs [that would affect her offspring], it was a real terror, now it is the Internet, [I mean] the pedophilia, and those things. The world evolves; it has good things, bad things, and really bad things.

So, there is a substantial moral panic⁴ concerning Internet usage by children and teenagers for at least two of the moderate Internet users. However, as Maria states during her interview: “[The Internet] is like everything, like a coin, it has two faces”.

c. Non-Internet users

Although the three non-Internet users report not using the Internet (or ever using a computer) I also asked them about their general perception of Internet usage. Two of the interviewees seem to not know what Internet is, or at least they are not sure about how to explain it. For example, Irene (85, former public servant) says “I know more or less, I don't know...No, I'm not sure”, while Fernando Jorge (83, former construction worker) says “Truly, I'm not sure what it is...I know, that they [cable company] want me to pay x and then I have a connection...”

However, despite not being able to grasp or to describe what Internet is, Fernando Jorge (83, former construction worker) tells a comic story of Internet usage by his son in law:

For a month and a few days he [his son in law] is with that retirement [sick leave]. He doesn't leave his home (...). He has a neck brace, and says he has a pain and can't move his neck. And so he's all day long at the computer (laugh)...No, but he's crazy. I mean, Brazilians and everything, they send him panties! (laugh) Once, he didn't want his wife to approach him while he was talking to them [women] online. But his wife decided to go there without him noticing, cause my daughter is not stupid! and suddenly he gets up and says “It's a miracle, a miracle”...The Brazilian girl [he was talking to online] thought his wife was sick, bedridden, and that she couldn't move (...) so he's more than crazy, don't you think?

The remaining interviewee, Sara (74, former housewife), although reporting that does not use the Internet, says:

⁴ ‘Moral panic’ is a “condition, episode, person or group of persons [that] emerges to become defined as a threat to societal values and interests” (Cohen, 1972:9)

No, I never used it. But I see my granddaughter that is in Prague, through the Internet. The sister of that granddaughter is living with me in Lisbon and as she has those things, Internet and everything, she sets everything and I see and talk to her sister online. I talk to her almost every week. In the beginning it was a bit confusing, I couldn't believe in it, but she would go close to the computer and say "Hi, grannie" and then I knew that she was seeing me. I also see her. The other [granddaughter] that is in Milan doesn't have that [the Internet], it's only through the telephone (...) I have a nephew that is turning 9 and the other day he even showed me Milan, where my granddaughter is (...) And so he showed me the Milan cathedral and my granddaughter had told me already that it was beautiful.

So, Sara is using the Internet with the help of third users⁵. On a previous study of the Portuguese elderly and their ICT usage and perception, me and my colleague, also found these types of non-Internet users that use the Internet indirectly (Cf. Neves & Amaro, 2012). We named these *faux users*. A faux user is a person that considers himself or herself a non-user but intermittently uses a technology with the assistance of others (Neves & Amaro, 2012).

When I asked the interviewees if they would like to learn how to use computers and the Internet, two of the interviewees answered negatively, Irene (85, former public servant) said she had no head for it now, and Fernando Jorge (83, former construction worker) suggested that he is not interested. But, Sara (74, former housewife) says:

I don't know how to work with that...but maybe I could learn (...) some time ago I said to my husband that if we had money we would buy one [a computer]. He asked me for what? And I said for...sometimes I go to a friend's house and she has a computer, and shows me some places and it is funny. [My nephew] showed me Milan, where my granddaughter is (...) And so he showed me the Milan cathedral and my granddaughter has told me already that it was beautiful. And so I said to my husband, if we had a computer at least we could see other beautiful things. We never leave here and so we could see beautiful things. And I thought it was really funny to hear the boy say to me 'Grandmother, do you want to see Milan?' And really from the letters I could see there he was really showing me Milan (...)

Considering advantages of Internet usage, Irene (85, former public servant) says that it is positive for those who like it; Fernando Jorge (83, former construction worker) says it allows people to solve a lot of things in a quick and faultless manner; and Sara (74, former housewife) says it is useful and has "beautiful things".

⁵ The World Internet Project (WIP) uses the term "proxy-users" to refer to people who look for information online on behalf of others (WIP, 2010, pg. 10-11, 23, 28; Dutton & Helsper, 2007, pg. 4, 48, 51, 52), but I found other WIP publications that seem to use the concept to refer to the non-users who get help from others (WIP Chile, 2004; OberCom, 2009). In the first case, WIP Poland reports "The most popular proxy-user is a child -2/3 of those non-users who have Internet access at home, ask this child for help or the child tells them about Internet on their own initiative" (WIP, 2010:28). However, I could not find an "official" definition of proxy-user.

Nonetheless, two of the non-users also emphasize the negative aspects of Internet usage, from physical harms, and crimes, such as kidnappings, to replacement or overthrow of people by machines (in a mild Luddite vision). So, on one hand, Sara (74, former housewife) states during the interview:

I've been hearing that it affects your vision (...) There are a lot of things that we hear on the TV and kids that are online and then are kidnapped and things like that...through people they talk to.

On the other hand, Fernando Jorge (83, former construction worker) explains:

It is like with machines, the more there are, more lack of job there will be, because a machine makes the same work of a few men (...) If 20 men were needed, we would have 20 men, not now, maybe four or five make the work of a brigade, so for me, it has advantages and doesn't have (...)

It seems that these fears (or moral panics) are based on what these interviewees get from the media.

8.2.9 Summary & discussion

In this section, I started by summarizing the main general qualitative findings, and then discussed some of its implications and significance for this research. Although the great value of qualitative research lies on the individual examples and stories, it also allows for systematic analysis. Therefore, to sum up:

- Both heavy and moderate Internet users primarily interact with their close ties face-to-face,
- Non-Internet users also mainly interact with their close ties face-to-face,
- For the three types of Internet users, the contact with their close ties is also done by phone and/or mobile phone,
- The Internet is also used to contact close ties for moderate and heavy Internet users,
- The moderate and the heavy Internet users are well aware of the social affordances of the Internet, and emphasize the cheap and easy communication feature of the Internet,

- The majority of the moderate and the heavy Internet users point to a positive effect of the Internet on their interaction with close ties and weak ties (more visible for the heavy Internet users),
- Only two of the eleven Internet users reported meeting people online,
- The majority of the online contacts of the respondents seem to also be offline contacts,
- Time lost online and email overload were the most pointed negative aspects of the Internet impact on my respondents' lives,
- Not all the interviewees had an example of mobilization of their social capital, but all had an example of reciprocity or of mobilizing themselves for others,
- Although mobilization of instrumental resources was mentioned by some of the interviewees, expressive resources were the most referenced ones.

The qualitative data allowed me to examine in-depth different themes, from social capital to the general perception of the Internet. These themes are discussed next:

Social capital

The interviews provided examples of social capital, namely examples of the mobilization of expressive and instrumental resources. These results illustrated that: first, expressive resources are more abundant or at least more accessed than instrumental ones, second, these resources are mainly provided by close ties. These results validate one of Lin's postulates: the "strength-of-strong ties" (Lin, 2001). This proposition suggests that the sharing of resources in strong relationships will tend to happen more frequently.

Besides these examples of social capital, the interviews also contributed with insights regarding reciprocity. Although I did not measure reciprocity in the survey, I wanted to explore it in the interviews. My goal was to understand if people gave back to their ties, if social capital was mobilized for others. I tried to explore this reciprocity, through questioning the respondents about a situation or event, last year, where family, friends, or acquaintances needed their help or assistance. Once again, I delimited the time frame to a year, because it is easier for people to recall a recent phase of their lives.

Of the eleven Internet users, they all remembered a situation/event, where they helped family members, friends, or acquaintances. Of the three non-Internet users, two remembered a situation/event, where they helped family members, friends, or

acquaintances in the last year (the interviewee that did not, explained that for health reasons she was very limited but she gave an example of someone she helped before). Interesting enough, while not all the interviewees remembered a situation where they had mobilized their social capital (6 out of 14), they all could remember of a situation where they had helped their ties. The examples ranged from emotional help, practical help, and specialized help (medical and legal advice), to financial help, given to family members and close friends but also to colleagues, and acquaintances. Despite some examples of instrumental resources (one of the interviewees was helping a friend to find a job; other was helping a friend and colleague with legal advice), they are mainly examples of expressive resources (emotional help, etc.) given to close ties. These results illustrate again that expressive resources are more abundant or at least more accessed than instrumental ones.

Internet: Perceptions of the impact of the Internet

Most of the interviewees had a very positive sense of the social affordances of the Internet, and of the positive impact on their lives: from facilitating a more frequent social interaction to the convenience of the medium. Some of the interviewees mentioned that the Internet allows for multi-interaction, multi-tasking, and facilitates some spontaneity in the social interaction, since a friend might come up online and an interaction might follow with no scheduled intention.

But the interviewees also mentioned negative aspects of Internet usage in their lives, such as loss of time and an overwhelming amount of daily emails (to what one interviewee adds a constant checking of emails, which is perceived as a mild addiction). Nevertheless, the need for a balanced use of the Internet is present in all the interviewees, even on the non-Internet users.

Besides these tensions of time and email overload (and dependence or habit), during the interviews I could also grasp other tensions, such as impression management and the Internet serendipity. In the first case, one of the interviewees, Cassandra, shows the tension of managing different social networks and her self-image:

No, it is not [easy to balance out the personal and the professional relationships online]. For example, sometimes, I want to write [on Facebook] stupid things, but then I think, it would come up in someone's wall...or because I'm friends with a Professor or something like that...I have that concern, but it's like going out in your pajamas. I have a lot of problems with orthographic mistakes and I have the preoccupation of not presenting myself as I really am (laugh).

For example, on Facebook, friends, colleagues, and family members are all combined in as "friends", which makes that personal management harder. The social networking site Google+ introduced "circles", which requires users to separate their different social networks. The jury is still out to see if network management tools will allow people to manage their different social networks in an effective way.

In the second case, interviewees consider the serendipity that the Internet affords through hyperlinks as a positive aspect. However, some also perceive it as a negative aspect, because of the time that is perceived to be lost online in the process of navigating it. As Maria (67, former jurist) says:

Once in a while I search about this or that theme that interests me and that then gets longer, right? It's like a snowball, one thinks it's going to be 20 or half an hour and ends up staying [online] for three or four hours because you check the links...

This shows how some features of the Internet can be perceived contrarily by different people or in different contexts, which also points for the duality of what can be defined as good and bad.

Considering the main general negative aspects of the Internet, the Internet users advanced:

- Misuse of the Internet, which is described as an abusive use or a major preference for an online interaction;
- informality at the work place that conceals what is important and leads to laxity or leniency;
- some superficiality of interaction;
- time displacement, which means the replacement of offline interaction or life with online activities;
- lack of privacy;
- frauds, viruses and spam;
- danger for youngsters (pedophilia, etc.);
- stress.

To this list, the non-users added physical harm (affects vision), pedophilia, and the replacement of men by the machine.

The misuse of the Internet and the question of pedophilia (which can be considered a "moral panic" fuelled in many cases by the media, as many of the interviewees noted) were the main reasons. Interestingly enough, a lot of these aspects and fears are not associated with the interviewees' direct experience, but are placed in their general overview of this reality. For instance, the interviewee that points for time displacement is also the one that says that the Internet allowed her to be more frequently in touch with her ties, which reinforced her social relationships. This might be an example of how different contexts define the normative value of an instrument or of an activity; or how perceptions differ from the concrete and the abstract level.

Social capital and Internet usage

These interviews allowed me to observe that the Internet has not displaced face-to-face contact, as the time displacement hypothesis suggested (Nie, Hillygus, & Erbring, 2002). The same conclusion can be reached with my quantitative results. Respondents emphasized the importance and the occurrence of frequent personal encounters with relatives and friends. The majority of the interviewees also mentioned the use of other ICT, such as the mobile phone. It seems that the more people interact with one medium, the more other media are used for the same purpose (Cf. media complexity, Haythornthwaite, 2005). In addition, some of the interviewees underline that they now use more the Internet than the mobile phone for social interaction, because of the cheap and quicker features of the Internet. As Wang & Wellman (2010:1150) note: “computer-communication has become cheaper, quicker, and much more efficient than visiting, telephoning, or writing letters the old fashioned pen-to-paper way.”

The Internet facilitated a more regular contact with close and weak ties: the Internet was embedded in the majority of the interviewees’ daily lives, since they use the Internet frequently during the day for short or long social interaction with their networks. It also allowed interviewees to contact family members, friends, and acquaintances living close or far; as well as to re-connect with old ties. This reinforces the “glocalization effect” of the Internet, as it connects distant, but also ties living in the same city or close geographic location (Cf. Boase et al., 2006). It also seems to support the latent tie theory: the addition of a new media allows individuals to access alters that they would not otherwise access (Haythornthwaite, 2005).

Additionally, most of the Internet users highlighted that the Internet had a positive impact on their social interaction with close and weak ties. A minority reported having met people online, although meeting new people online could contribute to the interviewees’ social capital, in terms of quantity and diversity of social ties.

As mentioned before, the time lost online and email overload were the most pointed negative aspects of the Internet impact on my respondents’ lives. But while this time lost online could suggest less time for family and friends, according to the respondents’ perception the time lost online was more in terms of working time, than of social time.

In the next section, I show how the combination of the qualitative and quantitative research contributes to a better understanding of the research subject.

8.3 Conclusion: mixing data

This combination of quantitative and qualitative data was extremely useful to explore the relationship between social capital and Internet usage. On one hand, the quantitative phase gave me important general data, which allowed me to test my hypotheses and estimate relationships with inferential statistical analysis.

On the other hand, the qualitative data helped to clarify some inconsistencies found in the quantitative analysis, mostly related to the differences between the self-images people present and what they actually do, and to inevitable bias during the survey data collection. On the other hand, it contributed to a contextualization and validation of the quantitative results, and to new findings, which were already explored in the previous section.

From the quantitative data analysis, we could see that social capital is associated with an interaction term between age and Internet usage. This makes sense if we consider that Internet usage is strongly associated with age and that they are both strongly associated with the dimensions of social capital: Internet usage is a significant predictor of the bonding and bridging dimensions (positive relationship), whereas age is a significant predictor of the three dimensions of social capital: bonding, bridging, and resources (negative relationship).

The likelihood of having a high level of bonding and bridging social capital increases with Internet usage, but decreases with age. Also for resources, the likelihood of having resources decreases with age. The Internet might be, therefore, allowing daily users to maintain and reinforce their ties and their social capital, while the age effect might be connected to specific life courses', as relationships and social resources change throughout a person's life-cycle, as explored previously. For example, older people tend to have less close and weak ties to drawn resources from, due to loss of family members, close friends, and acquaintances, and due to particular life changes, such as widowhood, retirement, etc. (Cf. Blau, 1961; Tilburg, 1998; Stevens & Tilburg, 2011).

But for social capital, Internet usage and age are only strong predictors when together. Why this interaction term is significant for social capital but not for any of the social capital dimensions (bonding and resources, as bridging could only be analyzed through a LCM estimation and the interaction term could not be tested) might be explained by the analysis of social capital as a whole, as a combination of the three dimensions, where the impact of age and Internet usage are more strongly associated. It indicates that the likelihood of having a high social capital increases or decreases differently per each unit of age according to the type of Internet users: young heavy Internet users are more likely to have a high level of social capital than

older heavy Internet users, and so on. But heavy Internet users are more likely to have a high level of social capital than non-Internet users.

The quantitative results support my main hypothesis that there is a positive relationship between social capital and Internet usage. It also supports my sub-hypotheses of the positive relationship between bonding social capital, bridging social capital, and Internet usage, but not my sub-hypothesis of the positive relationship between Internet usage and resources. It seems that Internet usage has no impact on the availability of specific resources.

The qualitative data also contributes to validate the positive relationship between social capital and Internet usage, since the majority of interviewees report a positive impact of the Internet on the interaction with close and weak ties, and on the preservation and even strengthening of their social relationships. Additionally, the interviewees point for the role of the Internet on re-connecting with old ties.

The qualitative data also helped to understand some inconsistencies or unexpected variations found in the quantitative data analysis:

1. The frequency of online contact with close relatives was significantly low

In terms of frequency of online contact with close relatives, 59% of the Internet users report doing it rarely or never, while 15% report doing it daily. Comparatively, 28% of the Internet users report rarely or never contacting their close friends online, while 39% reports doing it daily, 28% at least once a week, and 5.2% at least once a month. It seems, therefore, that the frequency of online contact with close relatives is significantly low and still that a third of the Internet users were not or were rarely interacting with their close friends online. These results contrast, in a way, with the strong association between Internet usage and bonding social capital. But during the interviews, it was clear that the Internet was used mostly for both ties (only two out of eleven interviewees say they use it only for interaction with close friends).

Additionally, one of the interviewees (Clara, a heavy Internet user) said at first not using it for family interaction, but while describing her day she gave several examples of using the Internet to contact her relatives (from conversations to short interactions, such as to ask a tie to buy something or to coordinate schedules). The same happened for one moderate interviewee, Pedro Lopes, although not with the same frequency. It might be that people's perception of what they do and what they actually do significantly changes or that their perception of what interaction is is different. Of course this does not

explain *per se* the low online interaction with close relatives, other possible explanations might be related to not having a lot of family members online or not feeling the need to communicate online with them so often, as the majority interact frequently face-to-face with close family members (more than they interact with close friends).

2. Non-users have more probability of having a high level of bonding, bridging, and social capital than light users

The quantitative data showed that for bonding, bridging, and social capital light users were less likely to have high levels of social capital than the non-Internet users. These results were surprising, because moderate and heavy Internet users are more likely to have higher levels of bonding, bridging, and social capital than non-Internet users. And so, I was expecting a similar pattern for light users. Some of the possible explanations for this variation were already explored previously, from specific personality traits (the light Internet users of my sample might be less extroverted or sociable than the non-users and so less able to reach and maintain ties or resources) to types of Internet usage (more search-based than interaction-based), and to even a misrepresentation of the light users in my sample (3.1%), which might be skewing the results. But with the interviews a new possible explanation emerged: the *faux-users*⁶.

While interviewing Sara, a non-user, I realized that like it had happened before in my study of the elderly and ICT in Lisbon (Cf. Neves & Amaro, 2012), the interviewee does not use directly the Internet but she takes advantage of it, using Skype, for instance, to contact her granddaughter abroad. A relative sets everything up for her, and then she talks and sees her granddaughter that is living in the Czech Republic. So, it might also be the case that some of the non-Internet users are actually faux-users, using the Internet for social related activities. This could be a complementary factor to help explain the visible difference between light-users and non-users, meaning the higher chances of non-users having social capital when comparing to light users.

The qualitative data also contextualized and validated some of the quantitative results:

1. Users prefer face-to-face interaction, but Internet usage is also used as a medium of social interaction:

⁶ A *faux-user* is a person that considers himself or herself a non-user but intermittently uses a technology with assistance of others (Neves & Amaro, 2012).

According to the quantitative data, the most selected online activity was to send/receive emails (29%), followed by to browse websites (28%), to use instant messaging services or similar services (16%) and to use social networking sites (11%). Emails are not primarily used for work-related communication, as Internet users report sending emails mainly to friends (53%), followed by coworkers/colleagues/clients (27%), and family members (7%). Similarly, instant messaging services or similar services and social networking sites are mainly used to contact friends.

From the interviews, and even though the interviewees emphasized the frequency and the preference for face-to-face interaction, the online interaction is increasingly part of their quotidian: from conversations to short messages, such as a quick hi to a friend, or to coordinate schedules with family members. The Internet is increasingly embedded in their lives, being the email the most used service.

As Guinaldo (63 years old, lawyer) humorously puts it:

I've started to have a hard time interacting with people that don't know how to use a computer (laugh).

Besides the frequency of Internet usage, there were some qualitative differences between the heavy and the moderate users: Heavy Internet users seem to be more active online, in terms of social media usage, and seem to be more enthusiastic about the positive impact of the Internet on the interaction with weak ties. Furthermore, none of the moderate users reported meeting a new person online, although only two of the heavy users reported doing so.

2. Low number of people met online

The quantitative data shows that only 44% of the Internet users of my survey sample indicated having met someone online. These results were similar for the interviewees: only two out of eleven Internet users reported meeting people online. But even these two interviewees (which were heavy Internet users) only reported meeting one online friend. When I asked the remaining interviewees about their Facebook friends (for those who used this social networking site, which were eight) and if they knew all their Facebook contacts offline, the answer was positive. So, it seems that, the great majority of online friends or contacts of the respondents were also offline contacts. These findings are consistent with research in the field, namely on online ties: only a small percentage of Internet users actually meet that many new people

online (Katz & Rice, 2003).

Nonetheless, I felt throughout the interviewing process and through the analysis of the transcripts that there was a clear sense of inappropriateness of meeting people online or at least of acknowledging it. The respondents would answer negatively, in a very promptly manner, with noticeable nonlinguistic signs of disapproval. The negative idea of “strangers”, of being bad or wrong to talk to strangers, seemed to be extended to the online world. During the interviews, the interviewees would make constant reference to the dangers of the Internet, in terms of strangers, pedophiles, etc. This might be, of course, a Portuguese cultural idiosyncrasy that would have to be properly explored.

3. The “Strength-of-strong tie” & “strength-of-weak tie” propositions (Lin, 2001)

The mixed results of this study and the measurement of the available and the mobilized social capital confirms, at least, two of Lin’s (2001) propositions of social capital: the “strength-of-strong ties” and the “strength-of-weak ties”. Considering the first proposition, it means that, firstly, the stronger the tie, the more likely the social capital accessed will positively affect the success of an expressive action; secondly, the sharing of resources in strong relationships will tend to happen more frequently.

Considering the second proposition, it means that the weaker the tie, the more likely a person will have access to better social capital for instrumental action. To have access to different information, an individual might need to go out of his/her social circle, connecting with ties that belong to other social circles. These weak ties permit resource heterogeneity and are normally associated with bridging social capital.

Starting with the quantitative results, in the measurement of resources, I could conclude that the family is the primary source for all the resources, with the exception of “finding a job”. To get help to find a job (which is considered an instrumental resource, because it leads to instrumental action) people rely more on friends (42.2%) than family (27.3%). Friends might have access to different information and be more capable of bridging for this kind of resources. Acquaintances get a higher value than friends at getting help with any business at the municipal council/local government (23.5% vs 22.8%), even though family is still the highest one (34.3%). Once again, to access specific institutions people may have to rely on acquaintances, on their bridging social capital, mainly through weak ties.

So, on one hand, strong close ties (in this case, kin), dominate the availability of resources related to expressive actions (or expressive resources), such as emotional support, practical daily support, etc. This is an example of the “strength-of-strong-tie” proposition. On the other hand, weaker ties are associated with resources related to instrumental actions (or instrumental resources), such as finding a job or getting access to official institutions. This is an example of the “strength-of-weak-tie” proposition, which posits that instrumental resources are more likely to be reached through not so close contacts, people that move in different social networks.

But to complement the perceived availability of social capital, which was measured in the survey, in the interviews I tried to explore the mobilization of social capital. I questioned the respondents about any situation or event that happened in the last year where they had had the need of turning to family, friends, or acquaintances for help. I delimited the time frame to a year, because it is easier for people to recall a recent phase of their lives. Of the 11 Internet users, six remembered a situation/event, where they needed the help of family, friends, or acquaintances. Of the three non-Internet users, two remembered a situation/event, where they needed the help of family, friends, or acquaintances. Of these types of mobilized resources, six are related to emotional support, one is related to a direct financial support, and the other is related to getting access to a loan from a bank.

