"GOOD VIBRATIONS":
OPTIMISM, SOCIAL NETWORK POSITION AND RESOURCE-ATTRACTION CAPABILITY

by

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ABSTRACT

The work reported in this thesis addresses the research question of when and how positive psychological states impact positive behavior and positive organizational development. We present two theoretical essays and three empirical studies to find possible answers to this question and we use a multitude of methodologies with different epistemological assumptions, including quantitative correlation analysis, social network analysis and qualitative grounded theory analysis. In the whole, our work shows that positive psychological states are fundamental to promote individual and organizational higher-levels of performance and well-being. It also points that the capability to induce positive psychological states in others (an "alter-positive" approach) is a powerful way to develop outstanding individuals and organizations. In a broader sense, it stresses the need to promote *good vibrations* as a fundamental route to create a better world.

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"Energy and persistence conquer all things."

Benjamin Franklin

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CHAPTER 1

INTRODUCTION

"The good society is one in which virtue pays."

Abraham Maslow

At the time we have started to work on this thesis, positive approaches to management were beginning to take momentum, following the newborn and neighboring science of Positive Psychology. Positive Psychology constituted a breakthrough conceptual change from the mainstream psychology, arguing that psychology should focus not only on disease, weakness, and damage, but also on happiness, strength, and virtue (Seligman, 2003). Positive Psychology is thus about "identifying and nurturing [people's] strongest qualities, what they own and are best at, and helping them find niches in which they can best live out these strengths" (Seligman and Csikszentmihalyi, 2000, p.6).

Those who have proposed such a positively deviant approach to the study and application of human behaviour and functioning (Seligman, 1998; Seligman and Csikszentmihalyi, 2000) have argued that mainstream psychologists have forgotten two of the initial missions of Psychology after World War II: (1) to make peoples' lives happier, productive and fulfilling, and (2) to identify and nurture people's strongest qualities and talents. In fact, the focus of psychological sciences has been mostly on the Psychology's initial third mission: (3) to cure mental illness.

It is true that studying diseases and weaknesses has had its pay-off, such as finding treatment for major illness, contributing to scientific development by the

operationalization and measurement, and also by the improvement of experimental designs. Despite these positive consequences, tough, psychology has remained profoundly distant from the purpose of finding out what makes life worth living (Seligman, 2003; Luthans, 2002a).

In addition, following this positive approach, Peterson and Seligman (2003) have stressed the advantage of looking to the psychological object in a tripartite concern. Positive psychology should look equally to the subjective, the individual, and the institutional realms. The subjective realm includes the positive subjective experiences of individuals from their past (contentment, satisfaction and well-being), their present (happiness, flow, ecstasy and sensual pleasures), and about their future (optimism and hope). The individual realm is about the study of positive individual traits (strengths and virtues) like integrity or wisdom. The institutional realm includes the study of both positive institutions and positive communities and societies, embracing units as families, work organizations or schools. The reasoning is as follows: positive institutional characteristics enable the emergence of positive traits may potentially lead to positive subjective experiences (Seligman, 2002).

The impact of Positive Psychology as a movement thus stressed the need to extend the study of positivity beyond the individual level. It directly called for a major role of the institutional or organizational level in promoting positive organizing. Following that calling, positive organizational approaches were quick to emerged, such as positive organizational scholarship (POS) and positive organizational behavior (POB).

Cameron and Caza (2004) defined POS as “a new movement in organizational science that focuses on the dynamics leading to exceptional individual and organizational performance such as developing human strength, producing resilience

and restoration, and fostering vitality" (p.731). POS focuses on positive outcomes, processes, and attributes of organizations and their members. Accordingly, Cameron, Dutton and Quinn (2003) assume that POS is a non-neutral approach biased towards three core assumptions: it is positive, organizational and scholarly-based. It is a positive approach since it focuses on the understanding of positive states, positive dynamics, and positive outcomes. This positive bias doesn't mean, however, that the study of negative states as stress, depression and other dysfunctional behaviour and performance are not of capital importance. POS is just more committed to stress the importance of the often neglected part of the phenomena, i.e., the life giving, generative, ennobling human factor. As stated by Cameron et al. (2003) "Whereas POS does not reject the examination of dysfunctions, or dynamics that disable or produce harm, it does tend to emphasize the examination of factors that enable positive consequences for individuals, groups, and organizations" (p.5). This is a new framework for studying organizational phenomena, one that has established as an alternative to mainstream organization studies.

These positive enabling factors are approached within the POS studies in the context of organizations – the organizational bias. POS focuses on "the processes and conditions that occur in organizational contexts (…) to study organizations and organizational contexts typified by appreciation, collaboration, vitality, and fulfilment, where creating abundance and human well-being are key indicators of success" (Cameron, Dutton and Quinn, 2003, p.3). As a consequence, to attain its mission POS scholars search in already existing and in developing theories from the organizational field to better understand, explain and predict the occurrence of positive organizational phenomena, but also its causes and consequences (Cameron et. al, 2004, 2003).

The discussion on how to achieve happiness or being effective is not, however, a new one. There are many self-help books exploring the theme. However, POS posits that these usually lack the empirical credibility and the theoretical ground to explain why it works (Cameron et al., 2003). That is why POS advocates a bias toward scholarship which is firstly based on following the scientific method and rooted in a "careful definition of terms, a rationale for prescriptions and recommendations, consistency with scientific procedures in drawing conclusions, and grounding in previous related work" (Cameron et al, 2003, p.6). POS does not deny the importance and/or the ultimate accuracy that self-help books have. It just aims to develop rigorous, systematic and theory-based positive knowledge able to describe and prescribe when self-help prescriptions result and when they don't. This bias is at least partially rooted in positive psychology, since as Peterson and Seligman (2003) have said "we believe that the use of tried-and-true scientific techniques to investigate the good life is what will make positive social science viable" (p.18). POS should then always be based in experimental facts and try to approach them with the tried-and-true methods of scientific inquiry (Peterson, 2004).

Though grounded in Positive Psychology, POS has also received insight from other social sciences. From community psychology's emphasis on the prevention of illness and on wellness enhancement (more than on illness treatment), to managerial studies of organizational citizenship behaviour focusing on extra-role discretionary behaviours, to recent studies in the corporate social responsibility studies stressing the value and urgency of organizations to address societal problems and ills, many scholarly and applied have preceded POS in the study of organizational positive dynamics (Cameron et al., 2003).

Particularly contributing to POS has been *Appreciative Inquiry* (Cooperrider & Sekerka, 2003). Emerging from the field of organizational development, Appreciative Inquiry cuts with past perspectives on organizational change and development by defining at its core the factors that contribute most to the best of organizational life, instead of the usually organizational interventions focused on error detection, gap analysis and problem fixing (the negative perspective or deficit-based inquiry). Cooperrider and Sekerka (2003) resume the technique as follows "Appreciative Inquiry is a process of search and discovery designed to value, prize, and honour. It assumes that organizations are networks of relatedness and that these networks are "alive". The objective of Appreciative Inquiry is to touch the "positive core" of organizational life" (p.226). It is grounded on the idea that asking positive questions draws out the positive spirit in a self-organized way, contrary to negative questions posed by traditional deficit-based inquiry. So POS can certainly benefit from adopting the appreciative inquiry assumptions, mainly in what concerns the positive and organizational biases.

In line with the POS approach, some authors, namely Fred Luthans, have developed a distinct view of what could be a positive approach to organizations: Positive Organizational Behaviour (Luthans & Youssef, 2004; Wright, 2003; Luthans, 2002a, 2002b). Luthans (2002a) firstly defined POB as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace." (p.59). This must be considered as a derivative of Positive Psychology since more than considering the employees as a means to attain organizational productivity, the POB approach calls for the pursuit of employee happiness, health, and personal betterment as an end in itself (Wright, 2003).

Furthermore, by stating that POB strives to understand how we can develop positive psychological capabilities and strengths and consequentially assuming that they can be developed, one must necessarily accept the potentially state-like character of the POB constructs and "rule out the more fixed, trait-like personality, attitudinal, and motivational variables traditionally associated with OB" (Luthans, 2002a: 59). Some positive characteristics fall down the requirements to be considered in the POB approach (i.e. measurable, developable and manageable). Luthans (2002a) includes confidence (self-efficacy), hope, optimism, subjective well-being or happiness, and emotional intelligence in that group of positive capabilities.

Contrary to the research status when we started to investigate these issues, there is now a growing amount of evidence of the impacts of positive psychological capital in individual and organizational outputs, such as supervisor rated performance, merit-based salary performance (Luthans, Avolio, Walumba , & Li, 2005), self-rated job performance and job satisfaction (Luthans, Avolio, Avey & Norman, 2007).

Giving the status of the literature when we started conducting our research back in 2004, the leading question that drove the series of investigations that are presented in this thesis was then: *how do positive psychological states impact positive behavior and positive organizational development?* Despite addressing further specific research questions, all the three empirical studies reported here were conducted with this question in mind.

Accordingly, the thesis is organized as follows. In the second chapter presented right in the next pages, we set an overview of the roots of positive studies in management and organizational psychology. We specifically approach the questions of *what is Positive Organizational Scholarship* and *which are its contributions to a humanistic perspective on business*. After presenting the main research topics in POS,

we answer these questions by analyzing how POS accentuates the positive, increases the impact of management theories in the real world, and strengthens the legitimacy of a humanistic perspective on management. We end this chapter by asserting POS as pragmatic humanism, a perspective that accepts "new" positive approaches as a rhetoric that in fact exemplifies and reinforces the capitalist dominant structure of our society, but that seeks to highlight, at the same time, the benefits of positive work environments. The chapter is a slightly changed version of a book chapter published by Lopes, Cunha, Kaiser and Müller-Seitz (2008).

As a consequence of the dual implications of a positive perspective on business pinpointed in chapter two (both positive and negative), the essay presented in chapter three specifically address the biased character of both *mainstream* organizational behavior and *positive* organizational behavior. After showing evidence that POB is as biased as mainstream OB research, we advance three strategies to help researchers to seek more comprehensive and integrative theories. These strategies are: (1) exploring non-linear frameworks of analysis, (2) focusing in contextual relations and (3) adopting counterintuitive research techniques. As this literature review has shown to us, there may be both positive and negative outcomes from "positive" psychological capabilities. As such, despite our starting research question being *how positive psychological states impact positive behavior and positive organizational development* we were well aware that we should not let the negative aspects of human functioning and living outside the equation.

In fact, this was precisely what drove the empirical question of our first study, which is presented in the chapter four of this thesis. Because we wanted to better understand *how positive psychological states impact positive behavior* we took proactive coping as an indicator of positive behavior, and optimism as indicator positive

psychological states, and tested a tentative answer for the question of "who is more proactive, the optimist or the pessimist?" (Lopes & Cunha, 2008). Previous research has shown evidence that both optimism and pessimism may promote more proactive behavior. In this study, we tested whether these seemly contradictory results might, in turn, be explained by taking into account the role of hope as a moderator. Although we have found that optimism actually impacts proactive coping, we also found that hope do play a role as s moderator variable, particularly for higher pessimistic people. Along with a well developed introduction to the concepts of proactivity and proactive coping, we discuss in this chapter the implications of our results for our understanding of the differential coping strategies and adaptive processes of optimists and pessimists. In addition, we also propose an explicative model of effective optimism and effective pessimism, as well as a model of unrealistic optimism and passive pessimism.

The results of our first empirical study did not point that optimism has a clear universal advantage as compared to pessimism, at least not for everybody. We then interpreted this as a sign that a personality and individual level of analysis might not be the best approach to investigate our research question and move onto a very different theoretical and methodological approach. In our second empirical study presented in chapter five of this dissertation, we took an inter-personal and relational level of analysis and relied on social network analysis techniques to study not the positive psychological states of individuals but those states that individuals induce in others (Lopes & Cunha, 2007). In the whole, the results from this second study confirmed the hypothesis that individuals higher in alter-optimism occupy more central positions in these social networks. This indicates that the ability to induce positive and *good vibrations* in others – an ability that we labeled *alter-optimism* – can have positive

benefits regarding problem-solving and innovation networks in organizational settings, the positive outputs that we have considered.

We finally conducted a third empirical study for two main reasons. First, to understand how the ability to induce *good vibrations* in others can be behaviorally operationalized (i.e., what people do when they induce positive psychological states in others). Second, to understand *how do positive psychological states impact positive organizational development* (i.e., impact at an organizational level of analysis) and not only *positive behavior* at an individual level of analysis. The results of this third empirical study that is presented in the chapter six of this thesis allowed us to pinpoint the major behavioral categories that explain how entrepreneurs attract others (i.e., the resource-holders) to support their venturing efforts by inducing positivity in them. In addition, the results from this study also allowed us to devise a model of venture development and growth based in two main routes that entrepreneurs use to attract the crucial resources they need in this process.

All these findings and conclusions are discussed in chapter seven in which we make a *General Discussion* of all the answers that we have found regarding our starting research question. We interpret the results of our empirical studies in the light of the development stages of positive approaches to management and organizational behavior and explain how each of these studies allowed us to progressively answer our research question. We then discuss some general limitation of these set of studies in the whole and draw some implications for future research. Finally, we discuss specific implications for the emergent field of positive leadership.

In the last chapter of this thesis, we outline some concluding remarks of the work developed and we end with a call for further research in the fields of positive

organizational behavior and the need to pursue more humanistic and dignity-driven management practices.

CHAPTER 2

POSITIVE ORGANIZATIONAL SCHOLARSHIP: ACCENTUATING A HUMANISTIC PERSPECTIVE ON BUSINESS

"What a man can be, he must be"

Maslow (1970: p.46)

Positive Organizational Scholarship (POS) is an umbrella label that includes theory and research concerned with the study of positive outcomes, processes and attributes of both organizations and their members (Roberts, 2006; Cameron, Dutton, & Quinn, 2003). As such, POS embraces the study of topics such as gratitude, resilience, appreciative inquiry, energizing relationships, happiness, and others that involve the pursuit of human growth and self-development.

POS was initially based on the positive psychology movement. According to the proponents of positive psychology, instead of only accentuating the dysfunctional and negative aspects of human life, with a deficit framework in mind, researchers and practitioners alike should start to look more into identifying and nurturing people's strongest qualities, and focus on understanding those things that make life worth living (Seligman & Csikszentmihalyi, 2000). Those who support POS are likewise committed to understanding how organizations and institutions can help individuals devise their best selves and delineate how they can best accomplish them (Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005). This resembles the contributions of humanistic scholars such as Maslow, quoted above, in their emphasis on the need for the self-actualization of the human being, and attests to the humanistic roots of POS.

The humanistic character of POS is thus easy to track. However, POS constitutes more than just another humanistic approach. It represents an accentuation of the

humanistic values, strengthening both the humanistic claims and their impact on the business world. As such, in the positive and appreciative spirit of POS, in this chapter we outline three contributions that the POS movement is offering to help bolster a humanistic perspective on business. First, POS is accentuating the need to look for the most positive aspects of business and organizations, leading the revival of a humanistic stance toward the world of business. Second, POS seems able to create "real world" change in the direction of humanistic assumptions, because of its focus on the business level, the level at which we can cause dramatic social change. Third, because POS is grounded in sound empirical research, it is enhancing the legitimacy of a road into a more Humane society. We end this chapter by acknowledging that POS offers concrete and pragmatic management insights that can translate the humanistic ideals into substantive real world business change.

To present these insights, we organize the chapter as follows. We begin by making a brief point of what a humanistic perspective on business can mean and then introduce the character and historical roots of the POS movement. After this, we discuss the three major contributions that POS is offering toward more humanistic management and society. We conclude by appealing to all those identified with humanistic assumptions to follow the benefits of the POS approach.

A Humanistic Perspective on Business

The term *humanism* is believed to be derived from the Latin word *humanitas*, which meant the development of the human virtue to its fullest extent, and included the development of human qualities such as benevolence, compassion, and love (Grudin, 1989). The epigenesis of a humanistic tradition can be traced back to the writings of

Greek philosophers such as Socrates, Aristotle and Protagoras, that have explicitly concentrated on differentiating human beings from the rest of the worldly objects.

Humanism has been represented in the thought of leading authors throughout the centuries, in subsequent philosophical approaches. These included the influential writings of John Stuart-Mill and Wilhelm Von Humboldt in their desire to create a society of well-developed individuals (Valls, 1999), as well as the latter manuscripts of Georg Wilhelm Hegel and Karl Marx and their accent on the possible ways of restoring the ideal human conditions, free from the alienation of work and the dehumanized exploration of labor (Aktouf, 1992).

Throughout the twentieth century, humanistic concerns have continued their presence in the work of the most influential philosophers. This is the case of Martin Heidegger and Jean-Paul Sartre. For Heidegger (1982), philosophers should focus their insights on the "totality" of human existence, a recurrent call in every humanistic theory. Taking this focus on the whole human existence as a method, Sartre (1943) came to defend that freedom is a basic human tenet, which confronts human beings with the responsibility of their choices, i.e., by assuming their own choices, humans are propelled to construct a meaning for their existence. Meaning-making becomes, in fact, a human need, which is at the core of most humanistic theories.

In the business literature, humanism early on established a constant presence, representing "a philosophy that asserts the dignity and worth of people and their capacity for self-realization through reason" (McFarland, 1977). Melé (2003) identifies three major sets of humanistic approaches to management.

The first regards the humanistic assumptions of leading authors in the middle of the twenty-first century, such as Elton Mayo and Abraham Maslow, who were mainly interested in understanding how human behavior could be motivated to improve

outcomes through self-actualization. The second set of approaches is linked to the cultural movement in organizational studies that emerged in the second half of the last century, brought by scholars such as Deal and Kennedy (1982), Peters and Waterman (1982), and Schein (1992). These approaches were based on the assumption that culture is part of human life, as well as the best way to understand the human condition. Melé (2003) considers still another, more contemporary, set of humanistic management theories, built around the concept of *community*. The notion of community is here used to refer to the social structures of people with specific actions, relations, and a sense of unity, that allows the existence of a supra-personal character without removing from individuals their own personality and idiosyncrasies.

It is now becoming clear that POS represents the current leading humanistic approach in management studies. Sharing similar concerns with those of past humanistic authors, there is a significant and growing group of leading scholars in management and associated research fields who are laying the institutional foundations of POS. This institutionalization of POS is reflected in an increasing number of articles and special issue volumes in the most acknowledged and respected journals in management, such as the *Academy of Management Review* (2006), *Organizational Dynamics* (Vol. 33, Issue 2), *Journal of Management Inquiry* (Vol. 12, Issue 3) and the *Journal of Organizational Behavior* (Vol. 24). Many other articles and special issues are soon forthcoming (for a more complete view of these research outputs, please visit the website of the Center for Positive Organizational Scholarship, at www.bus.umich.edu/Positive/). In addition, there is also a vivid discussion on POS. Discussion forums, symposiums, conference sessions and tracks that have taken place over the last years, such as the Academy of Management and the European Academy of Management annual conferences.

The same is true in the related fields of organizational behavior and organizational psychology (Wright, 2003). A positive stance has been adopted by well-recognized authors such as Luthans (2002a,b) and Avolio (Avolio & Luthans, 2006). These authors' research repeatedly demonstrates the business benefits of investing in humane positive psychological capabilities, such as hope, optimism, and resilience (Luthans, Youssef, & Avolio, 2007). It is thus clear that POS is gaining *momentum* in scholarly environments. But what is POS? What are POS' core constructs and concerns? What are its tenets and foundational roots?

What is Positive Organizational Scholarship?

Positive Organizational Scholarship (POS) is a movement in organizational sciences that focuses on the dynamics leading to exceptional individual and organizational performance such as developing human strength, producing resilience and restoration, and fostering vitality (Cameron & Caza, 2004). Mainly derived from the influence of the positive psychology movement, POS focuses on positive outcomes, processes, and attributes of organizations and their members. This positive bias does not mean, however, that the study of negative states, such as stress, depression and other dysfunctional behavior and performance, are not of capital importance. It is just more interested in stressing the importance of the usually forgotten part of the phenomena – the life giving, generative and ennobling human factor. As stated by Cameron, Dutton, and Quinn (2003: p.5) "Whereas POS does not reject the examination of dysfunctions, or dynamics that disable or produce harm, it does tend to emphasize the examination of factors that enable positive consequences for individuals, groups, and organizations". This is a new framework for studying organizational phenomena, which departs from mainstream organization studies.

Furthermore, positive enabling factors are approached within POS studies in the context of organizations, focusing on the processes and conditions that occur in organizational contexts that trigger appreciation, collaboration, vitality, and fulfillment, and where creating abundance and human well-being are the key indicators of success (Cameron, Dutton & Quinn, 2003). Consequently, to achieve its mission, POS scholars search in existing organizational theories and those under development, to understand, explain and predict the occurrence of positive organizational phenomena, as well as to better understand its causes and consequences (Cameron et al., 2004, 2003). An outline of the main research areas covered by POS is seen in Table 1.

POS is not a parentless movement. In fact, it springs from insight in other research areas where many scholars and professionals have preceded POS in the study of positive organizational dynamics. These include community psychology and its emphasis on the prevention of illness and on wellness enhancement (more than on illness treatment), managerial studies of organizational citizenship behavior with its focus on extra-role discretionary behaviors, and corporate social responsibility and its accent on the value and urgency of organizations to address societal problems and ills (Cameron, Dutton & Quinn, 2003).

All these roots of POS testify to the humanistic nature of the movement. However, POS is more than just another humanistic approach. It brings a new perspective on the possibility of integrating economic business goals and humanistic concerns. We now turn to an explanation of how POS is contributing to the accentuation of a new humanistic foundation of business and society.

Table 1: Main research topics in POS

Research Topic	Content
Appreciative Inquiry	Appreciative inquiry is "a process of search and discovery designed to value, prize, and honor. (…) The objective of Appreciative Inquiry is to touch the "positive core" of organizational life." (Cooperrider & Sekerka, 2003: pp.226). Research has long shown that a focus on opportunities rather than on threats leads employees to an increased organizational understanding (Jackson & Dutton, 1988).
Authentic leadership	Authentic leadership is "a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-regulated positive behavior on the part of leaders and associates, fostering positive self-development" (Luthans & Avolio, 2003: pp.243). Research has evidenced that a leader's support of this kind leads to positive outcomes both for employees (job satisfaction, positive mood) and for organizations (commitment, reductions in withdrawal behavior, performance) (Gardner & Schermerhorn, 2004).
Compassion	Dutton, Worline, Frost, and Lilius (2006) have defined compassion as noticing, feeling, and responding to another's suffering. Compassion is important for business organizations because it influences the activation of people's attention to pain, empathetic concern, and action, to extract and coordinate resources from an organizational system, especially in crisis situations.
Energizing networks	Energy is a type of positive affective arousal which people can experience as emotion (Dutton, 2003). In social networks, high energizing people are better at getting others to act on their ideas, in gathering support for their initiatives, and persuading clients to purchase their services and products (Cross & Parker, 2004; Cross, Baker, & Parker, 2003).
Gratitude	Park and Peterson (2003: pp.36) define gratitude as "being aware of and thankful for the good things that happen; taking time to express thanks". There is evidence from experimental research that gratitude positively relates to individual levels of well-being (Emmons & Shelton, 2002) and more prosocial behavior and collaboration (Baron, 1984).
High-quality connections	According to Dutton and Dukerich (2006), high-quality connections are ties between individuals in which the individuals in them feel a sense of mutuality, positive regard, and vitality. They contrast with corrosive and toxic relationships also described in organizational research (Frost, 2003). High-quality connections have both individual positive effects on health and well-being, and organizational impacts on outcomes such as intra- and inter-organizational collaboration and organizational learning and resilience (Dutton & Heaphy, 2003).
Meaning & Meaningfulness	Meaning can be defined as "a subjective kind of sense that people make of their work" (Wrzesniewski, 2003: pp.297). Meaning is a basic human tenet related to the need to find some way of interpreting the deeper purpose of what they do. Meaning is an important organizational topic because of the assumption that it is related to positive job and organizational attitudes, motivation and performance (Roberson, 1990).
Positive Psychological Capital	PsyCap (Positive Psychological Capital) is an individual's positive psychological state of development characterized by high levels of self-confidence, optimism, hope, and resilience, which are the four main positive psychological capabilities (Luthans, Youssef, & Avolio, 2007). There is now significant evidence that PsyCap strongly relates to organizational performance outcomes (Luthans, Avolio, Walumba, & Li, 2005).
Resilience	Resilience refers to the maintenance of positive adjustment under challenging conditions (Sutcliffe & Vogus, 2003). As Sutcliffe and Vogus (2003: pp.104) assert, "organizational resilience results from enhancing particular competences, such as processes that encourage mindfulness as well as processes that enhance capabilities to recombine and deploy resources in new ways".
Strengths	A strength is "the ability to provide near-perfect performance in a given activity (Clifton & Harter, 2003). They can relate both to individual performance (e.g., the ability to manage several activities at the same time) and the organizational level (e.g., continuous innovation) and are positively related to employee engagement and performance.
Virtues	Virtues are positive traits that contribute to individual fulfillment. Park and Peterson (2003) have developed a classification of virtues – the values in action classification (VIA) – including wisdom and knowledge, courage, love, justice, temperance, and transcendence.
Virtuousness	Virtuousness in organizations refers to transcendent, elevating behavior of the organization's members (Cameron, Bright, & Caza, 2004). At the organizational level, virtuousness refers to features of the organization that engender virtuousness on the part of members. Research has shown that virtuousness and organizational performance, as measured by innovation, customer retention, employee turnover, quality, and profitability, are positively related.

Contributions of POS to a Humanistic Perspective on Business

While addressing the roots of POS, Cameron et al. (2003) exposed the reasons for the *Positive Organizational Scholarship* label. In their argument, POS is *positive* because it strives to understand positive states, dynamics, and outcomes; it is *organizational* given its focus on positive phenomena that exist within organizational contexts; and it is *scholarly-driven* since it is founded on the rigorous, systematic and theory-based practices that ground the scientific method, which are fundamental to gaining empirical credibility and societal impact. We realize that these three proclivities of POS also constitute its main contributions to a humanistic perspective on business. Based on these three distinctive features of POS, in the following sections we elaborate on how POS represents a robust and pragmatic humanistic perspective on management (Table 2).

Table 2: Contributions of POS to a Humanistic Perspective on Business

The three contributions of POS
1. Accentuating the positive
2. Impacting the real world
3. Strengthening the legitimacy

Accentuating the Positive

POS is about accentuating the positive in organizational functioning (Roberts, 2006). The positive here refers to an orientation toward the human fulfillment and social betterment that characterizes the most ennobling human behaviors (Cameron, Dutton, Quinn, & Wrzesniewski, 2003). As such, we can see POS as a movement in management studies that embodies the deepest assumptions of the humanistic theories.

Accentuating the positive is also an affirmation of a more humanistic approach to management. For this reason, some humanistic theorists, such as Held (2001), have defended that the recent emergence of these positive scholarly-based movements is no more than the resurgence of the humanistic tradition.

This thesis can be further grounded within the framework of Barley and Kunda (1992) who view the development of the American managerial discourse as alternating cycles between a rational efficiency and a normative rhetoric, where the first stresses the efficient use of structures and technologies, and the second stresses employee relations and well-being. These authors found evidence that these cycles in managerial ideologies were contingent upon the cycles of economic expansion and contraction proposed in the Kondratieff waves. They found data consistent with the idea that rational rhetoric surges when economies are expanding while normative rhetoric is associated with economic contractions. In light of this, POS can be considered the embodiment of such a new resurgence of a normative humanistic wave in business, linked to an economic contraction phase. As such, POS represents a movement on the cutting edge, with a rational-efficiency-driven model that has characterized management ideologies during the end of the twentieth century (e.g. business process reengineering).

Whether this humanistic resurgence is a managerial scheme to approach a certain socio-economic environment and attain organizational productivity (Barley & Kunda, 1992; Alvesson, 1982) or is really concerned with the pursuit of employee happiness, health, and personal betterment as an end in itself (Wright, 2003), is still a question of debate that we will address bellow, at the end of this chapter. Still, one cannot deny that POS represents a breakthrough concerning the need to accentuate the positive on human side of business and organizations. Thus, it is clearly an outstanding contribution of POS to the humanistic aims.

In this humanistic quest, POS is also expanding our knowledge of what constitutes an effective human functioning and how we can enable its emergence. Subjects as meaning-making at work (Wrzesniewski & Dutton, 2001), resilience (Masten & Reed, 2002), and psychological strengths (Clifton & Harter, 2003), are now becoming topics where we know more and more about how they function. This knowledge production will ultimately lead to a better comprehension of what the basic tenets of human welfare are, and what we can do to achieve them.

Besides extending research and our scientific understanding of positive human functioning, POS also extends the study of human affairs beyond the individual level. As Jane Dutton has pointed out (interviewed by Bernstein, 2003), "POS is not just about looking at topics like self-actualization. It is about structures, cultures, processes, leadership and other organizational conditions that foster positive states and positive dynamics in human communities". This is precisely the point we now turn to in discussing the next major contribution of POS to humanism – making an impact on the real world.

Impacting the Real World

A second contribution from POS to humanism has to do with the real-world impact of the humanistic values. Positive organizational scholars are concerned with the creation of positive organizational and business environments. They are focused on the individual realm at the level of positive individual traits (strengths and virtues), but they also bear on the institutional realm, which includes the study of both positive institutions and positive communities and societies, embracing units as families, work organizations and schools (Peterson & Seligman, 2003; Seligman, 2003).

As such, POS adopts an inclusive and broad perspective that goes beyond the individual level, to consider the relationships among these levels – individual, organizational, institutional, and societal – and focus on how some institutional characteristics can enable the emergence of positive strengths and virtues (Cameron, Dutton, Quinn, & Wrzesniewski, 2003; Seligman, 2002). This feature of POS is very important because some humanistic authors have often been criticized for adopting an individual view of personal growth while de-emphasizing the importance of humanistic issues at other levels (Hanley & Abell, 2002). This does not mean that both past (e.g. Humboldt, 1969) and contemporary authors (e.g. Despain, 2004) have not shown concern with the supra-individual aspects of humanism. However, these authors have not found a vehicle to significantly craft humanistic values in the business world.

