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Literature Review

The literature review section is organized in four parts. First, section 2.1 presents a discussion of the ethical decision-making literature: section 2.1.1 reviews ethical decision-making models, starting from the issue contingency model (JONES, 1991); section 2.1.2 shares the main results of the empirical ethical decision-making research based on these models; section 2.1.3 discusses the mutual interplay of three factors (individual, situational and the issue itself) as determinants of unethical decision, introducing the main component constructs (social capital, self-monitoring and temporal orientation) of this study.

Section 2.2 describes the method used for the literature review of social capital and the individual variables – self-monitoring and temporal orientation.

Next, the results of the literature review are shared: section 2.3 presents social capital literature, including a review of social capital theories applied in business research, and the literature that examined the relationship of social capital and unethical acts (called the “darker side” of social capital); section 2.4 discusses the literature related to self-monitoring and temporal orientation.

2.1.

Ethical Decision-making

This study follows the definitions of Kish-Gephart, Harrison and Trevino (2010) for unethical intention and behavior. The authors define unethical intention as the expression of one’s willingness or commitment to engage in an unethical behavior, and unethical behavior as any organizational member action that violates widely accepted societal moral norms. They distinguish the latter from two other concepts: workplace deviance – which violates organizational norms rather than widely accepted societal norms – and illegal behavior – which breaches the law. Furthermore, they clarify that some actions can be unethical and at the same time deviant or illegal; they observe, by way of example, that stealing is at the same time an illegal and an unethical act. On the other hand, receiving

expensive gifts to influence business relationships is not illegal, per se, but violates the code of conduct/ethics of many corporations.

2.1.1. Ethical Decision-making Models

Craft (2013) notes that the two most used models in ethical decision-making research are Rest's (1986) model for Individual Ethical Decision-making (based on a four-step model of awareness, judgment, intention and behavior of a moral issue) and Jones' (1991) Issue-Contingent Model.

Jones' model (Figure 2) is a synthesis of previous models (FERREL and GRESHAM, 1985; HUNT and VITELL, 1986; TREVINO, 1986; DUBINSKY and LOKEN, 1989), using Rest's model as its basis. One of the previous key concepts that Jones (1991) included in his model is the interaction of individual and situational variables, as defined by Trevino (1986). He also assumed that actual behavior is a function of behavior intention, based on the theory of reasoned action (AJZEN and FISHBEIN, 1980). In addition, Jones (1991) developed the concept of moral intensity – based on social cognition theories – arguing that ethical decision-making is issue contingent; that is, the characteristics of the moral issue are determinants of ethical decision-making and behavior.

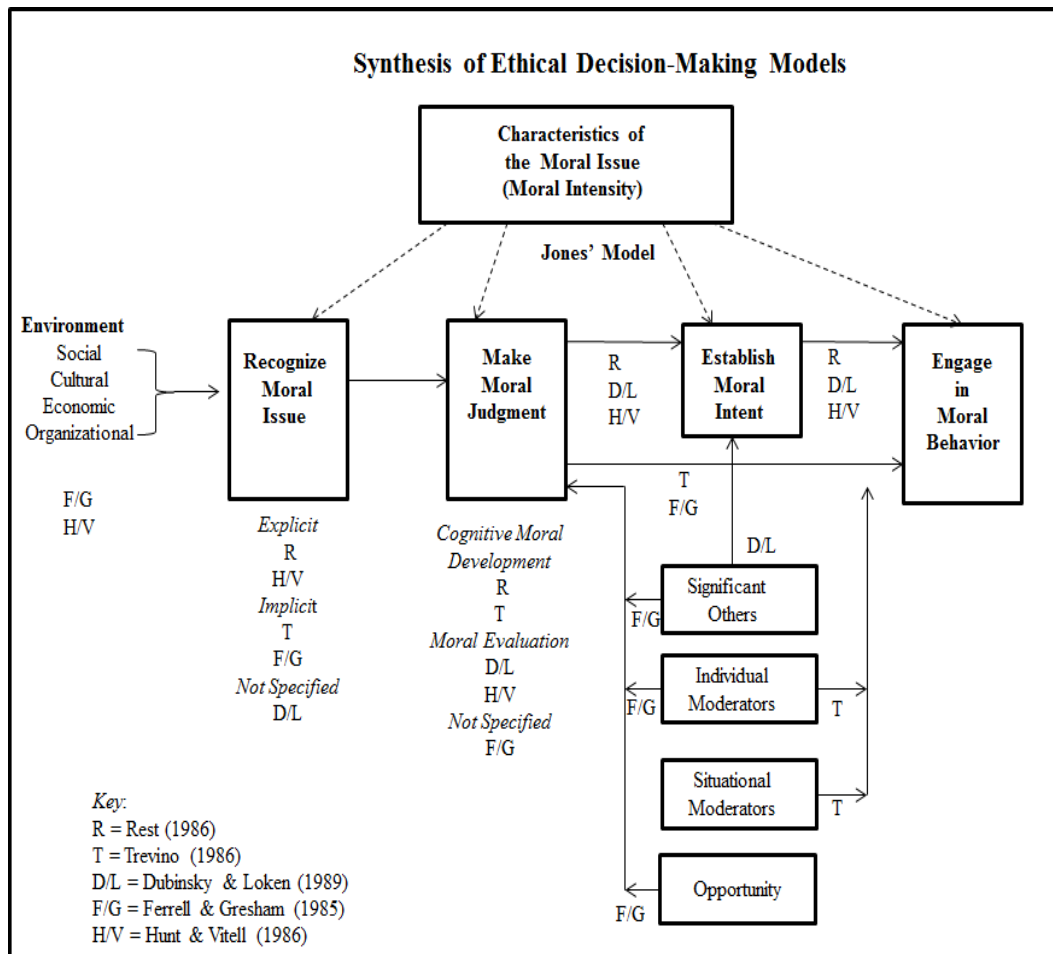


Figure 2 - The issue-contingent model
Source: (Jones, 1991)

Moral intensity is a multiple construct that includes six components: 1) magnitude of consequences (the sum of harm/benefits done to victims/beneficiaries); 2) social consensus (agreement that an action is good or bad); 3) probability of effect (probability that the act will occur and will cause the harm/benefit predicted); 4) temporal immediacy (temporal distance between the act and its consequences); 5) proximity (of those affected/benefited; those close socially, culturally, psychologically or physically); and 6) concentration of effect (inverse function of the number of people affected by an act of a given magnitude).

Ajzen (1991) developed the theory of planned behavior as an extension of the theory of reasoned action, arguing that intentions (motivations) and perceived behavioral control (abilities) explain behavior. As such, intentions are influenced by attitudes (the degree to which an individual has a positive evaluation of the behavior), subjective norms (an individual's belief about what significant others

think he or she should do) and the perceived behavioral control (the perceived ease of performing the behavior based on experience or anticipated problems).

Ajzen (1991) argued that intentions explain the motivational factors that influence an individual behavior, but to really perform an action, the actor depends on some other non-motivational factors, such as time, economic resources or the cooperation of others. Ajzen also observes that “beliefs” – salient information – are antecedents that predict intentions. Therefore, the antecedents of subjective norms are “normative antecedents,” that is, important referent (individual or group) approval or disapproval of performing a given behavior.

The importance of referent group was also recognized by Jones and Ryan (1997), as they extended Jones’ (1991) model to include the concept of moral approbation in organizations, defined as “moral approval from oneself or others.” The moral approbation is a process that occurs between the moral judgment stage and the establishment of the moral intent. Individuals will only decide on a moral intention if they feel comfortable with a certain threshold of approval of their behaviors.

The process of moral approbation is preceded by the individual’s attributed level of moral responsibility, which is defined as the amount of responsibility an individual receives from their referent groups, which can include self (that is a self-attribution of responsibility). The moral responsibility is a function of the severity of consequences, the moral certainty of an act, the degree of complicity (the extent to which the agent is involved in the decision or action) and the pressure to behave unethically.

Jones and Ryan (1997) argued that an individual may feel pressure to comply with organizational directives (not necessarily a direction to behave unethically, but pressure to achieve some results) and that the degree of complicity is difficult to prove insofar as in firms it is common to find decisions dispersed among several people/units. They also argued that there are differences at the individual level in the approbation model, as approbation can vary both in the individual need for approval (which can include self-attribution of responsibility or not) and in the size and composition of referent group (which can lead to possible bias by individuals with large or poorly understood referent groups).

Anand, Ashforth and Joshi (2004) found that individuals committing unethical actions and corruption use rationalization, that is, mental strategies that allow them to view their act as justified. They observed that research in white-collar crime found that corrupt individuals tend not to see themselves as corrupt. The authors identified six tactics that are most commonly used in organizations to justify an unethical act: denial of responsibility, denial of injury, denial of victim, social weighting, appeal to higher loyalties and metaphor of the ledger (that is, people who have deviant behaviors because they believe to have accrued credit, such as time and effort dedicated to their jobs). Moreover, they argued that actions of corruption gain a certain institutional momentum as the organization benefits from the corrupt actions.

Accordingly, Umphress and Bingham (2011) defined the construct unethical pro-organizational behavior, which they define as employees' unethical acts that are purposely intended to benefit their organization, its members or both. Based on the social exchange theory (EMERSON, 1976) and social identity theory (TAJFEL and TURNER, 1986), they argued that positive social exchange relationships and organizational identification may lead to unethical pro-organization behavior through neutralization of the ethical issue, that is, the removal or reduction of the ethical implications of an act. Wiltermuth (2011) found that people are more likely to behave unethically if it benefits themselves and others, using the latter as an excuse for their acts.

Kish-Gephart *et al.* (2010), based on the results of their meta-analysis of papers using Rest's or Jones' ethical decision-making models, which covered 136 studies and 43,914 people, proposed a framework of antecedents to unethical choices in the workplace. They found the following three antecedents: a) individual factors ("apples"); b) moral issues based on the moral intensity concept ("cases"); and c) organization factors ("barrels").

Drawing on the findings of Kish-Gephart *et al.* (2010), Pendse (2012) proposed the MMO model – Motive, Means and Opportunity – applying concepts of criminal behavior, as had Adler and Know (2002) in their social capital model. He argued that the conjunction of these three factors can create an "ethical hazard"; in other words, they can increase the likelihood of unethical behavior. In addition, they noticed that this conjunction is a dynamic process because a person who has the motive but lacks the opportunity or means will pursue the element

that is missing. They clarified that the “means” in corporate crimes or unethical behavior can be, for example, a source of power, giving as an example the power given by external agents (e.g. partners).

To examine the role of managers’ behavior to commit fraud in the case of 30 corporate scandals published in the press from 1992 to 2005, Cohen, Ding, Lesage and Stolowy (2010) integrated the fraud triangle decomposition model (WILKS and ZIMBELMAN, 2004), and the theory of reasoned action (AJZEN and FISHBEIN, 1980; AJZEN, 1991). The fraud triangle, based on the analysis of accounting crimes, included three factors that could indicate a higher risk of intentional fraud: a) incentives or pressures (e.g. to meet aggressive targets or being compensated by significant bonus) associated with b) opportunities (e.g. as lack of control of complex transactions) and c) the rational attitude to commit a dishonest act.

As presented, researchers have been looking for explanations for unethical behavior (including corruption), and there seems to be a consensus that it stems from a combination of factors – situational, organizational and individuals – that contribute to “ethical hazards.”

2.1.2. Empirical Research on Ethical Decision-making

There is an extensive review of the ethical decision-making empirical research based on Jones’ or Rest’s ethical models, including four consecutive literature reviews and the meta-analysis of Kish-Gephart *et al.* (Table 1). Following the reviews, the next sections share some results considering individual (“apples”), situational/organizational (“barrels”) and moral intensity (“case”) factors.

Authors	Ethical decision making empirical research
Ford and Richardson (1994)	Literature review of articles from 1978 to 1992
Loe, Ferrel and Mansfield (2000)	Literature review of articles from 1992 to 1996
O’Fallon and Butterfield (2005)	Literature review of articles from 1996 to 2003
Craft (2013)	Literature review of articles from 2004 to 2011
Kish-Gephart et al. (2010)	Meta-analysis of articles from 1988 to 2008

Table 1 - Reviews of empirical ethical decision-making research
Source: Elaborated by the author

2.1.2.1. Individual Factors

Individual variables used in empirical research based on Rest's or Jones' ethical models were extensively discussed in the four consecutive literature reviews mentioned earlier. The four most studied variables (not including demographics variables such as gender or age) were cognitive moral development (CMD), Machiavellianism, locus of control and value orientation/philosophy (FORD and RICHARDSON, 1994; LOE, FERREL and MANSFIELD, 2000; O'FALLON and BUTTERFIELD, 2005; CRAFT, 2013).

Kish-Gephart *et al.* (2010) meta-analyzed the first three variables, and for value orientation they studied idealism and relativism. The simultaneous effect of these variables on unethical intention and behavior had the following results: 1) CMD predicts negatively both intentions and behavior; 2) Machiavellianism predicts positively both intention and behavior; 3) external locus of control predicts positively unethical behavior; and 4) idealism (negatively) and relativism (positively) predict unethical intention (there were not enough studies to predict behavior). Additionally, although gender (men were more unethical than women at $p=0.10$) and age (negatively at $p=0.10$) contributed uniquely to unethical choice, when analyzed together with the other psychological variables, they had no significant contribution.

A comprehensive list of other variables (most of them in only one article) was also identified in the literature reviews: extraversion (FORD and RICHARDSON, 1994; CRAFT, 2013); conflict of role (FORD and RICHARDSON, 1994; O'FALLON and BUTTERFIELD, 2005), acceptance of authority (FORD and RICHARDSON, 1994), perspective taking, need for cognition, organizational commitment, intelligence, type A/B personality, self-efficacy, cynicism (O'FALLON and BUTTERFIELD, 2005), face, money orientation, relationship orientation, mindfulness, self-control, conformity, power, creativity, emotional intelligence, need for affiliation, empathy, hedonism and narcissism (CRAFT, 2013).

Another relevant meta-analysis was developed by Cooke and Sheeran (2004), who proposed that the theory of planned behavior explained a variety of behaviors, although its variables (attitudes, subjective norms and perceived behavioral control) only account for part of the variance in intentions and behavior. They developed a meta-analysis to understand how seven moderators affected the cognitions-behavior consistency and found that temporal stability, a measure of attitude strength, defined as “the extent to which cognitions remains consistent over time” (p. 161), is one of the strongest moderators of cognition-behavior relations.