The emotional support, indicated by the interviewees, was given by close ties, mainly kin; the direct financial support was given by the mother of the interviewee; and the access to an institutional loan was facilitated by a friend of the mother of the interviewee. Once again, these results support Lin’s two propositions, showing that expressive resources are more available and/or mobilized than instrumental ones.

In the case of the instrumental resources, the institutional loan was accessed through a weaker tie. But it was a strong tie of the interviewee (in this case, the mother) that reached out this weak tie, which also shows that close ties can facilitate bridging social capital. The same for the direct financial help given to one of the interviewees: this help allowed the individual to pursue an instrumental action, i.e. to gain resources. And while instrumental actions essentially provide social interactions that support vertical relationships among individuals with different resources, interests, and lifestyles (Lin, 2001), they can also be facilitated by horizontal relationships (close ties).

It is important to note that that I’m relying on people’s memory (for the quantitative and qualitative data collection), and so it might be hard for people

to remember their stock of social capital or to allocate a specific situation where they needed social resources. As Van der Gaag & Snijders (2005:27) put it: “in everyday life individuals may show more resourcefulness to locate the desired help when the need arises”.

In this sense, Lin (2001:43-44, footnote) argues that these reports are likely to be a “conservative estimate” of people’s social capital: “Individual actor’s own knowledge of resources embedded in their ties may be only a subset of the actual types and amounts of their social capital. This is so for two reasons: they are unaware of all their alters’ (direct ties’) resources and/or of the ties and resources in their alters’ networks. Thus, individual actors’ social capital can be divided into two parts: (a) the portion that they are aware of and (b) the remaining unknown portion. Actors’ self-reporting inevitably yields an incomplete and conservative estimate of their social capital’s potential repertoire. Self-reporting may yield different estimates than sociometric methods. There is no true estimate because that if social capital is not within individual actors’ cognitive maps, it may be inaccessible and not useful to them.”

Some studies report that weak ties tend to be forgotten more easily, because of the infrequency of the social interaction with those ties, which indicates an underestimation of instrumental resources and bridging social capital. Other studies show that partner relationships, useful mainly for expressive resources and bonding social capital, tend also to be neglected in prospective social capital questions (Van der Gaag & Snijders, 2005). This study is, in any sense, a rough approximation to my respondents’ perception of available and mobilized social capital.

4. Positive relationship between Internet usage and social capital

More importantly to the scope of this research, the positive statistical relationship between Internet usage and social capital given by the quantitative data was also reinforced by the qualitative data. The majority of the interviewees indicate that they all communicate more now with their close ties (close family members and close friends), which helps to maintain their relationships and their bonding social capital. Of the 11 Internet users, only two said that the Internet had no impact on their interaction with close ties, while nine said it had a positive impact.

Most of the interviewees were aware of the social affordances of the Internet, highlighting that it facilitates social interaction. The same was true for the interaction with weak ties: three interviewees (one heavy and two moderate

users) reported that the Internet had no impact on their interaction with weak ties, while eight said it had a positive impact on their bridging social capital. In this case, it was more visible the difference between the heavy and the moderate users, as the moderate users were less enthusiastic about that impact: two of the four moderate users said the Internet had no impact on their interaction with weak ties, whereas the other two said it was positive but they did not seem so certain about it.

According to some of the heavy Internet users, the impact of the Internet on weak ties was not only positive, as affected them in two aspects: first, it allowed them to maintain their not so close relationships and to contact their weak ties more frequently; second, it allowed some of them to find or to reunite with old acquaintances that they had lost track of during the years. It had, therefore, a double positive effect.

9 Conclusion

“For to all those who have, more will be given, and they will have an abundance;
but from those who have nothing, even what they have will be taken away”
Matthew 25:29, New Revised Standard Version (NRSV)

9.1 Social capital, Internet usage, and the “Matthew effect”

In this thesis I investigated the relationship between Internet usage and social capital. The probability of having a high level of social capital increases with Internet usage, but decreases with age. This is not only true for the variable social capital, but also for two of the three selected dimensions of social capital: bonding and bridging. For resources, the third dimension of social capital included in this study, I could not find any significant statistical association with Internet usage. However, the age effect is visible for the three dimensions, for social capital, and for any type of Internet user: for heavy users, moderate users, light users, and non-users.

A higher Internet usage seems to be related to a higher level of interaction with close and weak ties, which allows users to maintain and reinforce their relationships and social capital (i.e. to have access to expressive and instrumental resources). The Internet might be even serving as a tool to directly mobilize that social capital. In addition, the Internet promotes the so-called “networked individualism” by allowing people to seek out a wide range of suitable people and resources (Boase et al., 2006; Wellman, 2001).

In the case of the bonding dimension, the Internet is used to maintain frequent interaction with close ties, ties that are mainly a source of expressive but also of instrumental resources. The qualitative data of this study revealed how close ties can too provide instrumental resources or bridging social capital. This online interaction is not, however, replacing personal encounters. The frequency of face-to-face contact was the highest form of interaction reported for close ties. These findings are consistent in the quantitative and qualitative data of this research.

In the case of the bridging dimension, the social affordances of the Internet seem to be allowing users to contact, re-connect, or to be in touch more often with their weak ties. And so, for instance, the Internet might be providing users with more information exchange, allowing them to access more instrumental resources. More than one interviewee emphasized the “re-uniting” aspect facilitated by the Internet: through the medium they were able to find old friends and more distant relatives.

These findings seem to support the latent tie theory: adding a new media will allow individuals to access ties that they would not otherwise have access to (Haythornthwaite, 2005). But only as long as these ties are old acquaintances and relatives with which contact was lost.

While the Internet is potentially instrumental in producing new social capital, allowing Internet users to meet new people online (specially now with the proliferation of social networking sites and instant messaging), it was not something my respondents commonly did. To the question if they ever met anyone online, the majority of the interviewees would answer negatively with visible nonlinguistic signs or expressions of disapproval. This might be, of course, an idiosyncratic characteristic of the Portuguese people, since there are some anecdotal evidences of a traditional “social norm” of fear or moral panic towards strangers. The media seem to reinforce this “fear”, according to the interviewees’ account. And while the Internet has the social affordances to change that norm, because it provides non-personal interaction, and even anonymity, it seems that the offline “fear” is transversal to the online sphere.

Age, which is the other main significant predictor of social capital in this study, has a negative relationship with social capital and with the three dimensions of social capital: they all decrease with age. Possible explanations for this decrease were explored in the empirical chapters, but focused particularly on characteristics of specific life courses, since relationships change throughout a person’s life-cycle stages and span. For example, older people would have less close ties on which to draw resources, due to loss of family members or close friends, or due to life changes, such as widowhood, and retirement. Simultaneously, the number of friends and the extent of friendship participation tend to decline with age (Blau, 1961; Rawlins, 1992; Tilburg, 1998; Stevens & Tilburg, 2011). Therefore, my research validates the notion that these circumstances affect directly, and particularly, social capital and its dimensions.

While Internet usage and age were strong predictors of the bonding and bridging social capital dimensions, the interaction term between age and Internet usage was the strongest predictor of social capital (and not age and Internet usage separately). This points to an interesting connection between age and Internet usage. Social capital decreased with age, but differently for each type of Internet user. More importantly, it seems that the Internet is compensating for the age effect: those who are older and use the Internet are more likely to have a high level of social capital than those who are older but do not use it. Furthermore, heavy Internet users are more likely to have a higher level of social capital than non-users and light users; and heavy Internet users are more likely to have a higher level of bonding and bridging than non-users, light users, and moderate users.

Returning to the central question I posed at the beginning of this study, my research suggests that social capital and Internet usage are strongly and positively related. These results corroborate the research hypotheses, except in the case of the resources dimension: the more one uses the Internet, the more likely they are to have a higher level of bonding, bridging, and social capital.

The “Matthew effect”¹ (Merton, 1968) is an adequate concept to describe not only social capital but the relationship between social capital and Internet usage: advantage begets further advantage, and disadvantage begets further disadvantage. Heavy users have more probability than any other type of users to have high social capital, and heavy users are more likely to be younger and highly educated. Moreover, older people have less probability of having a high level of social capital, independently of the frequency of Internet usage, even though older heavy users are better off than older non-users.

The only exception to this Matthew effect seems to be the difference between non-Internet users and light users, since non-Internet users have better chances of having a high level of bonding, bridging, and social capital than light users. However, it might be that these light users face other structural disadvantages: I suggested some explanations from personality traits (the light users of my sample can be more introverted, or less opened, sociable, and agreeable than non-users) to specific social circumstances (such as an Internet newbie that is still learning how to use the medium and experiences a mild social anomie) and types of Internet usage (more oriented for individualistic activities than social ones).

But in the qualitative analysis, another explanation for this variation emerged - the *faux user*. That is, a person that considers himself or herself a non-user but intermittently uses a technology with the assistance of others (Neves & Amaro, 2012). For example, one of my interviewees depended on another family member to set up the computer for her so she could communicate with another family member in a different country. So, maybe some of the non-Internet users are actually faux users, using the Internet for social related activities, which would give them some advantage in terms of social capital, comparing to the light-users that have a different type of Internet usage.

¹ The “Matthew effect” was coined in 1968 by the sociologist Robert Merton, in an article about science and the processes of allocation of rewards to scientists for their contributions. Merton takes the expression from the biblical St. Mathew’s Gospel: “For unto everyone that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath” (as quoted in Merton, 1968:58). As Merton explains: “Put in less stately language, the Matthew effect consists in the accruing of greater increments of recognition for particular scientific contributions to scientists of considerable repute, and the withholding of such recognition from scientists who have not yet made their mark” (Merton, 1968:58). The expression is now broadly used to describe accumulated advantage, how the rich get richer, and the poor get poorer (Cf. Rigney, 2010).

Taken together, these findings confirm the growing body of literature that indicates the positive social effects of the Internet and disproves the time displacement theory. These findings also validate the social affordances perspective of the Internet, which illustrates how the Internet can affect social capital. Simultaneously, this study adds to the field's understanding of the relationship between social capital and Internet usage, in quantitative and qualitative terms.

9.2. Conceptual, methodological, and empirical contributions

This research has relevance to the theory of social capital and the field of Internet studies on three levels:

- **Conceptually:** The extensive review of the literature on social capital in a critical perspective, carried out in chapter 2 and 3, helped to clarify and to operationalize the concept of social capital. Based on that knowledge, I also proposed a multi-theory approach to frame social capital. This multi-theory approach combines elements of different theories, namely constructivist structuralism, neo capital theory, Lin's theory of social capital, bounded rationality, and second-generation collective action theories. The review carried out in chapter 4 adds to the understanding of the relationship between social capital and Internet usage. Finally, this research confirms that social capital can be a useful analytical tool to study the social effects of the Internet.
- **Methodologically:** although mixed methods have been applied to study social capital, the mixed-method approach is still a minority. This research demonstrated the benefits of conducting mixed research to study social capital. The quantitative part allowed me to gather data to test, infer, and generalize, whereas the qualitative part shed light on the contexts, meanings, and localized perceptions of the relationship between social capital and Internet usage. But the qualitative research also shed light on the general mobilization of social capital. The introduction of Latent Class Models (LCM) was an innovative statistical addition to the social capital field, since it proved to be extremely useful to create the social capital variables.
- **Empirically:** besides contributing with quantitative and qualitative data to analyze the relationship between Internet usage and social capital, this research also contributed with data to examine the mobilization of social capital, and the association between social trust, civic engagement, and social capital. Considering the mobilization of social capital, the findings suggested that bonding can facilitate bridging, and that people seem to mobilize (or to report the mobilization of) more expressive than instrumental resources.

Considering civic engagement and social trust, I did not find any association between civic engagement and social capital or social trust and social capital. These findings validate my definition and the option to not include these dimensions on my operationalization of social capital. I did find, however, an association between social trust and online bonding, and associational life and social capital. Civic engagement, as a broad variable that includes civic and political awareness and participation, was not associated with social capital. But when I tested for “associational life”, a variable that I created with a predominant emphasis on social participation (i.e. membership and volunteering), I found that it was positively related to social capital.

Sociologically speaking, it seems to me that membership and volunteering are different from voting or watching a political debate. Membership and volunteering imply social interaction, whereas voting or watching a political debate are mostly individual endeavors. So, it might be that there is a part of civic engagement that has a connection with social capital.

But if social trust and civic engagement were dimensions of social capital, the interconnection between them would have to be particularly strong. Of course, I cannot prove with certainty that they are not dimensions of social capital. What I can say is that in my study I only found a marginal relationship between them, which supports the literature that indicates that these concepts are independent (Cf. Lin, 2001; Lin & Erickson, 2008).

In general, these findings contributed to validate different theories or postulates: the strength of strong ties and the strength of weak ties postulates of Lin’s theory of social capital (2001); the social affordances perspective of the Internet, as described by Wellman et al. (2003) and by Hogan (2009); and the media multiplexity and the latent tie theory by Haythornthwaite (2005).

While the results suggest that the Internet is compensating for the age effect, Portugal has a significant age-based digital divide: for instance, in 2009, only 10% of the Portuguese population above 64 years of age used the Internet (INE, 2010). For the purposes of practical application, the results of this study could support the definition, development, and employment of public policies designed to improve digital literacy, and also functional digital literacy, taking into consideration skills and competencies to make critical and informed decisions when using the Internet.

9.3. Limitations, caveats, and further research

Firstly, these findings are limited by a cross sectional design. Only a longitudinal study would allow me to aspire to make causal inferences. Secondly, there are

limitations regarding the design, development, and analysis of this study. Every phase represented a new challenge.

There were considerable limitations with the instruments I used to capture data, mostly because of the need for adaptation, the time and space constraints, or because of the proxy feature of the social capital concept. For example, the bridging dimension could be improved by having a more clear quantification and image of my respondents' weak ties. Likewise, I had problems integrating the "online social capital", i.e. the social capital that can be derived from online ties, into the general social capital. This is not only related to the type of scales that I used, but also to the emergent difficulty of separating online and offline dimensions – these dimensions are progressively enmeshed, as the Internet becomes embedded in people's lives. Nevertheless, an improved measurement of this dimension and its integration in a general social capital would be of great interest to the field.

Thirdly, the city of Lisbon and the Portuguese society are not representative of the world, and Lisbon is not surely representative of Portugal. The findings of my research might be specific to the Portuguese and to the Lisbon context, due to particular socio-cultural idiosyncrasies. Nonetheless, Lisbon is a European capital, sharing some common socio-demographic indicators with other European countries (check, for instance, the EU social capital eurobarometer, 2005, presented on section 3.5).

Regardless, I hope this study opened new research questions and answered others.

The new research questions are related to a deeper understanding of the results of this research: Is the Internet, in fact, affecting social capital, or are other factors playing an important role, such as personality traits? And is the Internet affecting social capital or is social capital affecting Internet usage?

Considering the first question, I separated different levels of usage—non-users, light users, moderate users, and heavy users—what might also presuppose different types of people. I also controlled for an array of socio-demographic indicators, but I did not explore personality traits, for instance.

In terms of the second question, I believe that this is a reciprocal process: they both reinforce each other. Nonetheless, it would be interesting to control for other media, and to further explore the social affordances of the Internet and its social effects. A refined mixed methods study, specially a longitudinal one, could offer complementary and more robust insights into these linkages.

In addition, the data analysis pointed to three new themes that need to be explored

more thoroughly. The first one is the difference between non-Internet users and light users: light users have less probability of having a high level of bonding, bridging, and of social capital than non-users. I proposed some possible explanations for this difference, such as the faux users, but these are tentative explanations that need to be properly investigated.

The second one is a genderized social capital – surprisingly, Portuguese women have higher levels of bridging social capital and of resources than men. The explanation for this gender variance might be related to specific social networks by gender, and to the fact that women tend to have more ties than men.

The third one is that online social capital was not related to Internet usage, which was unexpected. Additionally, online social capital was not related to three types of Internet usage: emailing, using social networking sites, and instant messaging services. It might be that this type of social capital overcomes the medium itself.

A qualitative study could be conducted to explore these themes, providing a more in-depth understanding and contextualization of these findings. To fully capture the relationship between social capital and Internet usage, we have to account for people's perception and understandings.

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Appendices

Appendix A

Social capital and Internet usage survey



UNIVERSIDADE TÉCNICA DE LISBOA
INSTITUTO SUPERIOR DE CIÊNCIAS SOCIAIS E POLÍTICAS
2010
CAPITAL SOCIAL E INTERNET

Quest. nº _____



I. Sociabilidade e Bem-estar

Indique, por favor, se concorda ou discorda das seguintes afirmações:

1. Eu gosto de estar com pessoas

1. Discordo totalmente
2. Discordo
3. Nem discordo, nem concordo
4. Concordo
5. Concordo totalmente

2. Eu interessou-me por pessoas com um estilo de vida diferente

1. Discordo totalmente
2. Discordo
3. Nem discordo, nem concordo
4. Concordo
5. Concordo totalmente

3. Encontra-se muito satisfeito ou pouco satisfeito com a sua vida em geral?

1. Muito Satisfeito
2. Satisfeito
3. Pouco Satisfeito
4. Nada Satisfeito

No último mês, com que frequência? (cartão)

	Diariamente/ Quase todos os dias	Pelo menos, uma vez por semana	Pelo menos, uma vez por mês	Raramente/ Nunca
4. Foi sair socialmente com os seus amigos				
5. Foi a um restaurante ou café				
6. Fez parte de um grupo de ocupação de tempos livres				

Com que frequência se sente? (cartão)

	Nunca	Às vezes	Sempre
7. Sozinho			
8. Parte de um grupo de amigos			
9. Sociável e amigável			
10. Ninguém me conhece muito bem			

II. Confiança e Apoio Social

Indique, por favor, se concorda ou discorda das seguintes afirmações: (cartão)

	Discordo totalmente	Discordo	Nem discordo, nem concordo	Concordo	Concordo totalmente
11. Pode-se confiar na maioria das pessoas					
12. Todo o cuidado é pouco quando se trata de confiar nas pessoas					
13. Pode-se confiar no governo					
14. Pode-se confiar na Polícia					

15. Imaginando que se encontra doente em casa e precisa de ajuda. A quem podia recorrer? (resposta espontânea) (Só UMA RESPOSTA)

1. Esposo(a)/Companheiro
2. Familiar (dentro do agregado familiar)
3. Familiar (fora do agregado familiar)
4. Amigo
5. Vizinho
6. Colega de Trabalho
7. Organização/Instituição de Solidariedade Social
8. Outro
9. Ninguém
10. NS/NR

16. Imaginando que se encontra numa fase de crise financeira e precisa de pedir emprestado 100€. A quem podia recorrer? (resposta espontânea) (Só UMA RESPOSTA)

1. Esposo(a)/Companheiro
2. Familiar (dentro do agregado familiar)
3. Familiar (fora do agregado familiar)
4. Amigo
5. Vizinho
6. Colega de Trabalho
7. Organização/Instituição de Solidariedade Social
8. Outro
9. Ninguém
10. NS/NR

Indique, por favor, se concorda ou discorda das seguintes afirmações: (cartão)

	Discordo totalmente	Discordo	Nem discordo, nem concordo	Concordo	Concordo totalmente
17. Não conheço ninguém assim tão bem para pedir alguma coisa importante					
18. Quando me sinto sozinho, conheço várias pessoas com quem posso falar					
19. Se precisar de ajuda, conheço pessoas disponíveis para me ajudar					

Se precisasse de ajuda em cada uma das seguintes áreas, conhece alguém a quem pudesse rapidamente recorrer?

(cartão) (Só UMA RESPOSTA por pergunta)

	Família	Amigos	Vizinhos	Colegas	Conhecidos
20. Ajuda com pequenas reparações em casa					
21. Um sítio para ficar se tiver que deixar temporariamente a sua casa					
22. Conselhos sobre leis/regulamentos					
23. Ajuda se precisar de arranjar emprego					
24. Ajuda se precisar de usar computador/ aceder à Internet					
25. Ajuda se precisasse de um favor na freguesia/câmara municipal					

Indique, por favor, se concorda ou discorda das seguintes afirmações (cartão):

	Discordo totalmente	Discordo	Nem discordo, nem concordo	Concordo	Concordo totalmente
26. Interagir com pessoas faz-me interessar por ideias diferentes					
27. Interagir com pessoas faz-me sentir parte de algo maior					
28. Interagir com pessoas faz-me querer experimentar coisas novas					

III. Participação Cívica

29. Considerando o seu bairro (rua/área residencial onde vive), diria que a sua vizinhança:

1. É unida, ajuda-se mutuamente.
2. É cada um por si.
3. NS/NR

31. No último ano tomou alguma das seguintes acções para resolver um problema que afecta o seu bairro/área de residência? (sem limite de resposta) (cartão)

1. Contactei a comunicação social (rádio, TV, jornal)
2. Contactei a câmara municipal ou a freguesia
3. Participei numa assembleia municipal/reunião pública
4. Participei numa reunião de moradores
5. Participei numa manifestação
6. Ajudei a criar/participei numa petição sobre um assunto local
7. Fundei/Participei numa organização local
8. Não temos problemas na minha área de residência
9. Não tomei nenhuma acção
10. NS/NR

33. No último ano, contribuiu monetariamente para alguma das seguintes associações/instituições?

1. Associação desportiva/recreativa/juvenil
2. Organização política
3. Organização de solidariedade social/caridade
4. Grupos ambientais/protecção animal
5. Grupos religiosos
6. Outras organizações
7. Não contribui

35. Alguma dessas actividades foi on-line?

1. Sim
2. Não

37. Quando se encontra com amigos ou entre familiares, falam de temas da actualidade, como política?

1. Nunca
2. Raramente
3. Às vezes
4. Sempre

39. É membro filiado de algum partido político?

1. Sim
2. Não

41. Votou nas últimas eleições autárquicas, para a câmara municipal?

1. Sim
2. Não
3. NS/NR

30. Concorda ou discorda da seguinte afirmação “No meu bairro as pessoas dão-se bem”.

1. Discordo totalmente
2. Discordo
3. Concordo
4. Concordo totalmente
5. NS/NR
6. Somos todos iguais (resposta espontânea)

32. No último ano, foi voluntário em alguma das seguintes associações/instituições?

1. Associação desportiva/recreativa/juvenil
2. Organização política
3. Organização de solidariedade social/caridade
4. Grupos ambientais/protecção animal
5. Grupos religiosos
6. Outras organizações
7. Não

34. No último ano, participou em actividades de algum dos seguintes clubes/comunidades/organizações?

1. Clubes ou associações desportivas/recreativas/juvenis
2. Organizações políticas
3. Organizações de solidariedade social/ caridade
4. Grupos ambientais
5. Grupos Religiosos
6. Outras Organizações
7. Não (passar para pergunta 37)

36. Tomou conhecimento dessa actividade através da Internet?

1. Sim
2. Não

38. Assistiu a algum debate político no último ano?

1. Sim
2. Não
3. NS/NR

40. Votou nas últimas eleições legislativas, para a Assembleia da República?

1. Sim
2. Não
3. NS/NR

IV. A sua rede social

42. Quantos familiares **PRÓXIMOS** tem, ou seja, aqueles com quem mais interage e em quem mais confia (não têm que morar consigo)?

1. _____
2. NS/NR

43. Quantos desses familiares mais **próximos** vivem...?

Consigo	
No mesmo bairro/área residencial	
Na mesma cidade	
Noutra cidade, mas a menos de 1 hora de carro	
Noutra cidade, mas a mais de 1 hora de carro	
No estrangeiro	

Em média, quantas vezes... (cartão) (Só UMA RESPOSTA por pergunta)

	Diariamente	Pelo menos, uma vez por semana	Pelo menos, uma vez por mês	Raramente/Nunca
44. se encontra pessoalmente (face a face) com os seus familiares mais próximos?				
45. fala por telefone com os seus familiares mais próximos?				
46. fala por telemóvel (chamada ou sms) com os seus familiares mais próximos?				
47. fala on-line/ na Internet com os seus familiares mais próximos? (Skype, IM, email)				

48. Quantos amigos **PRÓXIMOS** tem? (Com esta questão queremos saber quantos amigos íntimos tem, considerando amigos que já conhece há algum tempo e em quem confia).