Given its accent on the organizational level, POS is at the forefront of creating a body of knowledge, which is able to contribute to real-world change. Take the example of appreciative inquiry (Cooperrider & Whitney, 1999). Appreciative inquiry is "a process of search and discovery designed to value, prize, and honor. It assumes that organizations are networks of relatedness and that these networks are "alive". The objective of appreciative inquiry is to touch the "positive core" of organizational life" (Cooperrider & Sekerka, 2003, p.226). It is grounded on the idea that asking positive questions draws out the positive spirit in a self-organized way. The operational net value of appreciative inquiry methodologies has been proved to be significantly positive for organizational change and development efforts (Bushe & Kassam, 2005), by helping people to trigger their best qualities and engaging them in outstanding performances. Through this change of continuous betterment, business organizations are able to affect the society in a positive way and drive the emergence of positive organizational and individual (i.e., humanistic) welfare. As such, POS is proving to be an appropriate

vehicle to create the real humanistic change in the world of business. POS scholars are developing the correct methodologies and finding the appropriate management practices that enable a more humanized society, with more authentizotic organizations (Kets de Vries, 2001).

The aim to attain such an impact in society is not new. Humanistic scholars have long defended that good theory and research is that which impacts real life (Giordi, 2005). However, POS scholars are practicing what they preach about this need. They are working at a level where a humanistic concern can be seen not only as an idealistic philosophy, but as real business practice.

Strengthening the Legitimacy

A final contribution of POS to humanism is related to POS' scholarly foundation. POS advocates a bias toward scholarship which is based first on scientific method, and on following methods rooted in a "careful definition of terms, a rationale for prescriptions and recommendations, consistency with scientific procedures in drawing conclusions, and grounding in previous work" (Cameron, Dutton, & Quinn, 2003: p.6).

This scholarly-based character has contributed heavily to asserting POS assumptions among the core concerns of both the business research community (Cameron & Caza, 2004; Roberts, 2006) and a larger business audience (e.g., POS was considered by the Harvard Business Review as one of the "Breakthrough Ideas for 2004").

The legitimacy that the POS movement has attained in less than half a decade is largely due to this empirical and scientific basis, and constitutes a landmark in the

assertion of a human-centered perspective on business. In fact, in this regard, POS is in contrast to most humanistic approaches to business. In the words of Kim Cameron, one of the leading founders of the movement:

> "One explanation for the lack of attention to POS phenomena is that they have often been associated with philosophy, religious or moral dogmatism, and scientific irrelevance. We are serious, however, about the word "scholarship". We are firmly committed to investigating positive phenomena scientifically." (Interviewed by Bernstein, 2003)

Grounding a management perspective in careful scientific evidence has long been recognized as contributing to the establishment of a new management fashion (Abrahamson, 1996). The presentation of full-fledged empirically validated scientific theories leads a management rhetoric to create the belief that a management technique or assumption is a rational one. But why is this so? Why is solid scientific research so important for POS and humanistic approaches to gain the legitimacy they need to make a real-world contribution?

We know from neo-institutional theories that prevailing social templates can help to legitimize certain practices (Scott, 1987; Meyer & Rowan, 1977). As POS researchers base their assumptions and recommendations on the well-established template of the scientific institution, they are raising social acceptability and legitimacy for the humanistic claims. This clearly constitutes a major contribution from POS to a humanistic approach to business.

This reliance of POS on such a "scientific" approach to positive human functioning is not without its critics, however. Some authors are stressing that this constitutes evidence of the insolence of the positive movement towards a more traditional humanistic research that is aligned with the work of pioneering humanists

(Held, 2004). Some humanistic psychologists, for instance, have demonstrated some reluctance regarding this scholarly character of POS and have, instead, advocated an existential and phenomenological approach to the study of human issues. In the words of Maslow (1968, p.9), humanistic psychology should "stress on starting from experiential knowledge rather than from systems of concepts or abstract categories or *a prioris*. Existentialism rests on phenomenology, i.e., it uses personal, subjective experience as the foundation upon which abstract knowledge is built".

Some authors have seen this as a divisive debate, but it must not be so. As pointed out by Rathunde (2001), the debate on what constitutes "good empirical research" should be more of a unifying one, and studies within the POS approach should adopt a wide variety of research methods (Dutton & Dukerich, 2006; Caza & Caza, in press; Cameron, Dutton, Quinn, & Wrzesniewski, 2003), some of which resembling the phenomenological approaches championed by humanistic psychologists. As such, POS researchers do not deny the importance of research methods grounded in existentialism, nor do they exclude it from POS' scope. Instead, they accept a diversity of research methods that include many other traditions (including positivism) that may help POS and its humanistic view to gain legitimacy in academia and in the world of business.

Concluding Remarks: POS as Pragmatic Humanism

Researchers are raising legitimate concerns regarding the goals of humanistic and positive theories and their impact over the *real* business world on both human resources management (McGuire, Cross, & O'Donnell, 2005) and POS (Fineman, 2006). These authors argue, under the label of critical management theory, that

humanistic approaches assume (whether intentionally or not) a naïve perspective on humanistic business practices and usually provide idealistic theories that do not take into account the real world of business and work. In fact, management can appropriate humanistic and positive discourses in order to promote its own totalitarian and exploitative ideologies. This would ultimately impose strong limits on the aims of humanistic business theories (Alvesson, 1982), and explain why the espoused humanistic ideals are incongruent with the frequent cost-cutting and market-oriented management practices.

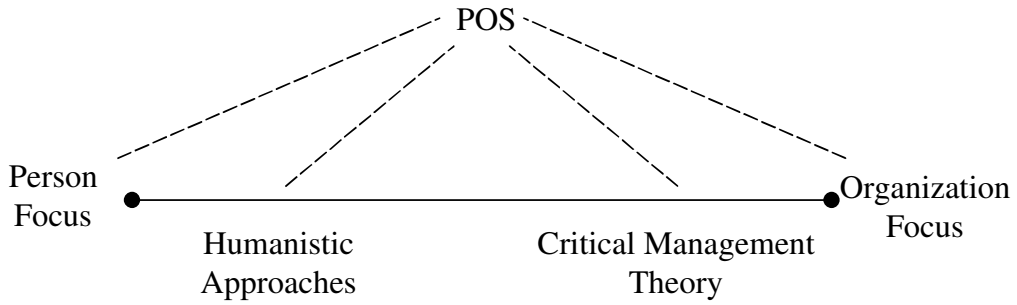
Despite the truth in this criticism, it is conceivable that there are still other situations where a humanistic management philosophy genuinely exists. Even not denying that humanistic premises can sometimes be used in a misleading way and have the effect of reinforcing the dominant power structures, it is also reasonable to assume that humanistic management practices can be seen as promoting employee motivation along with considering the need for people to nurture their human virtues (Melé, 2003). Furthermore, by admitting that positive management philosophies can help management achieve its business goals, but do it in a more positive, "humane" and socially responsible way, positive organizational theories advocate a perspective on business that is neither idealistic, nor naïve.

Take the example of positive organizational behavior (POB) as proposed by Luthans (Luthans, 2002a). A leading author in the field of organizational behavior and father of POB, Luthans (Luthans, 2002b) has defined it as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace." (p.59). This implies that the promotion of positive psychological states in organizations must go hand in hand with high performance levels to be considered as a

positive phenomenon, an association that existing research already demonstrates (Luthans, Avolio, Walumba, & Li, 2005).

In line with this evidence, the perspective set forth by scholars professing POS is much more aligned with a pragmatic view of positive organizational phenomena in that it holds a broader vision of what is positive, striving to include a multi-stakeholder countenance. As such, POS scholars have been able to distinguish themselves from other perspectives, by focusing solely on the positive phenomena that are seen as positive by all the stakeholders, contrary to other perspectives that have over-inflated the value of some stakeholders in their analysis (Figure 1). In fact, whereas critical management theorists focus on making explicit the negative results of many "positive" management practices, and humanistic approaches stress the positive for persons regardless of being negative for organizations, POS accentuates the need to explore how we can bring out relationships that are humane and more productive at the same time, a stance that is not far from past research on the happy-productive worker hypothesis (Wright & Staw, 1999; Staw, 1986).

Figure 1: Focus of analysis of Critical Management Theory, Humanistic Approaches, and POS



A good example of this pragmatic view of POS is the research conducted by Cameron and his colleagues on the topic of organizational downsizing (Cameron, 1998, 1994; Cameron, Bright, & Caza, 2004). The context of downsizing is a very negative one, usually conducive to negative outcomes in terms of both the financial and the human side of business (Cascio, Young, & Morris, 1997). However, research has found that some organizations have been able to respond with success to downsizing – the common ground of these few organizations being their genuine commitment to virtuousness. In these organizations, virtuousness is recognized by management, but mainly by employees who identify in their managers virtues such as compassion, humility and love, and reciprocate with their forgiveness for management action (Cameron & Caza, 2002). This abundant virtuousness from all the stakeholders is what makes these organizations great, regarding both people issues and financial affairs.

Taken together, these studies show that virtuousness and financial performance may go hand-in-hand in the real world of business. Whether virtuousness is only an end in itself or it also serves as a means toward better financial performance is a secondary question because only organizations genuinely committed to creating employee well-being and positiveness are able to benefit from these synergies. For this reason, we should be concerned with the warnings of critical management scholars that "positive speeches" can often be used in a perverted way to actually maintain inhumane employee conditions (Fineman, 2006; Alvesson, 1982), but we should welcome the fact that empirical data are suggesting that these "masked" organizations and managers will not get far with their fraudulent positiveness.

All in all, the message from POS to other humanistic scholars is twofold. First, adopt a multi-stakeholder viewpoint on what is considered humanistic management, instead of centering humanistic claims on working and living conditions only.

Management action should not be easily seen as inhumane or self-interested without a deep examination of their reasons. Second, search for evidence that shows that only genuinely true concerns about treating people grounded in the fundamental human values can lead to business success and development. This will ultimately discourage everyone to adopt opportunistic behaviors, and engage people in productive and genuinely virtuous relationships at work.

We call this a *pragmatic humanistic* perspective because it holds for the idealistic nature of humanistic theories, while admitting to the need to take a broader perspective. It requires us to look into the world of business and pragmatically search for a manner through which core humanistic assumptions can find their way into making a real difference in our world. This requires a pragmatic attention to the positive relationships between humanistic management practices and business success, even more as research points to the existence of few situations where we can have one without the other.

As a conclusion, we see POS as a vehicle for implementing pragmatic changes in today's management styles (Ghoshal & Moran, 2005) and fulfill our hope of having a more humanized business society.

CHAPTER 3

ALL THAT GLITTERS IS NOT GOLD: A CRITICALLY-CONSTRUCTIVE ANALYSIS OF THE IMPACTS OF POSITIVE ORGANIZATIONAL BEHAVIOR

"All that glitters is not gold;

Often have you heard that told"

(Shakespeare, *The Merchant of Venice*, Act II, Scene VII)

When Shakespeare's prince of Morocco asked for Portia's hand in marriage, he had to perform her father's ingenious test: to choose between one of three chests and hit upon the one in which her portrait was. One chest was golden, the other was silver and the other one was made of lead. He tried to riddle out the symbolism and wrongly chose the golden one, which did not contain Portia's likeness, but a paper with the words quoted above. It is most probable that Shakespeare wanted to make evident that sometimes things are not what they first appear to be on the surface, something we will try to illustrate in the following pages.

In recent years, an academic movement has emerged toward the study of positive phenomena in peoples' lives (Peterson, 2004; Seligman and Csikszentmihalyi, 2000). Proponents have openly criticized mainstream psychologists' bias toward negative aspects of human functioning and their failure to remember its mission of making peoples' lives happier, more productive, and fulfilling (Seligman, 1998). The movement quickly extended to the study of positive human behavior in organizations (Cameron, Duton, & Quinn, 2003; Luthans, 2002a, Vera & Rodriguez-Lopez, 2004),

stressing the major role positive institutions can have in promoting positive behavior (Peterson & Seligman, 2003; Seligman, 2003).

Organizational behavior's adoption of positive psychology's emphasis is not without its criticism. It can be argued that, contrary to psychology, in organizational studies "only recently have textbooks included harmful outcomes and organizational pathologies that adversely affect the public" (Vaughan, 1999, p.272). However, one must recognize the role that positive organization studies are playing in bringing new concepts and frameworks into organizational behavior (OB) research and practice, while filling the gap that non-theoretical, non-scholarly, self-help books have been exploring for years (Luthans, 2002a).

Luthans (2002b) first defined POB as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace." (p.59). These positive psychological capabilities are defined as positive developmental capacities, such as confidence (self-efficacy), hope, optimism, happiness and emotional intelligence, which promote positive personal growth and development, along with a better organizational performance (Luthans & Youssef, 2004; Wright, 2003; Luthans, 2002a, 2002b). In fact, many other psychological constructs could be added, given that they are still within the limits of this definition. By defining a positive psychological capability in these terms, POB authors explicitly assume that positive psychological capabilities will generally bring positive outcomes or, as Shakespeare would put it, "all that glitters is gold". Throughout this chapter, the reader should keep in mind that we are commenting on this particular definition of POB as proposed by Luthans and colleagues, although we believe that even for a broader definition of POB, the same criticism applies. The reader should also acknowledge that we consider these

psychological capabilities as "positive" because POB researchers have normatively considered them in that way.

Despite all the interest and research, a critical analysis of the function and consequences of the POB approach to the field of organizational behavior is yet to be done. This is the main purpose of this chapter. Although a critical review of the Positive Organizational Scholarship (POS) movement has already been undertaken (e.g. Judge & Ilies, 2004; Fineman, 2006), these examinations have not explicitly addressed the POB approach. Nor have the criticisms resulted in concrete strategies on how to improve the field of study. Given the early stage of development of POB and its strong and growing impact on the frameworks of both practitioners and academics, we propose some strategies to enable the development of more comprehensive and explicative theory concerning psychological processes in organizations.

We advance evidence that psychological capabilities advocated by POB as positive can instead cause negative impacts, while the so-called negative psychological states can result in positive outcomes, for both individuals and organizations. We make two main points regarding the impact of POB on organizational behavior research: first, we acknowledge that POB is a biased approach that focuses on middle-range (i.e., positive-sided) theories and not on broad exploratory theories of human functioning in organizations; second, as a consequence of this biased character and the somewhat contradictory impacts of positive psychological capabilities on relevant outcomes, we claim that research on POB can ultimately lead to broader explanatory descriptions of human behavior in organizations, if followed by research seeking to comprehensively integrate "positive" and "negative" phenomena.

As we explain our claims, we do not intend to make a comprehensive review of the field or to be exhaustive in our illustrations. Because our major goal is to point to

guidelines for theoretical development of OB research, we also rely on studies outside POB in addition to those explicitly advocating a POB approach. Specifically, we include concepts not explicitly regarded as positive psychological capabilities, but that are linked to positive management approaches. Although this may somewhat reduce the objectivity of our critique, it strongly contributes to the specification of our guidelines for further POB development.

As such, the chapter first discusses empirical evidence of a bias in POB's current perspective, but our goal is to offer viable routes to further improve the field of OB. In this sense, our analysis focuses on the confirmatory bias of current POB models as an opportunity to strengthen the field and widen its scope, and is in accordance with Luthans' (2002a) call to enhance theory development in POB research. We, too, may fall short of attaining an unbiased critique, but our effort should be seen as a needed step to accomplish the goal of providing useful guidelines for improving OB.

The chapter is organized as follows: we start by presenting the rationale for our analysis, arguing that both mainstream organizational behavior (MOB) and POB have been prone to the well-known scientific bias of confirmation. Next, we present counterintuitive evidence, showing that positive and negative psychological capabilities can have either negative or positive effects on individual and organizational performance. We then propose three strategies to further develop the field of OB, namely, exploring nonlinear frameworks, focusing on contextual relations, and adopting counterintuitive research techniques. We discuss how these research strategies may contribute to a broader and more complete understanding of organizational behavior.

POB and the case for a confirmatory bias

In the beginning, the growing movement toward the study of positive phenomena was meant to be a response against the unbalanced research over-focus on remediation and problem-repairing (Seligman, 2003; Peterson & Seligman, 2003; Luthans, 2002a; Wright, 2003). Mainstream approaches in psychology and OB were thus biased in the direction of the concepts considered, the methodologies proposed, and the core objectives striven for.

Given the development in the reflexive field of scientific philosophy and epistemology (McGuire, 1973; Popper, 1959), one should not be surprised by such a theoretical bias. Authors such as McGuire and Popper have claimed that, as humans, scientists are subject to a series of biases as they pursue their research work. A major bias is the confirmatory bias, the tendency to emphasize experiences that support data consistent with preliminary hypotheses and ignore or discount those that are inconsistent (Greenwald, Pratkanis, Leippe, & Baumgardner, 1986). Confirmatory bias in science is at the core of publication bias, materializing in the fact that statistical rejections of the null hypothesis are achieved more frequently in published than in unpublished studies (Sigelman, 1999).

Some researchers have proposed that confirmatory bias is probably the result of an illusory-correlation trap, into which scientists fall while conducting research. This illusory correlation, which corresponds to an overestimation of the frequency of natural association correlations, has been treated as resulting from the more general availability heuristic, the tendency to judge frequencies and probabilities based on the ease of retrieval of some situations from memory (Kahneman & Tversky, 1973).

Empirical evidence of confirmatory bias in science was attained in the classic study of Mahoney (1977). Reviewers in that study were asked to referee manuscripts

describing identical experimental procedures, but reporting positive, negative or mixed results. In their judgements, reviewers were strongly biased against manuscripts reporting results contrary to their own theoretical perspective. They also noted more an overlooked typographical error when the results were incongruent with their own perspective (71.4%) than when results were congruent (25%).

Several explanations for this phenomenon have been advanced, other than those founded in psychological processes (McCoun, 1998). Sociological and political factors such as institutional forces, professional incentives and social networks, have proved to be valuable in explaining confirmatory bias in science. In fact, confirmatory bias may be even more widespread in science than supposed, because scientists have usually staked their career on its success (Gorman, 1996).

Though representing the rule, confirmatory biases are problematic to science. If the logic of science is to search for refutability and falsification (Popper, 1972), a negative contra-theoretical result would yield more information than a positive one. This is at the core of our argument that both MOB and POB should not only focus on confirmatory research findings, but also explore and communicate counterintuitive results. To make all these possible relationships between psychological capabilities and outcomes more systematic and clear, we graphically represent the four possibilities in Figure 1. As can be seen, these relationships can be biased either toward the positive (POB) or the negative (MOB), or they can involve counterintuitive associations such as those of the negative outcomes of positive psychological capabilities (False positive) or the positive outcomes of negative psychological capabilities (False negative). We are not arguing that this is a particular problem of POB. However, because POB is partly rooted in a critique of such a bias in mainstream psychology, POB researchers should be especially aware of this phenomenon. Also, leading authors of the positive management

movement might refer to the need to find a balanced approach to organizational studies (e.g. Lopez, Snyder & Rasmussen, 2003; Peterson & Seligman, 2003), but, as observed elsewhere, this has been more of a rhetorical discourse than an actual practice (Held, 2004).

Figure 2: Relations between psychological capabilities and outcomes

		Outcome: Positive	Outcome: Negative
Psychological Capability: Positive		POB (a)	False positive (b)
Psychological Capability: Negative		False negative (c)	Mainstream OB (d)

Studies approaching the negative consequences of the so-called positive psychological capabilities, such as optimism or self-esteem, are in a clear disadvantage in psychology and are almost nonexistent in organizational behavior. The same has been mentioned regarding emotional intelligence (Zapf & Holz, 2006). This is not to say that they are nonexistent (e.g. Vancouver, Thompson, Tischmer, & Putka, 2002), but rather that they are clearly underrepresented. In the same vein, not much is known about how presumed negative psychological states, such as depressive mood or pessimism, sometimes positively impact performance and even health. We next review the few empirical studies that have tried to address these relations.

The Negative Outcomes of Positive Psychological Capabilities

The study of relations between positive psychological capabilities and negative outcomes has been conducted mainly in psychological science. Some authors have openly questioned the linear relationship between positive states and performance and health outcomes (Crocker & Park, 2004; Judge and Ilies, 2004). In fact, we can find in the literature examples of negative outcomes as consequences of positive psychological capabilities. Some of these "incongruent" relationships, as well as the respective studies, are included in Table 1.

Self-esteem is a good example. Individuals with high self-esteem are more self-confident and tend to show enhanced initiative after an initial failure (McFarlin & Blascovich, 1981). However, some research indicates that high self-esteem does not necessarily correlate with high academic achievement, or with high job performance, nor even does it relate with effective leadership (Crocker & Park, 2004). In fact, a high self-esteem is sometimes at the basis of negative outcomes. Research has shown that when people deliberately strive for self-esteem, they may end up focusing on themselves and not on others, thus hindering personal relationships (Brown, 1986). Sometimes they adopt a behavior of a narcissistic type. Some studies have also found evidence that these individuals have greater depression symptoms and tend to be more anxious (Dyckman, 1998). In part, this is so because their self-centred nature makes others see them as exploitive and manipulative (Judge & Ilies, 2004).

Table 3: The negative outcomes of positive psychological capabilities

Negative Outcomes of Positive Psychological Capabilities	Lower achievement, no better job performance, or effective leadership. (Crocker & Park, 2004; Ford & Sullivan, 2004; Felton, Gibson, & Sanbonmatsu, 2003; Sutton & Rafaeli, 1988; Buehler, Griffin, & Ross, 1994) Hindered personal relationships. (Brown, 1986) Depression symptoms and anxiety. (Dyckman, 1998) Self-centeredness, exploitive and manipulative personal image. (Judge & Ilies, 2004) Disappointment, inappropriate persistence and personal endangerment. (Taylor, 1989; Armor and Taylor, 1998) Higher stress levels, burnout and job dissatisfaction. (Judge & Ilies, 2004; Buehler, Griffin, & Ross, 1994) Frustration, antagonism, animosity, and less-positive feelings and relationships with colleagues and supervisors. (Janssen, Van de Vliert & West, 2004) Negative strategic persistence and escalating commitment. (Audia, Locke, & Smith, 2000; Whyte, Saks, & Hook, 1997; Knight & Nadel, 1986; Staw & Ross, 1987; Staw, 1981) More errors and lower team performance in self-managed teams. (Langfred, 2004) Reduced cognitive capacity for deliberate reasoning. (Isen, 1987; Isen & Daubman, 1984)

These negative outcomes may result directly from a high self-esteem, but they can also result from indirect individual actions. Buehler, Griffin, and Ross (1994) have found that high self-esteem people underestimate the time that is necessary to completely achieve a specific task or project. This can undermine much of a person's work organization, induce high levels of anxiety and stress, and lower performance. In

the same way, high self-esteem individuals can promote organizational conflict and perceptions of injustice. Evidence exists that high self-esteem people evaluate themselves in a self-serving way. Even when their performance is actually the same, they evaluate it more positively than do low self-esteem people (Taylor, 1989), something that might lead to a perceptual mismatch between actual behavior and performance assessment ratings.

Faced with this evidence, POB researchers might argue that self-esteem is only a proxy for a positive psychological capability, given the trait-like character that is sometimes attributed to it. However, this argument contradicts the evidence on the arbitrariness of the trait and state distinction (Allen & Potkay, 1981). It is also in contradiction to the measurement options of POB researchers who have assessed optimism with trait-type measurement scales (e.g. Luthans, Avolio, Walumba, & Li, 2005). But evidence from the potentially negative impact of positive psychological capabilities is also available for fundamental core concepts of POB. Research has found that optimism, considered by Fred Luthans as the heart of POB (Luthans, 2002b), can sometimes produce negative consequences. These studies have focused mainly on the effects of unrealistic optimism on performance. As for high self-esteem, unrealistic optimism can harm individuals and organizations, as unrealistic optimists are prone to assign unrealistically ambitious tasks to the available time (Taylor, 1989). This may undermine individual and organizational performance.

Armor and Taylor (1998) have reviewed research on optimism and offer this observation:

> "On the one hand, evidence suggests that there are benefits to being optimistic, with favorable expectations facilitating the attainment of favorable outcomes; but there is also evidence that people's specific predictions tend to be unrealistically optimistic, which if

> acted upon unchecked would seem to render people vulnerable to a variety of negative outcomes ranging from disappointment to endangerment." (pp.309-310)

Moreover, Armor and Taylor (1998) contrasted dispositional optimism with optimism in people's specific expectations and found that, unlike dispositional optimism, state-like optimism is responsible for both positive and negative consequences.

Even emotional intelligence, another of POB's central capabilities (Luthans, 2002b), has its downside. Contrary to POB's current assumption that positive psychological states correlate positively with performance outcomes, Sutton and Rafaeli (1988) found evidence of a negative relationship. In a field study conducted in retail stores, they found that higher levels of positive emotions displayed by employees were associated with lower levels of store sales, a finding which is quite counterintuitive. The qualitative study they devised to try to understand this unpredictable result demonstrated that it was due to store pace and line length. In stores with higher pace and busy times, clerks were less likely to display positive emotions to customers and to feel less positive. Even disregarding a causal direction, this shows that productivity (positive outcome) is sometimes associated with the consequence of negative psychological effects (negative mood), and as such, positive psychological capabilities and positive performance outcomes do not necessarily correlate positively.

Creativity is another example of the negative effects that positive psychological capabilities may carry for individuals in organizations. Performing innovative activities usually has negative costs for those who undertake them. As creative employees are likely to face resistance and conflict from others in the organization, taking innovative initiatives as a result of creative acts can cause frustration, antagonism and animosity,

leading to fewer positive feelings and relationships with colleagues and supervisors (Janssen, Van de Vliert & West, 2004). Furthermore, creativity may lead to frustration given the unfocused effort and diminished productivity that creative individuals may experience (Ford & Sullivan, 2004).

Until now we have discussed how positive psychological capabilities may negatively impact individual performance, but how much are these impacts directly extendable to organizational outcomes? Might optimism or high self-esteem actually cause damage in the world of business? Some research points to an affirmative answer.

A study on risk investments of financial analysts found that males in financial investment have a significantly higher variability than do females in terms of job performance (Felton, Gibson, and Sanbonmatsu, 2003). A detailed analysis showed that this was due to the lower performance of high dispositional optimistic males, who demonstrated a great propensity for risk. This probably occurs because optimists will continue to pursue the same goals in the face of negative information given their generalized belief that good things will happen in the future (Carver & Scheier, 1982). In some situations, pessimism may thus be beneficial, as pessimists disengage when faced with negative information. Their ability not to rely on the sunk-cost heuristic may lead, in some cases, to better outcomes.

A similar process has been evidenced in the work on strategic persistence and escalating commitment (Audia, Locke, & Smith, 2000; Staw, 1981; Staw and Ross, 1987). Research has uncovered evidence that high self-efficacy and satisfaction with past performance may have a paradoxical effect, often leading to negative outcomes. This tendency for firms to stick with strategies that have worked in the past possibly results in many cases from the incapacity of managers to respond to environmental signals that indicate the need for strategic change. A laboratory study conducted by

Audia et al. (2000) showed that dysfunctional persistence is due to the higher level of self-efficacy and higher goals that accompany past success, showing that self-efficacy (at least if excessive) may have a negative role in job performance.

In another laboratory study, with business students responding to dilemmas in which funds had been committed to a failing course of action, Whyte, Saks, and Hook (1997) found a moderately strong relationship between self-efficacy and intention to escalate. They concluded that in escalation situations, perceived self-efficacy for goal attainment may increase motivation to escalate commitment to a failing venture. A similar finding was reported by Knight and Nadel (1986), who concluded that when a course of action was failing, high self-esteem individuals sought less information and remained committed to their initial course of action.

Overall, this line of research has demonstrated that the mutual reinforcement of higher performance and higher self-efficacy creates an upward spiral, stimulating individuals to expect easy results (Lindsley, Brass, and Thomas, 1995). These expectations may make them less prone to adapt to a changing environment. This constitutes a clear example of a negative result coming from high self-efficacy, the POB concept with the most backup (Luthans, 2002a).

Evidence of non-intuitive effects of positive processes also come from group-level studies. Trust between team members has dominated in OB as a best-practice positive phenomenon. However, as Langfred (2004) has shown, too much trust between team members may be detrimental to team performance in self-managed teams characterized by high levels of individual autonomy. In this study, MBA student teams with high trust performed worse than lower-trust teams in a case study presentation. This probably occurs because the more team members trust one another, the less they choose to monitor each other, which may undermine opportunities to avoid errors and

improve performance. In some situations, therefore, high team member trust may be negative to group performance. This is in line with Janis' (1972) conclusions that cohesive groups may suppress dissent, censor information, create illusions of invulnerability, and stereotype opponents – all organizational phenomena that can cause negative outcomes. Although trust is not a positive psychological capability, as defined by Luthans and his colleagues researching on POB, this kind of research demonstrates that negative outcomes can result from supposedly positive relationships and behaviors, and should thus make us aware of the possibility of such counterintuitive relationships.

The Positive Outcomes of Negative Psychological Capabilities

Thus far, we have cited empirical studies showing that positive psychological capabilities can sometimes produce negative personal and organizational outcomes. In Table 2, we enumerate part of the research stressing the fact that negative psychological capabilities can, at least sometimes, enhance positive outcomes. However, these studies are even scarcer than the first. This could be interpreted at first sight as a higher reluctance of researchers to accept the virtues of negative psychological capabilities even more than the undesired effects of positive psychological capabilities.

Alloy and Abramson (1979) found that mildly depressed students estimated more realistically the contingencies between their actions and a desired outcome than non-depressed students, who tended to overestimate their level of control. This reveals that depressive moods are not necessarily negative and may indeed improve performance awareness in certain situations.

Depressive realists have also been found to avoid overestimating the favourability of impressions they convey to others (Lewinsohn, Mischel, Chaplin, &

Barton, 1980), and thus they are more sincere and authentic in interpersonal relationships. Authenticity has been studied as a desirable phenomenon in organization studies and in POB, particularly in the context of authentic leadership (Luthans & Avolio, 2003).

So-called negative capabilities also have direct positive effects on individual and organizational performance. People in a sad mood systematically use more detailed information processing (Forgas & Bower, 1987), analytical reasoning, and cognitive activity (Bless, Bohner, Schwarz, & Strack, 1990; Mackie & Worth, 1987). This may be a fundamental advantage in performing tasks requiring detailed, systematic information processing (Ambady & Gray, 2002). In fact, this is an important asset in many of the tasks that characterize work in the new knowledge economy, given the high levels of information one must deal with. Hence, Alloy and Abramson's (1979) maxim that these people may be "sadder but wiser".