Furthermore, they found that people low in ambivalence (the attribute that a person may have both positive and negative attitudes at the same time toward an opinion) possessed stronger attitude-behavior and attitude-intention consistency. This is very important because ethical dilemmas may include this ambivalence or ambiguity (e.g. it would be good to win one negotiation and avoid employee layoffs; it would be bad/dangerous to win the negotiation using bribery).

2.1.2.2.

Situational Factors: Significant Others or Referent Groups

All four previously mentioned literature reviews (Table 1) identified studies that addressed the influence of significant others – such as top management, direct managers/supervisors, peers inside the company or even behavior of “the average manager” in the same industry or market (e.g. BRENNER and MOLANDER, 1977) – on ethical decision-making. Significant others have a special importance because they can be the provider of the “social consensus” – one of the dimensions of the moral intensity of an ethical issue. Table 2 summarizes the number of studies that were identified by period and by type of significant other.

Significant Others	Ford and Richardson (1994)	Loe et al. (2000)	O'Fallon and Butterfield (2005)	Craft (2013)
Family/Parents			1	
Peers	5		3	4
Managers/Supervisors		2	3	1
Top Management	4		1	
Professional Relationship				1
Social Network				1
Significant Others (SO)		9		

Table 2 –The “significant others” in ethical decision-making

Source: Elaborated by the author

Ford and Richardson (1994), who reviewed the articles from 1978 to 1992, summarized that the influence of peers increased as the intensity and frequency of contact between the person and peers increase (as will be discussed later, frequency and intensity of contact are measures of network closure). Loe *et al.* (2000), in their revision of the following period (1992-1996), stated that there was an “overwhelming support for the importance of managing relationships within the work group and the pervasive influence of peers in ethical decision-making.”

O’Fallon and Butterfield (2005), who analyzed the period 1996-2003, argued that peers, identified as having a positive direct effect on ethical decision-making in many studies, could also have a moderating effect on decision. In the last review, covering the period of 2004 to 2011, Craft (2013) listed one empirical research that considered social network construct in the ethical decision-making process: Flynn and Wiltermuth (2010) found that people high in centrality in an advice network could not have the right perception of the ethical choices of other people in their network, that is, “centrality increases an individual’s estimates of agreements with others on ethical issues”.

2.1.2.3. Moral Issue Intensity

Most of the articles that studied some of the dimensions of moral intensity proposed by Jones (1991) confirmed that such dimensions do predict intention/behavior. Kish-Gephart *et al* (2010) suggested that the moral intensity construct should be formed by three factors only: social consensus, proximity (affected/benefited) and “expected harm” (those related to harm to the victims: magnitude of consequences, concentration of effect, probability of effect and temporal immediacy). They also found that social consensus and proximity had unique effects on unethical choices.

One specific type of unethical act is corruption. Pinto, Leana and Pil (2008) proposed a classification of corruption in organizations, defining two dimensions: 1) those who receive the benefits of the corruption – the organization or an individual; and 2) whether the corrupt act is undertaken by one or more individuals. They then defined a new type of corruption at the organizational level – the organization of corrupt individuals (OCI), and differentiated it from the concept of corrupt organization (CO).

Regarding the primary beneficiary, they clarified that, even if individuals benefit financially – for example winning a contract through a corrupt act (e.g. through bonuses or promotions for achieving the objectives) – the organization is still the primary beneficiary. They argued that corruption that benefits individuals only – for example, stealing or over-reporting of expenses – is usually performed by the individual. On the other hand, corruption that benefits an organization, CO, is corrupt behavior on behalf of the organization.

Rabl and Kuhlmann (2008) contributed to the definition of corruption, reviewing the many dimensions that the literature presents, and found that it is characterized by: 1) an exchange between partners by mutual agreement; 2) a violation of norms; 3) an abuse of power; 4) an absence of direct victims; and 5) secrecy of their exchange relationship. However, it is important to consider that corruption is an unethical as well as illegal act; as such, legal enforcement, although it does play a role (AJZEN, 1991), is restricted by its characteristics of secrecy and dispersion of victims.

Figure 3 summarizes the processes of denial of responsibility and neutralization of the moral issue as a function of some individual differences relevant to the research questions (JONES and RYAN, 1997; COOKE AND SHARON, 2004) as well as specific characteristics of the corruption issue, based on the issue-contingent model (JONES, 1991) extended by the approbation process (JONES and RYAN, 1997) and the rationalization/mitigation process (ANAND *et al.*, 2004; UMPHRESS and BINGHAM, 2011; WILTERMUTH, 2011).

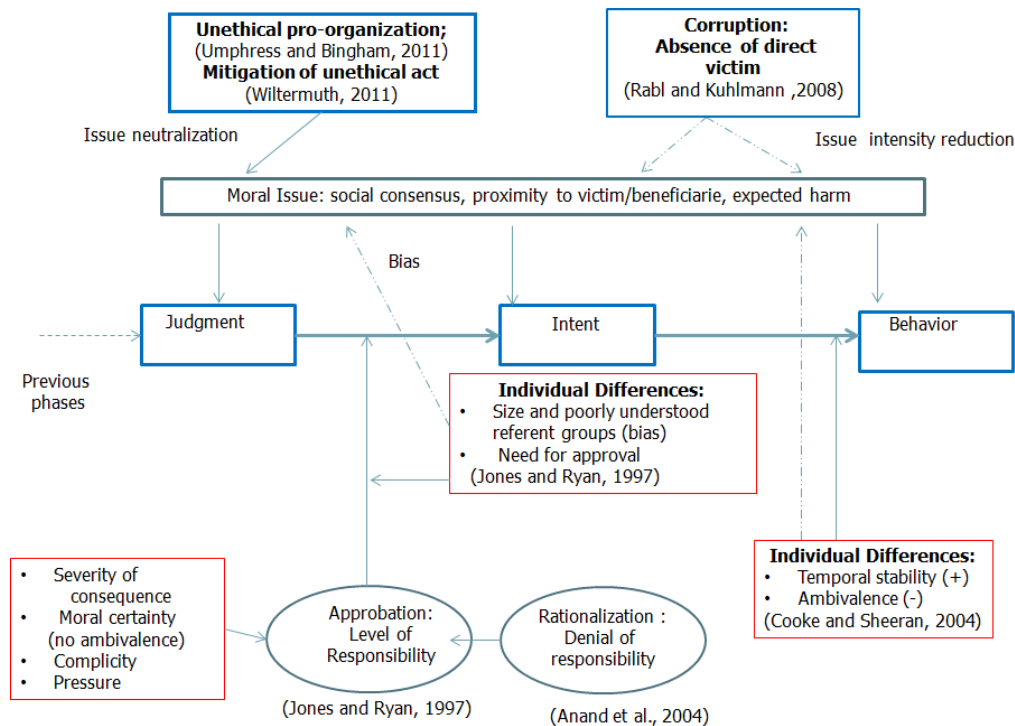


Figure 3 - Denial of responsibility and neutralization of the moral issue
Source: Elaborated by the author

Impacting the intensity of the moral issue, individual factors come into play, such as the fact that a poorly understood or large social network can lead to a bias about the social consensus (FLYNN and WILTERMUTH, 2010). Alternatively, individuals can neutralize the moral issue to justify an unethical pro-organizational behavior that benefits the organization, its members or both (see UMPHRESS and BINGHAM, 2011; WILTERMUTH, 2012). In addition, the individual's attitude strength (temporal stability) and ambivalence explain part of the intention-behavior variance (COOKE and SHEERON, 2004). Ambivalence can also affect the individual ability to analyze consequences, thereby reducing the "expected harm" and having a positive balance in the proximity of beneficiaries versus victims (for instance, a competitor as the victim and their social network as the beneficiaries).

In the case of corruption, with a direct victim absent, the intensity of moral issue can be reduced (RABL and KULHMANN, 2008). The situational pressures can outweigh the harm to society in general because of the benefits and rewards to those closer to the actor and the firm, thereby minimizing the moral intensity of the issue.

The benefits may be many, both at the individual and corporate levels: reinforcement of power and promotions in the corporation; bonus linked to direct (individual) and indirect (overall company results) performance; maintenance of the company's growth protecting current employees, achievement of financial performance committed to shareholders that directly impacts employees' stock options. Omission, in general, can perpetuate this situation insofar as the fraud or unethical behavior of one individual can be advantageous to the result of another or of all.

2.1.3.

Putting It All Together: Individual Factors, Social Networks and Ethical Cases

Ford and Richardson (1994) and Loe *et al.* (2000), in their literature reviews, included "referent groups" (or significant others) as a situational/organizational factor. The following two others literature reviews – O'Fallon and Butterfield (2005) and Craft (2013) – included this factor as an individual one. It seems that both perspectives are right. As Snyder and Kendzierski (1982) suggested, it is important to understand the "mutual interplay and reciprocal influences of individuals and social situations – by their choices of social situations, individuals may determine the social situation that in turn may determine their own behavior."

Although the results of the reviews stated that peers, supervisors and co-workers in general have influence on an individual's ethical decision, it is relevant to understand who are the ones used as reference (and that can bring social consensus) to a moral issue or can even bring the "means" to the unethical act, as Pendse (2012) suggested. It is a fact that organizational structure defines who are the peers of an actor; however, there are individual factors that influence the definition of whom, among the peers, are the "referent" others. That is, actors in a firm maintain relationships, building their own social networks.

Ibarra, Kilduff and Tsai (2005) discussed how social networks provide social identity and, therefore, actors in the same network are social referents to each other, at the same time that social identity affects networks. Gunia Wang, Huang, Wang and Murnighan (2012) found that conversations about a specific situation influence ethical decision-making. However, the content of the

conversation was critical to this influence: talking with ethical others had a positive influence on the moral right decision. As Gunia *et al* (2012) observed, organizational decision makers often choose their sources of advice and conversation and “may seek different types of conversation depending on their inclinations.”

This study addresses the claim of Kish-Gephart *et al.* (2010) that ethical decision-making research should integrate the multiple sets of predictors –apples (individual), barrels (situational/organizational factors) and cases (the moral issue of the situation). However, this study also proposes that the “mutual interplay” should be analyzed: an individual trait of an actor (apple) can predict how this actor will build their social network (barrels) in the work environment, which then becomes the reference group of the actor (or significant others) to support or constrain certain actions, providing the needed social consensus – thus impacting the considerations of the moral intensity of an issue (cases) – for the specific action.

Therefore, this research investigates self-monitoring and temporal orientation as individual factors, which can influence the development of social networks and that turn out to be the “referent others” that people use to constrain or support the ethical option. Figure 4 presents the proposed model of this research. Section 2.2 describes how articles were identified that discuss social network antecedents – self-monitoring and temporal orientations – and the unethical consequences of both individual traits and situational/organizational factors, starting from the social capital/network literature.

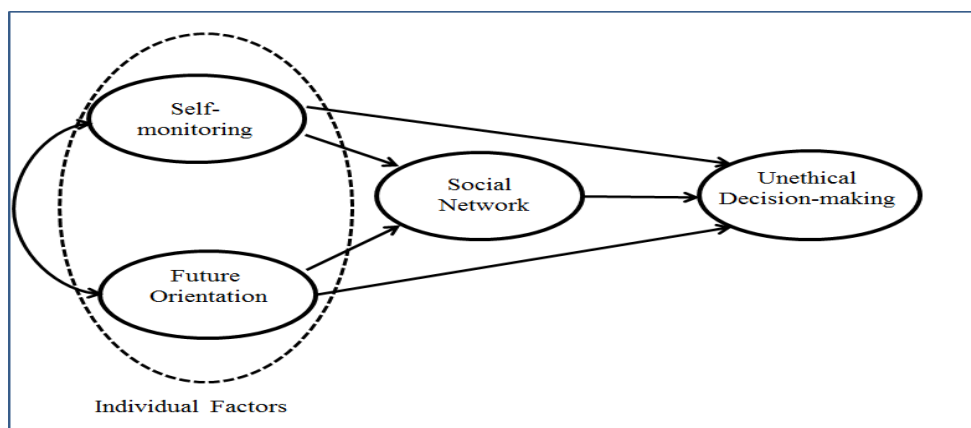


Figure 4 - Individual factors, social networks and unethical cases
Source: Elaborated by the author

2.2. Bibliographical Research Method

Figure 5 summarizes the steps that this study took to search and identify the relevant literature of social capital and, from this, the steps that were taken to review other concepts. The steps above the dashed line represent the selection of the social capital relevant articles and, among these articles, the studies that focused on at least one of the three other main concepts: ethics (the “darker side” of social capital), self-monitoring and temporal orientation; the steps below the dashed line represent the additional searches on these last three concepts to complement the literature review.

The list of peer-reviewed management publications (and the respective JCR 5-year impact factor in 2012) used for the literature review was as follows: *Academy of Management Review* (AMR), 11.578; *Academy of Management Journal* (AMJ), 10.031; *Journal of Management* (JM), 7.754; *Administrative Science Quarterly* (ASQ), 7.693; *Journal of Applied Psychology* (JAP), 7.313; *Strategic Management Journal* (SMJ), 6.393; *Organization Science* (OS), 5.506; *Journal of Management Studies* (JMS), 4.744; *Journal of Organizational Behavior* (JOB), 4.226; *Management Science* (MS), 3.057; and *Journal of Business Ethics* (JBE), 1.620. The *Business Ethics Quarterly*, *Organization Behavior and Human Decision Process* and several Brazilian management journals were included within the scope of the search; however, they did not yield appropriate articles.