1. _____
2. NS/NR

49. Quantos desses amigos mais **próximos** vivem...?

Consigo	
No mesmo bairro/área residencial	
Na mesma cidade	
Noutra cidade, mas a menos de 1 hora de carro	
Noutra cidade, mas a mais de 1 hora de carro	
No estrangeiro	

Em média, quantas vezes... (cartão) (Só UMA RESPOSTA por pergunta)

	Diariamente	Pelo menos, uma vez por semana	Pelo menos, uma vez por mês	Raramente/Nunca
50. se encontra pessoalmente (face a face) com os seus amigos?				
51. fala por telefone com os seus amigos?				
52. fala por telemóvel (chamada ou sms) com os seus amigos?				
53. fala na Internet (Skype, IM, email, etc.) com os seus amigos?				

V. Media e Internet

54. Com que frequência costuma ler/ouvir/ver as notícias?

1. Diariamente
2. Pelo menos uma vez por semana
3. Menos de que uma vez por semana
4. Raramente/Nunca

55. Onde costuma ler/ouvir/ver as notícias? (resposta espontânea e sem limite)

1. TV
2. Jornal
3. Rádio
4. Internet
5. Familiares/Amigos/Colegas
6. Outro

56. Possui algum dos seguintes equipamentos? (resposta sem limite) (cartão)

1. Televisão
2. Telemóvel
3. Telefone
4. Computador portátil
5. Computador fixo/pc
6. Leitor mp3
7. Máquina fotográfica digital
8. Acesso à Internet em casa

63. Com que frequência acede à Internet?

1. Todos os dias (passar para pergunta 65)
2. 3 ou 4 vezes por semana (passar para pergunta 65)
3. 1 ou 2 vezes por semana (passar para pergunta 65)
4. Pelo menos, uma vez por mês (passar para pergunta 65)
5. Raramente (passar para pergunta 65)
6. Não utilizo
7. Não utilizo, mas já utilizei
8. Não sei o que é (passar para bloco VI, p.98)

65. Normalmente, acede à Internet?

1. De casa
2. Do trabalho/da escola
3. De casa e do trabalho/da escola
4. Outro. Qual? _____

67. O que é que mais faz na Internet? (máximo 3 respostas) (cartão)

1. Envio/leio emails
2. Utilizo Messenger (MSN) ou Chat Rooms
3. Utilizo facebook, Hi5, twitter ou semelhante.
4. Leio blogs
5. Escrevo blogs/sites
6. Consulto sites
7. Vejo vídeos/ouço música (youtube, etc.)
8. Jogo
9. Faço downloads de música, filmes ou outros.
10. Outro. Qual? _____

76. Para quem envia mais emails?

1. Familiares
2. Amigos
3. Colegas de trabalho/escola
4. Outro _____
5. Não envia

78. Tem perfil em algum dos seguintes sites de redes sociais?

1. hi5
2. facebook
3. twitter
4. myspace
5. Outro _____
6. Não

Quanto tempo passa diariamente...

	Menos de 1 hora	1-2 horas	3-4 horas	Mais de 5 horas	Nunca ou quase nunca
57. a ver televisão					
58. no computador					
59. na Internet					
60. no telemóvel					
61. no telefone					
62. a ler livros/jornais					

64. Porquê que não utiliza a Internet? (R. espontânea. Após esta p., passar para p.98) (Só UMA RESPOSTA)

1. Não tenho tempo
2. Acho complicado
3. Não me interessa
4. Não tenho computador
5. Acho perigoso/ Tenho receio
6. Não sei como funciona
7. Outro _____

66. Em geral, para que é que utiliza a Internet? (Só UMA RESPOSTA) (cartão)

1. Para procurar informação
2. Para falar com familiares e amigos
3. Como forma de ocupação dos tempos livres
4. Para compras/serviços
5. Trabalho
6. Estudar
7. Outro. Qual? _____

Que actividades sabe realizar na Internet?

	Sim	Não
68. Enviar emails		
69. Acrescentar anexos (attach) nos emails		
70. Criar uma conta de email		
71. Fazer chamadas de vídeo através da Internet		
72. Telefonar através da Internet		
73. Colocar fotos ou vídeos on-line		
74. Criar um blog		
75. Fazer um site/página de Internet		

77. Se utiliza chat rooms, com quem mais fala no Messenger ou Chat rooms?

1. Familiares
2. Amigos
3. Colegas de trabalho/escola
4. Pessoas que conheci on-line
5. Não utiliza

79. Qual é o site de redes sociais que mais utiliza?

80. Com que frequência acede a esse site de redes sociais?

1. Mais de que uma vez por dia
2. Todos os dias
3. 3 ou 4 vezes por semana
4. 1 ou 2 vezes por semana
5. Pelo menos, uma vez por mês
6. Raramente

82. Já conheceu novas pessoas na Internet?

1. Sim
2. Não (passar para p.85)

84. Considerando essas pessoas que conheceu on-line, alguma delas se tornou amigo próximo, ou seja, com quem interage mais frequentemente?

1. Sim
2. Não

81. Para que é que utiliza esse site de redes sociais? (sem limite de resposta)

1. Para comunicar com família
2. Para comunicar com amigos
3. Para comunicar com colegas de trabalho/escola
4. Para ver informação sobre pessoas
5. Para partilhar ideias, notícias ou outros assuntos
6. Para jogar
7. Para seduzir/flirtar
8. Para conhecer novas pessoas

83. Se sim, chegou a conhecê-la(s) presencialmente/off-line?

1. Sim
2. Não
3. Alguns

85. Se não pudesse mais aceder à Internet, iria sentir a sua falta?

1. Muito
2. Um pouco
3. Não muito
4. Não

Em geral, diria que a Internet influenciou de que forma, as seguintes actividades: (cartão)

	Tornou mais complicado	Não afectou	Tornou mais fácil	Não uso a Internet para isso (espontânea)
86. Estar em contacto com familiares e amigos mais próximos				
87. Estar em contacto com outros familiares e amigos				
88. Conhecer pessoas novas				
89. Obter informações úteis				
90. A forma como trabalha/estuda				

Indique, por favor, se concorda ou discorda das seguintes afirmações, considerando pessoas que Só CONHECE ON-LINE (cartão):

	Discordo totalmente	Discordo	Nem discordo, nem concordo	Concordo	Concordo totalmente
91. Conheço várias pessoas on-line em quem confio para me ajudarem a resolver problemas.					
92. Quando me sinto sozinho, conheço várias pessoas on-line com quem posso falar.					
93. Não conheço ninguém on-line assim tão bem para pedir alguma coisa importante.					
94. Se precisar de um empréstimo de emergência de 100€, conheço alguém on-line a quem posso recorrer.					

Indique, por favor, se concorda ou discorda das seguintes afirmações, considerando pessoas que Só CONHECE ON-LINE (cartão):

	Discordo totalmente	Discordo	Nem discordo, nem concordo	Concordo	Concordo totalmente
95. Interagir com pessoas on-line faz-me interessar por ideias diferentes.					
96. Interagir com pessoas on-line faz-me sentir parte de algo maior					
97. Interagir com pessoas on-line faz-me querer experimentar coisas novas					

VI. Caracterização Soció-Demográfica

98. Género:

1. Feminino
2. Masculino

100. Qual é a sua profissão/ ocupação actual?

102. Qual a constituição do seu agregado familiar/quem vive consigo? (resposta espontânea)

1. Vive só
2. Vive com o cônjuge
3. Vive com o cônjuge e com os filhos
4. Vive com os pais
5. Vive com irmãos
6. Vive com os filhos
7. Vive com os filhos e com os netos
8. Vive com os netos
9. Outra situação. Qual _____

104. Religião (resposta espontânea)

1. Católico praticante
2. Católico não praticante
3. Muçulmano
4. Protestante
5. Não tem religião
6. Outra. Qual _____
7. NR/NR

99. Idade: _____

101. Estado civil (resposta espontânea)

1. Solteiro
2. Casado/unido de facto
3. Divorciado/separado
4. Viúvo

103. Habilitações literárias (resposta espontânea)

1. Não sabe ler/escrever
2. Instrução primária incompleta
3. Instrução primária
4. Ensino secundário ou equivalente
5. Curso superior incompleto
6. Curso superior completo
7. Mestrado
8. Doutoramento

Como componente complementar deste estudo, a investigadora principal, Mestre Bárbara Barbosa Neves, vai conduzir entrevistas aprofundadas sobre o tema. Estaria disponível para uma entrevista deste tipo? Se sim, por favor, deixe-nos o seu contacto:

Nome: _____

Contacto (email/contacto telefónico): _____

Data: ___/___/___ **Freguesia** _____
Entrevistador: _____

Appendix B

Interview Consent Form

Informação sobre a entrevista

Muito obrigado pela sua participação neste estudo sobre a utilização de Internet e capital social. Este estudo insere-se num projecto de doutoramento conduzido pela Mestre Bárbara Barbosa Neves, doutoranda do Instituto Superior de Ciências Sociais e Políticas (ISCSP) da Universidade Técnica de Lisboa e do Netlab, Universidade de Toronto, Canadá.

Esta entrevista realiza-se no seguimento do questionário que preencheu anteriormente e trata-se de uma conversa informal sobre a temática em análise. A entrevista dura aproximadamente entre trinta a quarenta minutos e com a sua permissão iremos gravar a entrevista para posterior transcrição. Se pretende rever a transcrição da entrevista basta solicitá-lo ao entrevistador.

A sua participação nesta entrevista é voluntária e pode retirar-se da entrevista a qualquer momento, apenas indicando que não pretende continuar a entrevista. Da mesma forma, pode recusar-se a responder a questões que considere sensíveis ou que não se sinta confortável para responder.

A entrevista é anónima e confidencial. Cada participante terá um pseudónimo e o seu nome e informação pessoal não serão utilizados neste estudo. Os dados recolhidos são exclusivamente para fins científicos. O termo de consentimento informado será guardado e protegida pela investigadora.

Muito obrigado,

Melhores cumprimentos,

Bárbara Barbosa Neves

ISCSP-UTL
Pólo Universitário do Alto da Ajuda,
Rua Professor Almerindo Lessa,
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www.bbneves.com
www.iscsp.utl.pt

Termo de Consentimento Informado

Eu li e compreendi as condições da participação nesta entrevista. Eu voluntariamente aceito participar nesta entrevista.

Nome: (maiúsculas) _____

Assinatura: _____

Data: _____

Eu concordo com a gravação da entrevista:

- Sim, eu concordo com a gravação da entrevista.
- Não, eu não concordo com a gravação da entrevista.

Appendix C

Semi-structured interviews – interview guide

Participant #:

Date:

New name:

- Are there other household members present during the interview? If yes, who?
- Is the interview being held at the Participants' home? If no, where?
- Wants the interview file?

Section one: Ties

1. Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?
2. E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?
3. No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, etc.)
4. E alguma situação/acontecimento em que os seus familiares, amigos, ou conhecidos precisassem da sua ajuda? Se sim, pode falar-me um pouco sobre essa situação?

Section 2: Internet usage

1. O que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?
2. Com quem comunica mais na Internet?
3. Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?
4. Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?
5. Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)
6. Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

7. Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?
8. Pontos positivos e negativos da Internet na sua vida/vivência cotidiana?

Semi-structured interviews – transcripts

“Guinaldo”

63 anos
Advogado
Entrevistado no ISCSP
Heavy Internet user

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Com a minha filha, neste momento, interajo pela Internet, quase todos os dias. Esporadicamente por telefone. A minha filha vive fora, na Holanda. Com o meu filho, interajo pelo telefone e contacto directo. Nós mantivemos, mesmo depois de eles saírem de casa, uma relação muito estreita. Temos o hábito de jantar ou almoçar uma a duas vezes por semana. De maneira que é assim que funcionamos. O meu filho umas vezes almoça comigo, outras vezes almoça ele e a mulher. E é assim. A minha filha almoça sozinha, porque é solteira e vive só, nesta altura. Houve uma altura em que não viveu e morava por cima da minha casa. Actualmente estou a viver sozinho...De maneira que o meu núcleo familiar é efectivamente constituído por mim, pelo meu filho, pela minha filha e pela minha nora.

E tem mais algum familiar, que considere mais próximo?

Não, não tenho mais familiares, morreram todos. A minha mãe era filha única, o meu pai tinha uma irmã, essa irmã não teve filhos. Já morreram todos, de maneira que neste momento, família, família, tenho uns primos afastados que já não vejo a um ror de tempo, foram morar para outra cidade e tenho os meus filhos.

E quanto aos seus amigos mais próximos, como é que normalmente interage com eles? Face-a-face e/ou através de outros meios?

Os meus amigos mais próximos são três e sou amigo deles desde os quinze anos de idade. E assim nos temos mantido. Que é o Júlio, o Guilherme e o Paulo. Eu como não tive irmãos, adoptei aqueles três irmãos. E temos uma relação realmente muito próxima, encontramos-nos com muito frequência, uns em casas dos outros, passamos férias juntos, etc., etc.

E utiliza a Internet para estar em contacto com esses amigos?

Fundamentalmente com o Guilherme. Com o Júlio não, porque está sempre a telefonar-me e encontramos-nos muitas vezes. Com o Paulo, ele de vez em quando envia-me uns emails e eu também, mas o Paulo é um caso muito especial. O Paulo teve um azar muito grande na vida, foi prendado com uma empresa de pantanas e também deu com a família de pantanas. De maneira que está numa posição muito...de modo que é um indivíduo que se zangou com o mundo. Ele zangou-se com ele próprio, por reflexo zangou-se com o mundo. De modo que acha que toda a gente emite relativamente a ele juízos de censura muito severos...e tem muito boas razões para isso. De maneira que afasta-se, muitas vezes faz comentários desagradáveis e tal. Mas eu continuo a ser muito amigo dele e ele continua a contar comigo para aquilo que quer e que precisa, etc. Mas, de facto, há assim uma relação um bocado de amor-

ódio. Ele mesmo diz “Epá vocês só pensam, andam nos copos e nas miúdas e não sei qué e não trabalham e têm uma vida porreira e eu fartei-me de esgadanhar e...” Mas ele é, de facto, um pouco megalómano e isso levou-o a esta situação. Além destes três amigos da minha geração, tenho o meu compadre que tem 72 anos e com quem também interajo muito – com ele e com a mulher. Correspondemo-nos via Internet e correspondemo-nos na casa um do outro, numas jantaradas e almoçaradas. Depois mais amigos, tenho um colega de profissão, que é um tipo da área, são amizades políticas, que é o Dário. Também nos correspondemos via Internet e nos encontramos para almoçar ou ele de vez em quando convida-nos (convida-nos, quer dizer a vários amigos) para ir a um monte que ele tem no Alentejo. Portanto este é o meu círculo de amigos...

Utiliza, então, diversos meios para os contactar?

Sim, raramente por telefone. Fundamentalmente, contacto pessoalmente e pela Internet. Aliás, eu já começo a ter dificuldade de me relacionar com pessoas que não sabem manejar o computador (laugh). Eu tenho também, pode dizer-se que é meu amigo, é um colega, o Lúcio, que tenho uma dificuldade enorme de me relacionar com ele, porque por telefone as coisas nunca ficam bem ditas, nem bem esclarecidas. Se a gente escreve, as pessoas têm tempo de ler, pensar, digerir e depois responder. E eu pergunto-lhe “Então, quando é que te agarras ao computador?”, mas ele diz-me que já não tem idade para essas coisas e depois teve um AVC e aquilo atacou-lhe um bocado o cerebelo...Com a quantidade de estúpidos que há a informática, ele com certeza que se mete num computador, que ele não é estúpido. E eu conheço dois casos, um pessoal, outro relataram-me, a sogra desse meu amigo Júlio, não foi neste Natal, foi no outro, os filhos ofereceram-lhe um computador – ela tem 86 anos – porque ela vive em casa da filha mais nova, quer dizer eles têm uma quintarola com duas casas, e tem uma vivenda onde vive a filha mais nova, e uma casa onde ela vive. E então havia grandes discussões com o neto por causa da utilização do computador, de maneira que ofereceram um computador à senhora. O pai de uma amiga minha que morreu, faz hoje 8 dias, também com 82 anos comprou um computador. De maneira que, penso que a informática não é nenhum bicho para ninguém e é uma excelente maneira de comunicar. Como tudo na vida, se há viciação, obviamente que existe perversão do uso do meio.

No último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.)

Não...nada que me lembre.

E alguma situação/acidente em que os seus familiares, amigos, ou conhecidos precisassem da sua ajuda? Se sim, pode falar-me um pouco sobre essa situação?

Dei um bocado de apoio ao Guilherme, porque ele teve um cancro num rim. Já está tratado e sem problema nenhum. Também dei um bocado de apoio e apanhei um grande susto com o meu compadre, que também teve um cancro, mas nos dois rins.

Também lhe aplicaram uma terapia nova, a criocirurgia, em que lhe congelaram o cancro, logo não ficou a fazer hemodiálise, que foi uma alegria muito grande para todos. Portanto, dei-lhes algum apoio moral, quer a um, quer a outro. Visitei-os e fui a casa deles. No caso do Guilherme, vim a Lisboa buscá-lo para ele ir para o Algarve, porque podia não estar ainda em condições de guiar. E todos os amigos e conhecidos obviamente telefonam-me, sei lá, pelo menos uma vez por semana, porque tem problemas com o senhorio, porque tem problemas com o emprego, porque tem problemas com a mulher ou com o marido...e pedem-me apoio. Aliás, o meu amigo que é refractário a informática, que é advogado, é dos que recorre mais a mim. Ele tem um óptimo aspecto, depois do AVC já teve duas mulheres, mas ficou um bocado afectado. Repete-se muito, etc. E esse também está sempre a telefonar, a perguntar como se faz isto ou aquilo. E aliás tratei-lhe de uma série de processos, porque a mulher na sequência do divórcio, pôs-lhe uma série de processos em cima...e foi na sequência disso que ele teve um AVC. E como ele me diz que não está em muito bom estado, eu dou-lhe uma ajuda. E gosto. Não me aborreço.

O que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Corresponder-me com as pessoas. Informação. Subscrevi de borla um site de jornais e revistas, pelo que todos os dias vejo os principais títulos e algumas notícias com desenvolvimento. E depois ligados a minha área profissional, sites ligados à justiça. Há um site chamado DGSI, onde temos acesso a todos os acórdãos, dos últimos 20 anos de todos os tribunais; dos pareceres da Procuradoria Geral da República...recorro praticamente duas vezes por semana, ando a navegar ali no meio daquela coisa. Portanto, estes são os aspectos profissionais. Depois vídeos. Gosto de ver uns quantos vídeos e informação geral, biografias, etc. Quero procurar um cantor qualquer, por exemplo Barbara Hendricks, onde que ela nasceu, etc. Óscar Perterson, pianista, etc. Vou muitas vezes ver estas curiosidades. Vou muita vezes ver a discografia de Jazz, para comprar, etc. Geralmente tem os vídeos com alguma música e dá uma certa orientação para não comprar às cegas.

E para comunicar na Internet, qual é a ferramenta que mais utiliza? Email, SNS, IM?

Essencialmente o email.

Utiliza sites de redes sociais, como o facebook ou o hi5?

Utilizo o facebook. Quer dizer, eu não utilizo o facebook, de vez em quando recebo propostas de amizade e digo que sim. No outro dia cheguei à conclusão que tinha mil e não sei quantos amigos, a maior parte que não conheço. Porque é assim, fulano 3 amigos comuns, Cicrano, 4 amigos comuns...ora são amigos comuns, mas muitos só conheço de vista.

E com quem costuma comunicar mais online?

Com o Guilherme, o meu compadre, com o Dário e com os meus filhos. Com uma companheiro que tive, que é socióloga. Com a mulher desse meu amigo Paulo. Com amigos e familiares e profissionalmente, com os colegas.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Não afectou negativamente, antes pelo contrário. Antes da Internet, estava-se às vezes muito tempo, sem ver as pessoas...e isso não quebrava, mas às vezes abrandava os laços. Assim, a gente corresponde-se todos os dias, de forma que é uma maneira de manter laços.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Familiares não tão próximos, não tenho. Com os conhecidos, acontece o mesmo que com os amigos mais próximos, mantenho um certo contacto.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Quer dizer, conheço toda a gente que está no facebook, às vezes de vista. Ou então são figuras públicas, como o Francisco Louça, ele diz que é meu amigo, não é...Quer dizer tenho muitos conhecidos. Pessoas novas online, nunca conheci ninguém.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Depende do tipo de informação, mas de uma maneira geral, vou à net. Se é uma informação profissional, vou aos sites da especialidade. Vou aos sites das livrarias para ver se tem o livro com o tema que quero. Pergunto aos amigos e colegas, se tenho dúvidas. Portanto, a Internet é o primeiro sítio onde eu vou quando tenho necessidade de uma informação.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Bem, se preciso de encontrar alguém urgentemente, telefono. Se não encontro, envio um email a dizer (e se tiver grande confiança) "Meu estupor, vê lá se atendes a porcaria do telefone"...Se for outro tipo de pessoa, a Internet.

Pontos positivos e negativos da Internet na sua vida/vivência quotidiana?

Positivos é o acesso à informação e manutenção de relacionamentos. E o entretenimento, também. Negativos, eu costumo dizer que se fizer uma dieta com coisas muito saudáveis, peixe cozido, legumes cozidos, temperados com azeite extravirgem, é uma alimentação excepcional, mas se eu comer três postas de bacalhau com um kilo de brócolos e regar com meio litro de azeite, obviamente que eu fico doente. E são coisas muito boas e que só fazem bem. Como o vinho, portanto. Se eu beber um copo de vinho tinto, aquilo até tem propriedades com incidência positiva no sistema cardiovascular, etc. Se eu beber uma garrafa obviamente que fico impróprio para consumo...por acaso não fico, mas...(laugh). Em princípio, ficarei impróprio para consumo. Com a Internet é a mesma coisa, se usar a Internet como instrumento de trabalho e entretenimento, exploro todos os aspectos positivos. Se eu passo o dia agarrado ao computador obviamente que esquizofrenizava, criava um mundo à parte e esquizofrenizava. Portanto, é como tudo na vida, os excessos são sempre maus. Se a gente souber criar um ponto de equilíbrio, perfeito.

Comecei a Internet dois ou três anos depois de ela aparecer e comecei a usar o computador quando apareceram os computadores de secretaria, os CPUs, e libertei-me de um anátema que me era lançado desde a instrução primária, que é a caligrafia péssima..ninguém percebe aquilo que eu escrevia...na vida profissional, as secretárias pediam ajuda. Quando apareceu o processador de texto, pensei logo que se ia acabar o meu tormento, pois agora toda a gente percebe o que escreve. E librei-me desse anátema, o que foi muito positivo. Mais um aspecto positivo, é que os livros de certa forma estão ultrapassados, porque são estáticos, enquanto a Internet permite-me encontrar artigos nacionais e internacionais sobre diversas temáticas. E mesmo da minha área de actuação, por exemplo, eu posso ir ao site do Supremo Tribunal de Justiça e ver que houve mudanças de uma orientação...assim, as coisas fluem muito rapidamente, às vezes de forma boa ou má. Vive-se numa Sociedade da Informação, de maneira que é fundamental estar bem informado, de preferência todos os dias. Agora leio tudo online, já não preciso do jornal.