Evidence from the positive effects of negative states that are closer (as an opposite) to POB, such as pessimism, is also emerging. First, as Norem (2003) reports, in many cases defensive pessimists and strategic optimists perform equally well in terms of objective performance outcomes. Compared with anxious individuals who do not use defensive pessimism, defensive pessimists show significant increases in self-esteem and satisfaction over time, perform better academically, form more supportive friendship networks, and make more progress on personal goals. This clarifies the positive power of pessimism (Norem & Chang, 2002). Second, defensive pessimism may be, in part, a cultural product, which provides a rationale for its positive effects on outcomes (Held, 2004). In some cultures, being a defensive pessimist may simply be of more social value than being an optimist, which translates into esteem advantages for

defensive pessimists in those cultures. At best, we must admit that there are both benefits and costs to defensive pessimists.

Table 4: The positive outcomes of negative psychological capabilities

Positive Outcomes of Negative Psychological Capabilities	More realistic contingency judgements - "sadder but wiser". (Alloy and Abramson, 1979) More sincere and authentic interpersonal relationships. (Lewinsohn, Mischel, Chaplin, & Barton, 1980) Detailed information processing and analytical reasoning and cognitive activity. (Bless, Bohner, Schwarz, & Strack, 1990; Forgas & Bower, 1987; Mackie & Worth, 1987; Ambady & Gray, 2002) Increases in self-esteem and satisfaction, more-supportive friendship networks, and more progress on personal goals. (Norem, 2003; Norem & Chang, 2002) Higher social value of negative psychological capabilities in some cultures. (Held, 2004) Lower cognitive mistakes and errors. (Tversky & Kahneman, 1974; Bazerman, 1997; Schaller & Cialdini, 1990) Higher helping and organizational citizenship behavior. (Konovsky & Organ, 1996; Organ & Ryan, 1995; Carlson & Miller, 1987; Organ & Near, 1983)

In addition, negative psychological states, such as being in a sad mood, lower the propensity to follow cognitive heuristic processing and, as such, reduce the likelihood of consequential mistakes and errors (Tversky & Kahneman, 1974). Following basic processing rules may generally mean being more adapted, but sometimes it conducts people to large financial and business losses (Bazerman, 1997). Negative moods elicit greater cognitive appraisal, higher levels of scrutiny of situational features and improved attention to relevant information (Schaller & Cialdini, 1990). These facets may be beneficial in many work environments. If one's job relies heavily on negotiation (e.g. attorneys) or high cognitive attention requirements (e.g., air traffic

controllers), for example, a sad mood may positively contribute to the job, as it enhances the likelihood of using systematic information processing and paying more attention to the quality of arguments (Worth & Mackie, 1987).

In organizational processes such as conflict management or negotiation, for example, an individual in a negative mood may perform better as he/she is likely to process strong rational arguments more than a person in a good mood (Bless et al., 1988). In fact, happy individuals are prone to a temporary lack of the cognitive capacity necessary for deliberate reasoning (Isen, 1987; Isen & Daubman, 1984), which may influence their performance in such situations.

There is also evidence that negative moods can produce positive outcomes in terms of interpersonal relationships. For example, being in a negative mood can serve to increase helping behavior (Carlson & Miller, 1987). Helping behaviors have been highly regarded in OB studies under the cluster of organizational citizenship (Konovsky & Organ, 1996; Organ & Ryan, 1995; Organ & Near, 1983).

Advancing the OB field

Given the evidence discussed above, OB theorists and practitioners should try to understand all of the possible consequences that psychological capabilities such as optimism, self-esteem and self-efficacy can have on performance outcomes. Researchers also need to explore the relations and contingencies between those capabilities and their outcomes. Otherwise, we risk developing capabilities whose impacts may contribute to negative results in organizations.

The evidence presented also pinpoints that POB assumptions contribute to the practice of biased research and is not comprehensive in its scope. Acknowledging this

would seem to be important for at least two main reasons. First, it explicitly recognizes the paradigmatic character of POB in Kuhnian terms (Kuhn, 1970) and, as such, clearly delimits the field of research. Second, and somewhat paradoxically, it raises the question of whether or not POB can contribute to the development of a more comprehensive science of psychological capabilities in organizations. This question may arise because POB research increases our knowledge of certain kinds of relationship between psychological capabilities and organizational outcomes and more integrative theories are often the result of bringing together antagonistic, middle-range theories.

As such, we do not see POB as "bad science", or as necessarily being incompatible with a science seeking more comprehensive theories of organizational functioning. Quite the contrary, we see POB as contributing to the development of more integrative approaches in OB. Our claim is that OB researchers should also devote more efforts to developing broader-level theories regarding psychological capabilities such as optimism, pessimism and self-confidence.

With this purpose in mind, and based on major developments of scientific epistemology, we next propose three strategies that may allow OB researchers to seek more integrative theoretical frameworks to further advance our understanding of psychological capabilities' impact on performance outcomes. There are other strategies referred to in the literature as viable to derive more integrative approaches (e.g., McGuire, 1997), but these three may adequately serve OB from the contributions of POB. These three strategies are referred to here as: nonlinear frameworks of analysis, contextual approaches, and counterintuitive techniques. These strategies need not be seen as mutually exclusive, but can instead be adopted synergistically to improve our knowledge of OB.

The true laws can not be linear nor can they be derived from such.

(Albert Einstein, *Autobiographical Notes*, 1969)

Nonlinear Frameworks

Some have argued that adopting a "more is always better" thinking in the study of positivity would be a great mistake (Schuldberg, 2003). In fact, we tend to assume that by monotonically increasing application of something good, we will make it better and better, despite our commitment to moderation.

However, given the evidence reported above, one must necessarily conclude that "bad things are not always bad, and good things are not always good". As Weiss and Cropanzano (1996) have put it "certainly, predicting simple linear associations between affective states (positive or negative) and performance (positive or negative) seems overly simple" (p.55). This means we need to begin to explore nonlinear relations between positive organizational capabilities, and performance outcomes and health.

An insightful change would be to adopt a curvilinear view of relations between positive capabilities and performance outcomes. An inverted U-shaped view of the relationships between organizational variables and performance is not new, and can be found in some OB studies. The relationship between stress and performance, for example, has been depicted by some authors as curvilinear/inverted U (Perrewe, Fernandez, & Morton, 1993). This means that the presence of stress may not necessarily impair performance, but that some level of stress can instead improve performance outcomes.

Others in the field of OB have provided similar evidence. While testing Peter Warr's vitamin model with a structural equation modelling procedure, De Jonge and

Schaufeli (1998) found a nonlinear U-shaped relation between three job characteristics – job demands, job autonomy and workforce social support – and employee well being measures of job satisfaction, anxiety and emotional exhaustion. In their study, the fit of the nonlinear model was better than that of the linear model. This means that job autonomy and social support do not always drive goodness but can instead promote negative outcomes such as job-related anxiety.

In a similar way, in order to gain more knowledge of the field, OB researchers should examine if the impact of psychological capabilities such as optimism and self-efficacy on organizational outcomes is best described as an inverted U-shaped one. It is possible that up to a certain level, optimism may relate positively to performance outcomes (e.g., deadline accomplishment), but start to relate negatively for levels of optimism beyond (i.e., higher than) the optimal point. The same might be true regarding pessimism. Perhaps a high self-esteem level may positively impact organizational outcomes such as citizenship behavior but, after an optimal point, start to contribute to a reduction in the frequency of those behaviors. As far as we know, these hypotheses remain to be tested.

Beyond U-shaped relationships, other nonlinear kinds of relations have recently been explored. In fact, some of the studies approaching nonlinear models are being developed within a positive framework. For example, Losada and Heaphy (2004) found different types of nonlinear dynamics in teams with different levels of performance. They propose that these nonlinear dynamics are tied to the ratio of positivity-to-negativity in team interactions. Based on this work, Frederickson and Losada (2005) have empirically found that human flourishing seems to follow a similar pattern when considering a threshold level of the positivity-to-negativity affect ratio.

Our suggestion here is that concepts tightly associated with POB, such as optimism, hope and self-efficacy, should be equated and tested for similar types of nonlinear relationships, such as threshold relationships and others. In fact, some pioneering researchers have long proposed this type of research (Carver & Scheier, 1998), but this is the exception rather than the rule. Because constructs as optimism and pessimism might differ from affect in that, unlike positive and negative affect, optimism and pessimism possibly constitute differing dimensions and not opposing poles of a single dimension (Peterson & Chang, 2002), different types of nonlinear relationships might explain how these constructs interact with one another.

The search for nonlinear relationships opens a large space for POB and OB researchers to explore how psychological capabilities impact individual and organizational outcomes. Besides providing researchers with more precise models to predict positive human behavior, the study of nonlinear relationships offers a new mindset with which OB can better expand knowledge of the relationships between the positive and the negative.

I am I and my circumstances.

(Ortega y Gasset, *Meditations on Quixote*, 1961)

Contextual Approaches

It is possible that the efficacy or appropriateness of a positive psychological capability is more a qualitative issue than a matter of degree (as suggested by the nonlinear framework strategy). There may be some contexts where high self-esteem is effective, such as after an initial failure, and some other situations where high levels of optimism would bring about positive results (McFarlin & Blascovich, 2004; Luthans,

2002b). Still, there are probably other situations where they would promote negative results. This raises the question of whether OB should adopt a contextual approach.

The crucial role of context has been discussed by OB authors (Rousseau & Fried, 2001). A contextual approach is supported with empirical research demonstrating that psychological capabilities may have effects contingent on the task at hand. The effects of happiness on performance, for example, may depend on the type of task (Ambady & Gray, 2002). Whereas a positive mood seems to increase performance in creative tasks, it may impair performance in tasks requiring more detailed and systematic information processing (Hirt, Melton, McDonald, & Harackiewicz, 1996). This is due to the fact that positive and negative affective states lead to different levels of scrutiny of relevant information (Schaller & Cialdini, 1990). Studies in the domain of persuasion have demonstrated that people in more positive moods are less likely to engage in effortful systematic information processing than people in more negative moods (Weiss & Cropanzano, 1996). Whether positive capabilities elicit a positive or negative outcome may thus depend on situation-specific characteristics.

Another example comes from the field of creative team working. Research finds evidence that the beneficial effects of a novel contribution depend on the stage in the life cycle of the team's project. Consistent with a contextual approach, creativity is beneficial early in the development of a project team, when its primary goals are to learn, search for information and articulate tentative solutions, but after a midpoint transition, when the team's goal is to meet a deadline, additional attempts to introduce novel ideas disrupt performance, and may make team members feel frustrated (Ford & Sullivan, 2004). Like creativity, other psychological capabilities such as optimism, hope and confidence, may play different roles in the different phases of a project team's life-cycle.

Under the umbrella of the psychology of science, researchers have explored this issue. Greenwald et al. (1986) discussed two result-cantered research strategies to overcome confirmatory bias and fully explored a study field: condition seeking and design approach. Condition seeking refers to the identification of the conditions under which a hypothetical relationship may be confirmed. It asks researchers to deliberately reduce the generalizability of their findings by identifying, from the many conditions where the relations were found, those that are necessary and those that are sufficient. In our case, this means that OB research should seek to understand, for example, under which conditions high levels of optimism produce positive results, and under what circumstances high self-efficacy can be beneficial.

In contrast, the design approach strategy argues that one should not search for the conditions under which a relation is likely to occur, but instead try to specify the conditions that can produce a currently unobtainable result. According to the design approach strategy, OB should seek to understand the conditions under which high levels of optimism drive negative results. In the same vein, OB should search for situations where low self-esteem is advantageous.

OB research will potentially make great improvements by adopting a contextual perspective, such as the one proposed by McGuire (1973, 1983). In McGuire's view of scientific development, researchers sooner or later end up finding a way to confirm their hypotheses, by discovering the situations where confirmation will occur. This perspective entails a plastic view of the world, where social science's role is not to find any truth or refute any hypothesis, but instead to understand the context in which the relation between variables is likely to occur.

The praise for the importance of context was also raised by Johns (2001). He stated that the fact that context-free research is seen as more scientific and prestigious

than context-specific research, is due to the role that organizational researchers define for themselves. As he says:

> "Organizational behavior researchers generally see themselves as being in the business of studying relationships among variables, and they tend to be uncomfortable with constants, if they consider them at all." (pp. 33)

However, a deep understanding of the causes and effects of psychological capabilities in organizational settings needs to consider the contexts where relationships between variables occur. Otherwise, researchers will be continually biased toward confirmatory results and unable to gain insight about why unpredictable results appear.

What if the earth is not the center of the universe?

(Copernicus, *On the Revolutions of the Heavenly Bodies*)

Counterintuitive Techniques

Another strategy to overcome confirmation bias would be to deliberately apply some counterintuitive techniques. Engaging in a counterintuitive strategy like counterfactual thinking can act as an effective debiasing tool (Tetlock & Belkin, 1996). This is so because counterfactual reasoning directs us to search the space that includes instances inconsistent with our current hypothesis (Farris & Revlin, 1989) and, as such, helps to develop and test more comprehensive and balanced propositions. But what do we mean by counterfactual thinking in this context? How can it be used to develop helpful techniques for overcoming confirmation bias in science?

Counterfactual thinking is simply thinking contrary to the facts, or asking "what might have been if...?" (Roese, 1997; Roese & Olson, 1995). By directing us to "what if..." type-questions, like the one raised by Copernicus centuries ago, counterfactual reasoning can serve as a tool to enhance our knowledge of the impact of positive psychological capabilities and further advance OB studies.

As such, it would help us search for answers to questions such as *what if high self-efficacy employees can negatively impact organizational outcomes?* or *what if pessimists can be beneficial for organizational functioning?* Not assuming linear relationships between these counterintuitive implications (which would be worse), the scope and impact of OB research could dramatically increase by answering these kind of questions.

This is a different epistemological stance than that of continuing testing confirmatory hypotheses and developing counterfactual research only when negative evidence is found (Olson, Roese, & Deibert, 1996). We propose the need to use counterfactual research as a tool to widen the OB field by a process of deliberately engaging in counterfactual reasoning. This resembles the mental-simulation heuristic proposed by Kahneman and Tversky (1982), a form of elaborative thinking emphasizing the unfolding of a sequence of events from an imaginative starting point or condition (e.g., high cognitive attention task) to a certain outcome (e.g., depressive mood).

In this respect, counterfactual thinking is in line with the contextual approach proposed above, as counterfactual thoughts focus attention on a factor – condition or event – that is antecedent of the observed outcome (Morris & Moore, 2000). However, counterfactual thinking does not lend itself to this perspective. Recently, McGill (2000;

see also McGill & Klein, 1993) proposed two types of counterfactual reasoning: outcome contrasts and antecedent contrasts.

Outcome contrasts compare instances in which the event occurred (e.g., high emotional intelligence leading to higher sales), with instances in which it did not (e.g., high emotional intelligence not leading to higher sales). In these cases, counterintuitive techniques allow us to "undo the event" in order to understand why the event sometimes occurs and sometimes does not.

Antecedent contrasts consider instances (real or imagined) in which the candidate factor to explain the outcome is absent, and ask whether the event would have occurred nevertheless (e.g., would high positive mood have led to higher performance if the task were not creative?). This means that the antecedent contrast technique focuses on undoing the explanatory candidate factor and checking if the outcomes still occur. Tetlock and Belkin (1996) referred to these procedures as *sideshadowing*.

The use of counterintuitive techniques such as those described are but an example of how new knowledge can be generated within the field of OB, not only by extending its scope, but mainly by assuring that it becomes a comprehensive and integrative scientific field.

Concluding remarks

The purpose of this chapter was to critically analyze the impact of POB research on the more general field of OB. We did this by (1) evidencing POB's positive biased character and (2) suggesting possible avenues upon which researchers investigating psychological capabilities in organizational settings can rely, in order to attain more integrative and comprehensive explanatory theories.

Our theoretical exploration led to a pair of major points. First, we suggested the possible existence of a confirmatory bias in the current mainstream POB vision. This bias may result in a simplification of OB in the sense that it would ignore both the positive consequences of negative capabilities and the negative consequences of these psychological capabilities. Second, we advanced three possibilities to move research on psychological capabilities toward a more comprehensive approach, demonstrating the usefulness of POB to the broader field of OB.

The first possibility consists in the use of nonlinear frameworks. Because good things are not always good and bad things are not always bad, and because there can be too much of a good thing, scholars may address OB topics in a counterintuitive form, our third possibility. They can ask, for example, *what are the risks of trust in work teams?*, or *what are the negative consequences of hope?*, or even *what are the positive results of pessimism?* Another possibility we suggest is the need to contextualize research, in order to better understand when positive effects emerge, and what contexts hinder their further flourishing. Additionally, it will be worth studying whether the combination of positive and negative capabilities may produce more "tempered" organizations than purely positive or negative ones. We have emphasized the need to carefully consider context. As we have discussed, what is positive in a given circumstance, may become negative in another one.

In summary, we provided evidence suggesting that POB research is biased and limited in its scope, but at the same time of major importance in preceding more integrative and comprehensive research on psychological capabilities in organizational settings. While the real impact of the POB approach in organizational psychology can only be truly evaluated in the years to come, we advance some potential consequences

of this approach and propose useful strategies to help researchers attain the goal of seeking more integrated and comprehensive OB theories.

CHAPTER 4

WHO IS MORE PROACTIVE, THE OPTIMIST OR THE PESSIMIST?

A deep analysis of the effects of the so called "positive" and "negative" psychological traits and states in the literature leads us to a variety of possibilities regarding their impact on outcomes as satisfaction, perceived conflict and job performance, as we have seen in the reflection in the previous chapter. This is also true regarding the effects of these psychological traits and states on proactive behavior, an important organizational outcome that is increasingly gaining relevance in organizational studies. Understanding the relations between the psychological traits of optimism and pessimism, and proactive behavior, is the core issue of this chapter.

Throughout the chapter, we start by describing the social and business context in which an increased interest in proactivity is growing. Then, we review the major definitional issues on the concept of proactivity and then we present up-to-date research that empirically demonstrates the positive outcomes of proactive behavior, both for individuals and for organizations. After that, we resume the literature that has focused in potential ways to improve proactivity in organizations and then present the manuscript that constitutes the main body of the chapter and includes an empirical research format. In the end of the chapter, we outline the major conclusions of this empirical study and draw implications for the research on optimism in organizational studies.

Proactivity in Organizational Studies

The growing role of proactivity for individuals and organizations

Proactive behavior has become a topic of major importance in studies regarding work, career and organizations within the last decades (Crant, 2000). Several factors have been pointed as crucial drivers of the raised importance of proactivity in the current business context.

One of these factors concerns the minimization of the surveillance function from the part of leadership that, due to a decentralization of work towards more operational levels, has led to an increased role of employees in identification and problem-solving (Frese, Fay, Hilburger, Leng, & Tag, 1997).

Another reason for the growing attention to proactivity as a key-concept in the literature was the emergence of career theories claiming a new role of people in the management of their careers, that have become "boundaryless" and "protean" (Hall, 1996) in part as a consequence of the changing nature of the employment relation and psychological contracts that have been registered in the recent past (Rousseau, 1996). In this new working environment, marked by an increasing rate of organizational change and the consequent variety of working experiences, employers, work arrangements and required competencies (Seibert, Kraimer, & Crant, 2001), employees need to become active constructors of their own careers, a need that some have already linked to the necessity of also turning into more proactive individuals (e.g., Jackson, 1996).

Proactivity in organizational studies: Different labels, similar constructs

Research striking proactive behavior in organizational settings has analyzed this kind of behavior grounded on different approaches and lens. Crant (2000) reviewed this literature and identified four major constructs related to proactivity: proactive personality, personal initiative, role breadth self-efficacy, and taking charge. We add the construct of proactive coping (Aspinwall & Taylor, 1997) to this list, a construct that has recently been attracting attentions to the fields of both proactive behavior and coping research (Schwarzer & Knoll, 2003). We next present a definition for each of these constructs and discuss their main similarities and differences.

Proactive personality

Proactive personality is probably the most salient concept in the study of proactivity in organizational and managerial research. In their seminal study on the development of a dispositional measure of the proactive personality, Bateman and Crant (1993) have defined the prototypic proactive personality individual as that who is "relatively unconstrained by situational forces, and who effects environmental change" (p. 105). These authors add that proactive people "scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change. They are pathfinders…" (Bateman & Crant, 1993, p. 105). As such, proactive personality as a personality disposition is a construct that allows us to identify individual differences in the extent to which people take action to influence their environments (Crant, 2000).

In part, the concept of proactive personality was also the result of an effort to overcome the person-environment dichotomy. Assuming that proactive individuals can

purposefully act towards their environment that will ultimately lead to an influence in their own behavior, this approach to proactivity admits that environment and personality continuously influence one another, as acknowledge by Bandura (1986) in his social cognitive theory. In other words, people are not passive recipients of environmental constraints but can instead intentionally change their own circumstances (Diener, Larsen, & Emmons, 1984).

Because the construct of proactive personality is well grounded on the existence of the reliable measure of the Proactive Personality Scale (PPS), there have been wide applications of this construct in proactivity research. In fact, several studies have used the PPS in their attempts to test the relations between proactivity and other important variables, such as leadership (e.g., Deluga, 1998), career success (e.g., Seibert, Crant, & Kraimer, 1999), entrepreneurial behavior (e.g., Becherer & Maurer, 1999), and network building and job performance (Thompson, 2005).

The existence of a measure of proactive personality also allows one to investigate the differences among proactive personality and related personality constructs, such as the conscientiousness and extraversion personality dimensions of the Big-five traits (Crant, 1995), thus contributing to the definition of proactive personality as a unique construct.

Personal initiative

Frese and his colleagues (Frese, Kring, Sooze, & Zempel, 1996; Frese, Fay, Hilburger, Leng, & Tag, 1997) have defined the concept of personal initiative as a behavioral pattern whereby individuals take an active and self-starting approach to work that goes beyond their formal job requirements. Personal initiative thus comprises a

range of self-started, proactive, and persistent behaviors that include actions such as going substantially beyond the prescribed contents of one's job (qualitative initiative), spending additional energy at work (quantitative initiative), and demonstrating perseverance in the face of obstacles (Frese & Fay, 2001; Rank, Pace, & Frese, 2004). We can identify five different components in the concept of personal initiative (Frese et al., 1996): (1) it is consistent with the organizational mission; (2) takes a long-term focus; (3) it is action-oriented an goal directed; (4) it is persistent in the face of obstacles; (5) is self-starting and proactive.

Frese et al. (1996) presented reliability and validity evidence of the construct of personal initiative using both qualitative and quantitative data from a sample of East and West German individuals. They found that personal initiative was significantly lower among formerly socialist East Germany participants compared to the West Germans. These, in turn, were related to perceptions of lower control at work (job autonomy and discretion) and work complexity, suggesting that these perceptions might be one of the causes of lower personal initiative among the East Germans. These authors argued that the construct of personal initiative is conceptually different of similar constructs on can find in the literature, such as entrepreneurship/intrapreneurship, organizational citizenship behaviors (OCB), organizational spontaneity and the McClelland's achievement motive (Frese et al. 1996, 1997). For example, whereas personal initiative is similar to OCB in that both of these constructs focus on pro-organizational behavior that goes beyond one's forma duties, OCB includes dimensions such as "compliance" that has a passive connotation that refers to the adherence to rules. Whereas both the achievement motive and personal initiative overlap in several ways, the first of these constructs does not necessarily (and usually do not) refers to extra-role working behavior, while the second does.

Role breadth self-efficacy

Role breadth self-efficacy (RBSE) refers to the "employees' perceived capability of carrying out a broader and more proactive set of work tasks that extend beyond prescribed technical requirements" (Parker, 1998, p.835). Given this, RBSE can be considered as an antecedent of proactive behavior, meaning that employees need to feel capable of performing such a proactive role for it to occur (Parker, 2000). Using confirmatory factor analysis in the data from a sample of 669 glass manufacturing company employees, Parker (1998) found that RBSE, proactive personality and self-esteem constitute different constructs. Although this same study has shown that these three constructs are associated, they seem to show a better fit as separate than as a single and same construct.

A study conducted by Parker (2000), with a sample of 650 employees and managers from a manufacturing company, evidenced that RBSE is also distinct from commonly used motivational concepts such as job satisfaction, organizational commitment or job strain. In that study, change receptiveness predicted RBSE but not those more traditional motivational measures. In conjunction with other empirical evidence that found a significant association between proactive personality and RBSE but not between proactive personality and job strain (Parker & Sprigg, 1999), these results support the idea that RBSE incorporates a proactive motivational component that more traditional motivational measures do not have.

A last important delimitation aspect of RBSE is its malleable and situational character. Like other self-efficacy constructs (Bandura, 1986) but unlike proactive personality, RBSE is better described as state than as a trait and is thus expected to

change according to environmental conditions and be specific regarding the performance of specific tasks.

Taking charge

In their foundation of the concept of taking charge and the development of quantitative measure for the construct, Morrison and Phelps (1999) have defined it as entailing "voluntary and constructive efforts, by individual employees, to effect organizationally functional change with respect to how work is executed within the contexts of their jobs, work units, or organizations" (p. 403). Taking charge is similarly to the construct of personal initiative regarding its discretionary character in the sense that it is not formally required. In this respect, taking charge is also similar to OCB that is also relative to discretionary behavior. However, taking charge is different from OCB in that it refers more to modest and trivial employee behavior that actually sustain the status quo existing in the organization (Organ, 1988) whereas taking charge captures that behavior of employees who are willing to challenge the status quo to create constructive change (Crant, 2000).

Although research on the concept of taking charge is scant in the literature and has not yet examined its relations to other proactivity concepts, the existing studies show evidence that taking charge does constitute a different type of extra-role behavior. For instance, McAllister, Kamdar, Morrison and Turban (2007) have recently found evidence from a discriminative predictors of two different forms of OCB. In one side, affiliative extra-role behaviors such as helping behaviors are interpersonal, cooperative, non-controversial and strengthen the relationships. In the other side, challenging behaviors such as taking charge are change oriented and focus on ideas and issues, emphasizing organizational change through status quo challenge. In a sample of 225

engineers from an Fortune 500 Indian company, found that affiliative extra-role behavior was predicted by perceived procedural justice, perceived role breadth, and perceived instrumentality, but not by perceived efficacy. In contrary, taking charge was also significantly predicted by perceived efficacy to take charge.

Proactive Coping

The construct of proactive coping owes much of its salience in literature to the work of Aspinwall and her colleagues (Aspinwall, 2005; Aspinwall & Taylor, 1997). Proactive coping refers to the actions people undertake in advance of potentially stressful events in order to prevent their occurrence or modify it before it happens. It builds on the coping research and literature (Folkman & Lazarus, 1985; Lazarus & Folkman, 1984) in that it can be distinguished from more traditional view of coping as necessarily being a reaction to a stressful event that already occurred, as is the case of emotional-focused coping and problem-focused coping. These more traditional coping strategies also included the idea of anticipatory coping, defined as the preparation for the stressful consequences of an upcoming event whose occurrence is likely certain (Folkman & Lazarus, 1985).

Folkman and Lazarus (1985) have defined coping as referring to "cognitive and behavioral efforts to manage (master, reduce, or tolerate) a troubled person-environment relationship" (p. 152), and have identified two major coping styles: problem-focused coping and emotion-focused coping. Problem-focused coping occurs when one does something to change or remove the causes that are provoking the distress. Emotional-focused coping, in its turn, refers to the regulation of the distressed emotion through cognitive and emotional mechanisms, such as psychologically minimizing the threat and

wishful thinking. In any case, emotional-focused coping does not incorporate any action against to remove or change the distressing object (Folkman & Moskowitz, 2004).

Rothbaum, Weisz, and Snyder (1982) have used different constructs that resemble those used by Folkman & Lazarus (1985). They have distinguished primary control efforts or primary coping, that involves direct and personal actions undertaken to bring the environment in line the individual's needs, from secondary control efforts or secondary coping, that is related to the indivual's efforts to change themselves and their understanding of the situations and accommodate, without any personal action, the environmental constraints and stressors.

Proactive coping differs from these traditional approaches to coping and from anticipatory coping in at least three fundamental ways (Aspinwall & Taylor, 1997): (1) proactive coping is temporally an antecedent phenomenon to anticipatory coping and includes the notion that resources can be accumulated for future needs, but not designed to address any particular stressor; (2) the skill requirements to cope with anticipated stressors are different from those involved with proactive coping; and (3) whereas anticipatory coping requires specific skills to deal with the specific anticipated stressor, proactive coping involves different skills and activities that are likely to be useful for this type of coping.

Aspinwall and Taylor (1997) also divide proactive coping into five different stages that include: (1) resource accumulation, such as money, planning and organizational skills and social support, that can be activated when future stressors and burdens occur; (2) recognition skills to detect a potential stressful event coming; (3) initial appraisal, representing the preliminary assessments and monitoring of the status of the potential stressor; (4) initial coping efforts that include the activities undertaken to reduce or prevent the effects of a suspected stress; and (5) elicitation and use of

feedback, a final stage that refers to the acquisition of information and use feedback regarding both the development of the stressful event and the effects of one's actions to influence it.

Recently, authors studying proactive coping have taken even further the concept and have distancing their approach from that of Aspinwall and colleagues. Greenglass, Schwarzer and Taubert (1999), for instance, have detached their view of proactive coping from previous conceptualizations. They say that Aspinwall and Taylor's (1997) framework still maintains a view of resource-accumulation for future threats, even if that treats can not be specified in advance. Greenglass and colleagues' (1999) conceptualization would call preventive coping to this kind of coping. In their conceptualization, proactive coping focuses not on threat anticipation but on proactive challenge seeking. As such, proactive coping does not require any anticipated negative appraisal, such as harm or threat but instead it reflects the positive efforts to find challenging goals and promote personal growth. In other words, proactive coping refers to people as agents who initiate constructive paths of action and seek challenging opportunities to growth. In the words of Schwarzer and Knoll (2003), "*Coping becomes goal management instead of risk management.*" (p. 396). In the light of this conceptualization, proactive coping is clearly a proactivity construct where all the components of reactivity to events (whether past or future, specific or generic) have been removed. Proactive coping as conceptualized this way can be measured with the Proactive Coping subscale of the Proactive Coping Inventory (PCI), developed by Greenglass and colleagues (1999).

Proactive behavior: A synthesis on definitions

From the communalities of these five constructs all of which imply proactive behavior in some sense, one might define proactive behavior as "taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions" (Crant, 2000, p.436).