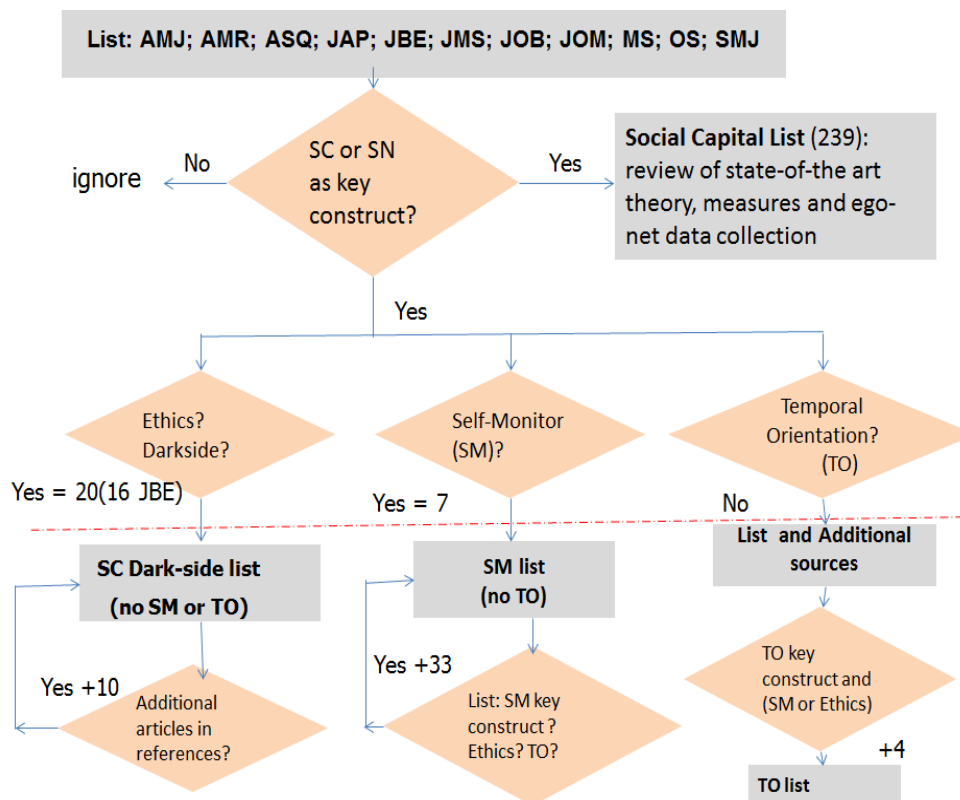


Figure 5 - Method for literature review
Source: Elaborated by the author

The search period follows Payne *et al.* (2011), who have comprehensively reviewed the social capital literature in management for the period 1989-2008. They selected the journals “which represent the most influence on the management field” and decided to begin their search at 1989, due to the seminal article of Coleman (1990) which was “acknowledged as the founding paper on social capital.”

The next step was a keyword search, looking for the articles that contained combinations of the expressions “social capital” for the period 1989-2014. This research also complemented the criteria of Payne *et al.* (2011) for this search, including the expression “social network” for the same period. Although there was a clear link between these two searches, additional articles that were relevant to the research question were identified. The articles selected included “social capital/network” as one of the main constructs of the study.

Carpenter, Li and Jiang (2012) have developed a framework to classify the social capital and network research in four main areas at the organizational context, providing recommendations for constructs, measurement, and analytic strategies for each area. “Social capital research,” as delimited by them, should have some non-network constructs as predicted constructs (for example, at the individual level the consequence could be career success, while at the inter-organizational level, managerial ties to other stakeholders could lead to firm performance). “Network development research” would encompass research in which networks serve as consequences and phenomena of interest (for example, formation and change of network structures).

Following Carpenter *et al.* (2012), the articles that were “social capital research” at both the individual and inter-organizational levels, and “network development research” at the individual level (for example, the papers that studied the creation of the social network of an individual) were selected. Note that it is beyond the scope of this paper to review the articles that study the formation and/or change of inter-organizational networks and that do not consider the individual (for example, examining the evolution of networks of organizations in a certain industry).

Table 3 presents a summary of 239 articles (174 articles identified using the query “social capital” and 65 using “social network”) as of January, 2014, by journal and by year. Among the articles, 181 were empirical and 58 were conceptual (25 in AMR, 10 in JBE, 9 in JOM, and the remainder in various journals). For each of these articles a search was undertaken for the social capital theories used, the data collection method (specifically for ego-networks) and measures of social capital. The social capital concept, based on this review, will be discussed in section 2.3.

Journal	Articles	Year	Articles
AMJ	41	1989-1999	20
AMR	25	2000	8
ASQ	21	2001	11
JAP	16	2002	7
JBE	16	2003	11
JMS	25	2004	16
JOB	14	2005	16
JOM	15	2006	14
MS	10	2007	9
OS	31	2008	14
SMJ	25	2009	16
Total	239	2010	17
		2011	15
		2012	28
		2013	26
		(Jan) 2014	11
		Total	239

Table 3 - Social capital/network literature review by journal and year
Source: Elaborated by the author

Among all the articles in this literature review, additional searches were made for “(un)ethical,” “self-monitoring,” and “temporal orientation/temporal perspective.” (Un)ethical had only four studies reported in these journals, except for the *Journal of Business Ethics*: two conceptual studies (BRASS, BUTTERFIELD and BRUCE, 1998; RODRIGUEZ, UHLENBRUCK and EDEN, 2005) and two empirical (FLYNN and WILTERMUTH, 2010; BIZZI, 2013). The *Journal of Business Ethics* presented a final list of 16 articles, of which six were empirical. From these 20 articles related to ethics, 15 were published after 2009.

It is worth noting that some recent research on corporate social responsibility (CSR), with a focus on externally-oriented discretionary moral behavior, could be considered as research in the ethical field (ROBERTSON, BLEVINS and DUFF, 2013). This study has not considered the CSR literature or consumer ethical behavior (e.g. not buying from a firm engaged in corruption) in its review.

Additional articles for the “dark side” of social capital were found by applying the three-stage method proposed by Villas, Macedo-Soares and Russo (2008) for carrying out literature reviews, a method that suggested a cycle process in which, after the selection of initial sources and documents, new documents are selected and the respected bibliographical references investigated. The focus was

on finding relevant articles that addressed “corruption or bribery” and “network or relationships.” This step resulted in an additional 10 articles selected as relevant. The “dark side” of social capital literature is presented in section 2.3.4.

Self-monitoring was examined in only six studies among the 239 identified (MEHRA, KILDUFF and BRASS, 2001; OH and KILDUFF, 2008; SASONOVA, MEHRA, BORGATTI and SCHIPPERS, 2010; FANG, DUFFY and SHAW, 2011; ROBERSON and WILLIAMSON, 2012; BRANDS, 2013) and impression management – one key behavioral characteristic of high self-monitors – was studied once (BARSNESS, DIEKMANN and SEIDEL, 2005).

A keyword search for articles published between 2000 and 2013 that contained “self-monitoring” in the same list of journals was conducted in order to obtain a more compelling review of the self-monitoring literature. The objective was not to provide a complete review of literature in the “self-monitoring” construct; indeed, recent comprehensive reviews include Day, Schleicher, Unckless and Hiller (2002) and Leone (2006). Rather the goal was to select articles that had self-monitoring as one of the main constructs of the study and some intersection with the other concepts under study (social capital, temporal orientation and unethical decision-making). Section 2.4.1 presents and discusses the 33 selected articles.

Regarding individual temporal orientation, no articles were found in the 239-article social capital literature survey. It is important to stress that other temporal variables were used to analyze the impact on the network, for instance how the longevity of ties leads to tie strength. A search for temporal orientation was conducted, using two different searches: “future self-continuity” and “time perspective” in the same list of journals and later extended to others using “Pesquisa Integrada,” a tool available at the PUC-Rio library database service. One article was found that related social network to time perspective (HOLMAN and ZIMBARDO, 2009); one article examined the relation between temporal perspective and self-monitoring (MURREL and MINGRONE, 1994); and two articles examined the relationship of temporal orientation to ethics (HERSHFIELD *et al.*, 2012) or honesty (ZIMBARDO and BOYD, 1999). However, there were other relevant studies linking temporal orientation to unethical decision-making or the equivalent, albeit using other temporal constructs. The temporal orientation literature is presented in section 2.4.2.

2.3. Social Capital Concept

2.3.1. What is Capital?

“The social world is accumulated history ... one must reintroduce into it the notion of capital and with it, accumulation and all its effects. Capital, which in its objectified or embodied forms, takes time to accumulate ...” (Bourdieu, 1986)

Lin (2001) defined capital as an “investment of resources with expected returns in the marketplace,” and clarified that capital is a resource twice processed: “In one instance, capital is the outcome of a production process (producing or adding value to a resource); in the other, it is the causal factor in a production (the resource is exchanged to generate a profit).”

Bourdieu (1986) discussed three important characteristics of capital in all its forms: 1) the importance of time in the accumulation process of capital; 2) the convertibility of the different types of capital as strategies to ensure the reproduction of capital and position occupied in social space; and 3) the risk associated with 1) and 2).

As Lin (2001) noted, although there are many theoretical differences in the definition of social capital among scholars, they all agree that social capital is “investment in social relations with expected returns in the marketplace.” Or, as Bourdieu (1986) proposed, like any other capital, the network of relationships is the result of investments strategies, “individual or collective, consciously or unconsciously” that can be used in the short or long term.

Social Capital, therefore, is one form of capital, along with economic capital, human capital and cultural capital. As Adler and Kwon (2002) discussed, social capital is “convertible” (BOURDIEU, 1986) and “appropriable” (COLEMAN, 1990). It is convertible insofar as one source can be transformed into another; for example, whereas financial capital can leverage physical capital (machinery), social capital can provide necessary support, such as reputation, to gain financial capital. It is also appropriable in the sense that “ties of one kind can be used for different purposes.” Furthermore, as with human capital and physical capital, social capital needs maintenance (COLEMAN, 1990).

2.3.2. Social Capital's Theoretical Foundation

Several scholars have contributed to social capital theory, notably Bourdieu (1986), Coleman (1990), Lin (1999, 2001), Flap (2004), Burt (1992, 2005) and Putman (2000). In the organizational context, Nahapiet and Goshal (1998), Granovetter (1973, 1985), Uzzi (1996) and Adler and Kwon (2002) have made significant contributions to the theoretical foundations of social capital research.

For Lin (2001) there are two groups of research in social capital, which are differentiated by the level of analysis: one group focuses on the individual's social capital (e.g. BURT, 1992; LIN, 2001; FLAP, 2004), while the other focuses on social capital at the collective level (e.g. BOURDIEU, 1986; COLEMAN, 1990; PUTMAN, 2000). Borgatti and Halgin (2011) suggested another classification of the studies: capitalization (based in the information flow in the network, which defines that the social position in the network provides access to resources) and coordination (based on the network "bonding," that is, how the network nodes combine to allow coordination or exploration).

Adler and Kwon (2002), in an extensive review in which they set out the differences between theories, noted that beyond the agreement that social relations are a source of social capital, there are two different lines of research: a) the first focuses on external relations – called "bridging" forms of social capital; b) the second focuses on internal ties within collectivities – called "bonding" forms of social ties. However, what is to be considered external or internal, they argued, depends on the level of analysis.

Adler and Kwon reviewed 23 distinct definitions of social capital in the management literature and noted that some management researchers were using the external view; others, the internal; and a third group, both. They pointed out that scholars used various perspectives, which included, and sometimes combined, the micro-level (individual, organization) and macro-level (country, for example) perspectives.

As research on social network and social capital in the organizational context has increased in the last decade, some scholars have proposed frameworks to clarify and simplify the understanding of this body of research (BORGATTI and FOSTER, 2003; BORGATTI and HALGIN, 2011; PAYNE *et al.*, 2011; CARPENTER, LI and JIANG, 2012).

In a review of management research in social capital spanning 20 years (from 1989 to 2008), Payne *et al.* (2011) identified that the opinions of management scholars varied widely in their explanation of the sources and outcomes of social capital. They classified the empirical articles in eight theoretical perspectives, and noted that some studies used more than one theory.

In the review of the literature up to January, 2014 (presented in section 2.1.3), no other theory arose with the exception of two articles – Laursen, Masciarelli and Prencipe's (2012) and López and Santos' (2014) that used Putman's (2000) view of the collective social capital. Because Putman's theory of social capital is related to social aggregates and not to individuals (TRONCA, 2011), it is not directly related to the scope of this research; however, it may be very important in a micro-macro analysis, comparing, for instance, data from different countries. Table 4 lists the social capital theories used in the business articles from 1989 to 2014 (adapted from PAYNE *et al.*, 2011). The rest of this section will present an overview of the main concepts of each of the theories followed by discussion of the evolution, omissions and similarity among the theories.

Section	Theories of Social Capital	Author
2.3.2.1	Strength of Weak Ties	Granovetter (1973)
2.3.2.2	Bridging of Structure Holes	Burt (1992, 2005)
2.3.2.3	Strong Ties and Network Closure	Coleman (1988, 1990)
2.3.2.4	Social Resource Theory	Lin (1999, 2001, 2008)
2.3.2.5	Embeddedness	Granovetter (1985) ; Uzzi (1996)
2.3.2.6	Multiple Dimensions of Social	Nahapiet & Goshal (1998)
2.3.2.7	Model of Social Capital	Adler & Kwon (2002)
2.3.2.8	Collective Social Capital	Putman (2000, 2001)

Table 4 - Social capital theories in business - 1989 to 2014

Source: Payne *et al.* (2011)

2.3.2.1.

Theory of Strength of Weak Ties (GRANOVETTER, 1973)

Granovetter (1973), in the strength of weak ties theory, proposed that weak ties are more valuable because they are a source of new information. Ties among individuals can be classified as strong ties (such as close friends) or weak ties (such as acquaintances). The strength of a tie is a function of frequency of interaction, duration, emotional intensity and reciprocity.

Borgatti and Halgin (2011) summarized that the theory is based on two basic assumptions and two inferences. The two assumptions are: 1) the stronger the tie between two people, the more likely their social world will overlap. This means that if A and B have a strong tie, and B and C also have a strong tie, then there is a chance that A and C will have at minimum a weak tie (this is called g-transitivity); and 2) bridging ties are a source of new, non-redundant information. A bridge is a tie that connects a person who is not connected to the other people of a given network.

The two assumptions lead to two inferences: 1) strong ties are unlikely to be sources of new information (if a bridge C has a strong tie with node A, then it is probable that C has some weak ties with other people connected to A, so C is not a bridge) and 2) only weak ties can be bridges. Granovetter (1973) argued that the reason for the g-transitivity is that the causes of tie formation are themselves transitive, such as homophily/similarity (BORGATTI and HALGIN, 2011).

Homophily, for example, is one of the key concepts that can explain such transitivity: people tend to have stronger relationships with people who are similar to themselves. McPherson, Smith-Lovin and Cook (2001) discussed the homophily (“people like me”) principle in social networks, which states that “contact between similar people occurs at a higher rate than among dissimilar people (...) and information that flows through networks will tend to be localized,” as summarized in the expression “birds of feather flock together.”

2.3.2.2. Structure Hole Theory (Burt, 1992, 2005)

Burt (2005), in his structure hole theory, argued that social capital is a metaphor for advantage: “the advantage created by a person’s location in a structure of relationships is known as social capital”. He pointed out that it is not the number of relationships that measures value, but one’s position related to bridging holes. He clarified that people are not only a source of information, but “ports” of access to the information that circulates around them.