Ainda compra jornal?

Compro o Expresso e um ou outro que tenha um artigo que me interessa. A semana passada telefonaram-me a dizer que eu ia receber o DN de borla, durante 6 meses. E se é de borla, recebo, não tenho problema nenhum (laugh). Eu vejo as notícias mais na TV, vejo pouca TV, mas de manhã ao pequeno-almoço vejo a SIC notícias, à noite depende. Se as notícias são as mesmas, sintonizo um bocado um canal musical, se há notícias novas, oiço.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, de momento, não.

“Clara”

Médica pediatra
60 anos
Heavy Internet user
Entrevistada no local de trabalho

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Bem, em presença para começar. Pessoalmente. Normalmente estou com os filhos e os netos, pelo menos nos fins-de-semana. Eu tenho sete netos, como sou pediatra andava sempre a dizer às minhas filhas que a taxa de natalidade estava a baixar e elas tinham que fazer alguma coisa pelo país. Uma tem quatro e a outra tem três. Estou com eles pelo menos ao fim-de-semana. Com a minha mãe, que ainda é viva e viúva, estou quase todos os dias. Utilizo muito o telefone e o telemóvel e falo todos os dias. Os miúdos e os graúdos todos os dias me telefonam. Com a família, utilizo raramente a Internet. Mas, os meus netos estão no facebook e têm a *farmville* e o *cityville* e portanto estão sempre a ligar-me e a dizer “amanhã vou ter um teste, vai colher-me não sei o quê...” E até acontece uma coisa muito engraçada, porque actualmente a ofensa pior que se pode fazer é que dizer aos miúdos que parece que estamos a fazer uma coisa dos anos setenta...é a data de nascimento dos pais deles e portanto acham que tudo o que seja antes dos anos setenta é velhíssimo. De maneira que às vezes eu estou no computador com eles aos fins-de-semana a fazer qualquer coisa que era muito mais fácil fazer de outra maneira, mas eles dizem-me “olha, anos setenta” (laugh). Portanto, acabo por ter alguma ligação com eles pela Internet, através do facebook...mas por causa da *farmville* e dessas coisas.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Em presença, mas muito menos, porque a vida é mais complicada. Telefone muito raramente, mas falo muito pela Internet, através dos emails.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.)

Eu não, mas, por exemplo, as minhas filhas volta e meia têm assim umas urgências emocionais ou financeiras e normalmente utilizamos muito a Internet para isso, porque como tudo trabalha e o telefone interrompe muito as reuniões e o que se estiver a fazer, é sempre mais desagradável. A pessoa agora com os telemóveis, parece que o outro do lado de lá nunca está a fazer nada, a gente está sempre à espera que ele atenda e que responda. E portanto, utilizo muito a Internet para sei lá, as minhas filhas estão em linha, uma é médica e a outra é advogada, mas têm normalmente o computador à frente e a Internet ligada e portanto muitas vezes eu estou aqui a trabalhar e dialogamos pela Internet. Sei lá, se é preciso comprar camisas para as crianças ou pagar a música ou sei lá.

Portanto, teve várias situações/acontecimentos em que os seus familiares, precisaram da sua ajuda? E os seus amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação?

Sim, à família e também aos amigos. Também me pedem ajuda pela Internet. Em especial, porque eu como médica. Como médica, também funciono com os doentes, neste caso como sou pediatra, com os pais dos doentes, pela Internet. Portanto, tenho duas moradas electrónicas, assim como, tenho dois telemóveis, uma morada só para os pais. Precisamente para não estarem sempre a interromper reuniões, eu vejo esse email pelo menos duas vezes ao dia. E é muito engraçado, porque muitas vezes os casais têm uma certa vergonha de estar a por muitas questões, porque acham que nos estão a fazer perder tempo ou que as questões são ridículas ou os problemas não são importantes. E se puserem num email, escrevem, escrevem um email inteiro, sei lá, com vinte linhas ou trinta e eu depois normalmente respondo directamente no texto do email a vermelho ou a amarelo “sim, não, talvez, dê o xarope, etc.” E eles ficam muito contentes, porque ficam todos descansados. E uma coisa que faço muito com os pais e com as minhas filhas, também quando os miúdos têm algum problema, é sei lá, se está cheio de borbulhas na cara, tira uma fotografia e manda-me a fotografia para o email e assim faço montes de diagnósticos através das fotografias. Portanto, utilizo muito o email e a Internet. E depois utilizo muito a Internet como pesquisa, como sou médica, pesquiso muito na área da qualidade em saúde, etc. E faço muito pesquisa, quase sempre tenho o google aberto.

E de todas actividades que me referiu que faz na Internet, o que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Utilizo como meio de comunicação, faço muita, muita pesquisa científica e depois utilizo para outro tipo de pesquisa. Agora precisava de comprar um biombo para a minha mãe, que ela queria um biombo e lá fui à Internet à procura, uma pessoa põe biombos e aparecem biombos por todo o lado. Quase todos os dias pergunto a mim própria – quer dizer eu já sou velhota e portanto sou da era pré-Internet – como é que a gente sobrevivia antes? Eu fiz o doutoramento, comecei a fazer em 89 e terminei nos anos 90, mas já tinha ajudado nos anos 60/70 outros superiores meus com quem trabalhava na faculdade, com os seus doutoramentos. E a pesquisa bibliográfica era feita com uns indexes médicos, uns livros enormes. Tínhamos umas palavras-chave, íamos lá com o dedo e depois retirávamos a indicação à mão, porque não tínhamos computadores sequer. E depois tínhamos que ir às embaixadas, porque o artigo era Americano, ou francês, ou inglês, a maior parte das revistas não havia em Portugal, pedir para virem os artigos, pagar, demorava um mês ou dois...enfim, não é possível! (laugh) Faço muita investigação científica, porque também dou aulas na faculdade e tenho que estar sempre em cima. Depois faço muita pesquisa comum, preciso de um biombo, etc. Os meus netos queriam os *beyblades* no Natal e andei na Internet, porque estavam todos esgotados cá em Lisboa. Não sei se sabe o que são *beyblades*? Eu também não sabia, é uma coisa para os rapazes lutarem. Descobri na Internet num site Americano e era para aí suponha dia 17 de Dezembro e eles disseram que sim senhora enviavam em dois dias e na véspera de Natal já os tinha recebido. Isto é uma coisa fabulosa, não é? Os livros também compro muito pela Amazon. Às vezes acontece uma coisa tão coisa engraçada, eu e o meu marido viajamos bastante e normalmente até compramos sempre um livro em cada cidade

em que estamos e escrevemos que compramos o livro em tal cidade e costumávamos vir sempre carregados de livros, que era um peso e uma chatice nos aeroportos, etc. E agora às vezes estamos numa livraria qualquer, numa cidade qualquer estrangeira a olhar para os livros e dizemos que não vamos comprar aqui, tiramos nota e mandamos vir pela Amazon. Isto é muito engraçado e é uma dinâmica completamente diferente. Portanto, eu uso para investigação normalíssima, para investigação científica, para ver qualquer coisa que preciso de comprar, para mandar vir livros, para fazer compras de brinquedos para os miúdos e...ah, e para ver o tempo. Eu viajo muito, por motivos profissionais, e só levo um saquinho com meia dúzias de coisas, porque às vezes vou num dia e regresso no outro e nunca despacho malas e portanto vou sempre aos sites do tempo, do weather, para ver se está a calor, frio, etc.. E depois utilizo para a farmville, porque tenho à minha conta para aí seis farmville, porque é a minha e as dos meus cinco netos mais velhos, porque às vezes tenho que cuidar das deles. E sou um bocadinho vidrada na farmville, porque acho muita graça.

Com quem comunica mais na Internet? E através de que ferramentas?

Eu tenho um dia de trabalho muito prolongado, normalmente entro aqui às 8-9h e saio daqui muitas vezes às 8 da noite. Utilizo muito aqui com os colaboradores, até aqui dentro da Instituição. Até com a minha secretária. Combinamos uma coisa, que eu tinha visto na América, aqui há uns anos e que fiquei muito impressionada. Que é assim se uma pessoa está a trabalhar num texto qualquer e toca o telefone e é uma maçada, mesmo que se seja para dizer duas palavras, já perdeu o...E portanto, mesmo a minha secretária – eu tenho sempre o email aberto – manda-me um email a dizer que chegou alguém ou que alguém quer falar comigo ao telefone, etc. E eu logo vejo, se atendo já ou depois, e acabo o meu pensamento e o que estava a escrever, não estou com aquela coisa de atender o telefone. Nós temos aqui 3 pisos e isto até me faz engordar, porque raramente me desloco tão frequentemente aos outros pisos. E entretanto tenho feito outra coisa também, ligada à avaliação das instituições públicas de saúde, que é videoconferência. Temos o equipamento no terceiro andar e utilizamos a Internet. Quer dizer se vem alguém do Porto para ter aqui uma reunião, acaba por perder tempo e dinheiro. E também fazemos videoconferências com instituições europeias e internacionais etc. Há pouco tempo fiz parte de um júri da OMS e éramos 6 pessoas, eu, um Russo, um Letão, um Sueco, um Turco e um Francês...eu era a única mulher. Portanto, era algo que implicava uma série de reuniões e temos que estar sempre a ir a Genebra era um aborrecimento. Assim, fizemos todas as reuniões preparativas em rede, através do computador. Não era videoconferência, porque era só áudio. E conseguimos unir estes países, com cada um no seu país. Eu acho que a potencialidade que tem a Internet a gente ainda não sabe, nem metade. Portanto, no meu dia de trabalho, comunico essencialmente aqui dentro, com os meus colaboradores e com outras instituições nacionais e internacionais. Depois comunico muito com a família, não com o meu marido, que é neurocirurgião, mas que não sabe mandar um email, não sabe mandar uma mensagem escrita no telemóvel...e portanto com ele não contacto nada, porque é uma desgraça. É a secretária dele que envia os emails. Mas, depois comunico com o resto da família. O meu marido é mais velho que eu, e acha que já não consegue aprender, mas é por preguiça. Qualquer dia reforma-se e fica sem secretária. E ele ainda não percebeu a potencialidade que a Internet tem, porque pedir à secretária para procurar não é a mesma coisa, porque nós quando procuramos vamos aqui e depois ali, etc.

Eu acho que ele ainda se vai converter à causa, mas é difícil. Com ele não troco nada, porque é impossível. Com o resto, tenho sempre o email ligado e tenho um ipod que vai dizendo que caiu mais um, etc...isto é um vício, também deve acontecer consigo.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Não, negativamente. Este é um ponto polémico e há pouco tempo vi um artigo que concluía que não, era um estudo com adolescentes, que partia de uma premissa que os adolescentes estão a ficar anti-sociais. Há uma coisa muito engraçada com os adolescentes, sabe que o adolescente Português em média manda cerca de 40 mensagens de telemóvel por dia. E como há agora aquelas ressonâncias funcionais em que se vê qual a parte do cérebro que está a funcionar com uma certa actividade, e chegou-se à conclusão que a área motora do cérebro relacionada com o polegar, aumentou imenso nestas gerações. Que não sei que resultados vai dar, porque se aumentou aquela, outra vai ter que diminuir. E portanto vamos ficar simiescos, outra vez. Porque aumentando aquela área do cérebro, quer dizer que este dedo provavelmente vai crescer. O que é muito engraçado, porque significa que é tudo plástico e portanto é a influência que a tecnologia pode ter no nosso estado físico, que é impressionante. Esse estudo, que penso que foi feito na Inglaterra, mostrou que não, que a utilização excessiva da Internet não está relacionada com comportamentos anti-sociais. Eu acho que se calhar até é estimulante.

Anterior ao telemóvel, a pessoa comunicava pouquíssimo com a família e amigos e com o telemóvel isso mudou. Também é um factor de ansiedade, porque a gente está sempre à espera que todos estejam contactáveis e ficamos enervadíssimos quando as pessoas não respondem ao telemóvel. Antigamente, as pessoas não respondiam, ou não estavam em casa, ou não estavam no trabalho. E a gente não se enervava, agora se não se responde ao telemóvel à segunda chamada, a gente pensa porque é que não responde e o que é que aconteceu, etc. O telemóvel veio fazer com que se comunique mais. Mas por exemplo, os meus netos não têm telemóvel, mas não gostam de gastar muito dinheiro por um lado, mas por outro têm o computador sempre ligado e portanto é mais fácil pela Internet e não me perturba tanto. A Internet alterou de certa forma, porque passei a usar mais a Internet que o telemóvel. Chego a casa e ao trabalho e a primeira coisa que faço é ter o email aberto. É realmente um vício. Relativamente à parte social, amigos que passo muito tempo sem ver, no primeiro casamento, era casada com um Madeirense e tenho muitos amigos na Madeira, que passo meses sem ver. E que passava meses sem ouvir falar, porque uma pessoa não se vai por a telefonar, porque se perde muito tempo. E portanto, nunca sabia notícias. E agora estamos sempre a trocar emails e sei muito mais notícias. E não significa que não me encontro com eles, ainda ontem um desses meus amigos me enviou um email a dizer que vinha a Lisboa e amanhã vamos jantar com eles. Portanto, até acho que a Internet é facilitadora da parte social, da interacção social.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Acho que sim, da mesma forma. Sabe-se mais notícias.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Não. Os meus netos têm um filtro e eu também não. Mesmo aquelas pessoas no facebook que são amigas de amigos, não aceito. Eu só entro no facebook para ir ao *farmville*.

Com os seus netos houve alguma espécie de educação/literacia para a utilização de Internet? Referiu-me que usavam filtros...

Eles têm um filtro e portanto está muito armadilhado e sabem que se aparece alguma coisa cancelam...há uma série de itens que eles sabem como fazer e que se aparecer alguém estranho. Quem está na rede deles, são primos, tios, família, alguns amigos e é uma rede muito fechada. Mas eles têm amigos, às vezes chegam a casa a dizer que têm um amigo da mesma idade (9 ou 10 anos) e que estavam na Internet e apareceram estranhos, etc...é sempre preocupante. E tenho no consultório alguns casos de alguma gravidade...Os pais ainda não têm a percepção...Tenho uma rapariga, adolescente, que é minha paciente desde bebé e que através da Internet arranjou um namorado pela Internet, que lhe trouxe imensos problemas...("Clara" não pôde desenvolver mais estes casos devido a questões éticas, sobretudo de confidencialidade médico-paciente).

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Primeiro vou sempre à Internet.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

A mesma coisa, ou ligo a alguém a pedir o contacto.

Pontos positivos e negativos da Internet na sua vida/vivência quotidiana?

Os positivos já referi. Mas há três factores negativos, digamos assim. O primeiro é a facilidade com que se manda um email, ou seja, eu no meu trabalho recebo 100 a 120 emails por dia, alguns com uma responsabilidade enorme. Só que é assim, eu chego vejo aquilo tudo, vejo os mais urgentes, os que tenho que ler com atenção – e alguns têm muita conversa – vejo os anexos, etc. e facilmente ao final do dia chegam aos mais de cem. Eu à sexta-feira vou rever os emails daquela semana e perco a tarde toda. Mas muitas vezes as pessoas enviam-me outro email, a referir aí eu enviei-te um email importantíssimo e ainda não respondeste. Isso é horrível, porque às vezes perdemos-nos na quantidade de emails que recebemos. O segundo é a informalidade, ou seja, o email não é a mesma coisa que uma carta. Quando se escrevia cartas, que agora ninguém escreve, utilizavam-se os títulos, etc., mas nem são os títulos que me fazem falta, é de falar das coisas às vezes de uma forma extremamente coloquial sobre assuntos que não devem ser coloquiais. Há uma diferença entre trocar um email com um amigo ou familiares ou com um contacto profissional. E eu própria, às vezes sem querer, mando um email muito coloquial e nestas situações entre profissionais, onde há hierarquias, a formalidade, às vezes, é importante.

Acha que este aspecto da informalidade é um aspecto cultural? Porque, por exemplo, noutros países, como os nórdicos, a informalidade reina e as

hierarquias são menos estabelecidas e acabam por ser países que estão sempre no topo de ranking de produtividade e qualidade de vida...

O que estou a dizer da informalidade é às vezes como se põem as coisas. A informalidade às vezes chega ao ponto deste estilo, por exemplo, eu envio qualquer coisa para parecer para um colaborador, o meu colaborador pede ajuda a um especialista e depois envia-me o parecer, sem ter feito uma análise do mesmo, que é o seu trabalho. Os emails facilitam que seja assim uma coisa, se fosse um ofício ele/ela teria que se pronunciar sobre o parecer – se concorda, se discorda, etc. Eu tenho que enviar para trás e pedir a análise. E às vezes são emails tão coloquiais e informais, que a gente nem se apercebe se há alguma coisa muito importante. Mas, sim, eu também quando recebo emails da OMS são sempre muito informais, alguém diz que foi fazer ski, etc...Eu vou fazer 45 anos de formada e às vezes o meu marido entre amigos diz que foi não sei quem ao consultório e tinha isto e aquilo e eu digo-lhe que isso não é ético e ele responde-me que as pessoas adoram que se fale sobre o que elas têm, adoram discutir as suas doenças, umas com as outras. Há vinte anos, havia imenso sigilo médico, ninguém dizia se um doente tinha isto ou aquilo e as pessoas tinham pudor relativamente às doenças e ninguém as discutia e agora se eu estiver numa sala com 30 pessoas e se souberem que eu sou médica, toda a gente se põe a contar sobre as suas doenças, numa tentativa até que a minha seja pior do que a dele. Portanto, nem tem a ver com o telemóvel ou com a Internet, nós estamos numa sociedade actualmente de visibilidade e o protagonismo. Um terceiro factor negativo é por exemplo, o que vejo de diálogos no facebook...a sua superficialidade...é isso...(atendeu o telemóvel e tem que terminar a entrevista).

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, muito obrigado.

“Sara”

74 anos
Reformada/Doméstica
Internet-non user
Entrevistada no ISOSP

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Quer dizer, com a minha filha que faleceu era mais através do telefone, ela morava nas Caldas da Rainha. Ela vinha cá de vez em quando e eu ia lá também de vez em quando. Mas agora, com a minha outra filha, que está cá, em pessoa, todos os dias.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Às vezes telefonemas, às vezes encontro-me com elas para fazer uma malhinha. Todas as semanas me encontro com uma senhora que é minha amiga.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.)

Ajuda precisamos sempre, sobretudo agora com uma certa idade. E através de conversarmos um bocadinho com a família e amigos. Financeiro não, porque quem podia me ajudar não pode, a minha filha está desempregada e a outra que me podia ajudar, faleceu. De maneira que é mais para apoio emocional, conversar e outras coisas, como para me levar ao médico e assim.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

Ajudo a minha filha, com o trabalho doméstico, a passar a ferro e faço muita coisa para ela. E quando não tenho muito para fazer, faço assim algumas coisinhas de enxoval para bebés que estão para nascer, para pessoas minhas amigas. Ajudo algumas pessoas com uns pontinhos de malha, pessoas que ainda sabem menos que eu. E eu ajudo e entretenho-me, a fazer.

Já usou computador ou Internet?

Não, nunca usei. Mas vejo a minha neta, que está em Praga, através da Internet. A irmã dessa minha neta está a viver comigo aqui em Lisboa e como tem essas coisas, Internet e isso tudo, para eu ver a irmã ela põe tudo e eu vejo-a e falo com ela. Falo com ela quase todas as semanas. Ao princípio fazia-me muita confusão, não acreditava, mas ela chegava ao pé do computador e dizia “Olá, avozinha” e então era que eu percebia que ela me estava a ver. Eu também a vejo. A outra que está em Milão não tem isso, é só por telefone.

E qual é a principal razão para não utilizar o computador, visto ter um em casa?

Não temos possibilidades para ter um para nós e também já temos uma certa idade. E como não temos – o que lá está é da neta – também não usamos (laugh). E também

me faz uma certa confusão vê-las mexer naquilo...nem sabia mexer naquilo, talvez aprendesse até...

E gostava de aprender?

Aqui há tempos disso ao meu marido que se tivéssemos dinheiro comprávamos um. Ele perguntou-me para que é que queríamos um computador e eu disse, olha para...eu às vezes vou a casa de uma amiga e ela tem computador e mostra-me certas terras e é giro. Tenho um sobrinho que vai agora fazer 9 anos e no outro dia até me mostrou Milão, onde está a minha neta. E ele vai fazer 9 anos agora em Março e ele põe aquilo a funcionar, que ele está sempre no computador...eu até acho que faz mal ele estar sempre assim, mas a mãe acha que faz bem...

Porque é que acha que faz mal?

Ah, sei lá. Tenho ouvido dizer que faz mal à vista. E ele então mostrou-me a catedral de Milão e a minha neta já me tinha dito que era linda. E por isso eu disse ao meu marido, se tivéssemos computador ao menos a gente via isso e outras coisas bonitas. Nós nunca saímos daqui e assim sempre víamos coisas bonitas. E achei imensa graça o garoto dizer-me “Ó avó, queres ver Milão?” (laugh) E realmente pelas letras que lá estavam via que ele estava mesmo a mostrar-me Milão. É filho de uma sobrinha minha que é Professora Universitária, só dos mestrados e tem um menino que vai agora fazer 9 aninhos. E até a pequenina que vai fazer agora 5, que é a irmã, também já tem um computador, tem o Magalhães. O outro não gostava do Magalhães, porque é muito pequenino e a mãe deu-lhe o dela e a faculdade deu-lhe outro. E eles lá se entretêm, por isso que eu era capaz de aprender...se eles são pequeninos e aprendem eu também era capaz de aprender.

E acha que a Internet e os computador têm elementos positivos?

Olhe, na minha fraca inteligência, eu acho que são coisas bonitas e até úteis, mas também tem muitos elementos negativos.

Pode falar-me um pouco desses elementos negativos?

Há muitas coisas que a gente ouve falar na televisão e miúdos que estão na Internet e depois já têm sido raptados e essas coisas assim...através de pessoas com quem eles falam. Tá bem que a gente vai para a frente, não vai para trás, mas eu acho que há coisas que são um bocadinho, que são capazes de ser...pessoas que também não têm a cabecinha no seu lugar. Mas, no fundo até faz confusão.

E como é que acha que poderíamos contornar esses elementos negativos?

Isso é difícil. Os pais têm que educar e controlar os filhos e os computadores e a própria Internet não terem tanta coisa que essas cabecinhas mais fracas seguem e acontece diversos problemas. Agora como se deve fazer não sei, os pais também hoje em dia...os miúdos têm mais liberdade que antigamente e os pais podem dizer não mexas aqui ou acolá, mas os miúdos sabem trabalhar com essas coisas, não é? Não sei como é que se podia fazer, todos os meus netos são certinhos, mas... e todos eles têm Internet. Tenho um netinho com 9 anos que foi o que faleceu a mãe também já tem o bendito Magalhães e quando vem cá diz-me “Ó avó, anda cá que eu ensino-te” e lá se põe a mostrar-me coisas e eu também não estou assim a tomar muita

atenção...mas ele já sabe mexer. Todos eles sabem mexer, menos eu...eu é que não sei.

E acha que é uma ferramenta útil para eles?