In line with the wide array of definitions regarding proactive behavior, we could say that proactive people are those that actively seek information and opportunities for improving things and not those who wait for information and opportunities to come to them without their purposeful action. Frese and Fay (2001) have also referred to these constructs as active performance concepts in that they imply that people go beyond assigned tasks instead of considering performance only in terms of given tasks or goals. In this respect, these active behaviors have much in common with organizational citizenship behavior which have long underlined the extra-role character of behavior at work (Bateman & Organ, 1983; Organ & Near, 1983; Organ & Ryan, 1995). All these behaviors can be considered as "contextual performance" as opposed to "task performance" in that they reflect some kind of extra-role discretionary behavior that can be exhibited by workers (Organ, 1997; Conway, 1999; Hoffman, Blair, Meriac, & Woehr, 2007; Motowidlo & Scotter, 1994).

Despite their conceptual overlap, there are important distinctions between the current approaches to proactive behavior in organizations. For instance, some of the constructs such as proactive personality, are more general regarding the variety of situations in which they should make a difference. In contrary, other concepts are more context-specific as is the case of proactive behaviors during the socialization process that may include information seeking, feedback seeking, relationship building and positive framing (Wanberg & Kammeyer-Mueller, 2000). In addition, whereas the

constructs of proactive personality and personal initiative stress the dispositional trait character of proactivity, the notions of role breadth self-efficacy and taking charge emphasize the situational influences in the nurturing of proactive behavior. Proactive coping as conceptualized by Greenglass and colleagues (1999), while traducing a self-evaluative perspective can be seen as an interactionist approach that encloses both individual and situational factors and focuses on the behavioral realm just like the remaining constructs relating to the coping strategies (Lazarus & Folkman, 1984). For this reason, in the empirical research reported on this chapter, we have opted to use proactive coping as the representative of proactivity.

The impact of proactivity on individuals and organizations

Though not as abundant as that of other areas of organizational studies, there is already considerable research concerning the impacts of proactive behavior on individual and organizational outcomes. Whether using quantitative or qualitative measures and using the different concepts described above, these studies clearly demonstrate the positive effects of proactive behavior.

One of the most cited studies that explicitly analyzed proactivity was that of Crant (1995) who empirically tested the relationship between real estate agents' proactive personality and job performance as measured by number of homes sold, listing agreements obtained, and commission income in a 9-month time lag. The author found that the proactive personality as measured by the PPS significantly predicted the overall performance of the sales agents. Furthermore, hierarchical regression analysis evidenced that the proactive personality was the best predictor of the overall

performance, maintaining a significantly explicative power of 8% of the variance after controlling for the agents' experience and general mental ability.

Given this impact of proactive personality on individual performance, it is not surprising that proactivity should also help to explain one's career success. The positive relation between proactivity and career success was empirically confirmed in a study conducted by Seibert, Crant, and Kraimer (1999) with a sample of 496 employees from a diverse set of occupations and organizations. These authors found that proactive personality was positively associated with self-reported objective measures of career success, such as current annual salary and number of promotions received over the entire career. In addition, Seibert and colleagues (1999) also found a positive and significant relation between the proactive personality of the participants and a subjective 5-item measure of career satisfaction. These evidences show that proactive career behaviors are crucial for coping with the career challenges and the necessary adjustments on must deal with along one's career.

In fact, proactive career behavior might make a difference right from the moment one enters into a new organization. When entering into an organization and beginning a socialization process, individuals proactively engage in a series of informal socialization tactics in addition to the formal and institutionalized socialization programs that might exist (Jones, 1986). Several empirical studies have supported that these proactive socialization behaviors are predictive of a set of job outcomes, such as job performance and job satisfaction. Morrison (1993a), for instance has investigated the information-seeking process of 205 new accountants in a longitudinal research design that measured the participants socialization tactics, satisfaction, performance and intentions to leave the organization over a 6-month period (data were collected one, three and six months after entry). The results clearly evidenced that the frequency of

proactive information seeking (i.e., seeking more technical information, information about role demands, performance feedback and normative social information) consistently showed to positively predict satisfaction and job performance and negatively predict intentions to leave an organization. The authors saw these results as supporting the view of newcomers as proactive. This conclusion has continued to be corroborated in subsequent studies on the topic of socialization (e.g., Morrison, 1993b).

In the same line of research, Ashford and Black (1996) specifically studied different strategies used by newcomers in their adaptation process and related those to self-reported measures of satisfaction and job performance. Their results, based on the ratings of the tactics generated in a sample of 84 MBA students, suggested that newcomers do engage in a series of proactive activities such as information and feedback seeking, relationship building, job-change negotiation and positive framing during the socialization phase and that these activities have differential impacts on satisfaction and job performance.

While these results demonstrate clear evidence of the impact of the proactive personality on individual and organizational achievements, other studies have contributed with additional information regarding the mechanisms that may explain these impacts. One of these variables is leadership. In a peculiar study conducted by Deluga (1998), the proactive personality of 39 U.S. Presidents, from Washington to Reagan, was found to be associated with ratings of charismatic leadership and presidential performance. Relying on historiometric procedures, the authors gave a 600-word profile of each of the presidents to a sample of 117 raters that were then evaluated using the PPS developed by Bateman and Crant (1993). The raters were not aware of the goal of the study, nor did they knew that the profile descriptions were referring to the presidents. Then, the authors collected independent ratings of charismatic leadership

style and performance ratings from five archival data on separated previous studies. On the overall, the hierarchical linear regression analysis supported the predictions that presidential proactive personality is positively associated with charismatic leadership and rated performance of the past presidents.

In the same line, Crant and Bateman (2000) empirically tested the hypothesis that proactive personality is related to supervisor ratings of charismatic leadership and in-role behavior. In a sample of 156 managers, the authors collected self-rating measures of proactive personality and had their supervisors rating their charismatic leadership with a 25-item instrument and in-role performance with a 7-item scale. The results evidenced that self-rated proactive personality is positively related to supervisor ratings of charismatic leadership above an beyond an array of control variables. This study corroborates in a sample of working managers the results previously obtained by Bateman and Crant (1993) where MBA students' proactive personality was found to be positively associated with peer nominations of transformational leadership.

Proactivity has also been studied in the context of entrepreneurial activity. In a study with a sample of 215 small company presidents, Becherer and Maurer (1999) found that a company's president proactivity disposition was related to the behaviors of starting rather than buying or inheriting a company, the number of startups founded, and the change in sales of the firm (i.e., company growth). The author see these results as reflecting the evidence that proactive presidents influence their businesses performance by creating organizations that scan for opportunities and take an aggressive approach to the market, thus actively shaping their firm's environment. This study confirmed the initial findings of Crant (1996) who found in a study with a sample of MBA students that proactivity is related to entrepreneurial intention, in a way that the proactive personality of the students significantly explained intention to own one's business even

after controlling for relevant variables such as gender, education, and having an entrepreneurial parent.

Even at the team level, evidence has also shown that proactivity can vary wide across an organization. Kirkman and Rosen (1999) had team leaders rating their team's proactivity based on a transformed short-version of the PPS and related team proactivity with a set of team performance measures. At the team level, teams are proactive when they seek continuous improvement, revise work processes and find innovative solutions to work problems, so that one should expect team proactivity and team performance to be positively related. In congruence, the authors found that team proactivity was significantly and positively related to team productivity (r = .43) and customer service quality (r = .35), as rated by the respective team leader.

Fostering proactivity in organizations

The growing evidence of the important positive role of proactive behavior for organizational outcomes has called attention to the need to further investigate the factors that promote proactivity in organizations. According to recent research on the topic conducted by Parker, Williams, and Turner (2006), both personality characteristics (e.g., self-efficacy) and situational features (e.g., job autonomy) can be deemed as factors influencing proactive behavior in organizations. In addition, research has also investigated the cognitive-motivational processes that underlie the mechanisms through which these antecedents impact proactive behavior, such as control appraisals and change orientation.

In the study of Frese and colleagues (1996) that analyzed personal initiative amongst East and West Germans, employee perceptions of work regarding their job

autonomy and discretion predicted changes in levels of personal initiative. More autonomous and discretionary jobs were related to increased personal initiative. In fact, the importance of job autonomy for employee well-being and productivity has long been acknowledged in organizational psychology (Hackman & Oldham, 1980) and in more managerial literature in general (Gratton, 2004; Lawler, 2003). Gratton (2004), for instance, argues that employees need to freely choose their way if they are to develop a sense of autonomy and engage in true adult-to-adult relationships with their organization. As defended by Lawler (2003; pp. 142), "One single defining characteristic must be present for the condition of responsibility to exist – autonomy." This autonomy is the root of the desired accountability that employees should have for the decisions they make and responsibility has been empirically confirmed as one of the drivers of proactive behaviors such as taking charge (Morrison & Phelps, 1999). In addition to job autonomy, task clarity is deemed to relate to proactive behavior in organizations. In a study investigating newcomers' socialization, Morrison (1993b) found that role clarity, considered as the perceived clarity of performance standards, was related to proactive newcomer behaviors such as referent information seeking and performance feedback seeking.

At an organizational level, Bateman and Crant (1999) devised four main organizational features that are determinant to generate proactive behavior in work settings. The first of these is *employee selection*. Because individuals differ in their proclivity to engage in proactive behavior, organizations can make a systematic effort to select those that score higher in proactive personality, whether it is assessed via self-reported measures or the analysis of past behavior. The second organizational feature is *training*. Because proactive behavior is a result of basic skills such as planning and opportunity identification, that can be nurtured and developed in individuals, training

programs can contribute to proactive generation in organizations. The third feature is labeled by the authors as *liberating*. It refers to all the efforts that the organization can do relax the often found overcontroling structures. Whether by allowing more freedom in job and organizational structuring for people to pursue their goals in creative and innovative ways or through a less autocratic and compliance-driven leadership style, organizations can enable people to liberate their proactivity in the workplace. Finally, the fourth feature is *inspiring and rewarding*. Even individuals with a proactive personality will ultimately exhibit proactive behavior as a consequence of the positive acceptance of their ideas. By rewarding or punishing proactive and exploratory actions on the part of employees, organizations are enhancing or depleting the chances that these individuals will engage in positive proactive behavior.

Despite this evidence of the impact of contextual factors in proactivity, personality can not be ruled out as a key determinant of proactive behavior. Following the findings of Frese and colleagues (1996) indicating the existence of a relation between job autonomy and personal initiative, it was found that this relation was dependent on (i.e., it was moderated by) the presence of employee self-efficacy (Speier & Frese, 1997). In other words, having more autonomous and discretionary jobs positively influenced proactivity for high self-efficacy individuals, but not for those with low self-efficacy. This demonstrates that both individual and contextual factors are intertwined in the production of proactive behavior and that individual personality aspects play an important role in proactivity generation.

Study One

In the remaining of this chapter, we present an empirical research that investigates the impact of the personality characteristics of optimism and pessimism on proactive coping. As discussed previously, optimism and pessimism have both been reported as potentially driving to positive (Scheier & Carver, 1985; Luthans, Youssef, & Avolio, 2007) and negative outcomes (Norem, 2003; Norem & Chang, 2002). This somewhat contradictory findings and theoretical elaborations can also be extended to a specific performance outcome: proactivity. The main goal of the following research was to help disentangle these seemingly contradictory theses by taking into account the role of hope.

The effects of optimism and pessimism on human behavior have been the target of considerable research but contradictory findings. Optimism, the generalized belief that good things will happen in the future (Scheier & Carver, 1985), is usually related with positive outcomes, such as higher achievement, increased perseverance and higher work motivation, coping with serious disease, and concern with health threats (Carver et al., 1993). This is because optimism is positively related with several proactive strategies such as active coping, planning, and deliberate seeking of social and emotional support (Scheier, Carver, & Bridges, 1994). One might therefore expect optimism to relate positively with individual proactive coping (Aspinwall & Taylor, 1997).

Nevertheless, the positive outcomes of optimism do not dictate that pessimism has detrimental consequences. On the contrary, research has found that pessimism can lead to positive outcomes, such as better academic performance, more supportive friendship networks and more progress towards personal goals (Norem & Chang, 2002). An explanation that has been advanced suggests that a pessimistic view of the world

leads pessimists to prepare for the adversities of the future, which makes them search in an anticipatory way for the resources and solutions they might later need for solving the problems and burdens they expect to face (Norem, 2003). Given so, we should also expect pessimism to relate positively to proactive coping.

In short, both optimism and pessimism may lead to increased proactive coping, which sounds like a clear contradiction. If optimism and pessimism constitute opposite sides of the same construct (Scheier et al., 1994), how can they lead to a similar effect on proactivity?

In this study, we test the hypothesis that these apparently contradictory effects are explained by the moderating role of hope. Snyder (2000) defined hope as the ability to define goals, find the pathways to achieve them, and motivate oneself to attain those goals. As such, hope includes both a motivational dimension (willpower), relative to how much one is willing to achieve certain goals, and a cognitive dimension (waypower), concerning how much one is able to formulate effective plans to achieve those goals (Lopez, Snyder, & Pedrotti, 2003; Snyder, Sympson, Ybasco, Borders, Babyak, & Higgins, 1996).

Because both optimism and pessimism refer to a generalized belief regarding future events, all things being equal, they should not necessarily lead to proactive behavior. Optimists, for instance, can become passive, and accept what might happen when they are in a difficult and uncontrollable situation (e.g., Aspinwall, Sechrist, & Jones, 2005). Pessimists, likewise, have long been associated with being passive due to the lack of the necessary agency to engage in exploratory behavior (e.g., Bryant & Cvengros, 2004; Malloy & Fyfe, 1980). As such, optimism and pessimism are no more than expectations regarding the future that may trigger proactive behavior in a more or less extent. Because hope, in the contrary, is related to the planning ability and

willingness to achieve certain goals, we hypothesize that both optimists and pessimists can become proactive when they are hopeful, but not when they are hopeless. In other words, we may put forth the possibility that hope moderates the relationship between optimism/pessimism and proactive coping.

In the remainder of this chapter we first present the rationale for these hypotheses and explain the research methods employed in this study. Then, we report the results and discuss them in terms of the hypothesis. We finish by outlining the major contributions of the study to the literature.

THEORY AND HYPOTHESIS

Proactive Coping

Aspinwall and Taylor (1997, p.417) defined proactive coping as the "efforts undertaken in advance of a potential stressful event to prevent it or to modify its form before it occurs". The bulk of research on coping focuses on how people cope with events that occurred in the past or are occurring in the present. Proactive coping represents a new development in coping research, dealing with how people cope in advance to prevent or lessen anticipated threatening events (Folkman & Moskowitz, 2004). This explains not only the scant research on the concept of proactive coping, but also the rapidly growing interest in the topic (Schwarzer & Knoll, 2003; Folkman & Moskowitz, 2004).

Proactive coping concerns actions that are aimed at uncertain challenging goals and growth opportunities, and can be considered as an effort to build general resources that facilitate promotion toward challenging goals and personal growth (Schwarzer & Taubert, 2002). It is distinct from anticipatory coping, which relates to a particular upcoming event. Proactive coping involves the accumulation of resources and

acquisition of skills not developed to address a specific stressful event, but rather to tackle general future stressful situations (Aspinwall and Taylor, 1997). Proactive coping is also different from reactive coping, which refers to the efforts to deal with past or present stressful events (Schwarzer & Knoll, 2003). As such, proactive coping is not preceded by a negative appraisal, as are other coping styles proposed in classical approaches (Lazarus, 1991; Lazarus & Folkman, 1984). Instead, it represents a positive approach to the coping literature, focusing not on people´s reactivity, but on their proactivity and exploratory behavior (Lopez et al., 2003). As Greenglass (2002) has stated, proactive coping is driven by a proactive attitude that reflects a relatively persistent personal belief in the rich potential of changes to improve oneself and one's environment.

Proactive coping involves the capability to anticipate and detect potential stressors (recognition), to initiate activities aimed at preventing or minimizing a recognized or suspected stressor (initial coping effort), and to acquire the necessary feedback to verify how the stressful event is unfolding, what the effects of the initial coping efforts on the stressful event may have been, and whether there is a need to expend further efforts (Aspinwall and Taylor, 1997). All these capabilities are advantageous because proactive coping leads, primarily, to resource accumulation and skill building in advance of any specific stressor. These capabilities are assumed to have an important role in explaining why proactive coping positively relates to certain outcomes, such as self-efficacy, less emotional exhaustion, more personal accomplishments and challenging views of stressors, and why it relates negatively with other variables, such as depression, self-blame, and procrastination (cf. Schwarzer & Taubert, 2002).

Solving an apparent contradiction: The moderating role of hope

The effects of optimism have stimulated considerable research (Armor & Taylor, 1998). Research has found that optimists are more likely to engage in active coping when faced with negative life events (Aspinwall & Taylor, 1992), and there remains little doubt that optimism correlates in some way with active coping strategies (Scheier, Weintraub, & Carver, 1986). Even in the revision on the LOT (Life Orientation Test) undertaken by Scheier, Carver, and Bridges (1994), which is the most extensively used scale to measure optimism, active coping has been fond to have a positive and significant correlation with optimism. Carver and Scheier's (1982) self-control theory explains the beneficial effects of optimism through the idea that optimism leads individuals to believe that further effort can be useful to attain their goals, making them take more active steps. This leads optimists to engage in more focused and active coping because their efforts are perceived to be productive (Carver & Scheier, 2003).

Despite these evidences, some studies have found that the relationships between optimism and proactive coping are not always straightforward. In a study conducted in the context of the Y2K bug problem, Aspinwall and colleagues (2005) have found that optimism positively predicted active coping with the problem. However, their results also evidenced that optimism predicted accommodative coping (i.e., accepting what is happening and "going with the flow"), particularly when damage estimates were perceived as high. They interpreted these results as an evidence that optimists rely more on secondary control-oriented coping (Rothbaum, Weisz, & Snyder, 1982) (i.e., changing the understanding of the situation and not having direct, personal actions to change the situation) as their appraisals of the magnitude and duration of potential problems increase. All in all, this study demonstrates that optimists might engage in more passive ways of coping, especially as problems get worse.

Whether dispositional optimism triggers active coping or promotes passive responses might thus depend on other factors. In the face of a material solution to the problem, the optimistic individuals from the Aspinwall and colleagues' (2005) research, seemed to demonstrate more passive (or accommodative) styles of coping. This is similar to the results of Scheier, Weintraub, and Carver (1986) that showed that when problems are perceived to be uncontrollable, optimists have been found to be more likely to disengage from active problem-solving and more passively accept the situation. Because hope is related to the individuals' ability to develop new goals and pathways to achieve those goals, we hypothesize that hope can help us to understand when does optimists engage in proactive coping behaviors and when they opt to accept what is going on. Specifically, we hypothesize that:

H1: Hope moderates the relationship between optimism and proactive coping in a way that this relationship will be stronger when hope is higher.

Pessimists have sometimes been assumed to be passive and contemplative individuals who cope through open denial and mental and behavioral disengagement from goals (Carver & Scheier, 2003; Scheier, Carver, & Bridges, 1994). As such, pessimism is often linked with negative outcomes. However, research has also found that pessimism may have a positive impact on human functioning (Held, 2004). Norem (2003), for example, has pointed out that pessimism sometimes has positive effects. A kind of pessimism that Norem (2003) labeled as defensive pessimism has been shown to contribute not only to better academic performance, but also to supportive friendship building. Anxious defensive pessimists also make more progress on personal goals than anxious individuals who do not use defensive pessimism. This evidence demonstrates that pessimists are not always the passive and avoiding individuals that some research

has emphasized. This is in line with empirical research conducted by Chang (1996), who found that increased active coping in a sample of Asian-Americans was positively predicted by pessimism scores. This impact of pessimism on active coping may seem surprising given the same effect of optimism on active coping. Peterson and Chang (2003; p.71) have justified the positive effect of pessimism on active coping by asserting that these individuals "might use their pessimism as a strategy to think about potential negative consequences as a means to motivate themselves toward proactive behaviour". This is similar to what Snyder and colleagues (1996) have defined as the pathways dimension of hope.

As such, we can apply the same reasoning that we have used for optimism regarding the role of hope in promoting proactive coping. Specifically, we argue that, when in conjunction with high levels of hope, pessimism may trigger proactive coping as a way to prepare individuals for the expected negative future. In other words, we hypothesize that:

H2: Hope moderates the relationship between pessimism and proactive coping in a way that this relationship will be stronger when hope is higher.

METHOD

Sample and Procedure

Data were collected via questionnaire in a private work organization. Four hundred and ninety four questionnaires were sent by internal mail and collected personally with the help of an internal employee. Questionnaires were delivered and collected sealed in an envelope to guarantee total confidentiality. A total of 444 envelopes were collected (89,88%), of which 99 (22,30%) were returned blank and 345 (77,70%) were returned completed. Two of these questionnaires were eliminated due to

lack of response variability (i.e., they responded the same for all the questionnaire items). The final sample contained 343 valid questionnaires. Respondents were equally distributed in terms of gender, with 50,8% being female; 48% aged between 26 and 35 years, 29% between 18 and 25 years, and 6% percent were above 46 years old; 45% had completed high school (12 years of school), 37% had 9 years of school and 4% had at least an undergraduate degree.

Variable Measurement

Optimism and Pessimism. Optimism and pessimism were measured with the revised version of the Life Orientation Test (LOT-R) developed by Scheier, Carver, and Bridges (1994). LOT-R is a revised version of the original LOT scale (Scheier & Carver, 1985). The original version of the LOT consisted of 8 coded items plus fillers, and has been revised mainly because the optimistic and pessimistic item subsets often form two factors which are not always interrelated (Carver & Scheier, 2003). LOT-R comprises 6 coded items and 4 filler distracter items. Three of the nonfiller items are reverse-coded (negative). To compose a global measure of optimism, the three items (negative items) are thus reversed and added with the other nonfillers (positive items). LOT-R items on our questionnaire ranged from "Strongly Disagree" (1) to "Strongly Agree" (7). Substantive evidence has been collected both for discriminant validity of the LOT-R with closer constructs, such as anxiety, self-mastery and self-esteem, and for its reliability (Carver & Scheier, 2003; Scheier, Carver, & Bridges, 1994).

Hope. Hope was measured with the Adult Hope Scale (AHS) developed by Snyder et al. (1991), which is the most widely used instrument in assessing hope (Flores & Obasi, 2003). It is a self-report 12-item inventory designed for adults. We used a 6-point Likert scale ranging from "Definitely False" (1) to "Definitely True" (6). Four of

the items score on the agency dimension of hope whereas another 4 score on pathways. The remaining 4 items are distracters and should be ignored in the analysis. Agency and pathways scores can be averaged to yield an overall hope score. Reliability indexes such as the Cronbach alpha and the test-retest correlation, as well as discriminant validity analysis, have shown that the scale has good psychometric properties (Lopez et al., 2003).

Proactive coping. Proactive coping was measured with the Proactive Coping Scale (Greenglass, Schwarzer, & Taubert, 1999). The scale has 14 items that form a single dimension. We used a 6-point Likert scale ranging from "Completely False" (1) to "Completely True" (6). The proactive coping index is calculated by averaging the results of all the items. Research has shown that the scale has good psychometric properties concerning reliability. Validity testing has been confirmed with variables like procrastination and lack of accomplishment (Schwarzer & Knoll, 2003).

Analytic Strategy

Before performing the moderation analysis necessary to test the hypotheses, we analyzed the structural and discriminant validity of the independent measures. For structural validity, we first investigated the structural properties of the independent variables of hope and optimism and their respective subscales, as well as the structure of proactive coping, when considered alone. We then investigated the structure of hope and optimism when analyzed together and compared the goodness-of-fit of a series of alternative measurement models using confirmatory factor analysis (CFA). Following Bryant and Cvengros (2004), we compared four specific models: (1) a model with a single factor that included all the items from the optimism and hope scales; (2) a four-factor model including the subscales of optimism, pessimism, agency and pathways,

assuming that these are correlated; (3) a higher-order model in which a single factor underlies the covariance among the first-order factors of optimism, pessimism, agency and pathways; and (4) a higher-order model with two correlated second-order factors, the first of which underlies the covariation between the first-order factors of optimism and pessimism and the second of which underlies the covariation between the first-order factors of agency and pathways.

In addition to structural validity, we investigated the disciminant validity of optimism and hope subscales. In all these analysis, we started by imposing equality constraints on the factors interrelationships in order to test the strength of the relationships among the latent variables while controlling for the influence of the other. We then used structural equation modeling (SEM) as a way to compare the different model-fit indexes and test the significance of the differences for each of the inter-correlations. Using SEM also enabled the control of measurement error, thus improving the reliability of results.

To investigate the discriminant validity of hope and optimism scales, we used proactive coping and passive coping as two criterion variables in a regression model and observed the pattern of association between hope and optimism and the model-fit indexes in a series of nested structural equation modeling comparative analysis. In these analysis we imposed equality constraints on the regression weights between hope and the two criterion measures as well as between optimism and the two criterion measures. We then tested the nested models in a similar procedure to that used to investigate the validity of the optimism and hope subscales, as explained in the previous paragraph. This statistical methodology enabled us to test differences in convergent and divergent effects of the two scales and conclude about the empirical distinction between optimism and hope.

When evaluating the model's fit to the data we relied on both an index of absolute model fit (RMSEA: Root Mean Square of Error Approximation; Steiger, 1990) and an index of relative model fit (CFI: Comparative Fit Index; Bentler, 1990). Values for the RMSEA are acceptable up to .08 and completely unacceptable above .10. For CFI, a value of at last .90 has been proposed as necessary to consider an acceptable adjustment fit. In addition to these two kinds of model adjustment evaluation, there should also be an analysis regarding model parsimony. The most used parsimony fit measure is the χ^2/degrees of freedom ratio (χ^2/df). For this ratio, values up to 2 are considered good (Hair, Anderson, Tatham, & Black, 1998). According to some authors, however, χ^2/df values are considered unacceptable only above 5 (e.g., Klem, 2000). Equally important for determining the best measurement and structural models is the comparison between different models fit. This is done by testing whether the χ^2 value of one of the models is lower comparing to the fit of the other, taking in account the difference in the degrees of freedom. The significance of this difference is evaluated according to the chi-square distribution.

RESULTS

Structural Validity

Optimism. We tested two models regarding the LOT-R measure: (1) a single-factor model composed by the six valid items; and (2) two-factor model with the two first-order factors representing the optimism and the pessimism subscales, respectively. The two-factor model yielded very good fit indexes, with a χ^2 (8, 343) = 3.3, RMSEA = .01, CFI = .98, while the single-factor model revealed a very poor fit to the data, χ^2 (9, 343) = 90.6, RMSEA = .16, CFI = .63. The difference between the two models adjustment was significant, with a $\Delta\chi^2$ (1, 343) = 87.3, p>.05. These results strongly

support the two-factor character of optimism as measured with the LOT and is in concordance with previous investigations on this issue (David, Montgomery, & Bovbjerg, 2006; Kubzansky, Kubzansky, & Maselko, 2004; Marshal, Wortman, Kusulas, Herving, & Vickers, 1992; Mroczek, Spiro, Aldwin, & Ozer, 1993; Robinson-Whelan, Kim, McCallum, & Kiecolt-Glaser, 1997).

Hope. We tested two different models concerning the AHS: (1) a single-factor model composed by the eight valid items; and (2) two-factor model with the first-order factors representing the agency and the pathways subscales. The two-factor model revealed a significant better fit than the one-factor model, $\Delta\chi^2$ (1, 343) = 10.1, p<.01. For the two-factor model, the adjustment indexes were χ^2 (19, 343) = 91, RMSEA = .09, CFI = .91, while for the one-factor model the indexes were χ^2 (20, 343) = 101.1, RMSEA = .11, CFI = .89. These results support the bi-dimensional structure of hope found by Snyder et al. (1991) and confirmed in subsequent research (Bryant & Cvengros, 2004).

Proactive Coping. Regarding proactive coping, we equally tested two different models. We did this, because a previous Exploratory Factor Analysis (EFA)[1] yielded a solution with two main and interpretable factors. As such, we tested (1) a two-factor model with the first-order factors representing, respectively, the nine items from the proactive coping dimension and the two items from the passive coping dimension; and

[1] We conducted an EFA with the 14 items of the Proactive Coping Scale. This analysis yielded a three-factor solution explaining 57% of the total variance, KMO = .886, Bartlett's Test of Sphericity with a p<.001. The first factor (9 items) was clearly interpretable as proactive coping and explained about 34% of the variance. The second factor (3 items) was clearly interpretable as passive coping, including the three reversed items of the scale, and explained about 13% of the scale variance. The third factor included the reminder two positive items and were not included in the remaining analyses because they formed a different factor possibly identifiable as proactive coping and, as such, we opted to use the first factor because it was more explicative of the total variance and had a higher robustness due to the larger number of items. After performing a reliability analysis to the second factor structure we also decided to eliminate one of the items because it was lowering the total reliability index. At the end, passive coping was computed by considering the two following items: "I often see myself failing so I don't get my hopes up too high" and "When I have a problem, I usually see myself in a non-win situation".

(2) a single-factor model composed by all the eleven items. The results show that the two-factor model yielded acceptable fit indexes, with a χ^2 (43, 343) = 169.8, RMSEA = .08, CFI = .92, while the single-factor model revealed a mediocre fit to the data, χ^2 (44, 343) = 23.7, RMSEA = .11, CFI = .87. The difference between the two models adjustment was a significant $\Delta\chi^2$ (1, 343) = 146.1, p<.001. These results led us to include both the proactive coping and passive coping dimensions in the remaining analysis.

Optimism and hope analyzed together. Regarding the structure of hope and optimism dimensions when analyzed together, we tested the fit of each of the four models described above, in the analytic strategy section. The model with a single factor including all the items from the optimism and hope scales showed an unacceptable fit to the data, with a χ^2 (76, 343) = 309.6, RMSEA = .10, CFI = .80. The same was true for the higher-order model in which a single factor underlies the covariance among the first-order factors of optimism, pessimism, agency and pathways, that yielded a χ^2 (77, 343) = 309.6, RMSEA = .09, CFI = .80. In contrary, the four-factor model including the correlated subscales of optimism, pessimism, agency and pathways provided acceptable fit indexes, with a χ^2 (71, 343) = 183.9, RMSEA = .06, CFI = .93, demonstrating a significant improvement in adjustment to the data comparing to the single-factor model [$\Delta\chi^2$ (5, 343) = 125.7, p<.001] and to the higher-order, single second-order factor [$\Delta\chi^2$ (6, 343) = 125.7, p<.001]. However, the four-factor model did not differed from the higher-order model with two correlated second-order factors, one underlying the covariation between the first-order factors of optimism and pessimism and the other underlying the covariation between the first-order factors of agency and pathways [$\Delta\chi^2$ (1, 343) = 0.3, p>.05]. In fact, this higher-order model with the two correlated second-order factors also yielded an acceptable fit to the data, with a χ^2 (72, 343) = 184.2,

RMSEA = .06, CFI = .91. In the whole, these results support the assumption that hope and optimism constitute two correlated but separate constructs and allow us to rule out the chance that they constitute separated dimensions of an higher-order positive future oriented factor. At the same time, these results do not allow to conclude whether the two constructs of hope and optimism are a better explanation than their respective dimensions taken alone. This reinforced the need to check the discriminant validity of these scales and subscales to better investigate how much hope and optimism and their respective subscales constitute separate constructs.