Burt’s (2005) definition of brokerage is “the action of coordinating across the hole (in the relationship network)” and brokers “are the people who build the bridges.” Structure hole, defined by its effects, is “a place in the network where brokerage could create value.” A broker then has a competitive advantage

building strong relations to disconnected groups. In fact, it was Burt who coined the expression “brokers do better,” based on the assumption that people who bridge holes have three structural advantages: a) access to wider diversity of information, and less redundancy; b) early access to information; c) control of information diffusion.

The structure hole theory is concerned with ego-network: the network composed of individuals (called alters) connected to one focal individual (called the ego) in a structure of social relationships. Burt (1992) developed a measure of ego-network called “constraint,” which determines whether an ego-network is more or less constrained to information.

As Burt (2004) noted, the structure hole theory draws on network and sociological concepts: strength of weak ties (GRANOVETTER, 1973), betweenness centrality (FREEMAN, 1977), the benefits of exclusive partners (COOK and EMERSON, 1978) and the autonomy created by complex networks (BURT, 1992). Structure hole theory and strength of weak ties theory are very similar in their basic concepts (BORGATTI and HALGIN, 2011), but Burt (1992) explains the difference between them: “First, the causal agent in the phenomenon is not the weakness of a tie, but the structure hole it spans. Tie weakness is a correlate, not a cause (...) Second, (...) the weak tie argument obscures the control benefits of structure holes.”

Since then, brokerage has been associated with many advantages to individuals – such as career, performance, and power – and to corporations – such as innovation. More recently, though, other studies have discussed the negative side of brokers, such as being a source of unethical behavior in the group (e.g. BIZZI, 2013).

2.3.2.3.

Strong Ties Theory and Network Closure (COLEMAN, 1990)

Coleman (1990) states that “social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: they all consist of some aspect of a social structure and they facilitate certain actions of individuals who are within that structure.”

Closure of a network means that each member has a tie with each other, which is important for the emergence of norms and trust. Mutual trust develops from the exchange of reciprocity. This allows for a greater “credit risk” – group members are more willing to extend favors to one another because they know that another member of the group will “repay” that favor in the future (OH, CHUNG and LABIANCA, 2004).

As norms are clear and enforced, there is less opportunism and consequently less need for costly monitoring of members. While this is an advantage, there are disadvantages as well, such as strong norms against out-of-group members, reduction in innovation and increased redundancy of information.

Coleman (1990) recognized that while social capital can be valuable in facilitating actions for one individual, it could, at the same time, be useless or even harmful for others. He explained that human capital resides in the nodes of the network, and social capital resides in the ties connecting the nodes.

Lin (2001) criticized Coleman’s definition of social capital, arguing that the functional view may be a tautology: “social capital is identified when and if it works; the potential causal explanation of social capital can be captured only by its effect.”

2.3.2.4.

Theory of Social Resource (LIN, 1982, 1999, 2001)

For Lin (2001), social capital is “resources embedded in social networks accessed and used by actors for actions.” Social capital supports access to information, influence, social credentials, and provides reinforcement of identity.

Lin’s theory posits that relevancy is in the resources flowing through the networks and not the network itself, contrary to the views of structuralist scholars (e.g. BURT, 1992), who focus on the structural partners of networks only (CARPENTER *et al*, 2012). He extended Granovetter’s (1973) concept of the strength of weak ties and Burt’s (1992) structure hole theory to define a set of seven propositions mixing structure and content of ties.

One of the main criticisms of Lin in relation to Burt’s theory is that not only is it important to span a structure hole, the sub-network that an individual will bridge has to present different “content” or the information will be redundant (i.e. there is no difference in the information accessed).

Lin proposed a measure of social capital, called “position generator” (to assess social positions, through occupations/professions in society), that measures the content of information by analyzing the range and diversity of occupations accessed (LIN and ERICKSON, 2008). Seibert, Kraimer and Liden (2001), for example, operationalized the position generator measure in the organization context as different functions (diversity) accessed and the levels in hierarchy accessed (range) by an organization’s actor.

Lin (2001) clarified that there are three elements intersecting structure and action: the structure (embedded), the opportunity (accessibility to resources) and the action-oriented aspect (the use of resources). It is important to note the difference between access (an individual’s collection of potentially mobilizable resources) and use (refers to action; mobilization of resources in order to create returns) of resources. Moreover, he explained that an action to maintain a resource in social relations (called expressive actions) is different from an action to gain a resource (called instrumental action), as are the structures needed to support them.

Four elements enhance outcomes of actions: a) information: facilitates the flow of information; b) influence: some social ties may exert influence in agents/decision-making processes; c) social credentials: reflect the individual accessibility to resources; and d) reinforcement of identity and recognition (assured as one’s worthiness as an individual and member of a social group), essential for maintenance of mental health.

Following the same theoretical foundation, Flap (2004) proposed that social capital is the function of alters (individuals that are connected to one focal individual, called ego, in a social network) who own various kinds of resources as well as these alters’ willingness to give access to their resources. Social Capital is formed by three dimensions: 1) the number of alters in the individual’s network; 2) the resources these alters give access to; and 3) the availability of these resources.

2.3.2.5.

The Theory of Embeddedness (GRANOVETTER, 1985; UZZI, 1996)

Granovetter, in a seminal article, criticized the “undersocialized conception of man” in economists’ analyses of the economic activity and the “oversocialized” conception of some sociology scholars that relegated the specifics of individual relations to a minor role. He argued that most behavior is closely embedded in networks of interpersonal relations, and that behaviors are a response to a present situation, aiming “not only at economic goals, but also at sociability, approval, status and power” (GRANOVETTER 1985).

Granovetter’s notion of embeddedness (economic transactions are embedded in social relations) had an objective: to introduce social and organizational relations in the analysis of economic systems, “as a structure with history and continuity that give it an independent impact on the functioning of the (economic) system” (COLEMAN, 1990).

Uzzi (1996), extended Granovetter’s embeddedness concept, in an empirical study in which he argued that, “the structure and quality of social ties among firms shape economic action.” That is, the type of network in which a firm is embedded and the position and types of ties that the firm has in the network define the availability and access to opportunities.

Uzzi found that there was a relationship between 1) embeddedness and production market structure, and 2) embeddedness and organizational performance. He used the variable *social capital embeddedness* to indicate whether a contractor had network ties to a business group. He also argued that an optimal network is composed of embedded ties and arm’s-length ties, and pointed to the risk that a firm’s structural location could be constraining, as it could “blind” it to the larger network structure – “the paradox of embeddedness” (UZZI, 1997).

Uzzi (1997) observed that “people’s time is the scarcest resource in the economy and how it is allocated has a profound economic effect.” He proposed that “the greater the level of embeddedness in an organization’s network, the greater its economies of time.” He found that embedded relationships had three main components – trust, fine-grained information transfer, and joint problem solving – that regulated the expectations and real behavior of partners, protecting

against opportunism (and thereby avoiding high monitoring costs). Thus, the higher the level of embeddedness, the higher the density of ties.

Carpenter *et al.* (2012) argued that embeddedness has two forms: *relational embeddedness* (based on the effects of network closure) and *structural embeddedness* (based on the effects of the network structure features, such as structure holes). They argued that social capital represents the consequences of the network and embeddedness represents the mechanism through which these consequences are realized.

2.3.2.6.

Dimensions of Social Capital (NAHAPIET and GHOSHAL, 1998)

Nahapiet and Ghoshal (1998) defined social capital as “the sum of actual and potential resources embedded within, available through, and derived from the networks possessed by an individual or social unit, and social capital thus comprises both the network and the assets that may be mobilized through that network.” Nahapiet and Ghoshal (1998), basing their argument on the resource-based theory of competitive advantage, argued that differences among firms could be explained by their ability to create and exploit social capital, which was responsible for the creation of the firm’s intellectual capital. They defined three dimensions for social capital: a) a structural dimension (network ties, network configuration and appropriable organizations); b) a cognitive dimension (shared code and language and shared narratives); and c) a relational dimension (trust, norms, obligations and identifications).

Nahapiet and Ghoshal (1998) suggested that the concept of embeddedness is related to social relations in the context of time and space. Based on Coleman’s (1990) theory of strong relations, they argued for the importance of the continuity – meaning duration and stability – of social relationships through time to build trust that can be a source of social capital.

2.3.2.7.

Model of Social Capital (ADLER and KWON, 2002)

Adler and Kwon (2002), in their seminal work to consolidate different concepts of social capital in the management literature, defined social capital as “the goodwill available to individuals or groups. Its source lies in the structure and

content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actor.”

Adler and Kwon (2002) emphasized the appropriability concept: “ties of one kind can be used for different purposes.” In addition, drawing on criminology concepts (in this case, the “crime” to do a favor to others), they proposed a framework in which they suggested that to have access to and to use social capital, an actor needs opportunity, motivation and ability (see Figure 6).

They presented a complementary perspective of benefits and risks of social capital and concluded that no one could “assure that the use of social capital resources in competition among actors will generate an optimal outcome for the broader aggregate” (ADLER and KWON, 2002).

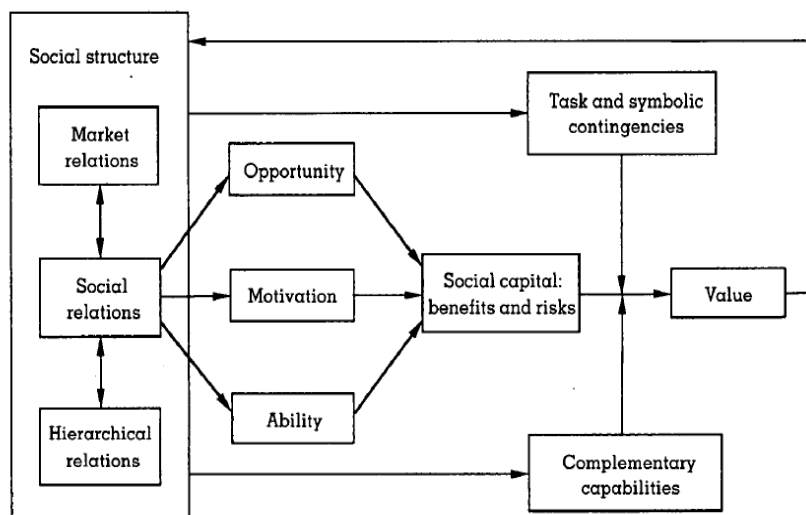


Figure 6 - Social Capital model
Source: Adler and Kwon, 2002, p. 23

2.3.2.8.

Collective of Social Capital (PUTMAN, 1995, 2000, 2001)

Putman (1995) defined social capital as “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit.” This definition proposes that social capital is related to collectives and social aggregates, and not to individuals, who are the beneficiaries of it through resolution of collective problems.

Putman (2000, 2001) proposed an index of social capital, formed by five dimensions, each with multiple indicators: 1) organizational life of the community (measured by, for example, the presence of civic and social organizations and the average number of group memberships); 2) engagement in public life (measured by, for example, electoral turnout at presidential elections); 3) volunteerism in society (measured by, for example, the number of non-profit organizations); 4) informal sociability (measured by, for example, the time spent at friends' houses); and 5) social trust (measured by generalized interpersonal trust) (TRONCA, 2011).

As mentioned before, only two articles among all those reviewed in this study followed Putman's view of Social Capital: Laursen *et al.* (2012), who studied how regional social capital impacts on innovation knowledge acquisition for firms; and López and Santos (2014), who analyzed the link between culture and social capital impact on the level of corruption.

2.3.3. Discussion of Social Capital Theories

The social capital theories have continued to be developed, and scholars have begun to recognize the importance of adopting complementary perspectives. For instance, Lin (1999) adopts the “content” view of social capital (that is, the significance is not the structure itself, but what flows through the structure) and suggests that social capital scholars might analyze both the structure and the content of the network.

Considering the structural view of social capital, there has been much discussion about the advantage of “strong” versus “weak” ties (also called the bonding versus bridging perspective), based on the strong ties theory (COLEMAN, 1990), strength of weak ties theory (GRANOVETTER, 1973, 1985) and the structure hole theory (BURT, 1992).

Gargiulo and Benassi (2000) argued that both network closure and structure hole theories agree that reciprocity is a “mechanism that turns relationships into assets that define social capital,” and that stronger relations are amplifiers of reciprocity. However, the theories differ on the effects of such amplified reciprocity: strong ties theory views it as necessary to secure norms and trust in

order to increase cooperation, but structure hole theory views it as a disadvantage to adaptation and innovation.

Burt (2005) has recently acknowledged what he called the “brokerage-closure tension”: closure or cohesiveness, which is based on high trust and strong relationships within a group, is a complement to brokerage beyond the group, in the sense that a cohesive group (high closure) combined with diverse external contacts (high brokerage) provides the best performance:

“Brokerage is about coordinating people between whom it would be valuable, but risky, to trust. Closure is about making it safe to trust. The key to creating value is to put the two together. Bridging a structure hole can create value, but delivering the value requires the closed network of a cohesive team around the bridge.”

Some empirical studies discussed the trade-off between structure holes and cohesiveness regarding performance of groups (e.g. REAGANS and ZUCKERMAN, 2001; BALKUNDI, KILDUFF, BARSNESS and MICHAEL, 2007), innovation, regarding creation versus implementation (FLEMING, MINGO and CHEN, 2007; TIWANA, 2008), or organization change (BATTILANA and CASCIARO, 2012). Others used the typology of Adler and Kwon (2002) of external and internal ties to analyze such a trade-off (e.g. LEANA and PIL, 2006).

There are also some studies that discuss essential differences between the strength of weak ties theory and the structure hole theory. Borgatti and Halgin (2011), for example, discussed the differences in the theoretical foundation of the formation of ties, and cited Kilduff (2010), who noted that Granovetter (1973) embraces “a serendipitous world in which people form ties that only incidentally prove useful, whereas Burt (1992) embraces a more strategic and instrumental view.”

Obstfeld (2005), based on the sociology research of Simmel (1950), brought back the concepts of *tertius iungens* (the one who joins) and *tertius gaudens* (the one who enjoys, i.e., an individual who manipulates the fact of being the one who connects unconnected people) to explain the differences between Granovetter’s (1973) and Burt’s (1992) theories. That is, the intention of the formation of the ties helps explain the motivations for the mobilization of social capital (for instance, as exploration versus exploitation). Zhou, Shin, Brass, Choi and Zhang (2009) discussed how weak ties and structural holes, although correlated, are not

the same: “the non-redundancy of structure holes refers to information differences between alters but does not tap the information differences between ego and alters” that is given by the weak ties.