Ó filha, há certas coisas que eu não entendo...desculpe dizer-lhe isto. Os miúdos agora têm tudo muito...eu acho que a minha quarta classe foi melhor que o sexto ou sétimo ano de agora. Eu tenho um sobrinho com 12 anos e a minha irmã – eu só tenho uma irmã que sempre toda a vida deu aulas, eu é que não estudei, a minha irmã tirou direito, não para exercer, mas para dar aulas. Este sobrinho é neto da minha irmã, mas o miúdo é muito mais atrasado...ele às vezes tá lá [em minha casa] à espera da avó, eles vão a minha casa para dar explicações, porque a minha irmã mora na baixa e ele mora aqui no casalinho da Ajuda e então eles vão lá todas as quartas-feiras...e às vezes ele está lá à espera e eu faço-lhe perguntas daquilo que eu sei, que não sei praticamente nada, e ele não sabe uma tabuada...eu não percebo...ele está no sexto ano. A avó é velha, mas sabe a tabuada. Ele responde que não sabe e eu digo-lhe para pensar e ele dá-me respostas erradas. Por isso é que eu acho que hoje em dia o ensino está muito facilitado, porque lá está há as calculadoras e não puxam pela cabeça. Eu ainda me lembro na minha quarta classe era fazer tabuadas nas folhas de 35 linhas e tínhamos que empinar...eles não chegam à máquina e vêm logo quanto é. Ele diz-me que vai buscar a máquina e diz-me já quanto é, mas assim não me interessa. Assim, não sabes. Por isso é que eu digo, às vezes estas coisas que avançam mais, os miúdos não puxam tanto pela cabeça. Eu até a quarta classe, ainda consigo corrigir e explicar. Mas este miúdo nem sabe ler nada de jeito, não sei, está muito atrasado aquele garoto, também teve agora 7 negativas. É o que eu digo ele não está interessado, às vezes entro no quarto para dar explicações e ele está a olhar pela janela...E eu digo à minha irmã, para pôr o miúdo a trabalhar. Antigamente, quando as minhas filhas andavam a estudar, uma tirou direito e foi para a magistratura, e às vezes a minha irmã dava-lhe explicações e ela dizia-me que não queria a tia a ensinar nada, porque ela gritava com ela. Hoje acho que a minha irmã facilita de mais ao neto. É neto! (laugh). Ele às vezes está meio a dormir e ela diz que ele é assim. Antigamente, ela gritava e dava uma palmadinha se fosse preciso...e não fazia mal nenhum dar uma palmada. Ele não tem interesse nenhum pela escola, tanto é que teve 7 negativas...7 negativas é muito. Isto não tem nada a haver com o que a menina quer saber...

Não, não se preocupe que está tudo interligado. A senhora quando trabalhava...

Eu nunca trabalhei, era doméstica e fazia uma costura. Eu não tinha ninguém a quem deixar os garotos e é o que o meu marido dizia, ele trabalhava na câmara, para estarmos a pagar a alguém para ficar com os miúdos, mais valia eu ficar em casa e olhar por eles. Tanto que as minhas filhas nunca foram para o infantário, nem as minhas filhas, nem os meus netos. Sempre tomei conta dos netos. E eu ouço dizer que é bom que os miúdos vão para a escola cedo, com quatro/cinco anos, mas as minhas filhas chegaram onde chegaram e não precisaram nada disso. A minha outra filha licenciou-se em História, mas hoje está desempregada com 46 anos. Nunca deu aulas de história, naquela altura quando acabou a licenciatura ela candidatou-se, mas não foi chamada e entretanto casou e depois arranjou um trabalhinho a recibos verdes para a Alta autoridade da Assembleia da República. Começou ali naquilo, ganhava, não ganhava muito, mas pronto. Depois compraram uma casinha em Paço de Arcos e

depois também para ser chamada para outros lados...e o tempo foi passando e agora até lhe digo que devia tentar outra vez, mas ela diz-me que da maneira que isto está com os professores de História...quem está, está e já tem dificuldades. Depois nasceram os filhos, até que mandaram muita gente embora e ela também veio. Já fez dois anos e estive com o subsídio e já acabou...e agora com 46 anos...é o que ela diz agora para dar aulas, ninguém me queria, mas até se me quisessem eu tinha que estudar outra vez tudo. Ao fim destes anos todos, nem sabia dar aulas. Ela diz que nem queria dar aulas, porque hoje em dia vai no autocarro e vê os miúdos e nós éramos um bocadinho endiabrados, mas não como agora...nunca vão quietos e fazem tantas diabruras, que ela diz que era incapaz de dar aulas a gente assim, porque não tinha mão neles. De maneira que ainda está desempregada e agora vai ser difícil. Vai ser muito complicado, ela está em tribunal, vai ser agora o julgamento...mas até que ela ganhe eles põem recurso e o ordenado é que não existe. Nós lá vamos ajudando...O meu marido está reformado da câmara, há dez anos. Ele também fez 80. Só temos uma reforma. Disseram-me que a partir dos 70 anos, o Estado dava-nos qualquer coisa. Eu há cinco anos tirei um peito e tenho 90% de incapacidade e a minha irmã foi comigo à Segurança Social, preenchi os papeis, mas como o meu marido ganha mais que o ordenado mínimo, ganha 850 euros e portanto eu não tenho direito a nada. Nem que fosse 100 euros, eu sentia-me bem...porque é a tal coisa eu se voltasse atrás, as minhas filhas iam para uma creche e eu tinha arranjado qualquer coisinha e hoje tinha uma reforma, pequenina que fosse. A vida está muito difícil e a minha filha e netos precisam de ajuda. Uns netos estão bem, porque o pai é Procurador da República, embora a mãe tenha falecido. Os outros é que precisam mais de ajuda. Eu tenho seis netos, quatro da minha filha que faleceu e dois da outra que está desempregada. Os netos vão lá almoçar e damos sempre alguma coisinha para um café, e assim. Se me tivessem dado 100/150 euros já ajudava, mas não deram. Eu ajudo muito a minha filha, mesmo com a incapacidade que tenho, passar a ferro e outras coisas. A gente já é velho...E agora também não tenho andado com muita saúde, mas não adianta nada andarmos a pensar na doença. E lá se vai andando.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, acho que não.

“Susete”

Doméstica
54 anos
Heavy Internet user
Entrevistada em casa

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

É mais pessoal. A minha formação é Informática e tudo que está relacionado com informática era trabalho. E como sou uma pessoa de fácil comunicação uso sempre mais a comunicação pessoal. Normalmente...eu tenho uma filha só, sou casada, vivo com o meu marido e a nossa filha não vive connosco, mas temos um dia por semana em que todos se reúnem. A minha sobrinha também mora aqui em Lisboa e também vem sempre ao Domingo...eu gosto muito de reuniões de família. Também utilizo muito o telefone, o telemóvel, outras vezes emails. Mas os emails são quando quero dar recados mais complicados e convém que fiquem escritos, para lembrar...a pessoa pode não responder logo, mas fica com essa informação. Utilizo muito a Internet, mas é em termos de bancos, de pesquisas de algumas coisas...mas gosto mais do pessoal, sempre.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Com os meus amigos mais próximos, também é pessoal. Um dia por semana também nos encontramos todos, temos esse hábito já há muitos anos. Mas também utilizo os emails. Utilizo até porque muitos não moram aqui na zona e então, utilizamos os emails.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

Sim, sim.

Pode falar-me um pouco sobre essa situação/situações?

Foi quando um tio meu morreu e como somos uma família de nos vermos muito, depois era necessário, naquela altura, que as pessoas se encontrassem um bocadinho mais e eu preciso...como sou muito de me dar com as pessoas, também depois gosto de muito de receber, que as pessoas venham cá a casa para falarmos...gosto mais desse tipo de coisas. E durante esse período, realmente foi um período um bocado complicado para mim. E os meus familiares e amigos estiveram lá para me dar apoio emocional.

Portanto, teve várias situações/acontecimentos em que os seus familiares, precisaram da sua ajuda? E os seus amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação?

Normalmente, é a minha filha (laugh). Normalmente a minha filha, em todos os aspectos. É nos aspectos financeiros, até mudou agora de casa e precisa sempre de

mais coisas e é emocional, temos uma relação muito próxima, e embora ela não viva cá passa sempre cá durante a semana, depois de vir do emprego...e qualquer coisa é sempre a mãe. Está aborrecida no emprego, telefona à mãe. Ou então passa aqui, porque lá está, até porque talvez eu lhe tenha transmitido que é sempre melhor encontramo-nos e falarmos, pessoalmente, como estamos aqui as duas, agora.

E de todas actividades que me referiu que faz na Internet, o que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Utilizo para fazer pagamentos, mas também aderi às facturas electrónicas...eu agora não estou a trabalhar, estou em casa...sobretudo para serviços. Também às vezes utilizo para pesquisa de...aqui há uns tempos precisei de fazer umas partilhas e não estava bem dentro do assunto e isso pesquisei quase tudo na Internet, o que era preciso, quais são os documentos, os passos e essas coisas. Nesse aspecto eu acho que a Internet é muito útil. Não uso muito a Internet para fazer amigos.

Tem perfil em algum site de redes sociais, como o hi5 ou o facebook?

Não. Quer dizer, eu tenho, mas não sou eu que uso (laugh). Eu vou lhe explicar, o meu marido é louco pelo farmville e então para ter duas quintas, criou um perfil só para mim (laugh)...então os meus amigos pensavam que era eu e diziam-me “ah, tu estás no farmville” e eu dizia “eu não” (laugh). São coisas do meu marido, porque ele está pré-reformado e também agora passa muito tempo em casa e entretém-se ali com os jogos e essas coisas. No computador, também às vezes jogo, mas não jogo online. Jogo jogos no computador, normalmente são cartas.

Com quem comunica mais na Internet? E através de que ferramentas?

Emails, para os amigos e pessoas de família. E tenho um grupo de antigos colegas, costumamos trocar emails...até porque os telefones além de serem caros, quero combinar um jantar, onde é que é, se vou estar a telefonar a 10 pessoas a explicar onde é o restaurante, etc., chego ali à Internet e faço um mail para todos. E é mais prático e as pessoas se quiserem consultar, é mais fácil Então isso uso bastante.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Não, não.

Nem positivamente, nem negativamente?

Ah, talvez mais positivamente. Mas quer dizer, não alterou, continuo a ter os hábitos em si...relacionamento não alterou. Agora se calhar, comunico mais, porque se calhar, como lhe estava a dizer, não vou fazer telefonemas individuais...normalmente, agora uso o telemóvel para felicitar por um nascimento, uns parabéns...assim coisas mais rápidas. O resto, se quero contar alguma coisa ou quero saber se a família está doente, etc. utilizo se calhar mais a Internet. Mas acho que é mais uma questão de custos, digamos.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Afectou positivamente, porque talvez alguns que eu comunicava menos ou quase nada, agora como tenho os emails deles, acabo por mandar também...ou às vezes vejo as pessoas, entre aspas, que estão online e também utilizo para dar um recadinho ou para dizer só olá. E assim, para esse tipo de coisas. Então talvez sim, nesse aspecto, melhorou.

Utiliza o Messenger, IM?

Não, utilizei muito o Messenger quando a minha filha teve no Brasil, seis meses, pelo ISCTE. Porque ela é licenciada pelo ISCTE e teve lá seis meses. E então era a maneira que nós tínhamos de comunicar, mas normalmente não utilizo. Utilizo para falar com uma sobrinha minha que voa e agora, por exemplo, está em África e às vezes apanho-a lá, porque eu tenho o gmail.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Não.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Normalmente, vou ao Google (laugh).

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Tento também entre os meus amigos se alguém tem o contacto...normalmente é a primeira maneira que arranjo e normalmente sou bem sucedida (laugh).

Pontos positivos e negativos da Internet na sua vida/vivência quotidiana?

Tornou mais prático as coisas práticas, pagar isto, aquilo, transferir dinheiro para outra conta. Inclusivamente se quiser fazer um depósito a prazo posso fazer, sem ter que ir ao balcão e estar à espera ou estar a dizer o que quero fazer, porque escusam de saber...Acho que nesse aspecto, é para que eu utilizo mais, no Google também, para tirar informações e depois para esse tipo de serviços. Negativos, não. Para mim, não. Até porque nem sou muito escrava, digamos, é mesmo quando preciso...às vezes vou ver se alguém me tentou contactar, é verdade, mas isso, não alterou nada. Sei lá, enquanto antes chegava a casa e via se tinha alguma gravação, agora vou ali ver se tenho um email. Consulto quase todos os dias, quer dizer nem sempre, mas normalmente é. Até porque agora trato de umas coisas familiares e para me contactarem utilizam o email.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, mas obrigado.

“Paulo”

Reformado
75 anos
Moderate Internet user
Entrevistado num parque da cidade

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Tenho 3 filhos e nenhum está junto de mim. Uma está em Bragança, outro está em Barcelona e tenho uma filha que está em Inglaterra. Portanto, sobretudo com o meu filho que está em Barcelona e a minha filha que está em Inglaterra, e como o que está em Bragança também, contacto com eles telefonicamente. Por vezes, também através do Skype, sobretudo com a minha filha que está em Inglaterra e a meu filho que está em Barcelona.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Também através do telefone e contacto pessoal. Nós, de vez em quando, vamos jantar ou almoçar, com alguns deles. Periodicamente com alguns, por exemplo, pessoas do meu curso e pessoas do trabalho. Já estou reformado e portanto também muitas vezes com as pessoas do trabalho.

No último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.)

Não, não. Nada que me lembre.

No último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

Geralmente aos familiares, por exemplo, a minha filha que está em Bragança tem uma filha pequena e às vezes precisa que eu vá lá para ajudar. Por exemplo, no próximo mês, já me comprometi e vou lá estar duas semanas, porque ela precisa de ir ao estrangeiro e precisa de ajuda para tomar conta da minha neta.

E de todas actividades que me referiu que faz na Internet, o que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Na Internet costumo ver as notícias, consulto coisas na área da informação e, por exemplo, marco as consultas via Internet. Eu sou beneficiário do SAMS, que é o serviço de saúde dos bancários, que eu era bancário. Costumo ver o saldo da minha conta, para serviços, transferências. Aderi à factura electrónica e recebo no email a factura, por exemplo, da EDP. Tenho email, mas não costumo enviar muitos emails.

Tenho dias, em que acedo à Internet todos os dias, outros que não. É conforme. É por fases.

E tem perfil em algum site de redes sociais? Como o facebook, o hi5?

Não. Não tenho perfil em sites de redes sociais

Com quem comunica mais na Internet? E através de que ferramentas?

Uso a Internet também para isso. Mais com os familiares. Através do Skype.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Não afectou. Sempre que é possível pessoalmente, quando não é, pela Internet.

Acha que afectou positivamente ou negativamente, ou não?

Através da Internet falo com os meus filhos, com uma certa frequência, o que é positivo.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Não, penso que não, nem positivamente, nem negativamente.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Não.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Às vezes vou à Internet, para ver os horários dos comboios, por exemplo.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Antigamente, consultava a lista telefónica, porque todos os telefones em regra estavam na lista. Agora peço através de pessoas conhecidas.

Pontos positivos e negativos da Internet na sua vida/vivência quotidiana?

A Internet facilita a comunicação e serviços, como transferir dinheiro, mas eu não utilizo muito a Internet, porque tenho as coisas perto e posso deslocar-me e devo deslocar-me. Eu tenho 75 anos e acho que devo manter-me activo. Negativos, não.

E pontos positivos e negativos da Internet, em geral? Quais acha que são?

Bem, positivos, na minha vida, facilitou a forma de comunicação, de facto. Negativos, há sempre aspectos negativos, mas o que é preciso é saber utilizar a Internet. Iludem-se muitas pessoas, através da Internet. Fraudes, fazem-se muitas fraudes. Eu trabalhei num banco, já me reformei há 12 anos e na altura já havia, mas agora há muitas mais. Quer dizer não foi a Internet que causou, mas facilitou. É uma ferramenta que facilitou um bocado essas situações. Já tenho ouvido falar de problemas com

crianças, que é preciso ensiná-las a utilizar essas ferramentas. Enfim, eu não utilizo muito a Internet.

Na sua fase profissional, quando estava a trabalhar, já utilizava computadores?

Utilizava computadores, ainda não havia Internet. No fim, já se utilizava a Internet, mas ainda muito pouco. Eu reformei-me em 98.

E notou alguma diferença em termos de utilização de computadores, quando se reformou?

Não, quando me reformei já tinha um computador em casa. Comprei um, quando o banco facilitou aos empregados à aquisição de um computador, num empréstimo sem juros. O primeiro computador que comprei custou oitocentos e tal contos, não é? Era muito caro, na altura.

E o que fazia no computador, quando estava em casa?

Na altura, era mais para os meus filhos. Os meus filhos começaram a estudar e era para fazer os trabalhos. Eu nunca utilizei para trabalhar em casa, era mais como ocupação dos tempos livres.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não.

“João Nuno”

Reformado
67 anos
Heavy Internet user
Entrevistado numa pastelaria

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Eu tenho a família dispersa, um dos filhos vive nos Açores e portanto a comunicação com ele é via telefone ou via Internet. Utilizo o Skype para conversar com ele e para ver o filho, a nora e os netos. O resto vivemos juntos, isto referindo-se à minha mulher e meus filhos, porque o resto...eu sou de uma família relativamente grande, éramos nove irmãos, hoje somos já só cinco e vivíamos todos na zona de Lisboa, nesta fase final da vida. Antes disso tivemos na Beira, Beira Baixa, estivemos em Moçambique e depois mais ou menos viemos todos para aqui. Viemos todos parar aqui a Lisboa e arredores de Lisboa. Mas eu vivo com a família mais próxima, há excepção do filho.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Além do contacto directo, pelo telefone. Mas também uso muito o email, a Internet. Eu sou utilizador de computadores há muitos anos. Porque eu fui técnico de informática e isso deixou um bichinho, durante toda a vida, que foi fazendo o seu caminho. Portanto, usei sempre o computador e agora uso para falar quer através do Skype, quer contactos através de email.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.)

Não me recordo assim de nada, em especial.

E a situação inversa, no último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

Sim, isso já aconteceu. Há algum tempo prestei alguma ajuda a uma pessoa familiar que precisava de alguma ajuda.

Pode falar-me um pouco sobre essa situação?

Era uma pessoa que se deixou apanhar pelo vício do álcool. E depois com o tempo foi-se agravando, ele era casado, e necessitou de fazer um tratamento, tratamento esse que foi fazer a Espanha. Na altura, eles, o marido e a mulher, solicitaram a minha companhia, para os ajudar na ida até Espanha. E estive em Espanha, dois ou três dias com eles, nessa altura. Graças a Deus a coisa resultou bem, porque de facto, ele acabou por ultrapassar o problema. Esta é a situação que me recordo assim mais recente, mas não tão recente assim, já tem algum tempo.

E de todas actividades que me referiu que faz na Internet, o que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Eu faço tudo aquilo que posso. comunicação por email com diversas pessoas e utilização das capacidades da Internet mesmo para por exemplo, movimentos bancários. Já há muito tempo que não vou ao banco, porque faço quase tudo através de Internet.

E tem perfil em algum site de redes sociais, como o hi5 ou o facebook?

Tenho no facebook. No hi5 tive, aliás tenho, mas praticamente não uso. Porque o facebook ultrapassou de longe as características do hi5, embora aparentemente seja a mesma coisa, mas na realidade não é. Como rede social, o facebook é espectacular. E uso para estar com e procurar amigos. Jogos, não jogo. Estou sempre a receber convites, sugestões, farmville, etc., e quer ser vizinho, não ligo a nada disso. Isso é que considero perder tempo.

E IM, também usa?

O Messenger também uso e para contacto até por vezes profissionalmente, profissionalmente porque eu dou assistência a Instituições de Solidariedade Social, e eu sou voluntário e presto essa ajuda. E muitas vezes é através do Messenger.

Com quem comunica mais na Internet? E através de que ferramentas?

Com essas duas entidades, do ponto de vista profissional. Mas depois para conversar, com amigos, vários amigos. No facebook eu tenho cerca de 150 amigos, portanto há ali muita gente para poder conversar.

E considera esses amigos no facebook, mesmo “amigos”?

Quase todos, a maioria deles. Foram antigos colegas profissionais. Eu estive nos recursos humanos de uma empresa grande e pessoas dessa empresa que hoje mantêm contacto comigo...e muitos deles aconteceu por iniciativa de um que deu depois origem a muitos outros e depois se vão prolongando e hoje são umas dezenas largas.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Não.

Nem de forma positiva ou negativa?

Ah, eu acho que de forma mais positiva, do que negativa. Embora, do ponto de familiar e do tempo que estou em casa, retira um bocadinho do tempo familiar, sem dúvida alguma. Mas, se soubermos dosear bem o tempo que utilizamos, é mais positivo do que negativo.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Geralmente, afectou positivamente. Eu considero-me uma pessoa que tem um fácil relacionamento e portanto tem resultados positivos. Não aceito assim facilmente a

vinda de qualquer pessoa que não seja dos meus relacionamentos. Mas já tem acontecido com pessoas com mais ou menos distantes com quem estabeleço contacto.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Sim, já aconteceu. Ainda agora a relativamente pouco tempo, uma pessoa do continente Africano, eu vivi em África durante uns anos, e eu costumo dizer sempre que não, que não estou interessado, mas resolvi dizer que sim. E então essa pessoa com quem vou contactando, foi um contacto absolutamente inesperado e nada previsto.

Que tipo de relacionamento mantém com essa pessoa?

De amizade. Até tenho ajudado essa pessoa com pequenos pormenores. E ao mesmo tempo, deu-me a possibilidade de poder fazer uma análise do tipo de vida que essa gente tem. Portanto, ela é do Continente Africano e a origem é Inglesa. Eu falo em Inglês com alguma dificuldade, com um programa de tradução ao lado...mas de qualquer maneira acabei por poder até orientar às vezes numa ou noutra situação, relativamente a um filho. Sei lá, às vezes um conselho pode ser o suficiente para que a pessoa mude o rumo, que está a querer seguir. E no caso, foi uma coisa dessas.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Utilizo o Google na pesquisa, aquilo é uma máquina extraordinária, responde a tudo. Mas, por exemplo, ontem a minha mulher tinha três nomes de três médicos que precisava de um bocadinho mais de informação e então utilizei o Google para ir à procura dessa informação. E o facebook também ajudou. Normalmente, não é preciso sair de casa para uma informação dessa.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Sim, se não souber como posso procurá-la ou através de quem, em princípio uso a Internet. Porque às vezes é difícil seleccionar com tantas pessoas com aquele nome, quem é que a pessoa que eu de facto procuro. Mas acontece muitas vezes.

Elementos positivos e negativos da Internet na sua vida/vivência quotidiana?

Começando pelos positivos...

Neste momento eu tenho bastante tempo, apesar de tudo. Embora dê colaboração a duas instituições, tenho bastante tempo livre. Sem sair de casa, acabo por estar o tempo que eu quiser. Ocupado e sinto que essa ocupação é uma ocupação válida, porque a Internet é, de facto, um meio que está ao nosso alcance e que tem tudo de bom que nós procuramos e tudo de mau que quisermos encontrar. Acho que isso diz tudo.

Que tipo de elementos negativos a Internet trouxe para a sua vida?

Bombardeamento sistemático de procura de interferir na nossa vida, com sugestões, sei lá, provocações até. Se a pessoa não for suficientemente segura, moralmente segura, é muito complicado. Daí é o que se ouve, desde a pedofilia a coisas por aí fora...quem não estiver moralmente construído, por assim dizer, vê-se aflita, porque é

diffícil saber escolher aquilo que se quer. Ou então ser-se determinado. Obriga a uma personalidade com determinação, se não está sujeita a desencaminhar-se e ir por caminhos que às vezes nem têm nada a ver com essa pessoa. E chegar a fins muito complicados, de envolvimento e coisas assim no género.

E elementos negativos especificamente para si, a Internet trouxe-lhe alguns?

Para mim pessoalmente, se calhar às vezes devia usar menos tempo. É o aspecto mais negativo, é a utilização do tempo. Desperdício de tempo, às vezes andamos ali à procura de nada quando podíamos utilizar o tempo para coisas mais úteis.