Discriminant Validity

Discriminant validity of optimism and hope subscales. As previously pointed, we started by imposing equality constraints on the inter-correlations between four subscales of optimism, pessimism, agency and pathways, and testing the significance of those inter-relationships by comparing the model's fit using CFA. The analyses demonstrated that the optimism factor correlated equally with both the agency dimension (standardized correlations from the CFA ϕ = .76) and the pathways dimension (ϕ = .68), $\Delta\chi^2$ (1, 343) = 0.2, p<.05, while the pessimism factor correlated more strongly with agency (ϕ = -.27) than with pathways (ϕ = -.21), $\Delta\chi^2$ (1, 343) = 13.6, p<.001. This result is similar to that obtained by Bryant and Cvengros (2004) and is an evidence of the discriminant validity of the optimism and hope subscales. It also demonstrates that the AHS and LOT-R measures have most in common their components of pessimism and agency and that the pessimism subscale is not structurally associated with the pathways subscale.

Discriminant validity of optimism and hope scales. To further investigate if hope and optimism constitute two separate constructs or two dimensions of a single higher-order construct, we checked for the discriminant validity of the two measures. We used proactive coping and passive coping as two criterion variables and imposed equality constraints on the regression weights linking optimism and hope to the criterion variables. The analyses resulting from the nested model fit comparisons demonstrated that optimism correlated equally well with proactive coping (completely standardized γ = 0.18) and passive coping (γ= 0.12), $\Delta\chi^2$ (1, 343) = 0.5, p>.05, while hope correlated significantly more with passive coping (γ= 0.76) than with proactive coping (γ= 0.49), $\Delta\chi^2$ (1, 343) = 4.0, p<.05, thus showing a discriminant effect of the hope measure over the criterion variables.

Descriptive Results and Correlations

Means, standard-deviations and correlations between the variables are presented in Table 1. All correlations were statistically significant (p<.05). Pessimism correlated positively with passive coping (*r* = .38), negatively with the variables of agency (*r* = -.18), pathways (*r* = -.17), and proactive coping (*r* = -.16). Optimism correlated negatively with passive coping (*r* = -0.29), but positively with the mediating variables and proactive coping, with Pearson correlations of .51, .46, and .52, respectively, for agency, pathways and proactive coping. The correlations between proactive coping and the two hope dimensions were high (*r* =.70 for agency and *r* =.72 for pathways), but those between passive coping and hope dimensions were only modest (*r* = -.30 for agency and *r* = -.35 for pathways).

Although these associations raise concerns for the potential existence of multicollinearity between hope and proactive coping measures, they almost exclude that possibility regarding hope's relationship with passive coping. Supporting the results of the CFA, optimism and pessimism showed a low correlation (r = -.12) and proactive coping and passive coping also revealed a moderated correlation (r = -.57).

Table 5: Means, standard-deviations and correlations

	Mean	SD	1	2	3	4	5	6	7
1. Optimism (1-7)	5.48	1.03	(.65)						
2. Pessimism (1-7)	3.46	1.24	-.12*	(.56)					
3. Agency (1-6)	4.76	.67	.51**	-.18**	(.70)				
4. Pathways (1-6)	4.94	.67	.46**	-.17**	.64**	(.73)			
5. Hope (1-6)	4.85	.61	.54**	-.19**	.91**	.91**	(.82)		
6. Proactive coping (1-6)	4.79	.65	.52**	-.16**	.70**	.72**	.78**	(.88)	
7. Passive Coping (1-6)	2.69	.84	-.29**	.38**	-.30**	-.35**	-.36**	-.57**	(.70)

*p<0.05; **p<0.01

Hypothesis Tests

Following Baron and Kenny (1986), we run a series of stepwise multiple regression analysis to tested our moderation hypotheses. We conducted separate analysis for optimism (Table 2) and for pessimism (Table 3). For each of these variables, we first tested whether hope played a moderator role and then we repeated the process for agency and pathways separately. Taking into account the structure of the proactive coping scale organized in two different factors, we also separated the analysis regarding proactive coping and passive coping.

Contrary to H1 that postulates a moderating relationship between optimism and proactive coping, the results showed that entering the interaction in step 3 did not significantly improved the regression model for any of the hope moderators (Table 2). This was also true when considering passive coping as the criterion variable. The results also evidence that optimism significantly influences proactive coping in a positive way (β = .496; p<.001) and passive coping in a negative way (β = -.290; p<.001).

Table 6: Multiple regression analysis to test the moderating role of hope, pathways and agency, between (a) optimism and proactive coping and between (b) optimism and passive coping

	(a) Criterion: Proactive Coping								
	Hope			Agency			Pathways		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Optimism	.496***	.119**	.118**						
Hope		.705***	.704***						
OptimismXHope			-.004						
Optimism				.496***	.204***	.210***			
Agency					.575***	.587***			
OptimismXAgency						.053			
Optimism							.496***	.211***	.210***
Pathways								.618***	.610***
OptimismXPathways									-.035
R^2	-	.601	.601	-	.491	.494	-	.547	.548
R^2 Change	-	.550***	.001	-	.245***	.003	-	.300***	.001

*p<.05; **p<.01; ***p<.001

	(b) Criterion: Passive Coping								
	Hope			Agency			Pathways		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Optimism	-.290***	-.137*	-.136*						
Hope		-.286***	-.284***						
OptimismXHope			.010						
Optimism				-.290**	-.185**	-.189**			
Agency					-.208**	-.216***			
OptimismXAgency						-.027			
Optimism							-.290***	-.164**	-.162**
Pathways								-.274***	-.264***
OptimismXPathways									.045
R^2	-	.143	.143	-	.116	.118	-	.144	.145
R^2 Change	-	.058***	.000	-	.032***	.001	-	.059***	.002

*p<.05; **p<.01; ***p<.001

Table 7: Multiple regression analysis to test the moderating role of hope and hope, pathways and agency, between (a) pessimism and proactive coping and between (b) pessimism and passive coping

	(a) Criterion: Proactive Coping								
	Hope			Agency			Pathways		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Pessimism	-.275***	-.131***	-.130***						
Hope		.744***	.744***						
PessimismXHope			-.003						
Pessimism				-.275***	-.156***	-.146***			
Agency					.650***	.663***			
PessimismXAgency						-.046			
Pessimism							-.275***	-.159***	-.161***
Pathways								.689***	.687***
PessimismXPathways									.011
R^2	-	.608	.608	-	.484	.486	-	.536	.536
R^2 Change	-	.532***	.001	-	.408***	.002	-	.461***	.001

*p<.05; **p<.01; ***p<.001

	(b) Criterion: Passive Coping								
	Hope			Agency			Pathways		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Pessimism	.382***	.324***	.350***						
Hope		-.296***	-.276***						
PessimismXHope			-.101*						
Pessimism				.382***	.338***	.342***			
Agency					-.240***	-.234***			
PessimismXAgency						-.020			
Pessimism							.382***	.332***	.370***
Pathways								-.294***	-.269***
PessimismXPathways									-.157***
R^2	-	.230	.240	-	.201	.202	-	.230	.253
R^2 Change	-	.084***	.009*	-	.056***	.001	-	.084***	.023***

*p<.05; **p<.01; ***p<.001

In the opposite, the results showed a different pattern concerning the effects of pessimism (Table 3). Similarly to what happened with the optimism variable, hope and hope subscales did not evidenced to moderate the relationship between pessimism and proactive coping. However, for both hope and pathways subscales, the results do evidence a moderation effect when considering passive coping as the criterion variable. For hope, entering the interaction (Pessimism×Hope) in the equation produced a significant standardized beta value (β = -.101; p<.05) and a significant increase in the model explaining variance (ΔR^2 = .009; p<.05). For the pathways subscale, the interaction (Pessimism×Pathways) also yielded a significant explanation increment (β = -.157; p<.001) and a significant increase in the model explaining variance (ΔR^2 = .023; p<.001). Because this pattern of moderating effects did not happen for the agency subscale and is much stronger for the pathways subscale than for hope, we have reasons to conclude that the moderating effect obtained for hope mainly occurs via the pathways dimension. As such, we found evidence supporting the hypothesis that hope moderates the relationship between pessimism and proactive coping, even if it only occurred when measuring the passive coping dimension. However, contrary to what we were expecting according to some research (e.g., Norem, 2003), pessimism demonstrated a negative relationship with proactive coping (β = -.275; p<.001) and a positive relationship with passive coping (β = .382; p<.001).

To interpret the nature of this interaction effect, we conducted additional analyses on the conditions that seem to strengthen the relationship between pessimism and passive coping. We thus split-halved participants as either high or low in pessimism according to the variable median and repeated this process for hope and for pathways. We then run an ANOVA to compare the groups in each of the interaction effect between pessimism and, respectively, hope (Figure 1) and pathways (Figure 2). The

results evidence that the groups differ in terms of the level of passive coping with an $F(3,342)=25.79$, $p<.001$.

Figure 3: Interaction effect between pessimism and hope

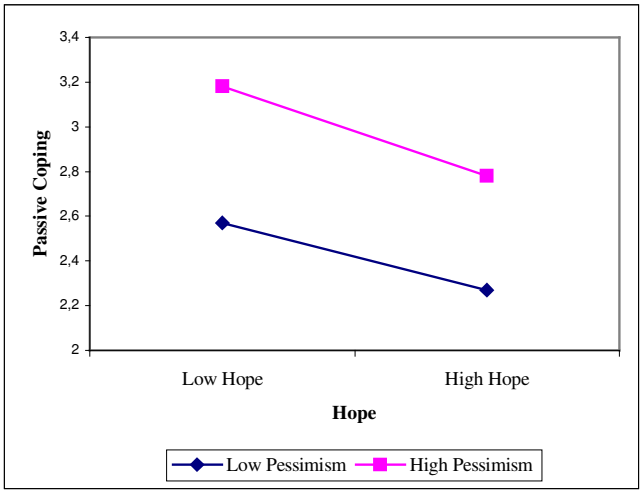
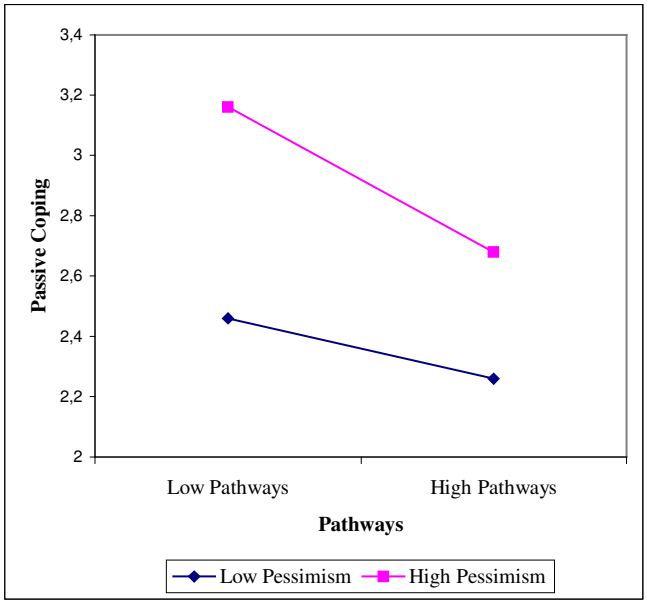


Figure 4: Interaction effect between pessimism and pathways.



The post-hoc analysis revealed that, regarding highly-pessimistic individuals, passive coping was significantly higher when they were low in hope (X=3.18; SD=.76) than when they were high in hope (X=2.78; SD=.87), p<.001. This was not the case for individuals with low pessimism, where having high levels of hope made only a marginal difference (X=2.57; SD=.09 *vs* X=2.27; SD=.07, p=.07). The results were similar but even more expressive in the case of pathways. These results show that passive coping was significantly higher for highly-pessimistic individuals when they were low in pathways (X=3.16; SD=.83) than when they were high in pathways (X=2.67; SD=.76), p<.001. However, for lower-pessimistic individuals this was definitely not the case, with the passive coping levels not differing significantly between the groups of high and low pathways (X=2.46; SD=.70 *vs* X=2.26; SD=.72, p=.30).

DISCUSSION

Earlier research efforts on the effects of optimism and pessimism have reached conflicting conclusions: both have been indicated as having a positive impact on proactive coping. Although related studies point to contradictory results, previous empirical research on proactive coping has never systematically examined the simultaneous impact of optimism and pessimism on proactive coping. Nor are we aware of any research that has tried to understand whether hope can be a moderator factor that explains these contradictions. This was the purpose of this research. To clarify this apparent contradiction, we tested the hypothesis that the simultaneous positive influence of optimism and pessimism on proactive coping could be explained by the moderating role of hope.

So, who is more proactive after all, optimists or pessimists? Our results evidenced that optimism is positively related to proactive coping while pessimism is

negatively related to proactive coping. As such, optimists seem to be more proactive. But how general is this conclusion? In the whole, the results from this study showed that this is a simplistic conclusion that requires further investigation. A deeper analysis from these results showed that the relationships between these variables are, in fact, much more complex.

In fact, we did not found evidence that hope moderates the relationship between pessimism and proactive coping, but we discovered that hope moderates the relationship between pessimism and passive coping, a dimension that emerged from the psychometric properties of the proactive coping measure. Specifically, the pathways dimension of hope, has revealed to be a strong moderator of the positive impact of pessimism on passive coping. These results can be interpreted in the light of the adaptive processes of the different coping strategies of optimists and pessimists.

The finding that the PCI scale seems to be structured in two separate dimensions (proactive coping and passive coping) also sheds some light over these differential coping strategies. The results showed that the predicting variables of hope did have a differential effect over these two criterion variables. This might be taken as evidence that what leads to proactive coping can be different from what makes individuals less passive. Being proactive requires a positive approach to exploratory behavior, while being less passive may result from a reactive stance towards a situation. The fact is that, according to our results, pessimism in the presence of hope, while not increasing proactive coping, did seem to reduce passive coping. This can be interpreted in terms of Norem's (2003) work on defensive pessimism. It can be the case that defensive pessimists reduce their passivity when they need to (e.g., when facing a threat), thus seeming to be more proactive, but only optimists truly engage in proactive coping. It is as if pessimists reduce their passivity only in the face of a threat or stressful event, while

optimists are constantly more proactive. As situations become perceived as uncontrollable, though, optimists may change to a secondary control effort (Rothbaum et al., 1981) and reduce their behavioral proactivity.

In sum, the results of this study are in line with the view that optimists and pessimists have different patterns of human adaptation. Optimists privilege primary control-oriented active coping that leads them to engage in proactive behaviors. However, in the face of uncontrollable stressors, they tend to turn to more secondary-oriented coping strategies, such as accommodative coping (Aspinwall et al., 2005). Pessimists, on the other hand, are naturally more passive and privilege secondary-oriented coping strategies but, in the face of a stressful event, may develop a hopeful state that leads them to avoid passivity and engage in primary-control coping. Although this shouldn't be equated as proactive behavior, some researchers interpreted this detachment from passivity as proactive coping, as is the case for the explanation of defensive pessimism (Norem, 2003).

Despite these interpretations, alternative explanations due to limitations of the study can be considered. First, we measured proactive coping and take it as a proxy of proactivity. Because subjects differed in terms of their optimistic and pessimistic traits, the relations we found may have resulted from a bias due to our reliance on a common method. In other words, the optimistic and pessimistic profiles of a person can bias the proactive coping assessment. Still, given the previous research on proactive coping as a style (not a behavioral set), our results are compelling. Second, our conclusions are also limited because we did not measure other coping styles that could be useful to understand whether pessimism and optimism also differ concerning other coping strategies. Schwarzer and Knoll (2003) have recently introduced other types of coping, such as preventive coping, which has to do with the efforts to prepare for uncertainty in

the long run. Investigating differential impacts of optimism and pessimism on different kinds of coping is needed and future studies should therefore use broader measures of coping styles. Finally, although we have thoroughly analyzed the structural and discriminant validity of the measures we used, some results are not as robust as we would like and error variances can still be present as a factor biasing our explanations. Still, we have done the possible to control error variance and we have ensured the reliability of our conclusions.

In spite of these limitations, though, we believe that this study has yielded significant new insights regarding the human functioning and adaptation of optimists and pessimists and has substantial contributions for both the research and practice of psychology.

Implications

Theoretically, in this study we found evidence that, as is the case of optimism and pessimism that constitute two separate constructs (Kubzansky et al., 2004), proactive coping can also be decomposed in their proactive and passive dimensions. True, the passive coping subscale was only constituted by two items, but the subscale reliability indexes were quite acceptable. Future measures of proactive coping should thrive to integrate more items representing this passive coping dimension.

In addition, the conclusions of this study further increase our knowledge on the coping strategies and adaptive processes of optimists and pessimists while allows us to understand a paradox identified in this literature. Because pessimists reduce their passive coping responses in certain situations and, at the same time, they do that by defining pathways to act, they were sometimes seen as proactive. However, pessimism

failed to evidence a positive relationship with proactive coping and hope demonstrated to function as a moderator of passive coping reduction regarding pessimism. This shed some light on a theoretical and empirical contradiction and advances a new possibility to understand the relationships between these variables.

The evidence that the relationship between pessimism and passive coping are moderated by hope are also significant for practitioners. Our results also indicate that the search for new pathways might prove to be a fruitful strategy to increase proactive coping when working with pessimistic individuals. Because the reduction of passive coping was particularly determined by the pathways dimension of hope, our results strongly reinforce interventions which are focused on the cognitive aspects of hope. Helping pessimistic individuals to find out new ways to achieve their goals can be deemed as an appropriate strategy to reduce the passivity many times associated with a pessimistic psychological viewpoint.

Finally, the fact that optimism, not pessimism, is the critical factor in influencing proactive coping also suggests valuable implications for practice. Research in psychology in general, and in social psychology in particular, has traditionally been unbalanced, emphasizing negative human functioning and stressing how to cope with dysfunctional processes. In line with a growing body of research, owing much to the call for a positive psychology (Seligman, 2003; Peterson, 2004; Seligman & Csikszentmihalyi, 2000) to study human and social processes, this study evidences the advantages of approaching practical challenges with a positive approach. The importance of optimism on proactive coping should encourage practitioners to de-emphasize the interventions aimed at changing negative expectancies, and to reinvigorate the work of the positive ones.

In summary, we have found evidence that optimism plays a major role in promoting proactive coping but, at the same time, we also found that pessimism can lead to reduce passivity when hope is present in an individual's psychological profile. This means that optimists and pessimists have different privileged coping and adaptive strategies. As such, we are not sure whether asking who is more proactive is the best question to ask. Instead, researchers might want to explore how each of them becomes more proactive in their turn, and make an effort to understand their differences on this respect.

Implications of Study One for the Research on Optimism in Organizational Studies

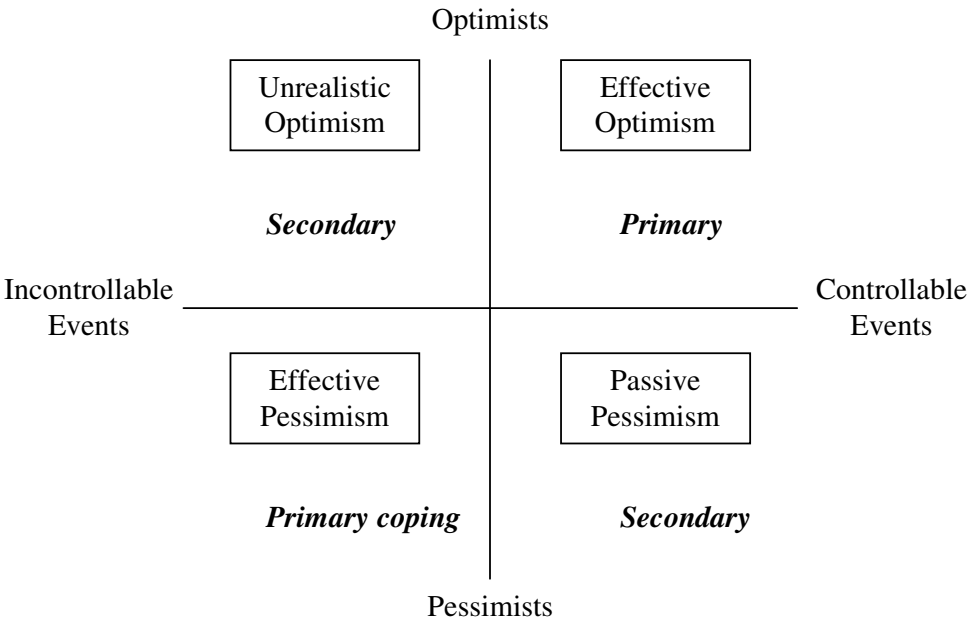
The findings from the present study have several implications for the literatures of optimism, hope, proactivity and positive psychological capital in organizations. The fact that optimism and pessimism play different roles in the process of human adaptation has both theoretical and practical implications for managing people in organizations.

Theoretical Implications

The main findings from the present field study can be graphically synthesized according to the Figure 1. The framework incorporates the idea that both optimism and pessimism can be effective and lead to proactive behaviors, but they can also be ineffective and conduct to passive behavior, as is the case of unrealistic optimism (Weinstein, 1980) and passive pessimism. Extending the interpretation of these results to the larger literature on coping strategies it seems that when challenged by controllable events, optimists engage in problem-focused primary coping strategies, evidencing high proactivity levels. In the same kind of events, pessimists reveal an high propensity to passive behavior. When facing more uncontrollable situations though, the coping strategies of optimists and pessimists seem to reverse. In this case, pessimism serves as a trigger to reduce passivity, somewhat increasing problem-focused coping, whereas optimism leads to a disengagement from active problem-solving and passive acceptance of the situation (cf. Aspinwall et al., 2005; Scheier et al., 1986). This idea that both optimism and pessimism might be predictors of proactive behavior through

different mechanisms and in different situations is a core and valuable implication of this research for the study of proactivity in organizations.

Figure 5: Optimists and Pessimists' adaptive strategies in controllable and incontrollable events



These considerations have important implications for the literature on positive psychological capital development in organizations (Luthans et al., 2007). Understanding how positive psychological capabilities impact on performance outcomes is important because of the assumption that these capabilities (including optimism, hope, self-confidence and resilience) create added value for organizations by generating a unique and distinct type of capital (Luthans & Youssef, 2005). However, because the majority of the studies have taken a partial capability-focused approach and have mostly measured a single positive psychological capability at a time (e.g. Luthans & Jensen, 2002; Peterson & Luthans, 2002), the literature has yet to explore how the different positive psychological capabilities interact with each other to generate positive

outcomes such as proactive behavior. The current study is a beginning in this major enterprise.

In the light of the conclusions of the current study, researchers should be aware that when analyzing a single psychological capability they must be cautious not to directly extend their conclusions to the more general construct of positive psychological capital. This is so, because the way in which positive psychological capabilities interact with each other may change their role in the psychological profile. An example from our findings is that, when in the presence of hope, pessimism can play a different role in reducing passive behavior.

As such, instead of looking to the positive psychological capabilities individually or as always having a positive effect in organizational outcomes, a configurationally approach might prove to be a good solution to understand the impact of psychological capital in organizational outcomes. In fact, whether positive psychological capital is a unidimensional or a multidimensional construct is still an issue to be empirically explored. Luthans et al. (2005), have found a single factor when empirically measuring the constructs of hope, optimism and resilience. But still they did not discard the possibility and advantage of analyzing each psychological capability in its own. The conclusions of the current study reinforce this need to make a systematic configurationally analysis of positive psychological capital, that includes the analysis of the overall construct of psychological capital, of each of the capabilities and of the inter-relations between these capabilities.

A final theoretical implication of the conclusions drawn from the current study refers to the research on pessimism and defensive pessimism. Though often taken as a negative psychological state, mot of the times implicitly, pessimism can play a positive role in creating adaptation behaviors in organizations. In fact, following Fredrickson's

(2003) evolutionary claims that positive emotions must play a positive role in human evolution and survival, the same evolutionary principles can be applied here. Using this naturalistic claim, if pessimism has survived up to nowadays, it probably has an important role in human adaptation and survival. The theoretical framework that was built on the implications of the present study helps to understand the role of pessimism in maintaining primary coping behaviors, particularly in perceived uncontrollable situations where optimism might lead to an unrealistic behavioral disengagement. In this cases, organizations might profit from having pessimistic individuals that engage in active behaviors (even if in a reactive way) and help these organizations to prepare for potentially negative situations in the future, just like defensive pessimists do (Norem & Chang, 2002; Held, 2004).

Practical Implications

The framework depicted in Figure 1 and the theoretical implications just discussed also have important practical implications for organizations. First, the fact that optimists and pessimists might have different coping strategies and different proactiviy triggers (i.e., perceived controllable *vs* incontrollable events) means that differential interventions should be aimed at individuals differing regarding this personality characteristic. In particular, personal skills and organizational practices regarding the development of the pathways dimension of hope (the "waypower"), such as scenario planning and work planning participation (Luthans & Youssef, 2005; Gardner & Schermerhorn, 2004), should be implemented to induce pessimists to avoid their passivity, mainly in the presence of perceived uncontrollable events. On the other hand, optimists should be prepared to avoid unrealistic optimism in the face of perceived uncontrollable events. They should be trained to detect situations where they

are accommodating to a positive expectancy that is not based on real evidences, engaging in an unrealistic optimistic state that can ultimately lead to their passivity in the face of potential threats.

Of course training optimists and pessimists to overcome the flaws of their personality tendencies is one of the routes to reduce the negative effects of their psychological characteristics. In fact, other organizational factors might prove to be crucial in promoting proactivity in both optimists and pessimists. This is the case of leadership. Leaders should have a main responsibility in promoting proactive behaviors by nurturing effective optimism and pessimism in their followers. Authentic leaders (Luthans & Avolio, 2003) are those who focus their action in developing the strengths of their workers and promoting self-awareness regarding both their strengths and weaknesses. These leaders should be able to identify the psychological traits and states of their employees and provide them with the necessary coaching in order to foster proactivity and reduce passive behavior. In addition, authentic leader act as role models for their workers (Iles, Morgeson, & Nahrgang, 2005) and, as such, they too should be able to demonstrate the ability to avoid passive pessimism and unrealistic optimism.

In sum, given the importance of proactive behavior in the contemporary business and societal context, both for organizations and for employees, the current study was designed to try to disentangle the contradictory previous conclusions about the role of optimism and pessimism in leading individuals to proactive action. While supporting the thesis that optimism does relate positively to proactive coping, the results of this study also showed that pessimists can overcome their passivity in the presence of hope, particularly the pathways dimension of hope. When integrated in the broader literature of coping and proactive coping, these results suggest that both optimism and pessimism can play a constructive role in leading employees and organizations into action,

evidencing that an individual level of analysis may fall too short in our understanding of how more and less optimistic people relate to others to produce proactive action (e.g., proactive problem-solving) that positively impacts the organizations' outcomes. For that reason, we advanced into a second empirical study that is presented in the following chapter of this thesis.

CHAPTER 5

THE SOCIAL NETWORKS OF OPTIMISTS AND ALTER-OPTIMISTS

Approaching organizationally-relevant behaviors such as proactivity and positive psychological capabilities such as optimism, only at an individual level, can lead into limited views of the role of these behaviors and psychological capabilities in organizations (Klein & Kozlowski, 2000). In line with this, some scholars have recently called attention to the advantages of investigating the interpersonal relationships that underlie the emergence of positive behaviors such as positive psychological capabilities and proactive behavior (Dutton & Ragins, 2007). This chapter analyzes optimism and some specific proactive behaviors (e.g., discussing innovation issues) with a relationship lens. Instead considering and operationally measure optimism as a personality characteristic, the empirical study reported here focus on the impacts of "optimistic relationships" in innovation-relevant proactive behaviors.

The chapter unfolds as follows: first, we assert the importance of social network research as an operational approach to understand relational phenomena, both at the inter-organizational and the intra-organizational levels; next, we briefly overview the rationale for the empirical study reported in this chapter; we then present the study and conclude with an outline of the major contributions and implications from our findings.

Social Networks in Organizational Studies

It is a consensual issue that network research is gaining its momentum in management research (Borgatti & Foster, 2003; Kilduff, Tsai, & Hanke, 2005). This increasing interest in understanding the role of social networks for organizations is removing both researchers and practitioners away from either individualistic or

atomistic approaches towards a more relational and systemic framework in order to better understand behavior in and of organizations.

In part, this growth in organizational networks research is due to a more general transformation in society and in the business world. Particularly after the 1980's, the economy has been changing towards a more global system, increasing the competitiveness in business environments and producing turbulent markets (Miles & Snow, 1992). These contextual and organizational transformations have had significant implications for both inter-organizational network relations, and intra-organizational and inter-personal network relations. We exemplify each of these streams of research in the following paragraphs.

Inter-firm Network Research

During the last decades, organizations have progressively been challenged by the inefficiencies of their traditional hierarchies and have come to recognize the advantages of the "network organization" to meet the flexibility requirements of this new socio-economic model (Eccles, 1981). As a result, the current hyper-competitive environment has increased the frequency of interorganizational relations resulting in actions such as establishing new joint ventures and other types of inter-firm alliances so that organizations can entry in other markets, obtain important knowledge from a partner or internationalize the business, without increasing the risks and costs with associated to their investments (Gulati & Gargiulo, 1999; Van Gils, 1998).

Within this line of reasoning, some authors have proposed the "hub firm" has essential for the innovation processes in organizations. The hub firm is one that is prominent and powerful in its context given its central position in the network structure

and its individual attributes (Dhanaraj & Parkhe, 2006). Hub firms use this power and prominence in order to assume a leadership role in pulling together the dispersed resources and capabilities of the network members. Research has shown that these organizations play a key role in promoting innovation for both the networks in which they are embedded and for their own innovation outputs.