The literature, mostly focused on manager networks, also suggests that there are different types of brokers. One of the first classifications of brokers was offered by Gould and Fernandez (1989). Shi, Markoczy and Dess (2009) criticized this classification, which was developed with the assumption that a broker exhibits *tertius gaudens* behavior, and extended the typology to define eight types of brokers. The authors argued that brokerage structure does not automatically trigger actions of brokerage and different types of brokerage bring different advantages. They also suggested that *tertius gaudens* and *tertius iungens* strategies may be complementary rather than contradictory, as the latter can be critical for strategy integration and implementation.

Additionally, some scholars have debated the contingency of social capital to culture (XIAO and TSUI, 2007; MA, HUANG and SHENKAR, 2012), industry (LUO, 2003), status quo of the institution (BATTILANA and CASCIARO, 2012), competition and ownership of a company (foreign/local) (LI, POPPO and ZHOU, 2008) and contingency of brokerage to the number of peers (BURT, 1997).

Another perspective in the literature relates to the concept of homophily – “similarity that breeds connection” (MCIPHERSON *et al.*, 2001). Brass *et al.* (1998) explained that there are two possible explanations using social network theory: a) cohesion – “similarity breeds attraction and interaction breeds similarity,” and b) structural equivalence – “people adopt attitudes of those who have equivalent positions” (BURT, 1987). McPherson *et al.* (2001) distinguished between status homophily (which includes major socio demographics characteristics, such as race, sex, age, education, religion, occupation and behavior partners) and value homophily (which is based on values, attitudes and beliefs). Value homophily includes the wide variety of internal states presumed to share our orientation toward future behavior. McPherson and Smith-Lovin (1987), discussed the difference of induced homophily – the result of constraints of the formal structure in organizations that limits contacts and choice homophily, resulting from the preference to interact with similar others. More recently, vanden Brink & Benschop (2014) offered a third view beyond the choice versus

induced homophily, relating creation of social networks not to a conscious process but to a liminal practice (“something that people are not fully aware of”).

In the literature, there is also some confusion about the relationship between trust and social capital (LIN, 2001; ADLER and KWON, 2002). As Lin (2001) noted, the problem occurs when social capital is considered a collective good, insofar as trust has become – as in some examples in the literature (cf. Putman’s view of collective trust) – a synonym or measure for social capital, which is not correct. Indeed, trust may be a source of social capital, but it is not social capital per se. Accordingly, for Adler and Kwon (2002), trust is a motivational source of social capital.

Ferrin, Dirks and Shah (2006) contributed to the determinants of interpersonal trust that is a base for many social capital theories, such as Coleman’s strong-ties theory and Nahapiet and Goshal’s relational model. They argued that network closure, structural equivalence and trust transferability are sources of interpersonal trust. Moldoveanu and Baum (2011) investigated the epistemology of trust and how trust functions to create social capital from network structures.

Another aspect that has been debated in social capital literature is the need to apply multilevel analysis (IBARRA, KILDUFF and TSAI, 2005; MOLITERNO and MAHONY, 2011) beyond the micro-macro linkage. As Moliterno and Mahony (2011) argued, the network theory should use multilevel scope and perspective inasmuch as organizations are multilevel systems of relationships, applying the concepts of nested networks. Payne *et al.* (2011) suggested that social capital is “fundamentally a multilevel theoretical perspective.”

Considering the macro-micro level integration, it is worth noting that Adler and Kwon (2002) argued that institutionalization theory and social capital theory are complementary. The former explains “how higher-level aggregates – through the diffusion and imposition via networks of norms, beliefs and authority – shape choices for lower-level aggregates.”

Wu (2008) summarized the different scholars' views about which social contexts at the macro level should be considered as social structure. He explained that there are two lines of research: a) those that consider cultural symbols and meanings as the deepest social structure in society; and b) those who argue that social structure is formed by concrete aspects of social conditions, such as economic conditions. The latter are also subdivided among those who give b1) a relational perspective of social context, and b2) those who give emphasis on "global properties," that is, aggregate attributes of large units, such as country level population size, stage of economy.

In the relational view, based on the theory of social exchange, Blau (1986) argued that a structure of social relations in a small group is developed by social interaction among the individuals. As there is no direct interaction among individuals in a large community, "cultural values and norms that prevail in a society are the matrix that forms the social relations among groups and individuals" (BLAU, 2008); that is, at the collective level, social processes are mediated by common values. He clarified that while shared values also influence behavior in small groups, they do not have the same importance as in complex structures.

Finally, very recently, certain scholars have called for an improved understanding of network dynamics. Ahuja, Soda, Zaheer (2012) argued that the understanding of network outcomes can only be partial unless there is an appreciation of the genesis of the network structures that resulted in such outcomes.

2.3.4. The "Darker Side" of Social Capital

"Without a rounded critique of social capital, researchers – and ultimately managers and policy-makers acting on that research – run the risk of overlooking the ethical issues and consequences of endorsing the concept, and undermining any good which it may engender." (AYIOS, JEURISSEN, MANNING, SPENCE, 2014)

The literature suggested that an individual's social capital can enable or constrain unethical behavior through three important processes, by 1) creating a bias to the social consensus that leads to a reduction or neutralization of the moral issue and impacting the approbation (moral approval from oneself and others)

process reducing the self-attribution of responsibility for the unethical act (as discussed in the previous section); 2) offering the means for the unethical act (COHEN, 2010; PENDSE, 2012), such as power and information from external partners and agents ; and 3) keeping silent to protect one's reputation (and in the end the social capital), all the while engendering a snowballing effect of tolerance of unethical acts, as will be discussed in this section.

In the literature review of social capital, this study found that of the 20 articles that focused on ethics (Table 5), six were empirical but only three used network structure measures (FLYNN and WILTERMUTH, 2010; BIZZI, 2013; LEE, 2013). Some studies proposed that ethical behavior could lead to an increase of social capital (PASTORIZA, ARIÑO and RICART, 2009; PASTORIZA and ARIÑO, 2013; SU, 2014), while others suggested that social capital could constrain or enable unethical actions (e.g. BRASS *et al*, 1998; FLYNN AND WILTERMUTH, 2010; HUANG and RICE, 2012, BIZZI, 2013). Although this study can be included in the latter group of articles, it is just a research focus; indeed, Snyder and Kendzierski (1982) suggested there may be a “mutual interplay and reciprocal influences of individuals behavior and social situations.”

Journal	Authors
AMJ	Flynn and Wiltermuth (2010)
AMR	Brass et al. (1998); Rodriguez et al. (2005)
JBE	Daboud and Calton (2002); Nielsen (2003); Maak (2007); Pastoriza et al. (2009); Dolfma et al. (2009); Millar and Choi (2009); Melé (2009); Bedford (2011); Huang and Rice (2012); Nguyen and Gragg (2012); McCarthy et al. (2012); Pastoriza and Arino (2103); Lee (2013); Lopéz and Santos (2014); Kaplan et al. (2014); Su (2014)
JOM	Bizzi (2013)

AMJ (Academy of Management Journal), AMR (Academy of Management Research), JOM (Journal of Management) and JBE (Journal of Business Ethics)

Table 5 - Social capital/network and ethics literature

Source: Elaborated by the author

As mentioned earlier in the bibliographic review method section, a second search was made for additional and relevant articles that considered “corruption or bribery” and “network or relationships.” Two groups of articles were found at this stage. The first group included research that used network constructs and found a relationship between brokerage and crimes in general, albeit not necessarily in

relation to white-collar crime (KLERKS, 2001; VAN METER, 2001; MORSELLI and GIGUERE, 2006; MORSELLI and ROY, 2008), as well as studies that, although they did not explicitly use social capital or network constructs, focused on the development and mobilization of external network relationships, such as relationships with government and partners who were mobilized for unethical purposes (UHLENBRUCK and EDEN, 2005; SEEVERS, SKINEER and KELLEY, 2007; RODRIGUEZ; SPENCER and GOMES, 2011).

The other group of scholars (cf. DE MARIA, 2006; MUEHLHEUSSER and ROIDER, 2008) studied the challenges created by an ethic of silence. The basis of their studies is that sometimes people may decide not to voice their opinions against unethical actions and corruption because it can cause loss of social capital (MILLIKEN, MORRISON and HEWLIN, 2003), thus engendering a vicious circle of incentives to further unethical action.

Section 2.3.4.1 gives an overview of the studies that investigated social capital or social network of relationships in unethical decisions and crime. Section 2.3.4.2 discusses research on the “ethics of silence,” including vis-à-vis deliberate acts of protecting social capital.

2.3.4.1. Unethical Decision and Corruption

Brass, Butterfield and Skaggs (1998) were pioneers in attempting to understand which social network conditions would be more likely to result in unethical actions. They presented a model under which an unethical decision can be the result of the interplay of individual, organizational and issue-related factors, but also involves individual social capital. They argued that the types and the structure of the relationships can provide constraints and opportunities for unethical behavior and suggested that individuals who are more centrally positioned in a network would be less likely to behave unethically because this could damage their reputation.

In line with Jones and Ryan’s (1997) proposition that social networks (larger and poorly understood) could lead to social consensus bias, Flynn and Wiltermuth (2010) recently found in an empirical study that brokers tend to exacerbate a false consensus bias on ethical issues. That is, a broker tends to overestimate the level of agreement between his/her view of ethical issues and the

view of his/her network alters; moreover, they argued that the effect of network centrality on an unethical decision was caused by social influence rather than protection of reputation, contrary to Brass's suggestion.

Flynn and Wiltermuth (2010) based their study on the theoretically conventional view of ethics in which "moral values are continually evolving and are shaped by patterns of behavior and discourse within a social group" and the "false consensus bias" concept. They cited the observation of Trevino (1986) in her perspective of individual-situation interaction that "socially shared ethical standards are important to recognize but often difficult to gauge."

Taking up the suggestion of scholars for more multilevel studies on network research, Bizzi (2013) found that a group composed of brokers is negatively associated with group performance and satisfaction, although for the individual broker it can bring an advantage. The author argued that brokers can act unethically, and cited Busken and Van de Rijt (2008), who suggested that "individuals spanning structure holes substitute logic of social obligation with a logic of calculation and personal gain." Lee (2013) combined individual variable (expertise) and network variable (centrality) and found that they interact to predict ethical predispositions (EP): central experts (vs. peripheral experts) have higher EP, while central novices (vs. peripheral novices) had lower EP.

Nielsen (2003) argued that a corrupt system is an integrated network and he suggested that to reform a corruption subsystem, it would be necessary to address the network rather than the individual alone. He observed that "corruption network relationships among individuals across organizations can negatively influence corruption behavior within an organization."

Based on the strength of weak ties theory, Nielsen (2003) argued that weak ties are sufficient to maintain established corruption networks while strong network ties are more important for reformers, such as promoters of social movements. In the same line of thought, Brass *et al.* (1998) noted that unethical behavior requiring cooperation of many actors in a network, such as collusion or conspiracies, is more likely to occur in sparsely connected weak ties.

Morselli and Roy (2008), merging criminal-script analysis with social network analysis based on Burt's (2005) concepts, found that brokers are fundamental for maintaining flexibility in criminal activities. Reviewing criminal literature, he noted that brokerage brings benefits to both criminal and legitimate enterprise. Moreover, they used Gould and Fernandez's (1989) construct "brokerage leverage" – brokerage between sub-groups within a network – in their research and found that the removal of brokers should have a negative impact on crime operation.

Accordingly, Klerks (2001), based in the structure hole theory, argued that the social network approach is valuable in studying criminal organization. He identified that it is possible to see some positions and roles using social network analysis that would not otherwise be detected. Such individuals he refers to as "criminal contact brokers" – those who quickly allow innovation and adaptation to avoid legal intervention. In the same vein, Van Meter (2001) argued that it is the criminal network structure that supports the required informal, flexible and opportunistic operations, in which a few actors mobilize a great number of other parties who share the profits of the actions. That is, few brokers provide the access to the required social capital.

Rodriguez, Uhlenbruck and Eden (2005) argued that corruption affects the strategic choice of a multinational's mode of entry and creates an incentive for the development of social networks that can be sources of external legitimacy. To penetrate the social network of the foreign country, the company will choose a partner, for example in a joint-venture model, who is willing to engage in bribery.

In a study of the pressures that MNE subsidiaries face to engage in bribery, Spencer and Gomez (2011) found that firms with local partners or local partial ownership face greater pressure to engage in corruption than firms without these structures. They gave two possible explanations for this. The first one is that corrupt officials would seek alternative access points (the partners) to accept bribery requests instead of MNE subsidiaries directly. The second is that the MNE subsidiary decides to engage in corruption, but does so through its partners, that is, it "outsources" the "need to bribe," so that the act becomes less transparent to stakeholders and serves as a means for local management to deny that such practices exist. This explanation is consistent with the argument of Pendse (2012) regarding looking for the "means" and with Cohen *et al.* (2010) in relation to an

extended fraud triangle framework, in which opportunities are characterized by the lack of control of complex transactions, in this case, the inclusion of a partner mediating the bribery.

In the same empirical study, Spencer and Gomes (2011) found that in some Eastern European countries, the MNEs from less corrupt home countries did not engage in local partner ownership. However, they did not find any difference in MNEs in Ghana, for example, where the country of origin of the MNE had no influence on their alliance strategy.

Huang and Rice (2012) discussed the role of inter-firm networking in bribery and corruption in general in China. They studied how *guanxi*, defined as “interpersonal relationships and connections” (SU and LITTLEFIELD, 2001), used by business and associated with institutional weaknesses leads to increased corruption. Other studies discussed the use (or abuse) of *guanxi*-based networks and the deterioration of business ethics in China (WRIGHT, SZETO and CHENG, 2002; SU, SIRGY and LITTLEFIELD, 2003; BEDFORD, 2011).

Similarly, considering the importance of personal networks in business in Russia, McCarthy and Puffer (2008), examined the “*blat*” (personal favor) cultural dimension. They used the definition of “*blat*” as “an exchange of favors of access in conditions of shortages and a state system of privileges... *Blat* provides access to public resources through personal channels.” These authors noted that there is no clear demarcation between *blat* and corruption in many circumstances and that the “dark side” of the economy is huge in Russia.

McCarthy, Puffer, Dunlap and Jaeger (2012) explained that these cultural relationships stem from favors present in BRIC countries: *jeitinho* in Brazil, *blat* in Russia, *jaan-pehchaan* in India and *guanxi* in China. They defined favor as

“an exchange of outcomes, between individuals, typically utilizing one’s connections, that is based on a commonly understood cultural tradition, with reciprocity by the receiver typically not being immediate, and its value being less than what would constitute bribery, within that cultural context.”