Notou grandes diferenças de utilização do computador e Internet quando transitou da vida profissional activa para a reforma?

Sim, o tempo é mais livre. Na altura, eu usava o computador como instrumento de trabalho, desde há muitos anos. Eu fui técnico de informática e estive numa empresa que fornecia software, nos anos 70...e desde então, sempre usei computador. Usava a nível profissional, para programação. Agora, uso o computador mais para a Internet. Logo que soube da existência da Internet, eu fui dos pioneiros da utilização de Internet em casas particulares e já há muitos anos que uso a Internet.

E o que é que nota que mudou desde então, desde os primórdios da Internet até hoje em dia?

Hoje temos o mundo na nossa secretária e antigamente tínhamos uma máquina que nos ajudava a resolver alguns problemas, hoje temos tudo. Desde de tudo o que é muito bom, a tudo que não presta, que é muito mau. Eu sou até da opinião, que hoje em dia, de uma forma generalizada, é praticamente impossível acabar com a Internet. Portanto, é uma coisa que está instituída e por mais que queiram não vão acabar. E penso que a Internet vai continuar a ajudar a esclarecer as pessoas que estão menos esclarecidas. Esta rapariga Africana, deu-me para ver isso, ela não tem computador em casa e então utiliza num cyber café e lá vai pagar um x por hora para utilização da Internet. Ela é Ganesa e isto em Gana, no coração Africano, dá-nos uma ideia do que se passa por aí. O resto basta ir ver. Por exemplo, no Skype se eu fizer uma pesquisa de um nome qualquer, aparece-me gente de todo o mundo, desde a China até à Austrália.

Mas se considerarmos o nível de info-exclusão mundial, mais de metade da população do mundo, não tem acesso à Internet, o que acha, também como técnico de informática, que se poderia fazer para diminuir esta cisão digital e alargar o impacto da ? Tem alguma ideia sobre isto?

Não, mas isso passa por uma situação que é muito mais complicada, que é o desenvolvimento social dessas pessoas. Eu vivi em África, como disse, e deu para perceber o tipo de vida que essas pessoas fazem dentro do Continente Africano e em zona mais do interior, não próximo das cidades capitais e etc. E agora estamos a assistir a isto do Cairo. Eu penso que vai trazendo, é uma espécie de um vírus, vai-se alastrando e conquistando espaço, trazendo às pessoas conhecimentos que elas não tinham. E nós falamos do global e essa globalização acaba por ser fruto dos meios de comunicação, que, desde da TV à Internet, que permite às pessoas verem esses meios através da Internet. Perdemos um bocadinho a noção das distâncias e precisamente por isto, temos um computador em cima da nossa mesa e neste

momento estamos na China e noutro momento na Austrália e sem sair de casa. A disponibilização de muita informação também pode ser perigoso. Na questão da saúde, a pesquisa que se faz na Internet, pode ser complicada. Porque a informação que às vezes os médicos dão está exposta na Internet e pode originar que a pessoa se aperceba de uma situação de saúde, que às vezes pode nem ser o que esta a afectar essa pessoa e falta-lhe os meios técnicos para digerir essa informação. Pode ir com boas intenções, mas depois pode ser muito complicado. Não é que a informação não seja boa, esta é a ser usada por uma pessoa não indicada. Eu já tive uma situação de um amigo que estava à procura de uma determinada informação de saúde e eu fui à procura na tentativa de o ajudar e, de facto, encontrei uma descrição desse problema de saúde, que aliás se veio a perceber que era valiosa, somente trazia outras informações e ele entregou à filha o texto que eu tirei da Internet e havia umas coisas que referiam a possibilidade de infertilidade, que essa doença podia causar. Mas não era taxativo. Eu sei que a filha desse amigo leu aquilo e ficou alarmadíssima com a ideia. Isto é um exemplo, há muitos outros. É perigoso, como é perigoso do ponto de vista económico. O Marketing é um perigo sabe e põem nas cabeças das pessoas soluções que parecem clarinhas como água, mas que depois são extremamente perigosas. E levam as pessoas a fazer investimentos e a gastar dinheiro que muitas vezes nem têm...situações que a própria Internet através de maus utilizadores traz às pessoas, com a possibilidade de as aliciar para...e nós soubemos quantas pessoas são burladas, não é? Eu ainda ponho muitas reticências nas compras pela Internet, embora já tenha comprado. Trabalhei muito para ter aquilo que tenho e tive uma vida difícil agora tenho graças a Deus uma boa vida, de maneira que não quero por em risco o meu património para responder assim de qualquer maneira a essas solicitações.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, muito obrigado. Gostei muito.

“Francisca”

Professora Universitária
31 anos
Heavy Internet user
Entrevistada online, via Skype

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Com alguma frequência ou bastante frequência pessoalmente e também por telefone. E cada vez mais pela Internet, através de email e Skype.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Mais pessoalmente, com os amigos não sinto tanta necessidade de contactar a todo o momento e portanto é mais feita a nível pessoal. Sendo que também, pontualmente, há contactos feitos por telefone e por email. Alguma vezes, Skype, também. Mas não com tanta frequência como com a família.

No último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.).

Sim.

Pode falar-me um pouco sobre essa situação?

No último ano, aconteceu tanta coisa, que eu vou ter alguma dificuldade em precisar alguma situação concreta...Eu acabei o meu doutoramento em Janeiro e muitas das minhas urgências do último ano tiveram a ver com trabalho, nomeadamente alguns pedidos de revisão de texto e coisas que eu precisasse no momento. Conteí imenso com a ajuda de amigos e familiares, nesse sentido.

E no último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

Agora de repente estava a lembrar-me duma situação do mesmo género, em que uma amiga me foi pedindo para rever alguns textos de coisas que ela estava a escrever. A minha mãe com muita frequência solicita-me ajuda em relação a coisas com computador e Internet e isso é algo que ao longo do último ano, por acaso, se tem intensificado.

E de todas actividades que já me referiu fazer na Internet, o que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Eu uso muito o email, todos os contactos profissionais passam muito pela Internet e faço muita pesquisa também. Pesquisa de tudo, desde coisas técnicas e específicas

relacionadas com o trabalho até coisas do dia-a-dia, sejam elas condições meteorológicas, receitas, confirmar palavras, através de dicionários...Passa tudo muito pela utilização da Internet.

E tem perfil em algum site de redes sociais, como o hi5 ou o facebook?

Tenho no facebook e no LinkedIn. Uso mais o facebook, mas não sou muito activa. É mais para ver o que se passa, dar uma espreitadela no que os amigos andam a dizer, e depois claro, que há aquela situação de se encontrar pessoas ou tomar conhecimento de situações de que outra forma seria pouco provável.

Com quem comunica mais na Internet? E através de que ferramentas?

A nível profissional a comunicação é bastante intensa, mas também com familiares e alguns amigos. Essencialmente email e skype, pontualmente o facebook ou o Messenger.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Acho que afectou de forma positiva. Porque facilita e não temos que sistematicamente pensar nos custos. E no meu caso que tenho ligação à Internet, pago um x por mês e depois tenho utilização ilimitada, acho que desse ponto de vista, facilita bastante a interacção. Depois também somos um bocadinho mais invadidos, porque quando mostramos que estamos online, mais facilmente, tal como eu faço, contactamos a pessoa que está do outro lado. Isso também é uma opção, porque podemos não nos mostrar online. Mesmo a minha avó já utiliza o Skype, com 82 anos. Não é uma utilização muito autónoma, do ponto de vista que ela não tem um computador dela, mas fala comigo frequentemente, ou com outras pessoas da família que estejam fora. E é muito engraçado ouvi-la a dizer "Estive na net, com a, b, ou c" (laugh).

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Acho que sim, sem dúvida. Eu tenho algumas pessoas nos Estados Unidos e facilita bastante a manutenção do contacto e tenho contactado com pessoas que não me estão próximas no dia-a-dia ou que eram amigos de infância ou aquelas pessoas que passam pela nossa vida, mas depois acabam por se afastar e aí o facebook foi o veículo.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Isso não. Nunca aconteceu. No facebook não aceito convites esporádicos de pessoas que não sei quem são.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

O primeiro passo é sempre o Google.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Vou tentar também através do Google, para ver se encontro essa pessoa, se há algum contacto ou o contacto de uma instituição a quem essa pessoa possa estar ligada.

Elementos positivos e negativos da Internet na sua vida/vivência quotidiana?

Começando pelos positivos...

Na minha vida diária, além da facilidade de comunicação, a rapidez de obtenção de qualquer informação que precisamos de obter. No outro dia, estava a escrever umas coisas e precisava de consultar uma tese relativamente recente, que não estava disponível online, mas de qualquer forma, contactei imediatamente uma pessoa que contactou o autor da tese e dez minutos depois tinha a tese a entrar-me na caixa de correio electrónica, vinda da Califórnia. E isto é, de facto, uma coisa que sem a Internet seria impensável. Eu provavelmente nem saberia que essa tese existia, quanto mais ela chegar-me às mãos em dez minutos, depois de eu ter pensado que aquela tese até me dava jeito. E isto é um exemplo daquilo que me parece que é fundamental, em qualquer altura, nós conseguimos ter acesso a quase tudo.

E elementos negativos?

É o tempo que perco. Acho que é o elemento mais negativo, porque a pessoa quer queira, quer não, muitas vezes se tenta focar e concentrar, mas entre aquele sentimento de responsabilidade ou seja o que for, estamos sistematicamente a ver se entrou algum email, com alguma coisa importante, se acabou de entrar, respondemos, entretanto, aparece mais alguma coisa que afinal nem era assim tão importante e isso faz-nos perder umas horas largas ao fim do mês. De outra forma, poderíamos estar mais focados naquilo que será realmente importante, naquele momento.

E elementos negativos, para a sociedade, a nível geral?

Acho que talvez a diminuição do contacto directo/pessoal entre as pessoas, como muita coisa se faz através da Internet, as pessoas encontram ocupação com a Internet e acabam por ter menos tempo, menos disponibilidade e menos necessidade de estar com os outros, de fazer coisas em espaços públicos e contribuir de alguma forma também para a sociedade. Porque acabam por estar mais ocupadas no seu nicho.

Qual é a diferença entre uma interação/contacto via digital e via pessoal? Há alguma diferença? Nós, neste momento, por exemplo, podemos ver-nos e ouvir-nos através do Skype.

Pois, isso é uma boa pergunta. É verdade, mas se calhar não partilhamos um abraço, não partilhamos um filme e um concerto. Não partilhamos esse tipo de momentos. Acho que há cumplicidades que se criam em presença, que no contacto digital é mais difícil.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, penso que já disse tudo.

“Cassandra”

Artista
26 anos
Heavy Internet user
Entrevistada em sua casa

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Telemóvel, telemóvel...telemóvel (laugh). Eu não vivo com os meus familiares, vivo com o meu namorado, noutra cidade, e com esses familiares a interacção não é tanto pessoal, pela distância física.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Facebook e telemóvel.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.).

Sim.

Pode falar-me um pouco sobre essa situação?

Tive a trabalhar numa empresa/atelier e as coisas não correram assim muito bem. Eu não gostei muito da experiência e depois saí e fiquei nesse dia, fiquei assim meia apática, todo o dia. E foi uma desilusão, porque pensei que o meu caminho poderia estar a seguir um rumo mais consistente e afinal, não. Porque novamente foi mais um erro na minha vida e especialmente na minha carreira profissional. E há noite estava na garagem com o meu namorado e tive um ataque de pânico, comecei a ver...a minha visão periférica fez com que o chão e o tecto se unissem. E depois deu-me uma cena horrível no elevador, uns tremores e eu não os conseguia controlar e depois fui para as urgências, mas não tinham psiquiatria e então levaram-me para outro hospital. O meu namorado foi quem me socorreu e ajudou e depois tive com os meus pais, cerca de um mês e meio, in #, para recuperar.

E os amigos mais próximos também estiveram presentes nesta altura?

Eu fugi dos meus amigos mais próximos.

E no último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

A minha prima, precisou de apoio emocional, no último ano. A minha prima é uma mulher muito sensível e especialmente muito carente. Esta forma de sentir e de viver o dia a dia é se calhar motivado por nunca ter tido uma estrutura familiar comum...pelo

menos a forma como eu vejo como comum...o pai não quer saber dela a muito tempo, a mãe tem outra família, um novo marido e outro filho e vive na Suíça acrescentando a não ter uma relação amorosa estável. Precisou de muito apoio emocional e eu estava lá.

O que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Procurar emprego, ver sites sobre arte, facebook uso muito e email também. Eu tenho alguns grupos de amizades e no email também fazemos uma espécie de conversação online com esse grupo (mailing-list). E acho que é isso.

Com quem comunica mais na Internet? E através de que ferramentas?

Com o meu namorado por email e no facebook, falo com as pessoas mais próximas. Raramente com a família.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Eu acho que sim, mas as nossas relações estão sempre em constante...nós temos obstáculos e ao mesmo tempo, novos instrumentos de comunicação e utilizamos esses instrumentos, mas não nos apercebemos muito bem, aquilo que mudou, ou o que é que é diferente em relação ao que era antes. Ainda não reflecti muito bem sobre isso. Por exemplo, se calhar eu consigo estar em dois espaços ao mesmo tempo, posso falar com os meus amigos, e se calhar não é uma coisa marcada, se calhar eles aparecem de forma mais espontânea, conversamos online, sem nenhum compromisso. Se eu tivesse que ir tomar uma café com uma pessoa e estivesse no café, eu tinha o compromisso de eu estar ali 100% dedicada a essa pessoa ou a essas pessoas. No caso da Internet, eu posso dedicar-me não só a essa pessoa, mas também a outro espaço, posso estar a ver TV, posso estar a falar com outra pessoa...e se calhar isso altera essa interacção.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Claro que sim. Primeiro, há uma coisa estranhíssima, é um reencontro com pessoas que eu conheci, mas que já não via há imenso tempo, pessoas da escola, e que acabei por reencontrar e até falar através da Internet. Não necessariamente significa que eu me encontre com essas pessoas fisicamente, mas pelo menos tenho um contacto mais regular. Depois há uma coisa que é interessante no caso do facebook é o networking, por exemplo, eu sou amiga de um fulano que eu quero ser amiga e acabo por enviar pedido de amizade e isso pode ou não ser um caminho mais rápido para se atingir um fim...sei lá, conhecer uma pessoa importante para...E no outro dia pedi um sofá velho para trabalhar e ofereceram-me um sofá no facebook e eu fui buscá-lo à pouco tempo. Se não houvesse facebook, não tinha a possibilidade de reencontrar amigos antigos.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Sim, mas só na Internet. Ah quer dizer conheci uma vez uma dessas pessoas, jogava ao poker comigo e era amigo de um amigo meu e encontrei esse amigo e o outro reconheceu-me pela fotografia (laugh)

Mas foi espontâneo, não marcaram um encontro?

Não, não, foi espontâneo. Não vou com esse intuito, de conhecer fisicamente essas pessoas que só conheço online.

Que tipo de relacionamento mantém com esses “amigos” só online?

De conhecidos, eu sou uma mulher muito desconfiada (laugh). Eu só desabafo e partilho coisas com amigos que realmente conheço. Eu não uso o facebook como diário para que toda a gente saiba o que estou a fazer, encaro como um suporte que me pode ajudar profissionalmente...pois, às vezes, as coisas misturam-se, mas eu, por exemplo, nunca coloquei fotografia nenhuma minha, é sempre do meu trabalho. Quer dizer também uso a nível pessoal, junto tudo.

E é fácil equilibrar essa relação pessoal/profissional?

Não é. Por exemplo, às vezes apetecia-me escrever coisas parvas, mas depois penso, ia aparecer no mural de não sei o quem e...ou porque sou amiga de uma Professora da faculdade ou assim...tenho essa preocupação, mas isso é como sair de pijama de casa para a rua. Tenho muitos problemas de erros ortográficos e tenho cuidado de não me apresentar como eu realmente sou (laugh).

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Internet, sem dúvida, nenhuma. Para tudo.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Telemóvel, se conhecer. Internet, se não conhecer, vou logo ao nosso amigo facebook (laugh).

Elementos positivos e negativos da Internet na sua vida/vivência quotidiana?

Começando pelos positivos...

Eu acho que já disse alguns. Estar mais perto das pessoas. Até para conheceres alguém, precisas de um conjunto de factores, tipo “estava no momento certo, à hora certa”. Com a Internet, não precisas desse tipo de “milagres”, rapidamente podes conhecer uma outra pessoa, sem esses factores. Se calhar não tens a mesma disponibilidade, do que se encontrasses essa pessoa pessoalmente...não sei.

E elementos negativos?

Perco muito tempo na Internet e no facebook. Parece que vivemos em duas dimensões, mais na virtual, do que na real. As vezes, é mais difícil parar. Eu, por exemplo, andava viciada no *farmville* e passei a viver 70% do meu tempo, da minha vida, na quinta. Decidi terminar de jogar, porque estava a perder imenso tempo e ninguém me pagava para cavar terra. Ainda gosto, mas tento evitar. Agora sonho ter uma quinta de verdade (laugh).

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, mas gostei muito da entrevista.

“Pedro Lopes”

Comissário de Bordo
45 anos
Moderate Internet user
Entrevistado num café

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Telefone, telemóvel, mas mais pessoalmente, presença mesmo. Ainda ontem estive na casa de uns tios meus, hoje outro compromisso que tenho à tarde é estar com um tio, também. Privilegio a interação pessoal, mas também falo bastante por telefone. Não tanto através da Internet. Não é forma de comunicar, quer dizer, não é que não possa ser útil, não sei...Também não uso o facebook para isso, sei lá já sou crescidinho, às vezes penso nisso, mas depois também vejo a minha sogra que já tem mais de 60 anos e que utiliza o facebook, mais do que os filhos. E é uma forma de comunicarem. Eu vivo umas temporadas no Brasil e, sem dúvida, que nessa altura é muito útil. Também tenho alguns primos em França e podia estar mais em contacto, mas não gosto de...prefiro pessoal ou por telefone.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Também mais pessoalmente e por telefone e telemóvel. Embora muitos deles estejam a viver no Algarve, eu vivi muito tempo no Algarve e tenho lá amigos que ainda hoje me dou. E vejo-os sempre que vou lá de férias.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.).

Não, nada de especial.

E no último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

Sim, ajudei um amigo. É um amigo que já tem mais 40 até e ainda não decidiu assentar. E então tem uns trabalhos, viveu uma temporada na Holanda e depois regressou e foi-se acomodando...porque é mais fácil ficar em casa e não procurar de trabalho. E houve uma altura, mais perto do Natal, que precisou de algum dinheiro e ligou-me e eu emprestei. Dei-lhe apoio financeiro, mas também dou muito apoio emocional.

O que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Utilizo para fazer pequenas pesquisas, por exemplo, para ver o tempo. Eu trabalho como comissário de bordo, primeiro sou obrigado a utilizar, obrigado quase, porque toda a informação que recebo relativamente ao trabalho que vou fazer, informações

relativas a um determinado voo que tenho planeado, tudo isso está online. Tenho mesmo que o fazer. Mesmo as informações que eu sou obrigado a receber são todas publicadas através de um portal que nós temos. Mesmo que eu não o quisesse fazer, era muito difícil. Há pessoas que tentam, eu também tentei, mas é praticamente impossível. Depois faço essas pesquisas, como está o tempo, eu agora vou trabalhar/viajar na Quinta-feira e preciso de saber se vou ter bom tempo ou não, para me preparar. Se tiver mau tempo posso pensar em levar mais uns livros ou coisa que o valha. Ontem por exemplo, um medicamento que eu fui buscar à farmácia, havia uma dúvida qualquer e eu fiz uma pesquisa para mais informação. Mas também às vezes sinto que perco um pouco e gasto ali muito tempo, nessas pesquisas.

E usa a Internet como meio de comunicação?

Pouco ou muito pouco. Ontem, por exemplo, precisei de uma receita médica, para que o seguro me pague e em vez de ir ao local e fazer requerimento a dizer que preciso disto, tenho a possibilidade de enviar através do email, que foi o que eu fiz, enviei para lá através de email. Como recebi ontem uma comunicação de uma médica de medicina do trabalho, que contactei por causa de uma dúvida. Podia lá ir ou telefonar, mas é através de email perguntei...mas esse tipo de situação. Claro, que não deixa de ser uma forma de comunicação. Eu agora vou pedir uns bilhetes para ir de férias e isso é tudo feito através da Internet, eles nem recebem esses pedidos de outra forma.

E com os seus amigos, costuma trocar emails?

Não muito. Eu tento utilizar a Internet para isso o menos possível. Não é que eu tenha algo contra, vejo todas as vantagens da Internet, mas prefiro contacto pessoal. Eu depois até acho estranho, porque a minha mulher usa os facebook e os emails muito e eu não. A minha filha também não. Ela já é crescidinha, vai fazer agora 18 anos e não uso assim tanto, usa mas eu vejo, que ela tenta usar o mínimo indispensável. É mais numa perspectiva é útil, é importante, é bom ter, mas controlado, nada de grandes exageros.

Tem perfil em algum site de redes sociais? Usa IM?

Não, não tenho nada. Tenho só um email, que é o email profissional. A minha mulher também me diz que devia ter outro email, porque aquele pode não ser tanto confidencial. Mas eu acho que não devo usar, não quero mais emails.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Não tanto. Mais a minha mulher, já nos chateamos algumas vezes por causa disso. Ela fica, às vezes, demasiado tempo online e descarta outras coisas, ela acha que não e eu acho que sim. Mas eu também percebo que há pessoas que têm mais necessidade de estar sempre em contacto com os familiares e amigos, eu não, até agora não tive essa necessidade e percebo isso perfeitamente. Mas eu prefiro o contacto pessoal. Mas também a Internet me dá muito jeito, ainda agora, a minha mulher estava em Lisboa, na semana passada, eu estava em trabalho na Venezuela, a minha mulher precisou mesmo de me contactar e ali não era assim tão fácil e eu estava sem rede. Então, foi através do telemóvel de um amigo. A minha filha adoeceu e como era preciso estarmos mais em contacto, a forma que conseguimos foi através

dela enviar emails para a pousada onde eu estava e eu usar o computador da pousada para responder. Se isto fosse há algum tempo atrás, provavelmente ficávamos sem comunicar ou então comunicávamos de uma forma exageradamente cara, porque fazer um telefonema de lá, através de um telemóvel, é para aí 3 euros por minuto no mínimo, ficava uma autêntica fortuna. Enquanto que aqui não, foi totalmente gratuito. Até que nessa pousada tinha acesso à Internet. Eu nunca levo computador, embora a minha mulher leve e todos os meus colegas também, na maioria. Não quero ter essa dependência, para já, embora veja toda a utilidade. Mas também nos rouba tempo, ainda ontem vi num estudo sobre o medicamento que lhe falei, que diz que uma dosagem mais pequena tem o mesmo efeito. E fiquei logo a pensar e hoje vou ver outro estudo, porque os efeitos secundários são menores e fica muito mais barato. Em vez de tomar um comprimido e gastar um valor, gasto menos. Mas tento usar de uma forma criteriosa, é mais isso.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Não.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Não. Eu não entro em, não faço parte do facebook e assim.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Internet, se tiver acesso. Depende das situações. Há coisa que eu não consigo encontrar na Internet, em relação ao meu trabalho, tenho que contactar colegas, mas só parto para isso quando se esgota as outras possibilidades.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Telefone e telemóvel, em princípio.

Elementos positivos e negativos da Internet na sua vida/vivência quotidiana?

Começando pelos positivos...