Ahuja (2000), for instance, has examined the relationship between the firms' position in the chemicals industry inter-firm collaborative networks and the organizations' innovation outputs, as measured by the number of successful patent applications. They found that both direct ties (measured by the number of direct partner of the focal firm) and indirect ties to other partners (as measured by indicators as the number of direct partners of the focal firm's partners) positively influenced the innovation outputs. Ahuja (2000) concluded that direct and indirect ties differ in the nature of the benefits they offer to organizations. Whereas direct ties provide both resource-sharing and information-spillover benefits, indirect ties provide only information-spillover benefits. All in all, this study clearly evidences that a firm's position in a network of same-industry organizations is predictive of that firm's innovation outputs.

These impacts of network positioning on innovation might well mirror the effects of network alliances in inter-organizational knowledge-sharing. Mowrey, Oxley, and Silverman (1996) investigated how inter-organizational collaboration changes the relationship between the firms' technological portfolios and those of their partners. They used the citation of a firm's patents in the other firms' patents as a measure of knowledge-sharing and found that: (1) equity ventures were more effective in conducting to the transfer of complex capabilities than contract-based alliances as licensing agreements; (2) lower levels of transfer occurred in unilateral contracts than in

bilateral arrangements. These results strongly support that a firm's non-hierarchical network relations are fundamental for knowledge-sharing, resulting in positive organizational outputs (Kogut, 2000).

The benefits of the network relations with other organizations have also been found among startup firms. Baum, Calabrese, and Silverman (2000) analyzed 369 Canadian biotechnology startup firms and found evidence that the differences in the alliances that these firms configure at the time of their founding significantly explain their latter differences in innovative performance, as measured by the startup's patenting and R&D spending growth. The number of upstream and downstream alliances that these startup firms established in their founding moment were clearly predictive of their initial performance level, thus evidencing the advantage of managing organizational networks from the beginning of a new venture.

There is no doubt thus that network research has already started to gain prominence in organizational studies. Not only a network framework of analysis provides an adequate lens to read most of the work and resource flow of today's business world, but it also has gotten some empirical confirmation. Because many of these linkages between organizations are also established through individuals (as well as determined by internal network functioning processes), we now describe relevant literature on these individual and intra-organizational relations.

Individual and Intra-firm Network Research

Research on social networks has also consistently found evidence of the impact of social network functioning on organizational, team and individual performance. Sparrowe, Liden, and Kraimer (2001), for instance, have used social network analysis

procedures to analyze the impact of the individuals' social network centrality (advice networks) on performance outcomes (both in-role and extra-role performance). They found that the individuals with higher centrality in their social networks (i.e., being highly reported by others as someone they would ask for advice) had higher levels of in-role and extra-role performance, as rated by their direct group leader. This means that group members who are more central in providing advice are rated more positively on individual performance. Sparrowe et al. (2001) could not rule out the possibility that these individuals do perform better and are thus more sought out for advice, but still the relationship between social network centrality and individual performance is an evidence.

Social networks also play a crucial role for individuals and organizations in processes such as negotiating initial salaries in new jobs. Seidel, Polzer, and Stewart (2000), for instance, have hypothesized that having a contact within an organization results in a higher wage benefit in salary negotiation for job candidates. This may result from having directly the social contact actively campaigning in the candidate's favor. In addition, the fact that the job candidate is known by someone in the organization might enhance trust in the candidate's potential and competence. It can also be the case that employers find this situation to facilitate the new employee's acculturation. Using a sample of 3,062 external job applicants database, Seidel and colleagues (2000) have confirmed the hypothesis that having a contact does enhance the job applicant's entry salary. They also found that this "network tie effect" actually accounts for the reported racial discriminations in the salary negotiation outcomes, as minorities were less likely than majority members to have that network tie.

Still within the individual's benefits, the role of social resources in the status attainment process has received significant attention in the literature (Lin, 1999). Lai

and colleagues' (1998), for example, have studied a representative sample of employed males in a metropolitan area of New York and have demonstrated that an individual's network resources provide the context in which social resources can be activated for searching a new job. In particular, their study confirmed that individuals with a resource-rich network are more likely to contact a resource-rich person during job search and that these contacts have a significant direct effect on status outcome.

The benefic effects of social networks in organizational processes are at least as evidence as it is for individuals. In a research conducted by Ibarra (1993), with a sample of 94 full-time employees from an advertising and public relations agency, the social network position of individuals was found to predict involvement in both technical and administrative roles. In particular, the centrality of individuals in the social network of the agency, as measured by questions regarding with whom participants discuss ongoing issues, get advice, get support, tried to influence, and were fiends, was more important for administrative than for technical innovation. Because these social networks were tapping the informal structure of the organization, the author interpreted these results as suggesting that this informal structure plays a critical role in explaining innovation effects of organizations.

The effects of these informal social network positions on perceptions of social influence and promotions to the supervisory level were also evidenced in a now classic study conducted by Brass (1984). In this research, conducted with a sample of 140 non-supervisory employees of a newspaper publishing company, the centrality of individuals within the communication workflow and friendship networks, was strongly related to the employee social influence as rated by the perceptions of both supervisors and non-supervisors. This study thus evidence the positive impact of occupying certain social network positions for individual benefits.

In another study conducted by Borgatti and Cross (2004) using social network analysis in a group of 37 information scientists and another group of 35 researchers, the authors have found that (1) knowing what the other colleagues know, (2) valuing what the colleagues know in relation to one's work and (3) being able to access the other person's thinking, are crucial factors to predict information seeking in organizations. This research by Borgatti and Cross (2003) is a landmark in evidencing that the knowing element (i.e., the cognitive memory factor) is important in determining the acquisition and leverage of information. This, of course, it linked to the major importance that knowledge management and the transfer of knowledge between organizational members is gaining in the management literature (Inkpen & Tsang, 2005).

In addition to these evidences of the benefits of social networks for individuals and for organizations, some evidence also exists regarding the impacts of group-level network effects on working groups. In a study of 182 work groups in a global organization, Cummings and Cross (2003) have found that a team's structural properties influence group performance as measured by a panel of senior managers. Specifically, teams with more hierarchical arrangements (i.e., centralized communication channels), teams with a well defined core-peripheral structure (i.e., with a dense, cohesive core and a sparse, unconnected periphery), and teams with leaders creating high structural holes within the team members (i.e., teams with reduced member-member connectivity in order to allow the leader to take advantage of informational and power benefits of non-redundant ties), all related negatively with the senior managers' performance evaluations, even after controlling for the mean levels of group communication.

Regarding the impact of group structural properties on group performance outcomes, the study of Cummings and Cross (2003) is in line with a previous research

designed by Reagans and Zuckerman (2001) to investigate the role of team member ties in explaining the influence of team diversity on team performance. In this other study with 224 corporate R&D teams, Reagans and Zuckerman (2001) found that tenure homogeneity negatively correlated with team performance while, at the same time, teams with higher within-density also performed better. The literature on team diversity has sometimes advocated the idea that because heterogeneous members do not communicate as frequently as homogeneous members, team diversity might become hazardous for team functioning, but this study shows that this is not the case. It evidences that team diversity and density might co-exist in the same team and co-contribute to the team performance output. All in all, these studies do show that investigating the social network processes of teams can prove to be an advantage to better understand team functioning and performance.

The studies described above leave no doubt that organizational and social network research are gaining importance in organizational literature. As we have stated, this is linked to the adequacy of network approaches to better understand current organizational environments in a global and internationalized business world. By better understanding how social networks really work inside organizations and teams, those who are in charge of management can gain a clear advantage in designing high-performance teams and organizations. The empirical study reported in this chapter is our contribution to this general goal.

Study Two

In this second study, we relied on social network analysis methods and opted for a research design that allowed us to extend what we know about optimism beyond the

individual level. As such, instead of focusing on the optimism levels of the individuals as the literature regarding optimism has privileged up to now, we analyzed the optimism levels of the participants' counterparts when interacting with them. In other words, we used social network analysis to study the effect of "good vibrations" (i.e., the capability to induce optimistic psychological states in other) among individuals in a social group. By doing this, we have followed a very recent approach in management that is calling for further research on the topic of positive relationships at work (Ragins & Dutton, 2007).

In the same line, instead of analyzing the proactive behavior of the participants, we have focused on the impact of the induced optimistic psychological states on organizationally-relevant proactive behaviors such as proactive problem-solving and innovation-seeking. It is truth that, because these behaviors are induced by others, we may question if they are actually proactive behaviors (cf. Crant, 2000), but taking a person-environment interactional perspective (Parker et al., 2006) this is perfectly acceptable as indicator of proactivity.

In sum, in this second empirical study we investigated how the capability to induce optimistic psychological states (or "good vibrations") in others relates to their proactive behaviors of problem-solving and innovation-seeking in relation to the optimism inducing individual. We thus analyzed this issue from the point of view of the optimism inducing individual (or "alter-optimist", as we will call these individuals) as an attracting individual. We now turn to the presentation of the study and discuss its implications for research on optimism in organizational studies at the end of the chapter.

Research on optimism has long evidenced its positive impacts upon individuals and organizations (Luthans, Youssef, & Avolio, 2007; Armor & Taylor, 1998). In fact, optimism has been shown to have a positive impact on individual variables such as

psychological and physical well being, health protective behavior (Scheier, Matthews, Owens, Magovern, Lefebvre, Abbott, & Carver, 1989), friendship network size (Brissette, Scheier, & Carver, 2002), and organizational outcomes, such as higher work performance (Luthans, Avolio, Walumba, & Li, 2005) and sales performance (Seligman, 1998).

The importance of optimism for these individual and organizational outcomes has increasingly shifted scholarly attention to the conditions and mechanisms that can enhance optimism in work settings (Luthans, 2002a; Gardner & Schermerhorn, 2004). Luthans, Avey, Avolio, Norman and Combs (2006) presented a specific micro-intervention designed to increase the psychological capital (including optimism) levels of employees. Other guidelines for optimism enhancement have been proposed, such as promoting mastering experiences (Bandura, 1997) and helping employees to manage how they attribute self and external causes to their success and lack of it (Luthans & Youssef, 2004). Along with these individual strategies, leadership has also been pointed to as a potential influential factor in promoting optimism in organizational settings, particularly what has been termed "authentic leadership" by Luthans and Avolio (2003).

Despite the identification of these determinants of optimism, the literature on optimism enhancement has yet to explore how interpersonal relationships can induce optimistic states in individuals. An interpersonal relationship level of analysis seems to be a powerful lens for investigating optimism enhancement in organizational settings because positive relationships at work have been addressed as a key "source of growth, vitality, learning, and generative states of human and collective flourishing" (Ragins & Dutton, 2007: p.7). This relational level of analysis is present in several research domains in topics as diverse as high-quality connections (Dutton, 2003), energizing

networks (Cross & Parker, 2004; Cross, Baker & Parker, 2003), and meaningful connections (Kahn, 2007).

In a similar vein, we argue that optimism can also be enhanced through interpersonal relationships. There is a well established literature in psychology concerning the emotional contagion that occurs when people interact with one another (Hatfiled et al., 1993; Hsee, Hatfield, & Carlson, 1990). This research has provided strong evidence that people tend to display and experience other people's emotions. Several explanations have been advanced to explain this phenomenon. Research on the "feeling good-doing good" framework (George & Brief, 1992) has found evidence that personality traits such as positive affect are positively associated with corresponding affective tones in social interactions (George, 1996), which in turn enact similar feelings in their alters. George (1996: 84), for instance, has asserted that those "who feel excited, enthusiastic, and energetic themselves are likely to similarly energize their followers". Therefore, all things being equal (e.g., having different individuals with the same information, skills and power), people should seek to interact primarily with those who make them feel more positive emotions, as is the case of those "contaminating" others with their high optimism levels.

In this chapter, we introduce the concept of alter-optimism to refer to this capacity to induce optimistic psychological states in others through interpersonal relationships. In addition, we empirically explore whether these optimism enhancing relationships have an impact in the advice-seeking, problem-solving and innovation networks. First, like optimism itself and other positive psychological capabilities, alter-optimism becomes organizationally-relevant only if we find evidence of its impact on organizational processes and outcomes (Luthans at al., 2007). Second, we chose these social networks as good indicators of organizational effectiveness based on the

recommendations of Cross and Parker (2004), who have considered advice-seeking, problem-solving and innovation networks as some of the best measures of the effective functioning of organizations. There is also clear evidence of the importance of problem-solving networks on innovation in organizations (Rickards & Moger, 2006), with problem-solving being considered a creativity skill driving to innovation (Amabile, 1988).

As such, the goal of this paper is to study if the capability of individuals to induce optimistic states in others, influences the features of advice-seeking, problem-solving and innovation networks. With that purpose in mind, we first discuss the pertinence of the construct of alter-optimism and then present empirical data regarding the effects of alter-optimism on the features of advice-seeking, problem-solving and innovation networks. We conclude by discussing theoretical and practical implications of our findings.

DEVELOPING THE CONCEPT OF ALTER-OPTIMISM

Optimism refers to the generalized belief that good things will happen in the future (Scheier & Carver, 1985). Sometimes regarded as a personality trait (Scheier, Carver & Bridges, 1994; Scheier & Carver, 1985), some authors have come to consider optimism as also incorporating a state-like character (Peterson & Chang, 2003; Peterson, 2002), in the sense that it is difficult to deny that even a very optimistic person might feel less optimistic sometimes. The acceptance of optimism as a state-like psychological variable is important as it implies the possibility of temporarily influencing the state of mind of a person regarding optimism (Luthans, 2002a, 2002b).

We focus on one of these possibilities, which is to enhance optimistic states through positive relationships at work. Positive work relationships, such as high-quality

connections (Dutton, 2003), have been confirmed to constitute a main driver of positive psychological states. Ragins and Dutton (2007: p.9) define positive work relationships as "a reoccurring connection between two people that takes place within the context of work and careers and is experienced as mutually beneficial, where beneficial is defined broadly to include any kind of positive state, process, or outcome in the relationship". Though dispersed through several literatures, positive work relationship studies have greatly benefited from research on high-quality connections (Dutton, 2003; Dutton & Heaphy, 2003). A connection is the dynamic that exists between two people involving mutual awareness and social interaction (Berscheid & Lopes, 1997). Based on the concept of connection, Dutton and Heaphy (2003) have defined high-quality connections as those between two people that are marked by vitality, mutuality and positive regard. Thus, high-quality connections are a particular kind of connection focused on the improvement of individual positive states.

The capability to enhance positive psychological states through high-quality connections may include the positive psychological states of optimism. This means that while interacting with others, individuals can induce optimistic states of mind in their counterparts, through the establishment of positive work relationships. This is also similar to what has been researched in the field of energizing relationships (Quinn, 2007). Research on energizing relationships has shown that employees may vary regarding to how much they are able to get others to act or, as they say, to feel energized (Cross & Parker, 2004). In the context of leadership, these authors have distinguished energizing leaders from de-energizing leaders, by evaluating how they typically affected others' energy levels. They found that energizers were better at getting others to act on their ideas, such as garnering support for initiatives and persuading clients to purchase a service or product. De-energizers – those rated as making others' energy levels drop –

had an energy-depleting effect on the social networks, thus adversely affecting positive organizational outcomes.

Based on this work on positive relationships, as high-quality connections and energizing relationships, we define alter-optimism as the capacity of an individual to establish a positive work relationship with another person in a way that will increase that person's states of optimism. We distinguish between individuals high and low in alter-optimism. Research has distinguished energizers from de-energizers based on how much psychological energy they can trigger in others (Cross & Parker, 2004; Cross, Baker, & Parker, 2003). In a similar vein, individuals can also be deemed as high or low in how much they are able to induce optimistic states of mind in others.

THE EFFECTS OF ALTER-OPTIMISM

Both the literature on high-quality connections and that on energizing relationships have stressed several implications for the social network impacts of those who establish positive relationships at work.

Individual and organizational benefits have been advanced regarding the impact of high-quality connections (Dutton, 2003; Dutton & Heaphy, 2003). Individual benefits include employee feelings of energy, zest and vitality after engaging in these types of relationships. There is also evidence that employees who have more high-quality connections demonstrate higher resilience at work (Sutcliffe & Vogus, 2003). Organizational benefits include higher levels of organizational identification and commitment from employees. As Dutton and Heaphy (2003: p.269) pointed out, "In a high-quality connection, a member may receive discretion and development from a leader, and in return, a leader may receive strong commitment and high effort from the

subordinate". In addition, high-quality connections also help to explain how people attain innovative and extraordinary results (Gittell, 2003).

Similar findings have been reported regarding energy relationships. Energizers tend to occupy more central positions in social networks, which brings several implications for organizations (Cross & Parker, 2004). First, energizers are higher performers, even when controlling for the asymmetry of information. Second, energizers are significantly more surrounded by individuals who are also higher performers. This means that being an energizer brings benefits for both the individual and those around him. It also means that, because some individuals occupy more central positions in social networks, they play a fundamental role in promoting high-performance levels in organizations.

There is a body of literature evidencing the benefits of more central network positions for individual and organizational performance. In fact, there are several individual and organizational implications for the individuals that occupy central network positions as a consequence of their establishment of positive work relationships. In a study with four organizations reported by Cross and Parker (2004), the authors found that what distinguished high performers from average or low performers were the larger and more diversified personal networks of employees. The benefits of these social networks also extend to learning and innovation. In fact, people seem to turn much more to other persons for information than to impersonal sources of information, such as databases. According to Cross and Parker (2004: p.11) "whom you know has a significant impact on what you come to know, because relationships are critical for obtaining information, solving problems, and learning". There are many other studies in organizational research of how social networks' size and diversity can positively contribute to organizational performance (Borgatti & Foster, 2003), including

individual creativity (Perry-Smith & Shalley, 2003), individual performance (Mehra, Kilduff, & Brass, 2001; Sparrowe, Liden, Wayne, & Kraimer, 2001), team performance (Tsai, 2001; Hansen, 1999), and innovation (Miettinen, 2006).

In all this social network research, several network positions have been recognize as important regarding their impact on individual and organizational outcomes. Perhaps inviting the most research is the network position of the broker (Burt, 1992, 1997). The brokering position refers to that position in which an individual controls the connection between other individuals or groups by bridging the links between them (Burt, 2000). These network positions represent empty spaces in the social structure – structural holes – and give rise to the emergence of brokerage opportunities for individuals in a network to improve their social capital (Burt, 1992, 2000). Empirical research has shown that certain personality characteristics are often associated with structural hole positioning (Kalish & Robins, 2006; Friedkin & Johnsen, 1997). This is the case for the entrepreneurial, the authority searching, and the advocacy and change thriving personality-types, which have been found to positively correlate with occupying a brokering position (Burt et al., 1998).

Other social network positions are also important to evaluate an individual's social value in a given network. This is the case of ego out-degree, ego in-degree, and ego betweenness. The distinctions between these different measures of network centrality will be proposed further bellow in this chapter, and we suggest that they can give us an accurate picture of an individual's social position (Freeman, 1979). Although the brokerage measure is sometimes not considered a measure of network centrality, we also took brokering as a centrality indicator, given the assertion of Jansson (1999:339) that "an individual who is central is more important than the less central in the sense

that a central individual is in a position to control or influence the network and its members", which is precisely what happens with those occupying a structural hole.

In this study, we advance the possibility that individuals who are more skilled at inducing optimistic psychological states will occupy more central positions in their work social networks. This should, in turn, lead to an improvement in both the individual performance of those high alter-optimism individuals and the organizational networks they belong to. As such, we hypothesize that *high alter-optimism individuals occupy more central positions in advice-seeking, problem-solving and innovation social networks than low alter-optimism individuals.*

METHOD

Sample and Procedure

Participants were 41 undergraduate students (31 female and 10 male) attending the same class. This is a quite acceptable sample size given the nomination character of the methodology we employ in this study. In fact, social network analysis of this kind has considered quite acceptable samples above 30 participants (e.g., Borgatti and Cross, 2003). The data were collected three weeks after the beginning of the semester, in order to allow the students to meet each other but not to establish a strong tie relationship. Participants completed a social network measure at the end of a lecture. The average age of the sample was 22.2 (range from 21 to 26).

We chose this kind of sample to test our hypothesis because the participants had only weak relational ties and were homogeneous regarding age, academic degree, and other kinds of hierarchy. Because these constitute conditions that influence a person's network position (Cross & Parker, 2004), they could allow us to identify alternative

explanations for our results if they were not controlled. As such, while we might have lost some ecological validity compared to data collected in a work organization, we strongly increased the internal validity of our research design.

Measures

Alter-optimism. The measure of alter-optimism was assessed with a single item asking participants, "*Please, indicate the colleagues who make you feel more optimistic when interacting with you*". After indicating the names of those colleagues, participants also rated the degree to which those colleagues made them feel more optimistic, on a scale ranging from "Enough" (1) to "Very Much" (7). The alter-optimism index for each individual is the mean value of the ratings of those who choose a given individual.

Network Measures. Network measures were collected by asking participants to nominate up to five same-class colleagues whom they would turn to: (1) when having to talk about a personal issue (personal issues network); (2) when having to make an important or hard decision (advice-seeking network); (3) when having a new study-related problem to solve (problem-solving network); and (4) to discuss study-related innovative ideas (innovation network). These last three social networks were taken from the recommendation of Cross and Parker (2004) and are widely used in social network research in organizations. The social network of personal-issue was included in order to control for the effect of work *vs* non-work related networks. In addition, for each of the nominations, participants also had to rate from "Enough" (1) to "Very Much" (7) how much they really turn to the nominees, for each of the network questions. Based on these ratings we were able to construct a valued graph which provided information on the differential of intensity of each of their alter-optimism values.

Data Analysis Strategy

All the statistical analyses were made using UCINET 6 (Borgatti, Everett, & Freeman, 2002). Graphic representations of the social networks were constructed with NetDraw, a network visualization application linked to UCINET 6.

To test our hypotheses we began by assigning each individual to the group of high or low alter-optimism, based on the median split of the sample. This became our alter-optimism group distinction. We then computed the social network measures. As such, we calculated four social network indices of network centrality – out-degree, in-degree, betweenness, and brokerage – for each of the four social networks we considered (the three experimental networks and the control). Out-degree and in-degree represent basic individual measures of network local centrality. Generally, a central position in a network is a position with many direct contacts with other points (Scott, 2000; Wasserman & Faust, 1994). Whereas out-degree centrality refers to the number of out-going ties a person has in a given network, in-degree represents the number of incoming ties (Cross & Parker, 2004). Discriminating out-degree from in-degree is only possible for directed graphs, where one can distinguish the direction of the relationship (i.e. who chooses whom). Betweenness is another network measure relating the centrality of an individual in a network. It respects the extent to which an individual lies "between" the other individuals in a social network (Everett & Borgatti, 2005; Freeman, Borgatti, & White, 1991). Betweenness has a very different nature from degree centrality measures. A person with a low degree centrality might keep playing a central role in a network if lying between important others. Even if that person has only a few ties (low degree centrality), others relating to that person's interlocutors might decide to seek that person out to reach more individuals in the network (high betweenness centrality). Our

betweenness measure is also different from brokerage because whereas we measured betweenness as the probability that the ego lies on the shortest directed path between two other individuals, brokerage was measured by analyzing the number of pairs not directly connected in the ego networks (cf. Hanneman & Riddle, 2005).

After computing these indices of network centrality we directly tested the hypothesis with a t-test analysis between high and low optimism inductors. These analyses were also run with the UCINET 6 (Borgatti, Everett, & Freeman, 2002), which gives a more accurate assessment of the differences for network data. Traditional statistical packages are rather inappropriate for treating network data because instead of describing distributions of actors, network analysis describes distributions of relations among actors. This is particularly important because "observations" in network data are not independent samplings from populations, and the usual formulas for computing standard errors and tests on attributes generally assuming independent relationships are thus not appropriate (Hanneman & Riddle, 2005). The t-tests computed by UCINET are interpreted in the same way as those found in other statistical packages.

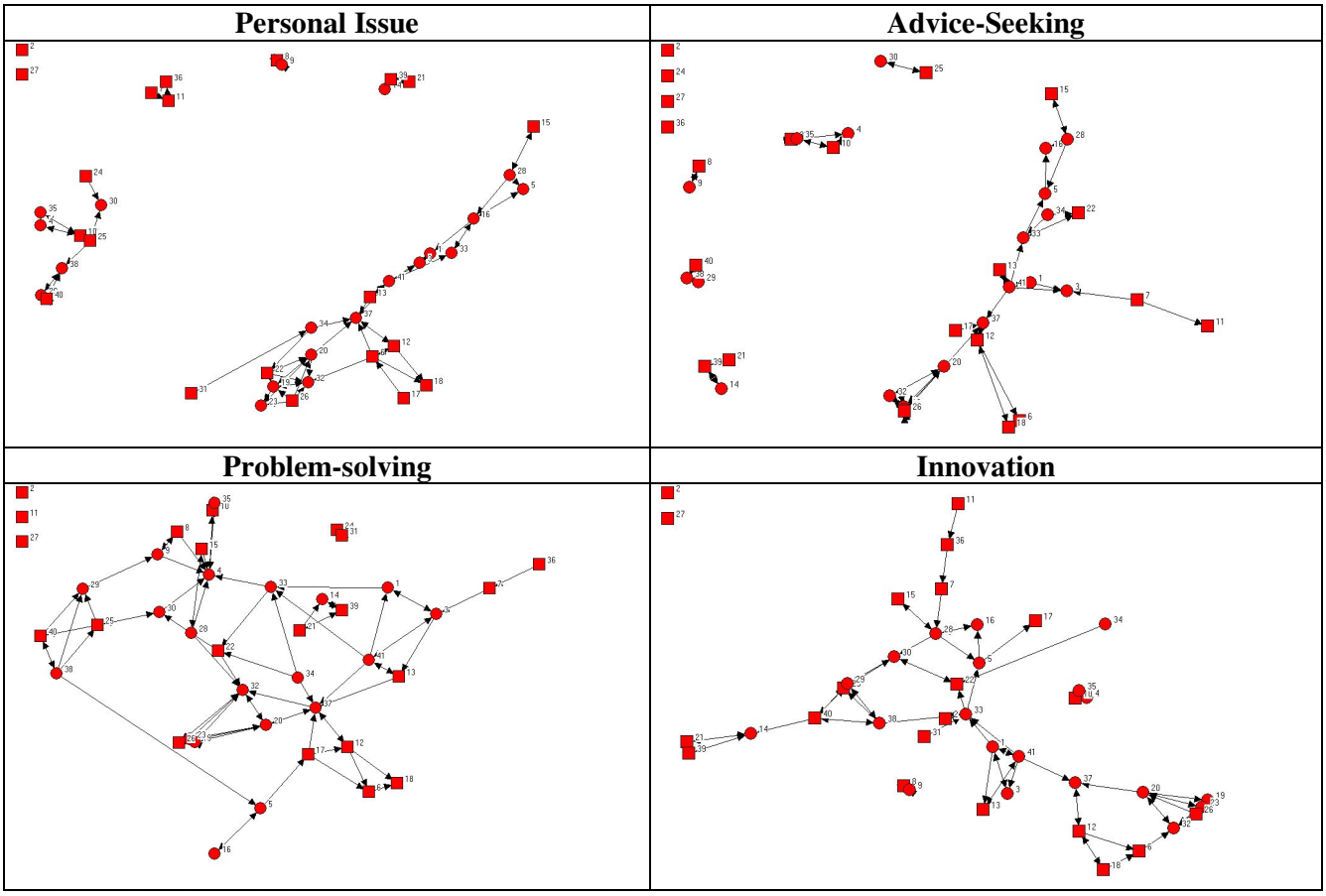
RESULTS

The advice-seeking, problem-solving and innovation networks of alter-optimists

The graphic representation of the three experimental social networks considered in this study (advice-seeking, problem-solving, and innovation) as well as the control social network (personal issue) are presented in Figure 6. A brief scan of these graphics shows that isolates (i.e., individuals who were never chosen by a colleague) are all low alter-optimism. On the contrary, we can graphically see that high alter-optimists generally establish more links with their counterparts, thus assuming network positions

that refer to more central roles. The quantitative analysis that follows further confirms this tendency.

Figure 6: The four social networks of high and low alter-optimists



Circles are high alter-optimists and squares are low alter-optimists.

Alter-optimism and network centrality in advice-seeking, problem-solving and innovation networks

Table 8 summarizes the core results to test our hypothesis that high alter-optimism individuals occupy more central positions in advice-seeking, problem-solving and innovation networks. In general, these results do support the hypothesis. For all these networks, centrality measures of in-degree, betweenness and brokerage were all significantly higher for high alter-optimism individuals than for low alter-optimism

individuals. This was not the case for our control network of personal-issue. In this case, betweenness did not differ between high and low alter-optimism, even if the measures of in-degree and brokerage did. A final meaningful result was the fact that the out-degree centrality measure differed between high and low alter-optimism only in the case of the innovation network.

Table 8: Centrality Measures for high and low alter-optimists

Network	Centrality Measures		High Alter-optimists	Low Alter-optimists	T Test (Difference)
Who do you turn to when you have to talk about a personal issue?	Out-degree	Mean	7.90	7.48	0.42
		SD	6.47	5.74	
	In-degree	Mean	11.00	4.52	6.48***
		SD	5.80	4.11	
	Betweenness	Mean	7.30	4.00	3.30
		SD	9.04	8.36	
	Brokerage	Mean	3.28	1.14	2.13*
		SD	3.86	1.98	
Who do you turn to for advice when you have to make an important or hard decision?	Out-degree	Mean	7.50	5.95	1.55
		SD	5.56	5.40	
	In-degree	Mean	9.50	4.05	5.45***
		SD	4.70	4.23	
	Betweenness	Mean	4.35	1.19	3.16*
		SD	7.74	4.68	
	Brokerage	Mean	3.28	1.14	2.13*
		SD	3.86	1.98	
Who do you turn to when you have a new study-related problem to solve?	Out-degree	Mean	12.10	8.33	3.77
		SD	6.80	6.27	
	In-degree	Mean	15.35	5.24	10.11***
		SD	11.24	3.66	
	Betweenness	Mean	37.06	17.85	19.22*
		SD	33.21	29.56	
	Brokerage	Mean	5.63	1.29	4.34**
		SD	6.45	1.73	
Who do you turn to discuss study-related innovative ideas?	Out-degree	Mean	11.05	7.14	3.91*
		SD	6.26	5.38	
	In-degree	Mean	12.70	5.57	7.13***
		SD	5.18	12.7	
	Betweenness	Mean	43.03	12.02	31.00**
		SD	44.75	21.39	
	Brokerage	Mean	1.83	0.24	1.59***
		SD	2.22	0.68	

* p<0.05; **p<0.01; ***p<0.001

DISCUSSION

The main goal of this research was to test whether individuals better skilled in inducing optimistic psychological states in their counterparts occupy more central positions in advice-seeking, problem-solving and innovation networks. In agreement with what we have hypothesized, the results suggest that individuals who are rated as more able to increase others' optimism level when interacting with them, tend to assume a more central and important role in this kind of network. This means that both innovation and its grounding behaviors of advice-seeking and problem-solving, are dependent upon the presence and actions of high alter-optimism individuals. In other words, it seems that those individuals who establish more optimistic and positive work relationships do play a major role in promoting problem-solving and innovation in organizations. This is in line with previous work arguing that creativity and innovation is more prone to occur in collaborative contexts (Sonnenburg, 2004).