Nguyen and Cragg (2012) noted that, by definition in several languages, the word favor has a double meaning – positive and negative. In Greek for example, it means “a generous act” or an “unjustified partiality.” These authors proposed a framework to analyze whether a favor is ethically acceptable or even desirable among organizations, and whether it is unethical, a code word for bribery, for

example. Accordingly, based on the three kinds of friendship discussed by Aristotle, Melé (2009) argues that there are three types of networking: utilitarian, emotional and virtuous. She observes that among the different forms of unethical networking, networking may mask bribery.

In summary, social network in corrupt actions can be used for several reasons. These include: 1) to reduce the risk to be discovered – by complicating auditing control (COHEN *et al.*, 2010), and reducing transparency to stakeholders, as well as functioning as an external legitimacy (SPENCER and GOMEZ, 2011); 2) to legitimize bribery as a social-cultural factor – local partners can exploit social-cultural factors, such as Chinese “guanxi” or the Brazilian “jeitinho” in the case of international firms, using social-cultural factors as an excuse to legitimate their “need to bribe” (MCCARTHY and PFUFFER, 2008; HUANG and RICE, 2012); and 3) to use trust as a way to facilitate coordination and action while keeping the agreement secret.

Moreover, among the few articles that used network theory, it was suggested that brokers or individuals high in centrality are more willing to get into a false consensus bias of the ethical issue (FLYNN and WILTERMUTH, 2010); garner personal gains, to the detriment of the group (BIZZI, 2013); and maintain the flexibility of crime networks (KLERKS, 2001; VAN METER, 2001; MORSELLI and ROY, 2008). Furthermore, weak ties could be sufficient to maintain established corruption networks (NIELSEN, 2003), collusion or conspiracies (BRASS *et al.*, 1998).

Omission in general can perpetuate this situation, as the fraud or unethical behavior of an individual can benefit the result of another or of all. Alternatively, as the next section will present, silence to avoid the loss of social capital and reputation can support the “wall of silence” in the organization, thereby creating an incentive for further unethical actions.

2.3.4.2. The Unethical Silence

Communication is a fundamental process in human interaction and relationship development; therefore, communication is part of the development of social capital. As Blau (1986) explained, social relations and transactions involve communication and the form of social communication shape the individual's opinions.

However, in order to maintain relationships individuals may decide not to voice their opinions if doing so might create problems for the maintenance of the relationship. Or as Flynn and Wiltermuth (2010) noticed, the problem can be even worse insofar as members of organizations tend to avoid moral discourse, preferring to restrict the subject matter to less sensitive topics, that is, the "discussion of morality seems almost taboo."

De Maria (2006) argued that secrecy and organizational silence may exponentially increase the incidence of unethical behavior and corruption in ways that are still not understood. He noted that among others implications, silence can foster the continuance of illegal practices (BEAMISH, 2000) and at the same time preserve power differences (BOWEN and BLACKMON, 2003). In addition, he questioned whether concerns in relation to career may be a possible reason for silence.

Tangirala and Ramanujam (2008) clarified that *employee silence* is a multifaceted construct that varies depending upon the topic (e.g. a simple work suggestion or the whistleblowing of unethical behavior or corruption), the actors (e.g. regular employee or top executive) and the target (e.g. against a co-worker, customer, competitor, society).

Bird (1996) argued that although most business people do have moral convictions, they tend not to voice them. He defined the moral silence when people do not communicate their moral concerns in situations where such communication would be fitting. The author classified three forms of morally mute behavior: 1) negative expressions (failing to call attention to what are regarded as morally questionable activities), which include, for example, not blowing the whistle on observed abuses, violations and misconduct, or not questioning or debating aspects of decisions thought to be morally debatable; 2) positive expressions (failing to speak up strongly for moral positions they regard

as important), which includes not speaking up for ideals; and 3) not holding others sufficiently accountable (failing to provide feedback in supervisory relationships). The author argued that the practice of ethics is a form of communication.

Bird (1996) argued that one of the critical issues of moral silence is that it is self-reinforcing, and that similar psychological impulses occur as when lying: if people have been morally mute and negative outcomes have not been discernible, they may consider it acceptable to stay silent. Furthermore, they may feel that it is necessary to cover up their silence with further silence in order to avoid being accused of awareness and failing to speak up.

Milliken, Morrison and Hewlin (2003) found in an exploratory qualitative study that one of the most frequent reasons for silence in business was the fear to be viewed negatively (as a “troublemaker”) and of the consequent harm to valued relationships. Assuming that people have relied on informal relationships to obtain information or to get their jobs done, such harm would affect a person’s job and/or career. That is, they suggested that perceived implications of a negative image can lead to loss of trust, and ensuing social rejection and weakened social capital. They also proposed a model of choice to remain silent based on three factors: individual, organizational and relationship with supervisor.

Muehlheusser and Roider (2008) analyzed the wall of silence phenomenon – honest employees that dislike unethical behaviors from other employees, but fail to voice concerns to authorities. They argued that the importance of benefits that actors receive when cooperating with each other is an influence factor to keep silence. In general, whistleblowers worry about reputational repercussions, which include the risk to be ostracized by the group, and the consequent loss of benefits as a group member or when looking for a new career position. The problem about the group is that a reporting decision can also include information about an honest team member (for instance a member who was witness to the misconduct but who remained silent).

Muehlheusser and Roider (2008) developed a model of wall of silence based on reputational concerns that proposes a feedback loop in the wall of silence, thereby functioning as an incentive for misbehavior and creating an equilibrium phenomenon. Viewing the wall of silence as a social norm, the model offers an explanation as to why some actors follow the behavioral rules despite their preference for other behaviors.

In his theory of social capital and action, Lin (2001) argued that the primary motive for an individual action is the maintenance of valued resources, followed by action to seek to gain additional resources. He explained that reputation and group solidarity – rational bases for social exchange – are sources of social capital. Lin (2001) defined individual reputation as a function of recognitions (social credits or social debts) received by an individual in a social group, while group reputation was a function of the sum of each individual reputation and the reputation of the group itself. Identification with a reputable group also enhances an individual's own reputation. This cyclical process supports an individual having an interest in maintaining group identification and solidarity.

Accordingly, Blau (1986) clarified that an individual who is ostracized (lost reputation) by their group is penalized with loss of social companionship and rewards and is under significant pressure to find social acceptance, modify behavior, or find another social group that accepts such behavior. He noted, however, that this is not what happens in the case of minority groups because individual members of the group, although rejected by other groups, receive support from their own group and can build strong social cohesion.

The rationality in the process of social exchange – that is, the calculation and choices of gains and losses – means that these choices are based on self-interest: collective interest enters the equation only when it is part of self-interest (LIN, 2001). As the meta-analysis of Kish-Gephart *et al.* (2010) suggested, self-interest (self-gain, self-preservation) may be one of the common factors among the individual characteristics analyzed that leads to unethical behavior. Kish-Gephart *et al.* (2010) refer to this phenomenon as “unethical silence.”

Furthermore, there is extensive social capital research (e.g. BURT *et al.*, 2000; SEIBERT *et al.*, 2001; LIN and ERICKSON, 2008) that correlates the mobilization of social capital, formally or informally, to job information, attainment in the market, career and success (though see Xiao and Tsui, (2007), who recently suggested a contingency aspect of culture exists as regards the relationship between brokerage and career success). So, if an individual voice could cause loss in their social capital (information, influence, power), they may prefer to remain silent.

Knoll and Van Dick (2012) found that turnover intentions were positively related to all forms of silence. As career opportunities go beyond the current borders of the organization, a worker would not be looking to their sub-network of relationships inside the company, but all others outside it— professional (such as customers, partners, head-hunters or competitors) or personal (such as families and friends). That is, a given individual would prefer to remain silent rather than whistleblowing perceived wrongdoing in a company and protect their safety and career, including outside the company.

Therefore, the connection between reputation and social capital explained by Lin (2001) gives support to the findings of Milliken *et al.* (2003) and Muehlheusser and Roider (2008) that an employee would keep silent about misbehavior in order to protect his or her reputation (as well as the whole group), and indirectly protect social capital.

However, the self-monitoring theory (to be discussed in more detail in the self-monitor section) explains that there are individual differences regarding what an individual considers as a reputation to be protected: low self-monitors construct social networks that support their reputation as “genuine and sincere people” (GANGESTAD and SNYDER, 2000), but high self-monitors cultivate public images of status.

Chang and Lai (2002) modeled organization corruption as social interaction and discussed the “snowballing character of social norms.” They explained that breaking a norm depends not only on individual sensitivity, but also on the number of people who follow the norms. Keeping silence to protect social capital fosters a snowball effect where corruption is acceptable and increases the perceived behavioral tolerance of future acts of corruption.

2.4. Individual Differences and Social Capital

Several scholars have suggested additional research in order to understand individual differences in social capital and network research (MEHRA *et al.*, 2001; KILDUFF and KRACKHARDT, 2008; PAYNE *et al.*, 2011). However, among the literature review presented in section 2.1.1, a small number of articles utilized individual variables as antecedents of social capital/network. In order to find a more compelling review, this study extended the search to the *Social*

Network journal. Some recent research also found that individual differences are key to getting benefits from certain network structures and examined the interaction of individual level variables and the structure of the network (ZHOU, SHIN, BRASS, CHOI and ZHANG, 2009; BAER, 2010).

Among personality traits, the most well researched were the Big Five (openness, conscientiousness, extraversion, agreeableness and neuroticism) or a subset thereof (CASCIARO, 1998; KLEIN, LIM, SALTZ, MAYER, 2004; JANICIK and LARRICK, 2005; KALISH and ROBINS, 2006; TOTTERDELL, HOLMAN and HUKI, 2008; BAER, 2010) and self-monitoring (CASCIARO, 1998; MEHRA, KILDUFF and BRASS 2001; JANICIK *et al.*, 2005; KALISH and ROBINS, 2006; OH and KILDUFF, 2008; SASOVOVA, MEHRA, BORGATTI and SCHIPPERS, 2010; FANG, DUFFY and SHAW, 2011; ROBERSON and WILLIAMSON, 2012; BRANDS, 2013).

Klein *et al.* (2004) performed the most complete study, analyzing the Big Five in three types of network: friendship, advice and adversarial. They found that conscientiousness did not predict centrality in any of the three networks. Neuroticism predicted the advice and friendship networks negatively, and adversarial networks positively. Openness and extraversion positively predicted adversarial networks centrality – probably because the “repeated interactions with a colleague’s openness (non-conformity, autonomy) and extraversion (talkativeness, assertiveness) could be a source of annoyance.” However, they found that sex similarity and some values similarity did predict centrality, strongly and positively; this occurred in advice networks (hedonism and tradition values) and in friendship networks (hedonism).

Kalish and Robins (2006) found that strong ties in network closure was predicted positively by extraversion and group focus, and negatively by neuroticism; individual focus and locus of control have small variance in different types of weak ties networks. In addition, some scholars posited that the weak relation between the Big Five personality dimensions and social capital was due to the lack of strong effect of personality on network behavior (BECKER, 2004; TOTTERDELL, *et al.*, 2008).

Other variables have also been investigated: Machiavellianism (JANICIK and LARRICK, 2005; KALISH and ROBINS, 2006); core self-evaluation (Fang, DUFF and SHAW, 2011); need for cognition (ANDERSON, 2008); affect (CASCIARO and LOBO, 2008); locus of control (KALISH and ROBINS, 2006); transformational leadership (BONO and ANDERSON, 2005); charismatic leadership (VARELLA, JAVIDAM and WALDMAN, 2012); expertise (LEE, 2013); entrepreneurs' passion (HO and POLLACK, 2014); conformity (ZHOU *et al.*, 2009); proactive personality (THOMPSON, 2005), and intrinsic motivation (PERRY-SMITH, 2006).

Van der Gaag and Snijder (2005) noticed that the mobilization of social resources depends not only on the availability of social capital, but also on the individual decision-making process. They stated that both individual and collective factors, such as the propensity of an individual to ask for help or moral rational consideration of future obligation (that is, to reciprocate a favor done) can affect the decision to use the social resources available. They also highlighted that it is important for researchers not to confound individual needs and styles of personal interaction with the macro-sociological level (e.g. a culture that does not allow asking for help). The next sections will discuss self-monitoring (section 2.4.1) and temporal orientation (section 2.4.2).

2.4.1. Self-monitoring

“Put simply, work would not be accomplished (at least not effectively) without a foundation of networked relationships in an organization. Self-monitoring personality is an important construct in understanding how such relationships are formed and maintained.” (DAY and SCHLEICHER, 2006)

The theory of self-monitoring (GANGESTAD and SNYDER, 2000) suggests that people differ “meaningfully in the extent to which they can and do engage in expressive control.” That is, people differ in the extent to which they value, create, cultivate and project social images and public appearances.

High self-monitors have the ability to perceive social cues and adapt their behaviors to impress others. On the other hand, low self-monitors do not adapt to the situation: instead their “expressive behavior functionally reflects their own inner attitudes, emotions, and dispositions” (GANGESTAD and SNYDER, 2000).

In addition, high self-monitors cultivate public images of social status and, therefore, construct social worlds that can function as instruments of status enhancement, whereas low self-monitors construct social networks that support their reputation as “genuine and sincere people” (GANGESTAD and SNYDER, 2000).

High and low self-monitors are also different with respect to the selection of friends. Snyder *et al.* (1983) found that high self-monitors tend to prefer different partners for different activities, that is, they have a more “compartmentalized social world,” while low self-monitors preferred “relatively homogenous social world,” spending time with friends who were similar to them.

The result of the literature review regarding self-monitoring and the development of social network structure, the use of impression management tactics, performance evaluation and career evolution, unethical behavior and silence will be presented next. Table 6 presents the list of the 33 articles selected in the literature review.

Journal	Authors
AMJ	Roberson and Williamson (2012); Scott et al. (2012), Slesman et al.(2012)
AMR	Bolino (1999); Hewlin (2003); Roberts(2005)
ASQ	Mehra et al. (2001); Flynn et al (2001); Sasovova et al. (2010)
JAP	Turnley & Bolino (2001); Allen et al. (2005); Flynn and Ames (2006); Jawahar & Mattson (2006);Oh & Kilduff (2008)
JBE	Uddin & Gillet (2002); Hogue et al. (2012)
JMS	Premeaux & Bedeian (2003)
JOB	Miller & Cardy (2000); Douglas & Gardner (2004); Semadar et al. (2006); Bolino et al. (2010); Ozcelik (2012); Bateman and Barry (2012); Oh et al. (2103); Brands (2013); Bolino et al. (2013)
JOM	Bolino & Turnley (2003); Treadway et al. (2005); Ferris et al. (2007); Fang, Suffs and Shaw (2011)
OS	Simons (2002)
SN	Casciaro (1998); Kalish and Robins (2006); Treadway et al. (2010)

Academy of Management Journal (AMJ); Academy of Management Review (AMR); Administrative Science Quarterly (ASQ); Journal of Applied Psychology (JAP); Journal of Business Ethics (JBE);Journal of Management Studies (JMS); Journal of Organizational Behavior (JOB); Journal of Management (JOM); Organization Science (OS);Social Networks (SN).