Positivos é essa facilidade de eu, sei lá, estou agora a lembrar-me que queria ver uma estação de metro, perto de Odivelas, que eu tenho lá uma casa e então podia ir ali ao metro buscar um mapa, podia perguntar a alguém ou podia ir logo à Internet. Isso é muito positivo. Embora haja um excesso de informação sobre determinadas coisas e essa informação leva-nos a outra informação e há ali uma perda de tempo que ou é preciso sabermos ir buscar a informação, se não aquilo é um mundo, não é...Facilidade também para como lhe disse ir buscar uns bilhetes, se eu tivesse que lá ir, tinha que me deslocar, sair de casa, estacionar, ficar numa fila, etc. Agora estou em casa e peço os bilhetes e passado dois ou três dias tenho os bilhetes e basta imprimir. Isto das consultas, que falei à pouco. Outras formas de comunicar, quero enviar uma mensagem a alguém maior do que podia enviar num sms. Mesmo para comunicar com a minha mulher, embora eu não privilegie esse meio, às vezes é o mais fácil. Ver

hotéis, pesquisar sobre viagens. Eventualmente, pensando com mais calma, podia encontrar mais coisas.

E elementos negativos?

Negativos são o excesso de informação e a perda de tempo. Às vezes criamos também ali algum stress, porque temos um computador lento e às vezes aquilo enerva. Ou até ficamos ansiosos, quando temos muita informação. E se calhar podia passar mais tempo com o meu filho, que às 16h ele já está em casa. Eu tento sempre usar o computador em horas em que ele não está em casa, que está a dormir, ou na escola. Tento que aquele tempinho livre que ele tem, eu possa estar presente. Uma vez o miúdo falou nisso e eu fiquei não foi chocado...porque ele comentou que a mãe estava sempre na Internet e eu fiquei um bocado chateado com isso. E sinto, porque eu nem sempre estou em casa e não sei como as coisas funcionam quando eu não estou. E dá-me essa ideia, e aí é que a minha mulher aproveita, quando não estou em casa. Às tantas ficava cada um num computador, o que acho que é um bocadinho...nós precisamos, também tem essa questão, nós não temos uma vida familiar normal, normal entre aspas, porque eu também não sei se há vidas normais, porque somos os dois comissários de bordo. Por exemplo, eu tive fora de casa de Domingo a Quinta-feira, estivemos juntos Sexta e Sábado e a minha mulher foi trabalhar Domingo. Vem na Quinta, mas quando ela chega eu vou, foi por casualidade, e depois só venho no Domingo. Se nós não aproveitamos esses dias, cada um ainda se mete nos computadores a fazer as suas coisas e então aí não há tempo em que estamos juntos.

E há alguma situação em que façam uma utilização partilhada da Internet? Todos juntos no mesmo computador?

É raro, não é que já não tenha acontecido. A falar com a minha sogra, que vive no Brasil e sei lá numa questão de aniversários. O meu filho está no quinto ano e os trabalhos da escola são todos feitos no computador e eu acho isso excelente, ele aprende coisas mais do que eu. Eu fiz um curso de turismo, eu já fiz quando era crescidinho, perdi o emprego, estava numa companhia de aviação no Algarve, essa companhia fechou e na altura achei que devia ter mais formação. Então, decidi voltar a estudar, inicialmente era bacharelato, depois a licenciatura. Acabei em 99, mas já tive que aprender a usar tecnologia. Mas tenho alguma...

É alguma resistência, aversão?

Sim, tenho alguma resistência. Mas o engraçado é que a minha filha também tem. Embora veja toda a utilidade. Mas mesmo estas coisas, por exemplo, o telemóvel costuma estar em silêncio, em vibração, prefiro não estar tão contactável. OK, se alguém me contacta, eu vejo, está sempre aqui no bolso...mas só a questão de, irrita-me bastante aquele som das mensagens dos telemóveis, por exemplo. Prefiro não estar sempre tão contactável. E quando estou fora, eu só se sentir alguma necessidade muito forte, ligo para casa. Só quando os nossos filhos ficam com a nossa empregada, pessoa de confiança, é quando eu ligo. Agora, quando a minha mulher está em casa, não faço questão que me enviem mensagens a dizer se está tudo bem. E a minha filha também se irrita com isso, quando eu lhe peço, ela diz-me mas queres que te diga o quê, que já jantamos, que vamos para a caminha? (laugh) e eu também não insisto muito. Não sinto essa necessidade e daí não. Ainda agora, há

coisas engraçadas, nós agora voamos para um sítio no Brasil e eu fiz o primeiro voo para lá, ainda sem estar a trabalhar. Ou seja, o primeiro voo ainda não tinha saído de Lisboa e nós já lá estávamos dois dias antes. Não é que a minha mulher me diz que já sabe os sítios todos nesse local onde se pode ir jantar, onde a noite é mais gira...e eu pensei, mas como é que é possível? Então o meu colega no dia seguinte, em vez de estar na piscina a aproveitar, porque aquilo é um sítio muito simpático para aproveitar o sol, só chegou às cinco da tarde e estava no facebook e então já tinha colocado toda a informação toda.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, acho que não. Acho que já lhe dei a minha perspectiva. Com certeza que vai encontrar pessoas mais utilizadoras. Isto tem muito a ver com a minha personalidade, eu gosto e preservo muito o meu tempo e o meu espaço. Eu agora vou almoçar sozinho, comer um peixinho a um sítio excelente e amanhã vou com o meu filho. Mas há pessoas que são incapazes de fazerem uma refeição sozinha. Eu tenho gosto de estar comigo próprio, não é sempre, mas preservo o meu espaço e isso também transporto para outras vivências, com esta questão da Internet. Essa situação de não usar de forma indiscriminada e a toda a hora...mas cada vez mais sinto que se não acompanhar toda esta evolução, daqui a uns anos vou estar completamente fora de algumas coisas. Mas, em relação ao facebook, acho que vou resistir (laugh). Por exemplo, eu sei que posso colocar músicas no telemóvel, mas tenho que saber, se não tenho que estar sempre a perguntar e isso não é muito simpático. Vejo a necessidade, mas tento equilibrá-la.

“Daniel”

Jornalista
31 anos
Heavy Internet user
Entrevistado no ISCSP

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Por telemóvel e pessoalmente. Eu vivo sozinho. A periodicidade do contacto depende, com a minha mãe falo diariamente e uma vez por semana, presencialmente, com o meu pai uma vez por semana presencialmente e com a minha irmã quinzenalmente presencialmente.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Há alguns que contacto diariamente, presencialmente. E os que não contacto diariamente, costumo contactar duas vezes por semana por telefone ou presencialmente ou pela Internet, através das redes sociais. Mas, depende, pode ser diariamente.

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.).

Sim, precisei de uma ajuda. Comprei casa e na altura o dinheiro não chegava para a parte da escritura, pedi uma pequena ajuda à minha mãe, um empréstimo.

E no último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.).

Não me lembro de nada. Há pequenos favores, mas isso vai havendo sempre. Pequenos apoios emocionais e outras coisas mais pequenas. O que é normal entre amigos.

O que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Utilizo a nível pessoal, todos os dias, para que mais não seja ver emails. Mesmo, há uma parte profissional que faço através da Internet, com o estrangeiro. E também para “diversão”, gosto imenso de fotografia e consulto vários sites e blogs sobre fotografia, com notícias de fotografia, etc. Isto a nível pessoal, a nível profissional, eu sou jornalista de rádio e hoje em dia, o jornalismo faz-se pela Internet e o meu trabalho é feito com um computador.

Tem perfil em algum site de redes sociais? Usa IM?

Sim, no facebook. Também Messenger.

E o que é que costuma fazer mais no facebook?

Passo por lá, escrever é raro, para não ficar para trás. Essencialmente, para ver o que os amigos estão a dizer, uma boa parte da vida hoje faz-se nas redes sociais e portanto não quero ficar atrás. Mesmo sendo jornalista, os media estão agora todos representados nas redes sociais e é uma plataforma fácil de acompanhar as coisas.

Com que comunica mais na Internet?

Com amigos. A família próxima, quer pais, quer irmã, não utiliza muito Internet. Tirando alguns primos, com que troco alguns emails.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Não, nem positivamente, nem negativamente.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Também não.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Não. Quer dizer o que às vezes acontece é aquele contacto muito superficial de um amigo de um amigo, de primeira conversa, mais formal, e depois eu ou ele convidamos para ingressar a mesma rede social onde estamos. Mas, depois também não passa para um nível mais próximo.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Internet.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Depende, pode ser pela Internet, se quiser algo mais formal, ou por telefone, para algo mais rápido e casual. Sendo jornalista tenho os meus meios para conseguir telefones (laugh) e vou logo por aí.

Elementos positivos e negativos da Internet na sua vida/vivência quotidiana?

Começando pelos positivos...

A nível profissional, hoje em dia, seria complicado não fazer jornalismo com a Internet, pela facilidade e rapidez de se aceder o que quer que seja. A nível pessoal, é também fácil estar em contacto com hobbies, com gostos, lá está, neste caso com a fotografia. E uma boa parte da comunicação, formal, seja de correspondência, hoje em dia faz-se pela Internet, é muito mais rápido e ecológico. Facilidade de estar ligado a instituições onde tenho contratos, seja a água, a luz, etc. Acho que é essencialmente isso, a facilidade. Outro elemento positivo é poder ir às compras pela Internet, em casa é mais quentinho e mais barato.

E elementos negativos?

Negativos, para a minha vida, não vejo.

E elementos negativos, em geral, para a sociedade?

Como em tudo, o uso abusivo. No caso das redes sociais a pessoa transporta a vida, enquanto que eu, tento viver a vida real e as relações mais próximas e mais importantes, não transporto isso para a vida virtual. Vou vendo pessoas à minha volta, em que é o contrário. Se calhar preferem não sair de casa para estar no computador a falar com amigos... pior do que isso, como acontece no meu local de trabalho, pessoas que perdem muito tempo nas redes sociais, em vez de estarem a trabalhar. Há pessoas que não se conseguem controlar.

E porque é que acha que as pessoas preferem viver uma vida mais virtual do que real? Tem alguma ideia sobre isso?

Tenho...estou só a ver como explicar isto. Por um lado, a Internet dá para conciliar os dois mundos, o mundo físico, onde se está e ao mesmo tempo, o mundo virtual, para se falar com pessoas que estão longe espacialmente, mas que conseguem estar perto pela Internet. Fica-se ali num limbo entre os dois, e se calhar perde-se mais tempo a falar com os que estão longe, em vez dos que estão perto. E depois, como a maior parte das pessoas estão nas redes sociais, por brincadeira, pela facilidade de partilhar uma música, um vídeo, uma piada, é giro, é divertido...

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não.

“Maria”

Reformada
67 anos
Moderate Internet user
Entrevistada numa pastelaria

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Os que estão em casa, pessoalmente. Os que estão fora por telefone e pela Internet, por Messenger. Até porque o filho que está mais longe é o do que eu tenho um netinho. E portanto, utilizo muito Messenger, para falar com ele. Não vou tantas vezes como desejava lá para os ver, embora vá praticamente todos os meses. Mas, é uma maneira de eu o ver crescer, não é? Ele tem dois aninhos e ainda é bebé.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Com os mais próximos é também através da Internet, mandamos emails, por telefone e pessoalmente sempre que é possível.

No último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.).

O meu pai faleceu e precisei de apoio emocional. Passei por uma situação muito difícil, de ultrapassar. Foi o acontecimento mais marcante. Tive muito apoio dos meus amigos e de alguns familiares, embora tenha pouca família aqui, tenho os meus filhos e a minha mãe. Os meus familiares estão quase todos no Brasil. Aliás, eu vim do Brasil para cá, há muitos anos. Portanto, a minha família está um pouco dispersa.

E no último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.).

Normalmente, os meus filhos. Financeira e emocional, que é o normal. E os amigos também, porque há sempre aquelas situações. Eu tenho uma amizade bastante prolongada nos anos com muitos dos colegas com quem trabalhei e a situação de vamos reformar-nos, não vamos, porque já tínhamos reunido as condições desde 2005 e portanto discutimos muito isso, porque é sempre uma situação difícil, quando gostamos do que fazemos. E portanto, aí, nos apoiamos bastante uns aos outros e acabamos por nos reformar praticamente na mesma altura. Aposentamo-nos quatro e está uma, que meteu os papéis e está à espera...Portanto, houve uma combinação e depois o que é que vamos fazer? vamos continuar a trabalhar cá fora?, etc. Ainda estamos a decidir o que vamos fazer, embora eu não acredite que vá trabalhar cá fora, vamos brincar um bocadinho, para a cabeça continuar sã. O que é muito importante, uma pessoa tem uma actividade muito exigente e entretanto já não tem obrigação nenhuma, a cabeça pára, não é?

O que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Costumo ver as notícias, usar os emails e de vez em quando fazer umas pesquisas sobre um ou outro tema que me interessa e depois aquilo vai-se estendendo, não é? Parece uma bola de neve, a pessoa pensa que vai estar vinte ou meia hora e acaba por ficar três ou quatro horas, porque vai olhando para os links...é isso que eu faço normalmente. Uma ou outra coisa imprimo, como sou muito velha, gosto de papel, de livros e portanto gosto de mexer. Se o artigo é pequenino, se é grande, lá vai a impressora a funcionar. Mas acho que a Internet é uma ferramenta ótima, está ali à mão, nem tem pó para limpar o que é ótimo, enquanto os livros têm, parecem que captam o pó e não ocupa tanto espaço. Que as casas actualmente...eu tenho muita dificuldade em ver-me livre de livros, neste momento, tenho quatro caixotes com livros e ando num dilema, porque acho que há livros que têm utilidade para oferecer, mas há outros que não têm, são códigos desactualizados...saíam todos os anos, a pessoa recebia anualmente, porque os autores ofereciam. Mas há sempre aquela resistência para me desfazer de livros.

Tem perfil em algum site de redes sociais, como o facebook ou o hi5? Tipo de utilização.

Não. O facebook não me atrai. Acho que já não tenho idade, não é uma atracção para mim. Eu tenho colegas e amigos que utilizam muito, mas não me atrai.

Com quem comunica mais na Internet?

Com os amigos e com o meu filho que está longe.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em quem confia e considera muito próximos)? Em que medida?

Não afectou negativamente, só me trouxe vantagens. Lá está eu não sou exagerada, mesmo o tempo que passo na Internet não tiro nada, porque é de noite. Que eu gosto de estar sossegada, durante o dia não uso. Afectou positivamente, por exemplo, o Messenger é ótimo para ver o neto crescer. É ótimo porque se fala bastante sem se gastar dinheiro como numa chamada. Reconheço que pode trazer alguns perigos e eu já ando a tremer com o meu netinho...com dois anos, ele já mexe na televisão, não fala quase, mas põe o vídeo, tira o vídeo, o pai mexe no computador e ele vai logo e para ele os botões...a máquina de lavar já põe a trabalhar...portanto vai ser muito difícil disciplinar e não sei se esse meu filho tem os conhecimentos necessários de Internet para depois o vigiar, porque eles são rápidos na aprendizagem e o meu filho não é grande adepto da informática...é um utilizador ainda pior do que eu. Aí eu tenho um certo receio, porque acho que é capaz de haver alguns perigos.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

Não...Quer dizer tem neste aspecto, pessoas que não vejo há algum tempo, que não estou em permanente contacto, quer dizer semanalmente, recebo de vez em quando um email a perguntar se estou boa e eu também mando. Mandamos um email que a gente acha giro, que nos mandaram, portanto acaba por haver um olá, coisas que muitas vezes é como se fosse uma carta. Antigamente, escrevia-se um postal,

viajava-se e enviava-se um postal e dava um alô, e agora a Internet serve para isso e é um aproveitamento de algo que está à nossa disposição.

Quando estava a trabalhar, utilizava a Internet diariamente, segundo os dados do questionário que respondeu, e agora que entretanto se reformou? Mudou alguma coisa?

Ainda continuo a ir ver os “Diários da República” para me manter actualizada, mas já não é aquela ligação. Já não tenho o email profissional, onde tenho as coisas necessárias. Lá fazia uma utilização muito mais intensa. Aqui se não for um dia ver o correio [electrónico] não tenho problema nenhum. Sempre que não vou, lá tenho alguma coisa de interessa, uma comunicação...a Internet é óptima para mandar documentos, digitaliza e lá vai, evitamos de nos deslocar e facilita muito a vida.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Não.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Vou logo à Internet. Antigamente ia à lista telefónica, ao 118, agora vou à Internet.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Tenho outros meios, devido à minha profissão de jurista. Não tenho tido essa necessidade, tive uma vez e foi mais fácil utilizar outros meios do que ir à Internet.

Elementos positivos e negativos da Internet na sua vida/vivência quotidiana?

Começando pelos positivos...

A Internet é positivo. E como tudo, como uma moeda, tem dois lados. Mas é muito positivo pela abertura que dá às pessoas, porque as pessoas não estão isoladas, as pessoas que estão sozinhas, não ficam solitárias, porque têm sempre essa possibilidade...eu não uso para isso, mas há pessoas que até se conhecem através da Internet, eu tenho uma amiga que arranhou duas grandes amizades através da Internet e depois se encontraram, um homem e uma senhora, e agora deixaram a Internet e dão-se pessoalmente. Eu acho que tem muitas vantagens em todos os aspectos, no aspecto da vida quotidiana, no aspecto da vida profissional, no aspecto de investigação, de novos conhecimentos ou necessidade, também uma ajuda, claro que tem que ser certificado, não substitui as fontes. Eu acho que a Internet é a efectivamente positiva.

E elementos negativos?

Eu penso que tem, principalmente para jovens e crianças, pode oferecer alguns perigos.

E que perigos são esses?

Conhecimento de pessoas que não seja conveniente, pessoas que...há uma coisa que me aflige, aquelas coisas “já ganhou, clique aqui”, se as pessoas forem crédulas, pode-lhes trazer bastante inconvenientes, mas o perigo maior é para os jovens serem

cativados por pessoas mal formadas e para mim é o maior perigo. Também pode acontecer na rua, mas é mais fácil pela Internet. Mas para já, as crianças pequenas não andam sozinhas na rua, mas na Internet estão no sossego do seu espaço, têm acesso que muitas vezes não é vigiado. No nosso caso, em Portugal, ficam-se muitas horas afastados da família e muitas vezes, quando não se está no trabalho, há outros afazeres a fazer-se em casa. E portanto, antigamente punham-se desenhos animados para as crianças e agora são os computadores. E portanto, eles é que gerem essa utilização e muitas vezes ainda não têm o bom senso para gerirem ou não sabem...

E como é que acha que poderíamos controlar esse perigo?

Não sei, não tenho conhecimentos suficientes sobre a Internet e de informática. Penso que aqueles adultos que dominam a informática talvez seja possível bloquear, não sei se é possível ou não, como se faz na televisão para certos canais. E talvez se possa filtrar. Acho que isso era muito importante, mas sem saciar, porque depois as crianças também já reivindicam e é preciso ensiná-las. Embora eles gostem de fazer o contrário daquilo que os pais dizem, que é uma forma de se afirmarem. Isto é muito complicado. Tenho um certo receio, às vezes fico feliz por não ter filhos mais novos para me preocupar, para ter essas preocupações. Isto é por fases, havia uma altura em que a minha maior preocupação era a droga, era o verdadeiro terror, agora é a Internet, a pedofilia, essas coisas. O mundo vai evoluindo, tem coisas boas, tem coisas más e tem coisas muito más.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, eu acho é que se calhar não disse nada de importante para si.

“Marina”

Auxiliar num centro de dia
39 anos
Moderate Internet user
Entrevistada por telefone

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Pessoalmente. Eu vivo com a minha mãe, logo comunico com ela pessoalmente.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios?

Por Internet, por Messenger ou facebook. Também uso o telemóvel. E falo com eles sempre que posso, quando saio do trabalho e tenho um tempinho, há alturas que não dá, mas quando dá, chego a casa e ligo a Internet.

No último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (tomar conta de crianças, um favor, apoio financeiro ou emocional, etc.).

Tive que pedir um empréstimo para obras na minha casa e foi através da minha mãe, ou seja, foi através de uma amiga da minha mãe. E depois apoio emocional precisamos sempre, de alguma forma.

E no último ano, teve alguma situação/acidente em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Se sim, pode falar-me um pouco sobre essa situação (um favor, apoio financeiro ou emocional, etc.)

Sim, por falta de trabalho. Uma amiga ficou sem trabalho e nós tentámos ajudar de alguma forma, porque os ordenados também são pequeninos. Mas de alguma forma tentamos ajudar, com bens ou o que for possível. E também ajudar a encontrar outro trabalho.

O que é que costuma fazer mais na Internet? Desenvolver tipo de utilização. Utiliza sites de redes sociais? Email? IM?

Pesquisar, comunicar, jogar online, trabalhar...e é isso basicamente. Ah e fazer testes de código, porque estou a tirar a carta.

Tem perfil em algum site de redes sociais, como o facebook ou o hi5? Tipo de utilização.

Tenho no facebook. Ultimamente não tenho utilizado muito, sou sincera. O Messenger é que utilizo mais. Mas sempre que posso entro no facebook. Tenho utilizado mais, ultimamente, o Messenger, mais do que emails.

Com que comunica mais na Internet?

Falo com amigas e amigos.

Acha que a Internet afectou a sua interacção/relacionamento com a sua família e amigos mais próximos (aqueles em que confia e considera muito próximos)? Em que medida?

Teve um impacto positivo, é muito bom. É uma forma muito positiva, dá para navegar e para abrir novos horizontes. Dá para ir mais longe. Permite-me falar mais com os meus amigos e permite uma abertura destas cabeças, e eu falo por mim (laugh)...e é uma forma muito mais prática de interagir.

Acha que a Internet afectou a sua interacção com outros familiares e amigos menos próximos (conhecidos)? Em que medida?

O mesmo, mais com um primo ou outro. Quando podemos encontramo-nos, mas as pessoas tem a sua vida e andam sempre a correr...e moram longe.

Já alguma vez conheceu novas pessoas online? Fale-me um pouco sobre isso (Tornaram-se amigos ou mantiveram algum relacionamento mais duradouro?)

Não, isso não, sou sincera.

Quando precisa de uma informação urgente sobre qualquer assunto, como se procura informar? Procura na Internet? Fala com familiares/amigos/conhecidos?

Vou à Internet.

Se precisar de encontrar alguém rapidamente, que meios costuma utilizar?

Se não conseguir mais de nenhuma forma, através da Internet.

Elementos positivos e negativos da Internet na sua vida/vivência quotidiana?

Começando pelos positivos...

Mais abertura, mais facilidade em comunicar. Tem sido óptimo para os testes de código. Acho que a Internet foi bom.

E elementos negativos?

Negativos, não.

E perigos, em geral?

Depende. É assim, eu também não sou muito expert em computadores, sei o que é básico. Mas também tento saber mais e mais. Esses vírus que uma pessoa às vezes apanha, sem querer, o que também acontece. Em relação ao facebook, por exemplo, eu só comunico com pessoas que conheço. Nem aceito pessoas que não conheço. Para mim, isso pode ser mau para os mais novos, estar mais abertos a desconhecidos.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, que considere pertinente?

Não, muito obrigado.

“Irene”

Reformada (ocupação anterior: doméstica)

85 anos

Viúva, vive sozinha

Non-Internet user

Entrevistada num centro de seniores, onde se encontra durante o dia

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Não, o meu filho vai lá a casa. Pessoalmente.

E vai lá todos os dias?