The results of this research also indicate that alter-optimism plays a differing role when it is a work-related or a personal-related relationship. In fact, the control network of personal-issue that we considered showed different results. In this personal network, high alter-optimism individuals continued to be more sought out by their fellows than low alter-optimism individuals, but contrary to the work-related networks, high alter-optimism individuals did not play the linking bridge role (as measured by the betweenness measure). This means that in personal networks, alter-optimism still attracts others to interaction but not to serve as someone who joins people. This is clear evidence that work-related networks function differently from personal-related networks. But even for personal-issue networks, the generality of the centrality measures demonstrated to be higher for high alter-optimism than for low alter-optimism.

Another interesting finding in our results was the fact that only for the innovation network did high alter-optimism individuals present higher out-degree centrality than low alter-optimism individuals. This means that high alter-optimism individuals search for others significantly more to discuss innovation issues in addition to being sought out by them. As such, high alter-optimism individuals seem to demonstrate a proactive behavior regarding innovation issues that contrasts with their behavior in the other networks. Further work is needed to test whether this and other personal correlates exist regarding high alter-optimism individuals.

Theoretical Implications

One of the major theoretical implications of this study is the need to conduct meso-level research that focuses on the relations between people as drivers of innovation. Much of the research regarding innovation stresses either the macro-level organizational features (e.g., minimally-structured contexts) or micro-level characteristics (e.g., individual creativity) (Lopes & Cunha, forthcoming). The present study evidences that relations themselves might also prove to be worth investigating if we are to understand how innovation emerges in organizations.

In light of all of this, this study is aligned with recent literature arguing for the importance of considering positive work relationships as a leverage factor of human and organizational performance (Dutton & Ragins, 2007). But it extends that literature by introducing a new kind of positive work relationship based on the positive psychological state of optimism – alter-optimism – which constitutes a core capability of positive psychological capital (Luthans, 2002a). Research in the field of Positive Organizational Behavior has focused particularly on individual positive psychological

states and their impact on individual and organizational performance. This study extends this area of research by introducing a relational lens to understand how positive psychological capital can be nurtured through relationships.

Also, a natural implication of this research is the need to further investigate what differs in the behavior of high and low alter-optimism individuals. We know from research in energizing relationships that some relationship features contribute to energy enhancement, such as conveying presence, being genuine, communicating affirmatively, regularly and adequately, making fair and transparent decisions, giving clear guidance, and holding people accountable and trustworthy (Cross & Parker, 2004; Dutton, 2003). We need to know both if these behaviors are also optimism-inducing and if there are other behaviors able to induce higher levels of optimism in others.

Practical Implications

Our conclusions have several implications for practitioners. Following individual-centered research models, interventions to improve optimism are often ego-centered and focused on individual psychological states (e.g. Luthans et al., 2006). Our results suggest that improving optimism may be a matter of how people impact upon others (i.e., how they behave), in addition to who people are.

This finding has important implications for those who manage people in organizations, particularly for leaders. Leaders need to play a crucial role in organizational networks, especially the networks we have studied here, such as innovation, advice-seeking and problem-solving. POB research has acknowledged the importance of approaching leadership through an impact viewpoint (Avolio & Luthans, 2005). Developing alter-optimism capabilities in leaders and employees will stimulate a

more efficient functioning of the organizational networks and improved individual problem-solving and organizational innovation.

Those involved in managing people and innovation in organizations should also evaluate the measures they use in terms of how much they facilitate or not the emergence of alter-optimism interactions. Many factors can exist in organizations that contribute positively or negatively to the establishment of network relationships concerning innovation and problem-solving. Some of these barriers might be physically detectable, but others, such as organizational culture, may be invisible.

CONCLUSION

The main goal of this research was to study if the capability to induce optimistic states in others influences the features of advice-seeking, innovation and problem-solving networks. We found that individuals rated high by their counterparts regarding the capability to induce optimistic states tend to assume more central positions in these networks, as compared to those individuals who do not induce optimism.

This finding has several contributions for theory development and practice, with the main consequence being the need to look at the relationship level in order to understand how positive psychological states can be induced through interpersonal relationships, in order to improve problem-solving and innovation. It can also help those in practice to reorient their interventions in order to invest in the development of alter-optimism in employees, particularly in those assuming a leadership role.

The study has some limitations. First, it was conducted in a relatively controlled environment with a sample of students. If this increases internal validity because biasing characteristics such as hierarchy and previous relationships are controlled, it certainly

decreases ecological validity. As such, further research should extend the study of alter-optimism to workplaces, increasing the ecological validity of the phenomenon. Second, we have measured alter-optimism with a single item. This raises concerns regarding construct validity. Although the logistics of a social network analysis data collection demand more effort, future studies should approach this issue by introducing more items to measure alter-optimism. Third, our data is cross-sectional and, as such, we cannot determine a causality effect. Nor can we tap the dynamics of network development. Addressing this challenge is certainly a fascinating research area for the future.

In summary, this study constitutes a first step in trying to understand how alter-optimism relationships help to explain the social network characteristics regarding advice-seeking, problem-solving and innovation in organizations. We have found empirical evidence that those who have the capability to establish such relationships do play a major role in those networks. We hope this work inspires more research to increase our understanding of the mechanisms through which it occurs.

Implications of Two Three for the Research on Optimism in Organizational Studies

The findings from the present study have several implications for the literatures of optimism, positive psychological capital and proactivity. The main contribution is perhaps for the literature on optimism. Whether in light of positive organizational studies, positive psychology or social psychology, researchers studying optimism have consistently taken an "ego-centric" approach and have focused in understanding the predictors and outcomes of optimism as a psychological state or trait of the individual (e.g., Lopes & Cunha, 2008, Luthans, 2002a, Scheier et al., 1994).

The study reported here goes beyond this "state of the art", analyzing optimism inducement instead of optimism as a personality characteristic or individual psychological state. By doing so, we have taken an "alter-centric" approach and we have opened a new research field that focuses in the ability to induce optimism psychological states in others. This is a totally different ontological stance that focuses in the analysis of the relationships between two individuals instead of considering each of them discretely, a relationship level that has been deemed as necessary to understand human behavior in organizations (Gersick, Bartunek, & Dutton, 2000; Kahn, 1998). We have not measured the optimism level of neither the agent nor that of the receiver of the action. Instead, we have considered as our research unit the relationship effect, which according to Berscheid (1999), do not reside in the individuals but in the reoccurring interconnections that exist within the oscillating rhythm of interactions between people. To the best of our knowledge, this is the first study on optimism referencing this relationship unit of analysis.

In addition, this study also evidences that those who are more skilled at inducing positive psychological states such as optimism, in others, seem more able to exert an

attraction-effect that leads induced individuals to seek them out, increasing their centrality in these networks. Because network centrality and brokerage positions have been clearly associated in the literature with personal benefits (Burt, 2000, 1997), this means that high alter-optimism individuals have their trade-off in terms of their ability to induce optimistic psychological states in others.

But this study may also trigger important implications for research in the broader field of positive psychological capital. Because authors such as Fred Luthans and other researchers of POB have stressed the changing and developmental nature of positive psychological capabilities (Luthans et al., 2007), it makes totally sense to study how these capabilities can change as a consequence of social interactions. In light of this, researchers investigating POB could go a step forward and try to understand how positive psychological capital enhancing relationships function instead of focusing only in positive psychological capabilities at an individual level. For example, how much optimistic psychological states can be contagious within a work group? Can positive social relationships induce resilience? If so, how does it happens? What are the interaction mechanisms that explains that? How does an optimistic leader induces positive psychological states in followers? Can a pessimistic leader induce positive psychological states? How? These are some of the research questions that this study opens up as essential to understand optimism and other psychological capabilities at the relationship level.

Despite its innovative conclusions and directions, the present study does not elucidate us about the reasons beyond the attraction effect that is evidenced. In other words, this study does not explain how the optimism inductor induces the optimistic psychological states (the inductor's inducing behavior), nor does it evidences the mechanisms that are on the basis of the attraction effect that takes induced individuals

to seek those who make them feel more optimistic. In other words, the present study does not explain how "good vibrations" leverages innovation and problem-solving behaviors in others that are aimed toward the individuals who spread these good vibrations. In order to better understand what individuals actually do to ignite these attraction effects from the behalf of others we have devised a field study in a context where these are critical behaviors: entrepreneurship and new venture development.

CHAPTER 6

"GOOD VIBRATIONS" IN THE REAL WORLD: HOW ENTREPRENEURS ATTRACT RESOURCES FOR THEIR VENTURES

We moved to this third empirical study aimed at gaining a better understanding about what people actually do to attract others, the same way that we confirmed in the previous study that high alter-optimists were able to do regarding problem-solving and innovation. If someone is able to attract others by inducing in them a positive psychological state, the following research question is "how". Because we were interested in grounding new hypotheses concerning how individuals attract others (i.e., which are their attraction-behaviors) and because there is a scant literature describing how does this attraction happens in the business world, we decided to conduct a qualitative research based in grounded theory methodology (Locke, 2001).

In this chapter, we start by analyzing our methodological possibilities to study how individuals attract others in the business world and present our arguments that sustain that qualitative and grounded theory approaches were the best to accomplish our research goal. We then explain why we have chosen the filed of entrepreneurship to develop our study. Finally, we present the study rationale, describe the study details and end up with a series of conclusions regarding what entrepreneurs actually do to attract resources for establishing new ventures.

Fundamental Methodological Issues

The literature about research methodology is clear in pointing that the selection of a methodology should rely, among other things, in the character of its research

question (Eisenhardt & Graebner, 2007). Usually related to this criterion is the maturity level of a research field. Researchers have suggested that the current *state of the art* of a field of study should support the methodological choices, either by sustaining a qualitative approach if the theoretical field is yet underdeveloped or a quantitative approach if there are already sufficient propositions to test in a larger set of contexts (Creswell, 2003). In other words, when a research field is underdeveloped, an exploratory study suits better the study's goal (Robson, 2002). This happens to be the case of the current study where there is no existing theory that offers a feasible and systematic answer to the question *how do individuals actually behave to attract others and their resources to support them in a business context?*

In addition to the option of relying in a qualitative approach, other methodological decisions ought to be considered to devise a study to answer a research question such as that in the present study, namely the sampling issues. In qualitative research, the case-study approach is amongst the most compelling strategies (Miles & Huberman, 1994; Yin, 1984). In part, this is justified by the fact that investigations using case-studies typically answers research questions that address "how" and "why" in unexplored areas (Eisenhardt & Graebner, 2007; Locke, 2001). In deductive, theory building research, such as the one we needed to investigate in our research question, the case-study strategy seemed adjusted as it allowed for the selection of cases that were particularly suitable for illuminating and extending the relationships and logic among the constructs (Eisenhardt & Graebner, 2007).

In addition to all these arguments that uphold our methodological options, two more issues must be pointed. First, the research question in this third study required that we should rely on a field study in order to gain insight of what people actually do to attract others for their projects. Because case-study research is the most suited design to

conduct in-depth investigation of a social phenomenon in the real context (Feagin et al., 1991), it was deemed as indicated for the purpose of the current study. Second, we relied on multiple case-studies instead of considering a single case-study design. Some authors have argued that single case-studies are better to describe the existence of a phenomenon, while multiple case-studies provide a stronger base for theory-building (Yin, 1984). Because we were interested in generating novel theory regarding what people do to attract others and resources for their ventures, using multiple cases-studies seemed a better approach for the present purposes. In addition, some authors have also voiced that considering multiple cases also contribute to the creation of more robust theory because propositions are grounded in a variety of empirical evidence (e.g., Eisenhardt & Graebner, 2007). For all these reasons, we relied in a qualitative multiple case-study approach in the design of the present study.

As for the data analysis methodology, we relied on the grounded theory approach (Glaser & Strauss, 1967; Locke, 2001). Since the seminal study from Glaser and Strauss (1967) that introduced this approach, the grounded theory has flourished as a preferential methodology for many researchers. This has occurred, in part, as a consequence of the distinctive characteristics of this methodology, namely its adequacy to (1) generate novel theories to explain a phenomenon, (2) ground those theories in empirical data, not in theoretical deductive reasoning, and (3) sustain a systematic method to analyze emerging data (Locke, 2001). In other words, grounded theory is the data analysis methodology that better suits the generation of novel theory abut a given social phenomenon, particularly when it is still under-explored (Brown & Eisenhardt, 1997).

The systematic analysis tools of grounded theory (e.g., open and axial codification) will be summarized and exemplified in the method section of the empirical

study reported here, but we stress from now that those tools allow researchers to undertake a comparative analysis of emergent data that triggers the patterns of relationships between emergent constructs and categories (Hallberg, 2006; Straus & Corbin, 1998). In this respect, and similar to other qualitative methodologies, grounded theory is an inductive methodology that requires only minimal theoretical knowledge (or even no knowledge at all, in the extreme case) about the phenomenon under study (Suddaby, 1996). In contrary to quantitative confirmatory research, where a big deal of theoretical *a priori* knowledge is necessary to devise testable hypotheses, grounded theory assumes that all (including the research question) is being constructed in the research process (Patton, 1980). As such, grounded theory does not requires an extensive literature revision, but simply the understanding of the major theories from the research field.

Given all these unique features of grounded theory, we opted to rely on this methodology to frame our study. We reasoned that grounded theory was suited to support our study of *how do individuals behave to attract others and their resources to support them in a business context* because it allowed us to deductively generate novel theory regarding what people actually do in these circumstances. This was particularly adjusted to our intents to conduct the study in a single business context where attraction is a crucial factor: entrepreneurship and new venture development.

Why the Entrepreneurship Context?

It is quite easy to explain how entrepreneurship came into our mind when considering to study how do individuals behave to attract others to support them in a business context. Since the pioneering introduction of the term “entrepreneurship” by

Cantillon, the French economist, in 1775, that it refers to someone who lies between those who produce a common good and those who consume it (Cantillon, 1775).

In this respect, the entrepreneur (from the French "entrepreneur") is someone who needs to attract others, joining common interests in order to contribute to the regular and equilibrated functioning of the economic balance between production and consumption (Schailer, 1994; Klerk & Kruger, 2002). As the name itself states, the entrepreneur is someone who lies between ("entre" in French), a position which is similar to the "broker" position proposed by Burt (1992, 2000) and considered in the previous chapter of this thesis.

Following Cantillon in this respect, another notable author on entrepreneurship, Joseph Schumpeter, has also stressed the relational character of the entrepreneurship phenomenon (Schumpeter, 1950) In Schumpeter's conception, the entrepreneur was someone with the capability to combine means of productions and to join different people (Schumpeter, 1950, 1961). In other words, the entrepreneur was someone with the ability to attract other people around a business case. This view of Schumpeter is congruent with that of the majority of entrepreneurship researchers.

Say, for instance, a scholar from the 18th and 19th Centuries, saw the entrepreneur as the central economic figure that unites and combines the disperse production means (Bruyat, 1993). In the same line, Bygrave (1993) has more recently equated entrepreneurship as the acquisition, combination, and redeployment of resources that provide new products and services. For all these researchers the entrepreneur has always been considered an attractor of other's efforts, ideas and wills. This view of entrepreneurship as attraction capability is notable throughout the literature and makes the field of entrepreneurship and new venture development a unique field in which to investigate our research question.

In addition, we also show entrepreneurial venture development as the background of this third empirical study because we wanted to investigate the impact of positive behavior at an individual level on certain outputs at the organizational level of analysis. Because settling up a business and making it grow is probably one of the most challenging contexts to make an organization develop – the extreme case strategy (Eisenhardt, 1989) – we deemed it as an appropriate context to conduct this study.

Study Three

Resources play a critical role in an entrepreneur's capability to establish a new venture. Explanations of how entrepreneurs acquire the resources they need have focused either on stressing the role of entrepreneurs as active hunters of resources (mainly at the personality traits level) (e.g. Baum & Locke, 2004) or on pointing out the constraints that resource availability can have over entrepreneurial activity in a given society or community (e.g. Ring, Bigley, D'Aunno, & Khana, 2005; Busenitz, Gómez, & Spencer, 2000). In fact, the resources available for entrepreneurs of a given community to establish and develop new ventures is a fundamental determinant of the community's entrepreneurial activity and economic dynamism (Johannisson, 2000). A favorable entrepreneurial environment should thus have a predictive value regarding the success of a new venture.

However, even in these favorable environments, many entrepreneurs still continue to fail gathering the necessary resources to ignite a new venture or to make it grow and prosper in the long run. At the same time, successful ventures are born and flourish in quite adverse and hostile environments (Thompson, 2004). As some have argued, this proves the role that individual characteristics play in activating and

mobilizing the resources available in the environment, and calls for a framework conceiving entrepreneurial behavior as an output of both environmental constraints and individual characteristics. This depicts a vision of entrepreneurs as active crafters of their environments in the sense that they are more or less able to leverage environmental potentials (e.g. potential resources) in order to support their undertakings (Smircich & Stubbart, 1985; Weick, 1979). As such, entrepreneurs are not independent of the environments that they inhabit, but neither are they fatalistic products of it.

This research was designed to understand what entrepreneurs do to attract the resources they need to start and develop their ventures. Based on the interviews of a sample of entrepreneurs from six case studies, we develop a framework to explain how entrepreneurs gather vital resources from important resource-holders in order to create and develop successful new ventures. The framework is focused at the behavioral level of the entrepreneurs, describing what they do to attract resources. By focusing our analysis on the behavioral realm of entrepreneurial activity, we reduce them neither to the individual characteristics, nor to the entrepreneurial context. Instead, we consider a meso-level perspective (Kozlowsky & Klein, 2000), one that closely examines how entrepreneurs relate to the important resource-holders they need to implement and develop a new venture.

The chapter contributes to the field of entrepreneurship in three main ways. First, it offers a coherent and comprehensive framework to analyze resource gathering in new venture foundation and development, and indicates useful behaviors for entrepreneurs to improve their resource acquisition capabilities. Second, it presents two different fundamental routes that entrepreneurs may use to attract the necessary resources to support their ventures. Third, the analysis shows a viable way to overcome

the antagonisms between contextual and individual determinants of successful venture creation and development.

The rest of the chapter unfolds as follows. First, we review the literature that stresses the crucial role of resource attraction for entrepreneurial activity. Then, we present the two traditionally opposing viewpoints on entrepreneurship and discuss the need to investigate entrepreneurial behaviors as a potential solution to approach the meso-level nature of the individual/structural relationship. Next, we describe the method we have used to collect the empirical data and present the framework that has emerged from the data analysis. We then discuss the theoretical and practical implications of conceptualizing entrepreneurs' resource-attraction behaviors with such a framework and conclude by suggesting further avenues to improve this field of research.

RESOURCE ATTRACTION AND NEW VENTURE SUCCESS

Attracting resources into a new business venture is probably the greatest challenge faced by entrepreneurs (Brush, Green, & Hart, 2001). It is also a crucial factor in determining a new venture's development and success. Some authors have even equated entrepreneurship with the acquisition, combination, and redeployment of resources that provide new products and services through the creation of new organizations and new markets (Bygrave, 1993). It is accepted that the attraction of vital resources is not a sufficient factor for venturing success. Entrepreneurs also have to set up new operations and new systems. But the role of resources is a fundamental one. In fact, new ventures emerge when entrepreneurs succeed in mobilizing resources in response to perceived opportunities (Aldrich & Fiol, 1994).

The crucial role of resource attraction in new venture creation and success requires entrepreneurs to become highly skilled in resource gathering and management. Baum and Locke (2004: 589) have defined new resource skill as "the ability to acquire and systematize the operating resources needed to start and grow an organization". Effective entrepreneurs must then possess a high capability to attract the resources they need.

Authors within the field of entrepreneurship have already indicated important types of resources for the creation and development of a new venture. Shane and Venkataraman (2000) have identified money, people, and information as basic resources for startup and venture growth activities. While analyzing the relationships between entrepreneurs and their core networks, Renzulli and Aldrich (2005) found four types of resources relevant for venture growth: legal, loan, financial, and expert advice. A more exhaustive resource typology for entrepreneurial activity was mentioned by Brush et al. (2001). For these authors, the vital resources for implementing a new business can be grouped into six types, namely, human, social, financial, physical, technological, and organizational. Despite all this evidence of the importance of resource attraction to new venture foundation and development, the literature on entrepreneurship is still in need of achieving a synthesis of the entrepreneurial behaviors that best maximize the attraction of resources from important resource-holders. A possible explanation for this fact is the relatively bi-cephalous character one finds in entrepreneurship research, emphasizing either the importance of entrepreneur's personality or the role of the social-cultural milieu. We now turn to this fundamental issue.

TWO VIEWPOINTS ON ENTREPRENEURSHIP: CONTEXT AND PERSONALITY

Entrepreneurship is not a new issue in either economics or management, but it has witnessed a recent surge of interest due, in great measure, to the internet's evolution and the small-business explosion it generated at the end of the 20th century (Formaini, 2001). It is argued that entrepreneurship is the true driver of economic growth in the capitalist societies dominating the western world (Newbert, 2005). It is usually considered the "engine of the capitalist process" (Formaini, 2001).

Classical economists who first introduced the concept of entrepreneurship devoted no significant attention to the individuals who carried on the process of venture creation. For them, production was a given and, as such, the role of individual productive factors needed no elaboration. Schumpeter (1961), on the other hand, stressed the key role of the entrepreneurial individual and defended that the entrepreneur is the main thing responsible for the introduction of change into a commercially organized economic system, thus considering entrepreneurship as a characteristic of an individual (McFarling, 2000).

This duality between what could be termed a macro perspective and a micro perspective on entrepreneurship came to extend to other human sciences – especially sociology and psychology – as they started to investigate entrepreneurship on their own. Sociologists emphasized the study of socio-demographic and cultural factors to explain entrepreneurial phenomena (macro/structural) (e.g. Steensma, Marino, Weaver, & Dickson, 2000; Katila & Shane, 2005), whereas psychologists favored an individual trait approach (micro/behavioral), thus largely disregarding the influence of environmental constraints (e.g. Crant, 1996; McClelland & Winter, 1969).

At a macro level, research has mainly focused on the ecological constraints of entrepreneurs and new ventures. Stewart, Carland, Carland, Watson, and Sweo (2003) have found, while comparing US with Russian entrepreneurs, that entrepreneurial

dispositions varied according to national culture. In the same way, Blanchflower and Oswald (1998) found evidence that financial and liquidity constraints are the main forces affecting entrepreneurial activity, unlike psychological test scores, which did not reveal significant predictive power of later self-employment (a proxy used by the authors to measure entrepreneurship). In the same way, Wang and Ang (2004) also found empirical evidence that the richness of opportunities for corporate venturing and the technological contextual opportunities, as well as environmental hostility, predicted new business venture financial growth among a sample of Singaporean venture capital firms. They concluded that the environment is a major constraint for venturing activities.

On the other hand, micro explanations for entrepreneurial behavior have also emerged. Thomson (2004), for instance, has developed an indicator to identify entrepreneur's potential. Not only does this author conceive entrepreneurship at an individual level, but he also framed his approach on innate abilities. Others have taken a similar innate stance towards entrepreneurial behavior (e.g. Harrison, 2005), arguing that talent is probably its main predictor. Thomson (2004: 246) defined talent as "certain important characteristics or innate abilities that we are born with, but which have to be discovered".

Although not necessarily defending an innate perspective, other authors have explored micro psychological variables as explanations for entrepreneurial behavior. This is the case of Lumpkin and Dess' (1996) concept of entrepreneurial orientation, Sagie and Elizur's (1999) study of the achievement motive's influence on entrepreneurial orientation, or Baum and Locke's (2004) effect of passion and tenacity on venture growth [an exhaustive review of literature on this issue can be found in Baron (2002)].

In an attempt to develop a comprehensive view of entrepreneurship, several authors have proposed integrative models to explain new venture creation and entrepreneurial activity (Shook, Priem, & McGee, 2003; Gartner, 1985). However, these models generally still give an incomplete picture of entrepreneurship for two main reasons. First, they tend to focus exclusively on the venture formation process and largely ignore subsequent business development and success. Second, these models outline different level variables – micro and macro – but they have said little or nothing about the relationships between those variables (inter-level relationships).

ATTRACTING RESOURCES: THE ROLE OF ENTREPRENEURIAL BEHAVIORS

The dichotomy bias (micro *vs* macro) generally found in entrepreneurial studies is not new in management research. It has, in fact, constituted the mainstream in some organizational fields, such as organizational behavior (House, Rousseau, & Thomas-hunt, 1995; Rousseau, 1985). In spite of this reductionist tendency toward the individual or the context, a call for an integrative, multilevel approach has been made (Kozlowsky & Klein, 2000; Klein, Tosi, & Cannella, 1999; Klein, Dansereau, & Hall, 1994; Hackman, 2003).

In addition to proposing the simultaneous study of both macro and micro-level explanations and the relations between these levels of analysis, multilevel perspectives have also stressed the need to look into the meso-level, a level that concerns the relationships and behaviors through which individuals interact with their environments (Rousseau & House, 1994).

This need to emphasize the behavior of entrepreneurs as they seek to gather resources is at the core of this research. By doing so, we are focusing on the interactional product of personality and environment while, at the same time, we can develop knowledge that might be directly actionable by entrepreneurs in the pursuit of their projects and goals. In fact, because the starting level of explanation for this research is located in the behavioral realm, it can be taught and communicated to those who really need it: entrepreneurs.

In sum, entrepreneurship literature has focused either on the personality of the entrepreneur or on the environment where he/she operates. However, more studies are needed to examine the way entrepreneurs act to capture the resources they need to build successful new ventures. We sought to explore this issue by building theory from a series of interviews conducted with entrepreneurs from six recently founded firms.

METHOD

Sample and Context

In order to build theory regarding how entrepreneurs attract the critical resources for venture creation and development, we used a grounded theory approach to better understand the unexplored behaviors that entrepreneurs used to get their resources. Grounded theory was used in order to generate novel and accurate insights into the processes being explored (Glaser & Strauss, 1967; Locke, 2001). As data were being collected, they were analysed and re-analysed in order to make the constructs emerge (Eisenhardt, 1989). We combined narrative descriptions with graphics and tabular forms to order the information more systematically.

To elaborate theory on resource attraction routes, we turned our attention to entrepreneurs who have built successful companies. We considered successful companies to be those firms that continued to grow beyond their second year of existence. Several studies have shown that a significant percentage of new firms die during their first two years of life, a phenomenon known as liability of the newness (e.g. Singh, Tucker & House, 1986; Stinchcombe, 1965). As such, we aimed at guaranteeing that we were studying successful entrepreneurs only. To identify a growing firm we relied on the sales criteria, which is considered to be the best growth measure (e.g. Davidsson & Wilklund, 2002; Hoy, McDougall & Dsouza, 1992).

We used this criterion because we sought a context that could serve as an "extreme case" (Eisenhardt, 1989). Theory building is easier in extreme cases, as the phenomena being studied tend to be more observable than they might be in other contexts. By dealing with growing companies, we could better understand the most relevant and efficient modes of action that their entrepreneurs used to attract resources to make their organizations successful. As such, we selected a sample of six consulting firms that operate in highly competitive environments, where new competitors are constantly emerging. Given their competitive environment, these companies have rapidly changing internal rhythms, a factor that also facilitated the observation of multiple behaviors (Brown & Eisenhardt, 1997). Descriptions of the organizations and entrepreneurs that are included in our sample are presented in Table 1.

Table 9: Companies (fictitious names), Industry, and Entrepreneurs used in data collection

Companies	Industry	Entrepreneurs
Colored Device	Computer	RT is his thirties and he is a specialist in the computing science. He studied computing engineering for three years at the university, but he did not complete his degree. He worked for eight years in two other companies in the computer industry. He is now the managing partner of Coloured Device.
		DS is also in his thirties and he is a specialist in the computing science. He has taken several courses in computing science and he spends all his free time exploring computers. He worked for seven years in one rival company in the computer industry. DS and RT were both colleagues in this company. DS is partner at the Coloured Device.
		JB is in his twenties and he loves computing science. Although considering computer science his vocation, JB has neither experience nor academic background in this field. All he knows about computers, he knows by himself. He is partner at the Coloured Device.
Green Space	Environment	JC is his thirties and holds a degree in environment engineering. He worked for more than 10 years in environmental consultancy worldwide. He is managing partner at the Green Space.
		DC is in her late twenties. After finishing a degree in environment engineering, she worked as an environmental consultant in a multinational company. She achieved the top in five years. She is now managing partner at the Green Space.
		MC is a forty-years-old man with a chemistry degree. He has about six years of experience in the chemistry industry, as a production supervisor. An enthusiast in the environment affairs, he has worked as consultant in a multinational company for eight years. He is managing partner at the Green Space. JC, DC and MC worked as colleagues in the same multinational environmental company for about four years.
White Paper	Graphic Arts	JF is a forty-years-old man with a wide experience in several industries, from building and construction to food. He had the opportunity to work in the graphic industry and he never stopped. He begun printing advertisements and by the end of the third year he was supervising all the activities in the company where he worked before. He has completed several courses and he is very interested in the graphic arts. He describes himself as a self-taught person in this area. He is the managing partner of the White Paper.
Golden Coin	Finance	ES is in his late thirties and he holds a degree in economics and an MBA. He has a huge experience in the financial industry. He has worked as a financial consultant worldwide and as a commercial director in a prestigious bank for more than twelve year. He is the managing partner of the Golden Coin.
		PM is in his late thirties and he also holds a degree in economics. Like ES, PM has a wide experience in the financial industry. He worked as a consultant and as a bank director for more than ten years. He is partner at the Golden Coin. ES and PM were colleagues in the same bank for about four years.
Yellow Man	HR	ZM is in his fifties and holds a degree in management. He has a vast experience, having worked in several industries and companies, mainly in the human resources area. ZM is the managing partner of the Yellow Man. He is also the managing partner of another company of distribution.
		CM is in his late twenties and holds a degree in organizational psychology. She worked for about five years as a human resources consultant in different companies. With two more colleagues she launched a human resources company before Yellow Man. About one year later, she quit and joined ZM to build the Yellow Man. CM is partner at the Yellow Man.
Blue Chip	IT	NL is in his late thirties and he holds a degree in mathematics. He began his career in the IT industry. He worked more than ten years either as a consultant or supervisor in different national and multinational companies. He is the managing partner of the Blue Chip.
		NL is in his late thirties and holds a degree in mathematics. He began his career in the IT industry. He has a huge experience in this sector, either as a consultant or supervisor in different multinational companies. He is also managing partner at the Blue Chip. He met NL in the multinational company where both worked.