Table 6 - Self-monitoring literature review

Source: Elaborated by the author

2.4.1.1. Self-monitoring and Social Structure

In the review of the social capital and social network literature, some studies analyzed the self-monitoring construct: Casciaro, 1998; Mehra, Kilduff and Brass 2001; Janicik *et al.*, 2005; Kalish and Robins, 2006; Oh and Kilduff, 2008; Sasovova, Mehra, Borgatti and Schippers, 2010; Fang, Duffy and Shaw, 2011; Roberson and Williamson, 2012; and Brands, 2013.

Self-monitoring was associated with centrality and brokerage in three studies (MEHRA, KILDUFF and BRASS 2001, OH and KILDUFF, 2008; SASOVOVA, MEHRA, BORGATTI and SCHIPPERS, 2010). However, self-monitoring analyses did not present relevant results associated with social structure in two other studies: Janicki and Larrick (2005) and Kalish and Robins (2006). But, as Kalish and Robins (2006) pointed out, the difference could be due to the student sample used, as in an “unconstrained university environment” relationships are freely chosen, differently from a work environment.

Mehra *et al.* (2001) found that self-monitoring and centrality in social networks (friendship and workflow types of network) predicted, independently, an individual's performance in the workplace. It was one of the first studies to show as well that self-monitoring personality characteristics could predict structure; in this case, high self-monitors tended to occupy positions of centrality.

Oh and Kilduff (2008) found that self-monitoring personality is related to brokerage position. Studying Korean expatriate entrepreneurs in Canada they found that high self-monitors tend to occupy direct and indirect (acquaintances of acquaintances that are unconnected to each other) brokerage roles in the Korean Community. Accordingly, Sasovova *et al.* (2010), using a longitudinal data on friendship networks in the work environment, found that the dynamics of the network were related to self-monitoring personality: high self-monitors were more likely (than low self-monitors) to attract new friends and occupy new bridging positions.

Several scholars who studied cognitive social networks – how the individual perceives the network of relationships around them – found contradictory results concerning the ability of high self-monitors to have more accurate perception of their networks. A wrong perception of the network could lead, for example, to a wrong perception on the social consensus of the ethical issue. Casciaro (1998) did

not find that high self-monitors had more accurate perception; however, Flynn Reagans, Amanatullah, and Ames (2006) argued that high self-monitors appeared to be more sensitive to the status of social exchange in relationships and have more accurate perception of help or favors networks, being more willing to receive requests of help from others but avoid asking for help.

Finally, Roberson and Williamson (2012) analyzed network density and procedural justice climate. They found that in high team self-monitoring (defined as the team's ability to adjust behavior to the demands of its social behavior) there is a positive relationship between expressive network (for social support, friendship) density and procedural justice climate. However, it was also found that justice climate was strongest in teams with low self-monitors and low density.

2.4.1.2.

Self-Monitoring and Impression Management

Day *et al.* (2002) argued that the core of the self-monitoring construct is expressed by “individual differences in the propensity for impression management involving the construction of positive social appearances.” One of the objectives of impression management is to influence evaluations of oneself and to win approval from others. The authors reminded that although the evidence suggests that self-monitors have the advantage in promotions, thus far researchers have not investigated the relative effectiveness of high self-monitors' leadership.

Turnley and Bolino (2001) identified that three different impression-management tactics – ingratiation (favor-doing, flattery), self-promotion and exemplification (to appear dedicated) fostered a desired versus undesired images depending on whether the individual was high or low self-monitor. High self-monitors engaging in ingratiation were evaluated by their student peers as “likeable,” whereas low self-monitors were viewed as “sycophants.”

High self-monitors who engaged in self-promotion were perceived as competent, but competence was unrelated to low self-monitors when they utilized the same tactics. Exemplification was positively related to dedication for high self-monitors, but related to “feel superior to others” for low self-monitors. Turnley and Bolino (2001) also suggested that it is the skills, and not the frequency, in engaging in such tactics that creates such perceived differences. In

addition, they called for researchers to study the target of impression management, that is, how a self-monitoring boss perceives such impression management tactics.

Barsness, Diekmann and Siedel (2005) analyzed two types of impression management (a key behavior of self-monitors, although not utilizing self-monitoring constructs specifically): supervisor impression management (subordinate doing favors for and making compliments to supervisor) and job impression management (reporting one's accomplishments; self-enhancement posturing). They found that supervisor impression management was positively related to performance evaluation.

Barsness *et al.* (2005) also found that centrality does moderate the relationship between supervisor impression management and performance evaluation. In this case, people who are low in centrality (and engage in supervisor impression management) had a marginal increase in their performance; however, those high in centrality saw a substantial increase in their performance evaluation.

The authors suggest that this effect could happen due to supervisors' possible expectation that their more central employees engage in that sort of behavior. Another explanation could be due to – as found by other studies – self-monitors being more “competent” in impression management (TURNLEY and BOLINO, 2001) while at the same time being more willing to occupy central positions (MEHRA *et al.*, 2002; SASONOVA *et al.*, 2010).

Barsness *et al.* (2005) also found that sex-dissimilarity moderated the relationship between impression management and performance evaluation: same sex had a small increase in performance evaluation, but different sex had a much higher increase in the performance evaluation, if and only if the subordinate was a female. This means that male supervisors are more influenced by the impression management attitudes of favors and compliments of their female subordinates, and women supervisors are not influenced by this kind of impression management. On the other hand, they found that job impression management was negatively associated with performance evaluation, but even more “harshly” when the subordinate is of the opposite sex.

2.4.1.3.

Self-monitoring, Career and Gender

Day *et al.* (2002), in a meta-analytic investigation of self-monitoring personality at work, found that high self-monitors (compared to low) are likely to be younger, male, receive better performance ratings and more promotions, and emerge as a leader. On the other hand, they are likely to be exposed to more occupational stress and show less commitment to their organization. They suggested that the findings related to difference in gender – women are more low self-monitors – could support the understanding of the difference between men and women at the top echelons of organizations.

Day and Schleicher (2006), in their review of that theory and research, found that high self-monitors have the ability to be adaptive and flexible and display likeability (to be liked by others), characteristics resulting in an advantage to both performance and promotions in organizations. They argued that those holding superior positions would tend to be high self-monitors, creating a risk of a negative tie (DAY and KILDUFF, 2003) to low self-monitors (“the lack of flexibility may seem like an overly rigid or dogmatic approach to the high self-monitoring boss”) and creating a cycle to promote more high self-monitors.

However, another explanation could be that it is not the adaptability and flexibility of the high self-monitors that give such an advantage, but a “competence” in using ingratiation (supervisor impression management) to obtain higher evaluation performance and, as a consequence, promotions.

In addition, Allen, Weeks and Moffitt (2005) contributed to the intention-behavior and turnover literatures and found that low self-monitors and those lower in risk aversion presented a stronger relationship between intention of turnover and turnover act. That is, high self-monitors could be “flexible” and adapt to their intention to leave the company, or could be deceiving in order to obtain salary and career benefits from the company.

On the other hand, Jawahar and Mattson (2006) used lab experiments to examine the influence of job type, sex and attractiveness of applicants for a job, as well as the self-monitoring characteristic of the decision-maker. They found that high self-monitoring decision makers had a higher propensity to select attractive applicants, and for gender-typed jobs (e.g. engineering is dominated by men) they were more influenced in their decision by the sex and attractiveness of applicants.

Their study confirmed previous theoretical and empirical studies (e.g. Snyder, Berscheid and Matwychuk, 1988) that high self-monitors are more influenced by physical attractiveness and by stereotypes when making selection. Besides, Jawahar and Mattson (2006) argued that, as more women are interested in “crossing over” into male jobs, this pattern of stereotyped decision has a greater adverse effect on women.

Kilduff and Krackhardt (1994) found that an individual perceived to have a “prominent friend” increased his/her reputation of good performance. Thus, high self-monitors would expend more effort on creating their network, selecting people who can enhance their status and reputation. Therefore, it is not only the high self-monitors’ subordinates, using impression management tactics for career advancement, but also the decision-making characteristics of the high self-monitors’ bosses that can create a snowball effect of leveraging high self-monitor men to the top.

Toegel, Anand and Kilduff (2007) found that gender (women) had a significant effect on predicting the role of emotion helper in organizations and simultaneously confirmed previous meta-analysis that women tend to be low self-monitors. Self-monitor per se had no significant results in predicting an emotion helper, but interacting with management role did. This seems to be contradictory to the findings of Flynn *et al.* (2006) that high self-monitors are more attentive to help others. One possible explanation is that high self-monitors do not effectively provide help, but seek to build a reputation as helpful, in light of the evidence in the literature with respect to their ingratiation abilities, as discussed in Turnley and Bolino (2001).

Flynn and Ames (2006) suggested that women in business could invest in the development of self-monitor skills in order to overcome gender negative stereotypes, given that, according to role congruity theory (EAGLY and KARAU, 2002), the stereotype of an effective manager reflects masculine characteristics. However, as Bowles, Babcock and Lai (200) suggested, based on Eagly (1987), “society rewards and reinforces different types of behavior for men and women.”

Analyzing the research on feminine modesty, Bowles *et al.* (2007) found that women tend to present themselves more modestly than men do and that this self-presentation modesty reduces their perceived competence compared to people who uses a self-promoting style. Even worse, if women adopt a masculine self-promoting manner they risk being perceived as lacking “social competence” although technically skilled (RUDMAN, 1998); further, if they adopt masculine leadership styles, as directive or authoritative, they are evaluated more severely than men.

Bowles *et al.* (2007) also found that claiming for a higher status (through promotion negotiation) can be considered an inappropriate behavior for women. They explained that if women display dominant behavior – a masculine trait – they challenge the gender status hierarchy, as competence and dominance are associated with status hierarchy. Bear (2011) found that gender alone would not explain the avoidance to initiate a negotiation, but that gender role incongruence could explain such avoidance. That is, the role of the topic being negotiated not fitting the expectations and norms of the gender (for example, women had a higher propensity not to initiate a salary negotiation than men, while men were significantly more likely to avoid negotiating access to a lactation room).

Because both lack of modesty (associated with self-promoting style) and promotion of social status are inherent to high self-monitors, it may be risky for women to behave in a self-monitoring way. This could add support to the arguments of Day *et al.* (2002) in relation to women promoted to higher positions, and to Day and Schleicher’s (2006) snowball cycle of self-monitor promotions.

Van den Brink and Benschop (2014) extended previous work on sex inequality in networks, suggesting that there is an explanation other than homophily (by choice or chance) for the preference of men to promote other men, i.e., a behavior related not to a conscious process but to a liminal practice whereby men base feelings of trust on the perception of similarity. This similarity however is not constrained to the men who select vis-à-vis candidates, but is also manifest between the candidates and the proven successful and ideal model of professionals in corporations: men who are white, flexible, mobile, committed and available. Besides, they argue that as trust and risk are closely connected and women are perceived as riskier candidates (not coincident with the success model), women suffer the exclusionary effects of the informal networking practices of men. In the

same line of research, Ding, Murray and Stuart (2013) examined gender differences in corporate scientific advisory boards and concluded that gender-stereotyped perceptions and unequal opportunities in social networks could explain the gap of men (twice as much as women) and women scientists in the boards.

2.4.1.4. Self-Monitoring and Unethical Choices

In addition to unethical behavior of impression management tactics in the pursuit of improved performance evaluations and consequent career, other types of unethical behavior (including different categories of impression management) were also found in the literature.

Hewlin (2003) suggested that minorities and high self-monitors tend to create more facades of conformity, defined as “false representations created by employees to appear as if they embrace organizational values,” which are not directed to anyone specifically (such as a supervisor), but rather to the entire organization.

Hogue, Levashina and Hang (2013), based on interpersonal deception theory (IDT), analyzed different types of deceptive intention in job interviews. They found that extensive image creation, defined as “generating wholly untrue personal information,” is higher for men than for women. They also found that intension towards image protection (“hiding unattractive personal truths”) is higher for both men and women higher in Machiavellianism, and the same for “deceptive ingratiation,” albeit in the latter case, only when high self-monitoring was present.

In the line of research of counterproductive work behavior, Oh, Charlier, Mount and Berry (2014) argued that the status enhancement motive of high self-monitors can lead them to either engage in impression management (if they are in public) or engage in opportunism, “win-at-all-costs” (if they are in private situations). The latter intensifies the low conscientiousness of high self-monitors via increased engagement in counterproductive behavior against the organization

Bolino, Klotz, Turnley and Herley (2013) discussed the “darker” organization citizenship behavior (OCB) practices, presenting how some employees engage in citizenship behavior driven by instrumental objectives of achieving professional success. In this case, OCB would be an act of impression management (BOLINO, KACMAR, TURNLEY and GILSTRAP, 2008; BOLINO and TURNLEY, 2003), and Bolino (1999) suggested that high self-monitors will be more willing to perform OCB in a self-serving goal to achieve better image.

Ashton and Lee (2005), basing their argument that the “self-monitoring” personality variable has elements of insincerity and deceit, empirically found that high self-monitors negatively correlate to the honesty-humility personality construct. This could explain the inconsistency of high self-monitors’ intention-behavior (they would be demonstrating – acting out – certain intentions but then behaving differently).

Caldwell and O’Reilly III (1982) studied the commitment to a failed past decision and found that high self-monitors are more likely to engage in information manipulation in order to minimize the negative consequences of an action, especially if they were responsible for the decision of the action.

Day and Schleicher (2006) argued that as high self-monitors tend to adapt their behavior to others, they are more susceptible to unethical influences. However, if ethical behavior is the prevailing norm, they would tend to follow the norms. That is, “high self-monitors will look to others for clues regarding ethical dilemmas, but low self-monitors will rely on their internalized values (p. 700).” On the other hand, low self-monitors can also behave unethically if their “guiding principle is to win at all costs” (BEDEIAN and DAY, 2004).

Pinto *et al.* (2008) in their theoretical study of organization-level corruption, argued that high self-monitors can create potential for corruption. That is, they have a higher propensity to be “molded into an organization’s culture” (p. 703) which may poses risks from a corruption perspective.