Às vezes vai, outras vezes não vai. Que ele é empregado na #, e de maneira que às vezes vai a Madrid duas vezes por semana, e depois volta, que também tem lá cargos para trabalhar. Mas é ele que me arranja os remédios. É ele que me faz essas coisinhas todas. É muito bom para mim, ele mete-me numas caixinhas, depois almoço, pequeno-almoço, e eu depois puxo aquelas caixinhas...

Ah. Deixa tudo preparado para si.

Tudo, tudo graças a Deus.

E tem netos?

Tenho um neto.

E costuma vê-lo?

Vejo-o. Quando era pequenino, andava aqui no colégio, e depois, agora, formou-se em jornalismo. Depois fez, não sei...dois anos ou quê, para sair, o que eu não sei o que é..

Mestrado?

Exactamente, o mestrado. E ele também é muito meu amigo. E o meu filho também é muito meu amigo.

Fala alguma vez por telefone com eles ou é só pessoalmente?

Falo muitas vezes, o meu filho até está sempre a ligar. Ainda hoje ele me ligou. Eu sou católica, mas não sou beata, sou católica, quer dizer. É que eu ouço a missa na televisão em casa e depois vai-me uma senhora a casa dar-me a comunhão.

E quanto aos seus amigos mais próximos, como interage com eles? Face-a-face e/ou através de outros meios, como o telefone?

Sim, vejo, vejo, mais ou menos, umas vezes vão lá, outras vezes...tenho uma prima que vai lá todas as semanas, passar a tarde comigo...é...e tenho a vizinha do lado que é muito minha amiga. Também está doente, mas ela vai lá de vez em bocadinho para o pé de mim, e depois vai para casa. Eu não tenho medo de ficar em casa sozinha...só tenho medo é se, se me dá alguma coisa.

Pois, claro, mas tem várias pessoas que a visitam todos os dias...

Sim, tenho. E a família do meu marido é toda muito minha amiga, e agora morreu um filho, ele não era meu filho, mas era quase como se fosse...Ele fazia hemodiálise três vezes por semana, mas agora já não podia fazer, e então deu entrada no hospital, e já faleceu, e eu tive muita pena. Mas é assim a vida (sigh).

No último ano, teve alguma situação/acontecimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Algum apoio emocional? Financeiro? Um favor?

Isso quando eu tinha qualquer coisa, o meu filho ia lá casa, mas não tive assim nada. Eu tomo muitos remédios. Porque é para o *Parkinson*. Não tenho é diabetes. E eu costumo dizer assim: “olha, ainda bem!” Porque eu gosto tanto de bolos (laugh). Eu é mais colesterol, de resto vou andando. Até uma senhora ensinou-me, comprar vinagre de cidra e quando se come a sopa, põe-se só uma colherinha, ou se põe na sopa, ou a gente come e depois come a sopa. Mas às vezes não faço, porque me esquece.

Olhe e o contrário. Pessoas, seus amigos ou familiares, a precisar de uma ajuda sua. No último ano teve alguma destas situações?

Agora não. Mas já tive uma cunhada, que adoeceu e eu fui lá para casa tratar dela. Agora não podia, mas ela também não tinha a minha idade. Porque o meu marido era mais velho do que eu vinte anos, mas ninguém dizia, porque ele era muito bonito, era muito interessante (mostra fotografia). E então a minha cunhada adoeceu, e eu depois ia tratar dela. E isso tratava, com carinho e tudo. Mas agora já não.

Alguma vez utilizou um computador?

Não, isso já não é para mim.

E gostava de aprender a utilizar?

Não, agora já não tenho cabeça para isso.

Acha que já não tem capacidade?

Não, não, não tenho. Esquece-me muitas coisas e depois digo muitas vezes as coisas, repito muitas vezes. E depois eu digo assim: “Já disse?”. E o meu filho responde, “olha mãe cinco ou seis vezes”. Eu também sou um bocadinho piegas. Às vezes ligo lá para o emprego, sei que se lhe ligo, ele depois liga para mim. E ele assim: “Diz mãe?” E eu gosto tanto de ouvir ele a dizer “Diz mãe?”. Que ele diz aquilo com tanta...

Com carinho?

Com carinho.

E a Internet, sabe o que é a Internet?

Sei mais ou menos, não sei. Não, não sei bem.

E o que é que acha dos computadores?

Acho que são bons, para quem gosta. O meu filho tem um e o meu neto também tem. Acho que deve ser bom. Mas não sei mais nada...não sei dizer mais nada.

Já terminei as questões que tinha para esta entrevista, não sei se quer acrescentar algo mais, algo que considere importante?

Não, muito obrigado. Eu agora estou a olhar para si e estou a lembrar-me da Catarina Furtado. E eu disse assim, mas eu conheço esta cara. É muito parecida. É é!

(laugh) Já terminei as minhas questões. Quer acrescentar mais alguma coisa?

Não. Olhe pode ser, gostei muito de si. Boa sorte com tudo.

“Fernando Jorge”

83 anos

Reformado (Ocupação anterior: Construção Civil)

Entrevistado em casa

Non-Internet user

Começando pelos seus familiares mais próximos, pode falar-me um pouco sobre como interage com eles? Pessoalmente e/ou através de outros meios?

Quer dizer, a família não é assim muito, não é muito grande. Agora é toda cá em Lisboa...ahhh...que seja a filha, que seja o genro, que seja o neto ou a neta, é, é por telefone. Se houver qualquer coisa, aparece, ainda ontem apareceu-me aí o neto e tocou à campainha, tocou à campainha, eu pus-me a olhar, não lhe via a cabeça, não abri... mas ele estava também a fazer uma chamada no telemóvel, e só quando acabou de fazer a chamada é que toca duas vezes seguidas muito rápido, e eu como estava desconfiado, porque aparece ali muito marmanjo, que a gente mora aqui ao fundo do bairro. Quando a gente não tem a certeza, vê bem quem é, se não interessa, não abre. E então o gajo tocou segunda vez e eu peguei e abri a janela, corri o estore, abri a janela, deitei a cabeça fora, diz ele é a policia de segurança pública! (laugh). E digo olha é o Avelino pá! E claro abri a porta, entrou para dentro e esteve ali mais de meia hora a falar com a gente e depois lá se foi embora...e com a mãe, também com ela falei assim sexta feira ou o que é que foi, é assim, é uma família muito, muito querida, a neta, as bisnetas, tenho duas bisnetas já com cinco anos também, que gostam muito de mim e eu delas...Portanto a família, antigamente era só eu, a minha falecida mulher, a filha e a minha mãe, foram desaparecendo, até que fiquei eu só, mas agora, por parte da filha e mais esta santinha (aponta para a segunda mulher) e essas coisas todas somos umas nove pessoas.

E os seus amigos mais próximos, como é que costuma interagir? É também pessoalmente, é por telefone? Como é que costuma ser?

Eu, quer dizer, não vou dizer que tenho muitos amigos, mas também não tenho inimigos. Sou uma pessoa que me meto na minha vida e não sou assim daqueles curiosos que gostam de saber tudo, às vezes esta diz (aponta para a esposa, que está na outra sala): “Olha sabes quem é coiso?”... Olha digo, oh que me interessa? Quer dizer não sou assim uma pessoa muito interessada por saber da vida dos outros, sou contra, quer dizer, sou capaz de tirar a camisa e dá-la! A quem merecer, agora andar-me a meter na vida deste ou daquele e daquele outro, não! Digo amigos sabe que uma pessoa que vem do norte lá do Alto Minho para aqui, por exemplo, agora desde que me reformei, já tenho mais um bocado de vagar, mas dantes eu saía, às vezes saía de noite, entrava de noite, portanto, não tinha tempo, havia muita gente aqui no bairro que não me conhecia e eu nem conheço toda!

Mas tem alguns amigos mais próximos aqui, ou perto de si?

Não, não. Quer dizer, sim, mas isso é preciso que não aconteça como o Manuel que não se dava com a filha, não se dava com ninguém, depois dizia que a pessoa neste mundo que gosto mais, que é mais minha amiga sou eu. E depois eu disse, disse, pá, quer dizer, se ele diz que eu que sou a pessoa mais amiga dele ou dele minha, então

eu de toda a cidade de Lisboa sou mais amigo eu deles, até era uma pessoa que não tinha assim muita confiança, mas é difícil, agora não posso por a pessoa dizer que eu que era amigo dele, ou ele meu, também não o posso tramar-lo, não é? Não, mas é como eu digo, eu nunca tive problemas com ninguém. Eu sou daqueles que às vezes digo ali na reinação... eu não tenho medo de ninguém, tenho medo é de mim, está a perceber?

Tem medo de si?

Não tenho medo de ninguém porque eu não faço mal, agora eu é que de mim tenho medo que posso fazer alguma asneira e tenho que a pagar, não é?

No último ano, teve alguma situação/acometimento em que precisasse de ajuda urgente dos seus familiares, amigos ou conhecidos? Algum apoio emocional? Financeiro? Um favor?

Não, eu por agora essas coisas tenho as resolvido sozinho. Graças a deus que... a filha... está empregada, tem um bom emprego, o genro, esse então nem se fala, tem um grande ordenado e essas coisas todas, mas eu tenho ajudado mais do que me têm ajudado a mim.

E que tipo de ajuda é que tem dado? Financeira? Emocional? E a quem?

(Esposa grita da outra sala...financeira!)

Ajudado...por exemplo, a senhora é muito nova, mas é sempre bom saber destas coisas, quer dizer uma pessoa que vem lá do Alto Minho para aqui, foi criado sem pai e...numa cidade como é Lisboa tem que ser uma pessoa como um bocado de juízo, não é? Houve altura que o juízo só fez que eu fosse um santo, se hoje gastasse cinquenta ou cem, enquanto não o recuperasse, eu não gastava outro, quer dizer, comer isso não, isso tinha que ser! Mas houve sempre um relevo e como houve sempre relevo, houve sempre a possibilidade. A minha filha é casada segunda vez, o primeiro matrimônio só durou cinco anos, que ele morreu.

(A esposa na outra sala, acrescenta: morreu de enfarte.)

E o casamento também não era assim tão afortunado como este, porque este é Engenheiro, e enfim, não havia mesmo nada, não havia, eles moravam na #, tinham lá um apartamentozito que eu também ajudei, mas vinham muito, sempre aqui comer. Eles nunca se iam embora sem falar comigo, porque havia sempre quinhentos pauzitos, ou, naquele tempo ainda não havia o Euro...Havia sempre uma ajuda, porque eles precisavam, não é? E eu...Deus me livre de eu saber que ela que estava a passar mal ou o neto ou assim, por enquanto houvesse, mas graças a Deus nunca falhou...aaahhh, depois também, tem sido sempre uma coisa de sacrificio, a mãe do meu genro morreu, ficou só o velho, o velho era transmuntano, era torto como um carneiro, poça! E só contava com ele e quer dizer, eles meteram-no num lar de luxo, que chegou estar a pagar trezentos, trezentos e trinta contos e o, e a minha filha chegou a uma certa altura que dizia, que dizia vou a Caselas ao banco, que o banco era eu! Vou a Caselas ao banco porque sempre fica mais em conta e tal, não, mas ela

dizia que depois, que quando vendessem a casa, que ele era filho único também que, que pagava...

(Esposa presente: não pagou!)

Bem, chegou a, foi até dezanove mil e quinhentos euros, depois ele morreu, não foi preciso mais... agora há coisa de uns, depois ela há coisa de uns três ou quatro anos, pouco mais ou menos, não é? O filho entrou para sócio da construção civil, compraram a cota, e ele passou para sócio e era preciso dinheiro para a comprar, que ela como vendeu a casa, entrou com a parte boa porque só para depósito, para comprar materiais e casa, era setenta e tal mil euros cada um. Era, ela dizia, ó pai você podia emprestar, podia emprestar dezassete mil e quinhentos euros ao João, porque ele tem que entrar, não sei quê, não sei assado, e digo assim, ouve lá mas é que o ... eu tenho impressão que a Joana que ainda era viva e digo assim, ouve lá, mas é que eu.. a tua mãe não tem reforma e eu fui juntando sempre tudo o que pude que era para os juros, era uma ajuda para a reforma dela, não é? Ah, mas eu pago, eu pago, eu pago! naquela altura disse que me dava todos os meses cem euros, porque eu depois disse, essa conta que veio lá do teu sogro, não é dezassete mil e quinhentos, é dezanove e diz ela então e porque é que ficam lá a fazer dois, dois mil, levanta-o todo! Levantou, levou os dezanove mil e quinhentos. De facto de primeiro, vinha aqui e deixava ficar os cem euros, quando eu não estava, deixava lá em cima da mesa, eu já sabia o que era, depois pediu o número da conta e não sei quê, que é que depositava no banco, agora, ano passado ..outro ano até Abril só tinha dado uma vez e depois em Abril disse que que tinha uma despesa muito grande e num sei quê eu eu disse agora enquanto não puderes, não pagas, olha até hoje!

E depois eu comprei o andar e tenho tido uma despesa muito grande, tivemos que meter uma escada nova, foi logo oitocentos e sessenta e tal euros a cada um, seis inquilinos, tivemos que meter a instalação da água toda nova que aquilo apodreceu tudo, aproveitamos, metemos o contador, os contadores na escada, que estava tudo na cozinha, mais, é sempre a entrar! Depois o vizinho de baixo, diz que lá em baixo lhe chovia muito e não sei quê, eu não tinha obrigação, porque é por baixo do terraço, que é clandestine. Mas, eu se morasse lá, também gostava. E depois aquilo deu para o torto, era seiscentos euros a cada um, mas eu tive pena do empreiteiro, que hoje punha a massa, amanhã tirava, tinha que fazer outro isolamento, andou naquilo um horror de tempo, quando cheguei ao fim, dei-lhe mais duzentos euros, mas nem disse ao outro que lhe dei, ele pagou seiscentos e mais nada e eu paguei, paguei, oitocentos, agora ...é sempre a entrar, é sempre a entrar!

Mas a filha é a tal coisa, a tal franqueza de, ainda noutro dia eu comecei a falar, a dar lá uns toques, que é par aver se ela começa a dar os juros, que ela diz que dava, mas ela muda de conversa...Muda de conversa e diz, aaah, depois se houver qualquer coisa, você diga que a gente paga. Se eu me vir enrascado, tem que pagar mesmo.

Utiliza a Internet?

Não.

E já utilizou?

Não

E porque não utiliza?

Porque nunca tive paixão por isso. As minhas paixões era, quando era, quando era mais novo e que vim morar aqui para aqui, que eu morava em Pedrouços antes, era ter uma boa aparelhagem. Para ouvir musica, então comprei uma aparelhagem com duas colunas, e é gravador, é gira discos, é tudo! E é rádio. ... Depois, às vezes até sabia quando era os programas, até vinha a correr para casa por causa de gravar aquelas músicas boas e assim...Depois meteu-se me na cabeça que, que havia de comprar um vídeo. Depois a mulher, que já morreu [esposa anterior], vai fazer agora sete anos, ou sete ou oito... era muito religiosa, e depois, a gente sabe, vivíamos sozinhos os dois porque a filha casou segunda vez ao fim de dois anos, mas morou sempre do lado de lá. E a mulher, se aparecesse uma rapariga na televisão a mostrar as pernas ou assim dizia que era eu que punha cassetes de propósito que era para ela não ver. Está a perceber? Dizia! E eu não fazia isso, antes pelo contrario, eu e a filha comprávamos-lhe cassetes religiosas para ela ver e gravava-lhe uma missas com o Cardeal, com essas coisas todas e ela tava sempre a implicar que eu que, lá está pus as mulheres de vídeo...Resumindo, fui comprar outro vídeo e outra televisão só para a mulher!

E alguma vez usou um computador?

Nunca, nunca!

Sente algum interesse em utilizar? Gostava de usar um computador?

Não, foi sempre uma vida de muito trabalho e depois era um grande profissional, e que trabalhei sempre em casas importantes e dedicava-me ao trabalho, parece que de noite que estava na cama e ía sonhar com o trabalho e como é que havia de fazer e como não havia de fazer e dediquei-me a isso, porque eu, é como eu digo, era eu sozinho a ganhar, porque a mulher era uma pessoa muito doente E eu gostei sempre de ter uma vidinha farta e tinha que trabalhar. Não é?

E gostava de aprender a utilizar agora?

Não quero, já me tem feito vários convites, mas não quero. Eu quando vou para a casa da minha filha...ainda ontem o neto me contou que o meu genro, o meu genro deram-lhe a reforma antecipada, que ele trabalha na Petrogal...Há um mês e tal que está com essa reforma, não sai de casa, agora o filho foi parar com ele, foi para com ele ao hospital da Cuf e tem um aparelho no pescoço que diz tem uma dor que não pode desandar o pescoço de estar ali sempre cravado no computador...Não, mas ele é maluco, quer dizer, até brasileiras e tudo, chegaram-lhe a mandar, chegaram-lhe a mandar cuecas...(laugh). Uma vez, depois num queria que a mulher se aproximasse quando ele estava lá a falar com elas e tudo, mas a mulher apareceu lá sem ele, a minha filha não é, não é nenhuma parva, aparece-lhe lá e o gajo levanta-se de repente e diz Milagre, milagre, milagre! ... a brasileira pensava que ela que estava acamada...E quando a viu em pé e loira, que ela também é, não desfazendo mas é bonita, e ele começa, milagre, milagre, milagre, como com o milagre foi ela que se levantou. Que estava acamada e não podia andar e que de repente começou andar, portanto, é mais que maluco, não é? (laugh)

Acha que os computadores e a Internet têm alguns elementos positivos?

Eu... vantagens, tem!

Que vantagens é que acha que tem?

Tem vantagens por, por um lado e tem desvantagens por outro...

Quais são as vantagens e desvantagens?

As vantagens é porque se resolve muita coisa e mais rápido. E com perfeição e essas coisas, a desvantagem ... é como as máquinas, quanto mais máquinas houver, mais, mais falta de trabalho há, porque uma máquina faz trabalho por uns poucos de homens e antigamente não era assim, tá a perceber? Se fosse preciso vinte homens, eram vinte homens, agora não, se calhar, quatro ou cinco fazem o trabalho de uma brigada, portanto para mim tem vantagens e não tem, aahhh ... se eu pudesse voltar a ter ... vinte anos e soubesse o que sei hoje, aperfeiçoava a minha forma de viver, mas não fugia muito deste ambiente. Eu gosto, gosto de tudo ao natural...

E internet, o que é que acha da internet?

Ah...eu verdadeiramente nem sei o que é...sei que eles, que pagasse num sei quanto e que há uma ligação, mas como estão fartos de falar lá para casa...Já tenho sessenta e cinco canais e não quero mais, já é demais...Tem muitos canais, a gente verdadeiramente ... vê, vê ali quatro ou cinco canais, desses sessenta e cinco e há muitos que nem vê...

Muito obrigado, eu já terminei as minhas questões, não sei se quer acrescentar alguma coisa?

Não, a única coisa que posso acrescentar é que ... há pessoas que lastimam-se de que é isto, é aquilo e aquele outro, e é azares, e eu não! aahh, a gente tem que estar preparado para positivo e para o negativo...E não é agora por uma coisa correr mal que uma pessoa se vai esfarrapar todo ou fazer asneiras ou essas coisas, olha pode ser que amanhã venha melhor dia...Pronto, muito obrigado, boa sorte para a senhora.

Appendix D

LCM estimations of civic engagement, associational life, and social trust

a. Civic engagement

Measured with indicators of:

- civic participation (engagement in actions to solve a local problem in the neighborhood),
- civic awareness (talking about politics, and watching a political debate),
- membership and volunteering (participation in leisure groups, participation in associations, volunteering, giving money to charity),
- political participation (membership in a political party, and turnout in local and in presidential elections).

Three-class latent model parameters' estimates

	Class 1/ Medium	Class 2/High	Class 3/ Low
Class Size	0,5596	0,2231	0,2172
Indicators			
SOCIAL PARTICIPATION			
Daily	0,0475	0,1272	0,0412
At least once a week	0,2267	0,3742	0,209
At least once a month	0,112	0,110	0,1078
Rarely/Never	0,6158	0,3867	0,6419
TALK POLITICS			
Never	0,0872	0,0368	0,2086
Rarely	0,1409	0,09	0,2039
Sometimes	0,5165	0,4994	0,4522
Always	0,2555	0,3737	0,1353
WATCHED POLITICAL DEBATE			
Yes	0,777	0,9119	0,523
No	0,2092	0,0769	0,4535
DK/DA	0,0138	0,0113	0,0235
MEMBER OF POLITICAL PARTY			
Yes	0,1088	0,2195	0,0475
No	0,8912	0,7805	0,9525
VOTE PRESIDENTIALS			
Yes	0,9996	0,9867	0,1081
No	0,0004	0,0133	0,8802
DK/DA	0	0	0,0118
VOTE LOCAL ELECTIONS			
Yes	0,9951	0,9944	0,0294

No	0,0049	0,0056	0,947
Neighborhood PARTICIPATION			
Yes	0,3406	0,5505	0,2288
No	0,6594	0,4495	0,7712
VOLUNTEERING			
Yes	0,0585	0,8895	0,1484
No	0,9415	0,1105	0,8516
MONEY TO CHARITY			
Yes	0,5522	0,9513	0,4376
No	0,4478	0,0487	0,5624
MEMBER OF ASSOCIATIONS			
Yes	0,0831	0,9078	0,2545
No	0,9169	0,0922	0,7455

b. Associational life

Measured with indicators of membership and volunteering: participation in leisure groups (social participation), participation in associations, and volunteering.

Two-class latent model parameters' estimates

	Class 1/ Low	Class 2/ High
Class Size	0.8178	0.1822
SOCIAL PARTIC.		
Daily	0.0541	0.1539
At least once a week	0.2296	0.3848
At least once a month	0.1087	0.1074
Rarely/Never	0.6077	0.354
VOLUNTEERING		
Sports/Youth/Recreation Association	0.0162	0.0331
Charity Organization	0.0327	0.3293
Environmental/Animal rights Groups	0.0147	0.0002
Religious groups	0.0006	0.5794
Other organization	0.0418	0.024
No	0.894	0.0208
More than one	0	0.0132
MEMBERSHIP ASSOCIATIONS		
Sports/Youth/Recreation Association	0.0847	0.0297
Political Organization	0.0034	0.0111
Charity Organization	0.0031	0.277
Environmental/Animal rights Groups	0.0218	0.0211
Religious groups	0.022	0.5888
Other organization	0.0324	0.0003
No	0.8325	0.0589
More than one	0	0.0132

c. Social trust

Social trust was measured with the following indicators, measured with a five-point Likert scale from 1, strongly disagree, to 5, strongly agree):

- Most people can be trusted (trust1)
- You can not be too careful when trusting people (trust2R)
- I can trust the government (trust3)
- I can trust the police (trust4)

Two-class latent model parameters' estimates

	Class 1/ High	Class 2/ Low
Class Size	0.7684	0.2316
TRUST 1		
Strongly disagree	0.0506	0.7642
Disagree	0.6564	0.2348
Neither disagree, nor agree	0.1152	0.001
Agree	0.1716	0
Strongly agree	0.0062	0
TRUST 3		
Strongly disagree	0.1371	0.2803
Disagree	0.2948	0.3578
Neither disagree, nor agree	0.4128	0.2975
Agree	0.1438	0.0615
Strongly agree	0.0116	0.0029
TRUST4		
Strongly disagree	0.0241	0.0961
Disagree	0.0979	0.2135
Neither disagree, nor agree	0.2457	0.2928
Agree	0.5844	0.3806
Strongly agree	0.0479	0.0171
TRUST2R		
Strongly disagree	0.023	0.7833
Disagree	0.7649	0.2164
Neither disagree, nor agree	0.0998	0.0002
Agree	0.0905	0
Strongly agree	0.0218	0