Based also on the theory of reasoned action (AJZEN and FISHBEIN, 1980), Uddin and Gillett (2002) performed an investigation of chief financial officers’ intent to commit fraud. They found that low self-monitors were more influenced by subjective norms than high self-monitors and surmised that this was contradictory to previous research. In light of their mixed results, they made no

conclusion in their empirical results as to whether high self-monitors were more willing to commit fraud.

2.4.1.5.

Self-Monitoring and Inconsistency Intention-Behavior

Ajzen, Timko and White (1982) found that there is no difference between low and high self-monitors regarding predictability of intentions from attitudes (that is, they both understand the implications of their attitudes). However low self-monitors showed stronger intention-behavior correlation than did high self-monitors. They argued that because high self-monitors are sensitive to situational demands, they could have a higher propensity to change from previously formed intentions.

Prislin and Kovrlja (1992), based on the Ajzen's theory of planned behavior, confirmed that low self-monitors' behaviors being "overt" could be predicted by intentions. Their research complemented that of Ajzen *et al.* (1982), and showed that high self-monitors' behaviors were predicted by the interaction of intention to perceived behavioral control. That is, high self-monitors' behaviors are a function of intention and the perceived availability of resources and opportunity to perform the behavior.

Accordingly, Simons (2002), studying behavioral integrity, defined as "perceived pattern of alignment between a manager's words and deeds," hypothesized that self-monitor and conscientiousness could affect behavioral consistency, and so could have a negative and positive relationship, respectively, with integrity.

Snyder and Kendzierski (1982) also investigated the correspondence of attitude-behavior, offering an individual the opportunity to choose whether to enter into situations that require them to perform actions implied by their attitudes. Low self-monitors engaged in "attitude-congruent" situations and avoided "attitude-incongruent" situations, that is, they chose to enter situations that supported "the behavioral expression of attitudes favorable towards affirmative actions" (p. 280).

As expected for high self-monitors, Snyder and Kendzierski (1982) found that there was no relation between personal attitudes and choice in these situations. However, they found that the choices of high self-monitors were related to gender: high self-monitor females were more likely than high self-monitor males to choose situations where their behavior reflected personal attitudes. For low self-monitors, the willingness to enter a given situation had little or no relation to gender.

One consequence of these findings is that low self-monitors will chose situations that “act upon their conceptions of self, but those same choices will serve to defend and perpetuate their conceptions of self” (p. 290). They argue that this can lead to a constraint of choices for low self-monitors in social life. On the other hand, Snyder and Kendzierski (1982) suggested that, as choice in real life is limited, it may be that low self-monitors are the individuals who are more likely to engage in situations to transform situations that do not correspond to their attitudes.

Premeaux and Bedeian (2003) found in an empirical study that self-monitoring characteristics of an individual predicted the probability of speaking up (defined as “openly stating one’s view or opinions”). Low self-monitors spoke out more often than did high self-monitors for different individuals factors (locus of control and self-esteem) and contexts (management openness and trust). They argued that the decision to speak-up is influenced by individual differences and situational contexts and it is usually preceded by deliberate evaluation of the possible consequences of that decision. This is in line with the self-monitoring theory that low self-monitors construct social networks that support their reputation as “genuine and sincere people” (GANGESTAD and SNYDER, 2000). That is, low self-monitors will tend to voice more and air their ideas.

Table 7 summarizes the relevant findings about self-monitoring discussed in this section.

High self-monitors (compared to low)	Authors
Lower organizational commitment	Day et al. (2002)
Lower levels of interpersonal commitment	Gangestad and Snyder (2000)
Less stable social bonds	Gangestad and Snyder (2000)
Compartmentalized social world	Snyder (2003)
Use impression management tactics	Gangestad and Snyder (2000)
Impression management tactics of ingratiation, self-promotion and exemplification were perceived positively (versus negatively or neutral to low self-monitors)	Turnley and Bolino (2001)
Higher deceptive ingratiation in men and women high in machiavellianism when applying for a job	Hogue et al. (2012)
Higher surface acting	Ozcelik (2012); Scott et al. (2012)
Higher facades of conformity	Hewlin (2003)
Lower behavioral integrity (consistency say-do)	Simon (2002)
More adept to achieve status (performance, leadership)	Day et al. (2002)
No difference considering perception of their network	Casciaro (1998)
Understand better who helps whom (better perception)	Flynn et al. (2006)
Getting ahead more (unconstrained to pursuit alternatives in the same or other organization)	Day and Schleicher (2003)
Socially astute to develop social capital in organization	Day and Schleicher (2003)
More variable in their behaviors across situations	Gangestad and Snyder (2000)
Less comfortable with ambiguity	Day et al. (2002)
More susceptible to pressure	Kilduff (1992)
More prone to OCB "dark side"	Bolino et al. (2013)
Much less influenced by subjective norms	Uddin and Gillet (2002)
Behavior is not predicted by intentions (high) x Intentions strongly predicts behavior (low)	Ajzen et al. (1982), Prislin and Krovijila (1982)
Attitude does not predict situation choice.	Snyder and Kendziersky (1983)
Turnover intention does not predict behavior	Allen et al. (2005)
Lower propensity to voice	Premeaux and Bedeian (2003)
Lower future orientation in relationships	Oner (2002)
Negative correlated to "honesty-humility"	Ashton and Lee (2005)
Higher risk to engage in corruption	Pinto et al. (2008)
Higher commitment to failure course of action	Caldwell and O'Reilly III (1982)
More influenced by physical attractiveness and stereotypes when making job selection decisions	Jawahar and Mattson (2006)
Self-monitor per se had no significant results in predicting to be an emotion helper, but interacting with management role did; but women tend to be more emotion helper.	Toegel et al. (2007)

Table 7 - Characteristics of high self-monitors
Source: Elaborated y the author

2.4.2. Temporal Orientation

“As individuals, we live in time. We constantly act under the influence of time, and it influences the choices that we make and the actions that we take. Time is an essential part of our nature, and much of our behavior is dictated by our relationship to time” (OKHUUSEN, GALINSKY & UPTIGROVE, 2003)

Ancona, Okhuysen and Perlow (2001) reviewed temporal research in the organizational context and suggested a classification to describe three categories of variables: 1) conceptions of time – that includes two subcategories: types of time and socially/culturally constructed time; 2) mapping activities to time; and 3) actors relating to time variables, which is divided in two subcategories: 3a) temporal perception and 3b) temporal personality. They also suggested a framework on the interrelationships among categories.

This study, following the classification of Ancona *et al.* (2001), focuses on temporal personality variables, specifically in relation to temporal orientation (“a more complete set of characteristics that specify an actor’s approach to time [p. 519]),” which is part of the personality of an actor and includes how an actor conceives time (e.g. either as linear or cyclical) and which part is more important (e.g. orientation to past or future).

Among the social capital literature reviewed, several articles have studied how temporal variables impact the network; however, none have investigated individual temporal orientation. Indeed, the research has investigated the relationship between the time duration of one individual or group in a network and possible outcomes insofar as temporal stability in networks of relationships is needed to establish trust and then develop social capital (NAPHAIET and GOSHAL, 1998; COLEMAN, 1990).

For example, several scholars studied how temporal conditions of the network, based on the longevity of ties, affected performance of organizations (BAUM, MCEVILY and ROWLEY, 2012; MCEVILY, JAFFE and TORTORIELLO, 2012). Ahuja, Soda and Zaheer (2012) discussed the importance of the study of the dynamics of the network structure, which is its evolution over time. Others, such as Rhee (2004), discussed the time-contingent value of social capital, arguing that learning is affected by the current relevance of information provided by a network.

There are different individual temporal constructs in the literature, which include consideration of future consequences (CFC) (STRATHMAN, GLEICHER, BONINGER, and EDWARDS, 1994); projection bias (LOWENSTEIN, O'DONOGHUE and RABIN, 2003); elaboration on potential outcomes (EPO) (NENKOV, INMAN and HULLAND, 2008); future anhedonia – “the belief that hedonic states will be less intense in the future than in the present” (KASSAM, GILBERT, BOSTON and WILSON, 2008); time perception (ZAUBERMAN, KIM, MALKOC, BETTMAN, 2009); time perspective (ZIMBARDO and BOYD, 1999); and future self-continuity (BARTELS and URMINSKY, 2011). This research will investigate the time perspective in its future dimension, called future time perspective and the future self-continuity constructs.

Zimbardo and Boyd (1999) defined time perspective (TP) as “the often non conscious process whereby the continual flow of personal and social experiences are assigned to temporal categories, or time frames, that help to give order, coherence, and meaning of those events.” They argued that time perspective has an influence on judgments, decisions and actions, and can manifest as a style or disposition, or in other words, an individual-difference variable.

The (Stanford) Zimbardo Time Perspective Inventories Scale (ZTPI) was developed by Zimbardo and Boyd (1999) to measure the five latent factors of TP: a) past-negative, b) past-positive, c) present-hedonistic, d) present-fatalistic, and e) future. The future factor was correlated significantly with conscientiousness (scrupulousness and perseverance, part of the Big Five personality factors), preference for consistency and for the other temporal variable called consideration of future consequence. It was also negatively related to novelty seeking and sensation seeking, as well as a lower frequency of lying.

Holman and Zimbardo (2009) studied the time perspective and social network connection. However, they did not use network structure measures or constructs, but scales assessing social support; the sample was undergraduate students. They found the future dimension of time perspective was strongly related to receiving support from significant others and not related to social network size. Thus, it was future, not present, which had the strongest association to significant others. They also conclude that social distance (considering the

reduction of similarity from significant others to acquaintances) moderates the relationship between future time perspective and the support received from others.

Future oriented individuals have a focus on personal organization and reported pressure to use time efficiently in order to reach their high standards, which led to a “social deficit,” a result of “having no time to waste” with friends (ZIMBARDO and BOYD, 1999). Such individuals were also less risk-taking (KEOUGH, ZIMBARDO and BOYD, 1999) and tended, in romantic relationships, to be associated with a low self-monitoring personality (ONER, 2002).

Murrell and Mingrone (1994) found that to predict present temporal perspective, only high self-monitoring was significant. However, they also found that high self-monitoring explained part of future orientation, which was predicted mainly by focus on achievement and, to a lesser extent, by higher levels of self-monitoring. Importantly, they used an older version of the temporal perspective scale (GONZALEZ and ZIMBARDO, 1985), which was later refined as the ZTPI scale, based on which Zimbardo and Boyd (1999) explained that future perspective is not contrary to present perspective.

According to Bartels and Urminsky (2011), the reason some individuals show more impatience, preferring the “now” in most cases, could be linked to their “disconnection to the future.” They developed the construct future self-continuity (also called future connectedness), defined as the proportion of features of the current “self” that is believed to exist in the future. They also presented empirical evidence that people with little self-connection to the future will prefer immediate results, even when minor compared with future results.

In a series of studies based on surveys and laboratory experiments, Hershfield, Cohen and Thompson (2012) showed evidence of how a low connection of the current self with the future self can predict unethical behavior in business decisions and that consideration of future consequences mediates the relationship between continuity of future self and disapproval of unethical business strategies.

As mentioned before, there are other relevant studies linking temporal orientation to unethical decision-making or the equivalent, albeit using different temporal constructs from the two discussed (temporal perspective and future self-continuity). For instance, Nevins, Bearden and Money (2007) found that future orientation resulted in higher levels of ethical values, using the individual long-term orientation construct, defined as “the degree to which one considers and plans for the future, as well as values traditions of the past.” This construct was developed by Bearden, Money and Nevins (2006) as an extension of the long-term orientation cultural construct (HOFSTEDE, 1980), as a cultural value at the individual level that measures how the individual does not value short-term results only, but values planning, tradition, and hard work to achieve future benefits.

Eyal, Sagristano, Trope, Liberman and Chaiken (2009), based on the construal level theory, found that people are more likely to use their values as a guide to behavioral intentions in the distant future than current behavior in the near future. They discussed that although people see their values as central to their self-identity and use them to guide future planning of their actions, more situational aspects determine their actual behavior. They argued that this occurs “since perceptions of distant future situations highlight more abstract, high-level features than near future situations, they are more influenced by high-level constructs such as values.”

According to the construal level theory of Trope and Liberman (2003), people interpret objects and events differently according to the temporal distance they have. The greater the temporal distance, the higher the abstraction and general view (“to see more the forest than the trees”). In a closer perspective, people have more concrete interpretations of specific details of an event, but have lower levels of understanding of the structure as a whole, and therefore fail to integrate various aspects. The temporal distance affects the analysis from the point of view of “why”(future) versus the “how” (now).

Wade-Benzoni (2002) developed the construct intergenerational discounting, defined as the tendency to prefer smaller, probable benefits for the self in the present as opposed to larger, albeit less probable benefits for others in the future. In an intergenerational context, those who make the decision leave the social situation over time and will not suffer or benefit from the decision. The issues between the generations are characterized by the absence of reciprocity and

lack of immediate future consequences. This intergeneration terminology is also appropriate in a corporate context, where organizational actors of the past, present and future can be seen as generations in the organization (WADE-BENZONI, HERNANDEZ, MEDVEC and MESSICK, 2008). That is, an individual can take a decision but will not suffer its consequence whenever the individual has a high mobility or there is constant restructuring in the organization.

Joireman, Daniels, George-Falvy and Kamdar (2006) made an interesting analysis by bringing together two temporal constructs – consideration of future consequences (CFC) and the time horizon of the employee in a firm to predict organizational citizenship behavior (OCB). They identified that individuals with high CFC would undertake more activities such as OCB than would individuals with a low degree of consideration regarding future consequences. However, consideration of the future showed a negative relationship with OCB for those who had a smaller time horizon in the company (that is, could leave the company in the short-term).

In summary, from the scant literature connecting individual temporal orientation to ethical decisions, one could argue that future orientation may lead to more ethical decision-making. Furthermore, a greater temporal distance from an event also leads to behavioral intentions closer to the values of the individual, and triggers more consideration for the future generation and more organization citizenship behavior. As noted previously, temporal stability (attitude strength, consistent over time) is one of the strongest individual moderators of attitude-behavior.

Therefore, there are at least three distinct dimensions of time that can be interrelated in one study: a) the temporal orientation of the individual (future, present or past oriented); b) time of the individual in the organization: b1) past: how long one has been in the organization and b2) future: how long one expects to be in the organization; and c) the temporal distance of a specific event that can trigger different individual behaviors disconnected from individual values. Other dimensions, such as the temporal orientation of the organization in which the individual belongs, i.e., greater focus on short-term versus long-term results, are not part of this study.