Data Collection

For this study, we relied on a series of semi-structured interviews with entrepreneurs (n = 13). We interviewed all the entrepreneurs from all of the companies included in our sample. Interviews were conducted at one moment in time, when the companies were about two years old. Demographically, our entrepreneurs were 11 men, ranging from 20 to 52 years old. The majority of our entrepreneurs were between 35 and 45 years of age. Nine of them had a graduate degree.

Interviews were conducted in the companies and lasted approximately one hour on average. All the interviews were transcribed verbatim. We used a guide to conduct our interviews. Common to all interviews were questions about (1) what the entrepreneurs did to attract what resources and (2) why did they act the way they did. For each question, we asked for examples, so that the entrepreneurs could be more accurate about their personal stories. We also asked questions about the companies (e.g. mission, culture, structure, strategy and sales) to establish details. In addition, we used secondary sources to supplement information about these organizational dimensions. Using different sources of evidence has at least two main advantages. It facilitates the "triangulation" of different types of data and allows for the observation of data convergence during data collection, facilitating construct validity (Glaser & Strauss, 1967; Yin, 1984).

Data Analysis

As is typical of inductive research, we analyzed the data as they were being collected, so that the constructs and relationships could emerge (Eisenhardt, 1989). We

often travelled back and forth in data, in order to better understand how the constructs that emerged in the framework were distinct from each other (Locke, 2001).

The process of data analysis can be systematized as follow: first, data were fractured and examined line by line (Strauss & Corbin, 1998). Via open coding, we examined data in order to identify statements about how entrepreneurs view the organization, the resources and the resource attraction behaviors. Following Miles and Huberman (1994), the common statements were coded, generating a pool of first-level terms and concepts. After they were constructed, the codes were revised to see if every data fragment fit each category. Some adjustments were made to get data more consistent and fitted with codes.

Second, by a process of axial coding, first-level codes were compared to each other in order to identify similarities and differences among them (Strauss & Corbin, 1998). First-level codes that represented similar ideas were grouped into a more general and abstract level of conceptual categories, the theoretical dimensions (Locke, 2001). These dimensions represented the different behaviors that entrepreneurs used to attract resources.

Third, theoretical dimensions were examined to search for underlying dimensions. Through selective coding, these categories were integrated and refined to shape a framework that took the form of a theory (Strauss & Corbin, 1998). As we had identified a possible framework, the fit between data and our aggregate dimensions were re-examined, to see if a better model could be identified (Glaser & Strauss, 1967; Locke, 2001). A coherent and fitted framework was built. Our aggregate meta-dimensions define the two basic routes used by entrepreneurs to attract the critical resources.

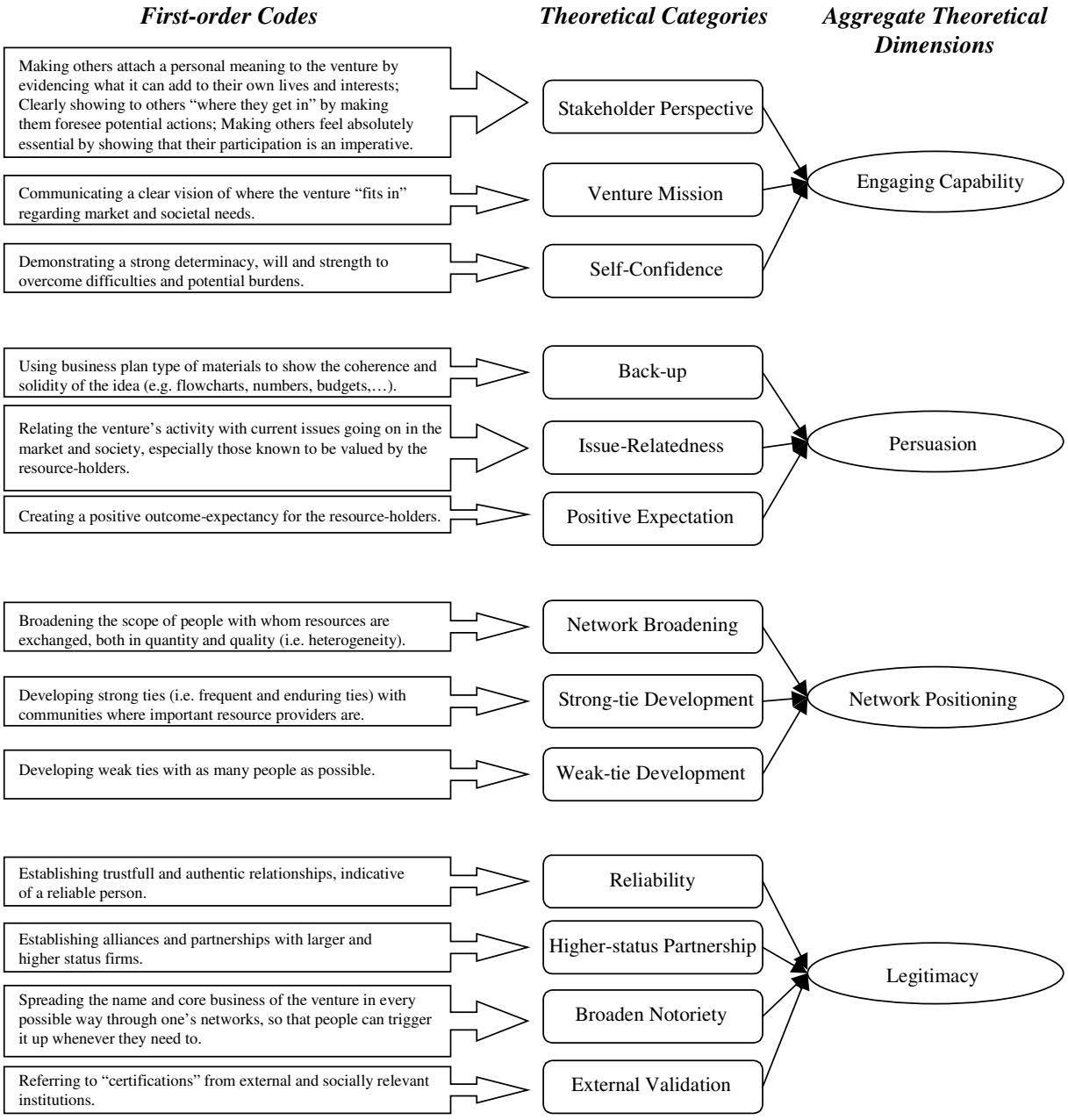
FINDINGS

In this section we explain how the behaviors identified by the entrepreneurs were coded and grouped in higher-level categories. We start by presenting the theoretical categories and aggregate theoretical dimensions that emerged from the data and end up discussing two meta-theoretical dimensions that form the basis of a framework to understand how entrepreneurs attract resources for their venturing initiatives.

How entrepreneurs attract resources for their ventures

We begin by presenting the theoretical categories that emerged from our data analysis after the coding of the discourse as well as the aggregate theoretical dimensions. We also relied on previous research on entrepreneurship in the process of making sense of our data. A synthesis of the first-order codes and the corresponding theoretical categories is presented in Figure 7.

Figure 7: First-order codes, theoretical categories and aggregate theoretical dimensions



We started analyzing our data by searching for information about what entrepreneurs do to attract relevant others to their venturing ideas. One of the

entrepreneurs from the financial services firm recalled his initial efforts to attract important human resources in the following manner:

"At that time, I had a team that I would like to take with me. When I explained to them what the project was about, they immediately decided to join the project, and my Administrative Director has come with me from my previous company from the very beginning."

What this entrepreneur was telling us is that he was somehow successful in attracting those people to support his venture, because he was able to engage them. Recent management literature has addressed what makes people fully engage in a productive, enthusiastic, and energetic fashion (Csikszentmihalyi, 2003). Authors within this framework have been making an effort to understand the mechanisms by which people become engaged in a certain activity, idea, or project. Dutton (2003) considers high quality connections as having a major influence on how energized and engaged people feel at work. For entrepreneurs, the capacity to engage others is certainly a critical capability. It is not until someone feels engaged in a certain project or venture that he/she will decide to actively support it. To be effective idea sellers, entrepreneurs must become, primarily, successful engagers.

People become engaged when they feel like performing roles in which they act in congruence with their true selves (Kahn, 1990). This means that when a person feels worthwhile, useful, and valuable, she is more prone to engage in supportive tasks. Entrepreneurs founding new ventures should frame their communications on meaningful contents when interacting with important resource-holders, in order to attract those important resources. This requires making significant others attach a personal meaning to the venture that the entrepreneur is "selling" them. Framing and meaning infusion while selling an issue can make it easier for others to devise issue-

related actions (Dutton & Ashford, 1993). As such, entrepreneurs selling their ideas must communicate a clear picture of "where do I get in on it" (Bird & Brush, 2003). One of our entrepreneurs put it as follows:

"I talked to each person individually and presented the overall project. Then, I presented what I was concretely expecting from each person and told them what they would have to do according to the structure of the company."

And the founder of the software development consulting company told us:

"This company was conceived by myself…conceptually…in a project that I had in my drawer for many years. This project was my responsibility, but today it is a project from everybody that works here, and they feel it."

Quotes like this were aggregated under the theoretical category of "stakeholder perspective" and referred to behaviors that make others understand where they can make a difference in the venture. It seems that entrepreneurs engage different others on the venture by using different frames. For example, while the framing focus for a financial investor should concern return on investment, a frame for attracting an important employee could be the venture feasibility to guarantee a successful career project. Framing is, however, a contextual and specific issue. Certain investors may perceive more personal relevance for the venture's feasibility in the long run than on short-run return on their investments. This supports the idea that selling frames must be carefully analyzed before interacting with any resource-holder.

In conjunction with the effort to engage others, entrepreneurs must also care to reduce factors that potentially disengage those people they interact with. A major element driving people away from a project is insecurity. Insecurity generates anxiety and occupies energy that could otherwise fuel engagement (Kahn, 1990). A safety

climate, on the contrary, promotes meaningfulness and engagement (May, Gilson, & Harter, 2004). This is particularly troublesome for entrepreneurs because, given the risky character of their activity, they are rarely able to provide objective security for those with whom they interact (Shane & Stuart, 2002). Literature on entrepreneurship has already addressed some strategic actions for overcoming the disengagement that may arise as a result of a high risk perception.

Most of these strategies stress the need to create a security "illusion". Aldrich and Fiol (1994: 651) stated that entrepreneurs "must concentrate on framing the unknown in such a way that it becomes believable". The idea is to act "as if" the venture was already a reality. Bird and Brush's (2003) concept of entrepreneurial vision can also aid us in devising fruitful ways to reduce uncertainty and increase resource-holders' engagement with the venture. An entrepreneurial vision is a mental image of the products, services, and organization that the entrepreneur wants to achieve. Entrepreneurial vision includes an image of the future as imagined by the entrepreneur and "serves to demonstrate to the 'seer' a possible future where currently held values or unmet needs are fulfilled" (Bird and Brush, 2003: 8). Effective entrepreneurs usually express these future states using pictures, metaphors, charts and stories. By doing so, they are creating the interactional context that makes others feel engaged in the entrepreneur's idea. Engaged resource-holders are likely to support the entrepreneurial venture by feeling attracted to the role they can play in the new venture.

One of the entrepreneurs from our finance consulting firm expressed this importance of fitting the venture with the societal needs as follows:

> "If the project is serious and ambitious, as is the case here, if it is a project that makes sense in the current financial market context, people are more receptive to face the challenge of going through…"

This kind of discourse was characterized as "venture mission" to make salient the need of entrepreneurs to communicate a vision of the venture as making sense in its social environment.

In addition, our data also demonstrate that to engage relevant resource-holders entrepreneurs must rely on something more than the content of their messages. As we were coding the data we noticed that several entrepreneurs pointed out aspects such as the self-determinacy and confidence that is needed to attract these resource-holders. As the entrepreneur from the graphic arts firm pointed out:

> "…at this moment in which we are starting our activity, we cannot fail. We must be sure that our workers have the necessary experience and knowledge"

Another of our entrepreneurs made his determinacy even clearer when he said:

> "I took this option. And what is done is done! So…in the days ahead I will stay the course, giving all that I can to see this company grow."

These entrepreneurs were noticing that the positive psychological capabilities of an entrepreneur also play an important role in reducing resource-holders' perceived threats and fears that can appear as they invest their time, money, and effort on the venture. Entrepreneurs' positive psychological capabilities such as self-efficacy (Markman & Baron, 2002), optimism (Cooper, Woo, & Dunkelberg, 1988), proactiveness (Lumpkin & Dess, 1996) and hope (Jensen & Luthans, 2003), have all been found to relate to entrepreneurial behavior and/or venture success. Although these

studies have not focused on the specific issue of resource-holders' engagement, it is easy to predict their positive effect on the attracting capabilities of entrepreneurs, given that these capabilities have been argued to have a similar role in organizational change processes of established firms (Cameron & Caza, 2004). Passages such as those above were thus categorized under the label "self confidence", to stress the determinacy that entrepreneurs seem to show while trying to engage resource-holders to support their venture.

As with the capability to engage others, the social skills of entrepreneurs also seemed to play an important role in helping to attract vital resources. This was also congruent with the literature on entrepreneurship. First, social skills are related to social capital and, as such, to gaining access to important social networks and resources (Shane & Cable, 2002). Second, social skills are also a determinant of entrepreneurial activity, because once an individual gets access to a given person or network, his social competence assumes the next level role in determining if the entrepreneur will be able to attain his/her resource gathering goals. In the words of Baron (2002):

> "…if entrepreneurs are not able to make a good first impression on these persons, or to persuade them of the soundness of their ideas or new products, they will not obtain the support – financial or otherwise – they are seeking." (p.248)

For entrepreneurs interacting with important resource-holders to gain patronage for their venture, persuasion skills assume a core role. Persuasion refers to the capacity to change the attitudes and the behavior of others in the desired direction (Baron & Markman, 2000). Selling an idea requires persuasion behaviors, given its intent to

prompt the movement of key resource-holders in the direction of the venture. In his/her efforts to "sell" the venturing idea to others, the entrepreneur can use several behaviors to persuade them.

One of the behaviors that our entrepreneurs constantly referred to was related to the need to present a rational and backed-up basis for their decision to start a new venture. Reporting on the beginning of his venture, one of these entrepreneurs mentioned these behaviors in the following way:

> "At that time, the market was signalling that we could have moments with few opportunities to develop this activity. I was waiting for the moment that the market would tighten even more the profit shares, activity, volume and…well, I considered that it was better to wait for the market to correct a bit more and then move to incorporate…"

Codes like this were categorized as "back-up" because they referred to the behavior that these entrepreneurs were following to demonstrate that their venturing idea was solidly and coherently grounded in hard-data market research.

In a different way, our subjects also seemed to persuade others by demonstrating how their ventures' activity made sense of the information scanned from the institutional environment. One of the coded texts in the interview with the founder of the environmental consulting firm was as follows:

> "In the beginning of this year, the Government approved new rules to regulate the future of air quality in the interior of buildings. I am not sure yet how it is going to be because information is scarce, but I have taken

> the decision of staying in the office and making a series of contacts to try to understand what will happen in the future."

Aligned with this idea, another entrepreneur sought to justify the pertinence of his business by relating it to major market trends in his industry. As he put it:

> "Either the company has the right size to evolve and grow in the future or, if it is too small, it will probably have development difficulties in the near future. The market will continue with these mergers and acquisitions and it will continue to become a global market, as it already is today. In this industry, and I am talking about the financial industry which is the one I know, if companies are too small, they risk failure because they will not have the best know-how, the best prices, and the best conditions to present to their customers."

Both of these excerpts and other similar statements were categorized as "issue relatedness". The category refers to how entrepreneurs made an effort to relate their ventures' activities with issues going on in societal discussions, particularly those of concern for the key stakeholders of the venture.

These persuasion behaviors in many ways resemble the work done on the topic of issue selling (Dutton, Ashford, O'Neil, & Lawrence, 2001), and can be interpreted by considering two persuasion behaviors as being relevant for entrepreneurs selling their ideas. We can summarize these behaviors as (1) presenting the idea with the logic of a business plan, and (2) presenting the venture bundled with other issues valued by the resource-holder.

The first persuasion behavior refers to the presentation of formal business plans and symbolic numbers and charts to convey logic and coherence to the venture activity. This is a very important way of gaining an issue's legitimacy, and entrepreneurs should use it extensively to persuade capitalist investors, acquaintance business specialists and valuable human resources to support them (Ames, 1989; Rich & Gumpert, 1985). This is a potential behavioral strategy to attract new venture resource-holders.

The second behavior calls for the need to directly connect the venture activities with the resource-holders interests. Dutton et al. (2001) have identified issue bundling as a strategy used by issue sellers in which they deliberately connected an issue to other ideas circulating in the organization. We extend this strategy to entrepreneurial idea selling and argue that the entrepreneur should bundle the venturing idea with issues previously known to be of interest to the resource-holder. By doing this, the entrepreneur may also allow the investor to create a positive expectancy outcome regarding the established supporting relationship. Positive outcome expectancies are known from the psychological literature to be strong motivational determinants (Vroom, 1964).

This category, which we labeled "positive expectation", refers to what several of our entrepreneurs mentioned. Here is an example of how they express their effort to create this positive expectancy in order to attract those they needed:

> "Another strategic asset of this company from the beginning was that people could know, right from the start, how much they get from the business they generate. This is extremely motivating…people know exactly how much they earn for each cent they bring to the company."

Another interviewee has put it as follows:

> "So…things are quite practical here, very simple. I think things are settled in a clear way for everybody. Nobody is mistaken. People know exactly what the costs are for the company and there is a great analytical accountability. As such, people know how much we will spend and how much we will earn. From that point, they all can easily find what they have a right to."

It seems clear that to obtain an attraction effect over important resource-holders, entrepreneurs should persuade them by linking the venture activity with the resource-holders' own interests.

Along with these relational behaviors, social networks have also been a prominent explanation for understanding entrepreneurial behavior (Johannisson, 2000). Entrepreneurship studies have stressed the structure of social networks as an important asset for entrepreneurial activities and have even considered networking contacts to be the prime factor in determining the success of a new venture (MacMillan, 1983). It seems that, to a large extent, a good networking position increases the chance of success of innovative ventures (Smith-Doer, Manev & Rizova, 2004).

While reflecting on resource-attraction, our interviewees were prone to identify the behaviors that maximize the use of social networks, always relating to the network position of the entrepreneur. In the literature as well, Yang (2004) has alluded to positional embeddedness to refer to the position of an element in the overall structure of a network and its effects on that element's access to information. In the same way, our data suggest that those who are able to build better network positions have a higher

probability of attracting those who are important resource-holders. This was clear in the statements of several of our interviewees who identified as many exchanging agents as they could, including professional associations, innovation centers and universities, business associations, and even governmental contacts. Sometimes, this behavioral strategy is implemented by integrating members that are highly networked themselves, as is the case of a member of one organization from our sample who was well networked with the government, as was explicit in the firm's founder's words, explaining the leaving out of that member:

> "I like to have these guys with many important and different contacts, but at this time things have not gone for the best. A strategy was settled down, but the project was not developed. Meanwhile, the person accepted a job in the Government and was gone."

Because these behaviors are related to the entrepreneur's network size (both in quantity and quality), we termed this category "Network broadening". This category is but an example of the ways that social networks can be used to attract resources. In fact, two major perspectives have dominated the literature on social network positions: network closure and structural holes (Burt, 2000). Network closure is reflected in the density of the entrepreneur's network and the centrality of the entrepreneur in that net. Network density refers to the degree to which someone's network is completed in the sense that all possible relations between the individual's neighborhood are present (Scott, 2000). Thus, density reflects the extent of connectedness among network players (Yang, 2004). Whether a high density facilitates or constrains entrepreneurial activities is an open question. Some authors argue that a dense network should be negatively associated with an entrepreneurial orientation because it reinforces conformity and

interdependence (Yang, 2004). Others see density as a good influence on innovation, given the in-depth communication and information exchange it promotes (Nahpiet & Goshal, 1998). In addition, entrepreneurs with a high density network are more prone to find resource providers within their core business network (Renzulli & Aldrich, 2005), not having to waste time and effort searching for them in external networks. Perhaps less discussable are the benefits of network centrality for entrepreneurs. Centrality refers to the extent to which one occupies a central role in a net in terms of how much he/she interacts and exchanges resources with others in the network as well as how much he/she stands between other people in that network (Cross & Parker, 2004). That is probably why our interviewees consistently commented on the need to establish enduring ties with their key resource-holders. We termed this "strong-tie development". As the founder of the human resource consulting firm told us:

> "I believe that the process at the origin of my company was not abrupt. I already had a good background in terms of technical experience, of management, and a solid network of contacts."

In many cases, these enduring ties may be established with organizations that can provide important resources for the venture foundation and development. This is the case of the connection to a university, commented on by the founder of the financial services firm, as follows:

> "We usually collaborate with three or four Universities. We have about ten mathematicians locked in a room, which we do not want outside, just developing mathematic models…models related to the top notch finance developments…"

Despite these functions of network closure, structural holes also provide a different perspective on network position. Structural holes are the gaps that exist between non-redundant contacts, and represent brokerage opportunities (Burt, 1992). Brokering positions are important network positions because brokers have access to the control of certain projects that bring together people from different networks. This happens because individuals that occupy structural hole positions are those who "know about, have a hand in, and exercise control over, more rewarding opportunities" (Burt, 2000: 355). According to this perspective, favorable network positions for entrepreneurs to act as resource attractors come more from highly frequent and heterogeneous ties than from a small set of closed and strong ties. This resonates the well known advantage of weak ties advanced by Granovetter (1973), and is aligned with the "weak-tie development" category we have detected in our data.

Here is an example of an episode told by one of the entrepreneurs, which has served to code the theoretical dimension related to the value of weak ties:

> "We started to talk about what we needed…to find someone willing to invest. We got to talk to a bank, but we saw that we were putting us too much in the edge. Meanwhile, the three of us went to a dinner with someone who could be interested, but he declined the idea. It then started with a casual trip that I made where I randomly had lunch with an acquaintance that became interested in the business and is now one of our investors. He is from the construction industry and wanted to get into this sector…and was willing to create a top-notch company."

In summary, both network centrality and brokerage positioning lie at the heart of resource-attraction. By increasing these network measures, entrepreneurs produce an attraction effect over key resource-holders they might need. They can even become sought for and resourced by important others they might not even be aware of. As such, research should focus on a better understanding of how entrepreneurs can craft network positions that increase their attraction effects over the resource-holder they need.

Cross and Parker (2004) have advanced important guidelines for enhancing social network capabilities at the individual and organizational levels. At the institutional level of industry creation, Aldrich and Fiol (1994) have noted that the capacity to attract resources is a byproduct of organizational legitimacy. Whether an entrepreneur's activity is seen as a high status or low status one plays a major role in the process of resource attraction. Research in entrepreneurial studies has shown that high status individuals more easily find resource providers within their social networks than do low status individuals (Renzulli & Aldrich, 2005). However, even high status individuals who create new ventures generally face great adversity in gaining social legitimacy, mainly because there is an absence of previous evidence about their novel activities (Gartner & Low, 1990). As such, the main available route for entrepreneurs to gather venture legitimacy is through an interpersonal process of building trust in the organizing process (Aldrich & Fiol, 1994).

This was exactly what all of the entrepreneurs we interviewed pointed to as an advantage in attracting resources. The founder of the graphic arts firm put it in the following words:

> "I was lucky in investing in some clients who I felt had confidence in me…also because they already knew my work and did not have too much uncertainty to invest in a new company. (…) And this is the commercial

aspect that you do not raise immediately. It involves both your ability to establish contacts and the time to evidence the quality of your work."

Another of our entrepreneurs also stressed the importance of establishing trusting and confident relationships:

"We do it everyday…making the client feel well and demonstrating we are able to respond to his needs. If possible, satisfy the client at the moment and exchange the material immediately, so that the client feels he is treated well, that he is also buying confidence."

Trust is a fundamental element in determining the network position of an individual (Cross & Parker, 2003). It is a basic tool to aid entrepreneurs gaining status and legitimacy in a network. As such, we can conceive the process of legitimacy gathering by an entrepreneur as a snowball effect. Entrepreneurs gain in legitimacy as they come to occupy more central positions on their nets which, in turn, lead to more legitimacy. We classified this group of behaviors as "reliability".

In addition to this need to create a market and social image of reliability and trust, the entrepreneurs we interviewed also identified other behaviors to achieve higher legitimacy in a given industry. Here is an entrepreneur's interview excerpt referring to a business partner and this theoretical dimension of network building:

"ICAP is the result of a merger from three international brokers that joined some years ago. It is the biggest world broker with a global perspective in financial products and services."

Other entrepreneurs in our sample were even more explicit in advancing the establishment of partnerships with higher status institutions. This was the case of a founder from the software consulting firm who stated:

"It is our intention to create, in the medium-term, a laboratory to support this area. We have in mind the idea of establishing partnerships with major universities and institutes."

It was also the case for another entrepreneur who commented:

> "It will be very important to demonstrate to our potential customers that we have big business groups as clients, because it brings confidence and more business. Trust is the touchstone!"

From all these data, we can confirm that legitimacy is so important in the launching of a new venture that many entrepreneurs establish alliances and partnerships with larger and higher status firms, not only to gain direct access to precious resources, but also to obtain higher legitimacy and become more attractive to potential clients, employees, and investors (Stuart, 2000; Alvarez & Barney, 2001). Hence, we labeled this theoretical category as "higher-status partnership".

It therefore seems that both cognitive factors (i.e. how much a new venture is known in a network) and social evaluative factors (i.e. how much a new venture is seen as performing high status activities) are of great importance for new venture development and success. This is in complete agreement with the propositions of Aldrich and Fiol (1994) who saw the implementation of new industries as increased legitimacy along two main dimensions: cognitive and sociopolitical. Cognitive legitimacy refers to the spread of knowledge about a new venture and can be measured

by how much there is a high degree of public knowledge of it. Sociopolitical legitimacy refers to the process by which a venture is assessed as being appropriate and right, considering societal norms, laws and values.

Both of these factors contribute to the legitimacy of an organization and are related to the need to spread the name and core business of the venture as much as possible as, expressed by the entrepreneurs we interviewed. One of the entrepreneurs, giving an example of a passage coded as "broaden notoriety", stated the following regarding his firm:

> "It is a name that is already heard in some places. And this is very good. In fact, this is something that we work for every day."

A final theoretical category that emerged from our data as a resource-attraction behavior that we termed "external validation", was the advantage of presenting external criteria to validate the quality and trustworthiness of the venture. This mentioned by the great majority of our interviewees regarding the existence of a certification. We finish this section with a passage from one of the entrepreneurs:

> "With the quality certification by IFQ [a quality certification institute] I believe our clients will see us differently, as more credible, and that is the image we seek, the image that I want to transmit to my clients. (…) Also, in marketing actions with customers it has revealed an advantage to be a certified company."

After grouping the first-order codes in theoretical categories, we conducted an axial coding to these categories and grouped them into four main aggregate theoretical

dimensions (Figure 1). These were: engaging capability, persuasion, network positioning, and legitimacy.

The first aggregate theoretical dimension included the categories of stakeholder perspective, venture mission, and self-confidence, and was based on the similarity of all these categories in referring to behaviors through which the entrepreneur drives the key resource-holders to define a sense for themselves regarding the venture and a sense for the venture concerning society and, thus, engages them in his/her own venturing ideas.

A second dimension, persuasion, included the categories of back-up, issue-relatedness, and positive expectations. All these categories have in common a rational-based persuasion strategy where the entrepreneur acts on the basis that the resource-holders are rational beings who need empirical data and are motivated by rational goals.

The third dimension grouped the categories of network broadening, strong-tie development, and weak-tie development, and was based on the similarities that these three categories present in terms of quantitatively increasing and qualitatively improving the network ties in the entrepreneurs' social environment.

Finally, we created a fourth dimension labeled legitimacy because it included categories that referred to entrepreneurial behaviors that help entrepreneurs and their ventures to achieve higher-status social positions in their social networks. This dimension included the categories of reliability, higher-status partnership, broadened notoriety, and external validation.

Idea selling and network building: two routes for resource-attraction

We now discuss how we grouped the aggregate theoretical dimensions into the two higher level dimensions that define our two-route model of resource-attraction. As

in the previous analysis, this was done through a sequential process of axial coding that led us to this two-route framework that describes what entrepreneurs do to attract resources for their ventures. From the analysis of the four aggregate theoretical dimensions – engaging capabilities, persuasion, network positioning, and legitimacy – we derived two aggregate meta-theoretical dimensions (Figure 8).

First, we grouped the theoretical dimensions of engaging capabilities and persuasion into a meta-theoretical dimension that we have termed "idea selling". We grouped these dimensions because they both refer to behaviors through which entrepreneurs purposively contact key resource-holders and strive to attract their resources and commitment in a way that is productive to the entrepreneur's venturing activity. It also considers that, to acquire the necessary resources for new business ventures, entrepreneurs have to "sell" their ideas to those who can provide them with what they need, i.e., the entrepreneur must relate to others as in order to convince them to "buy" the venturing idea and to get attracted by it. This was true for behaviors included in the dimensions of engaging capabilities and persuasion, but not for the dimensions of network positioning and legitimacy.

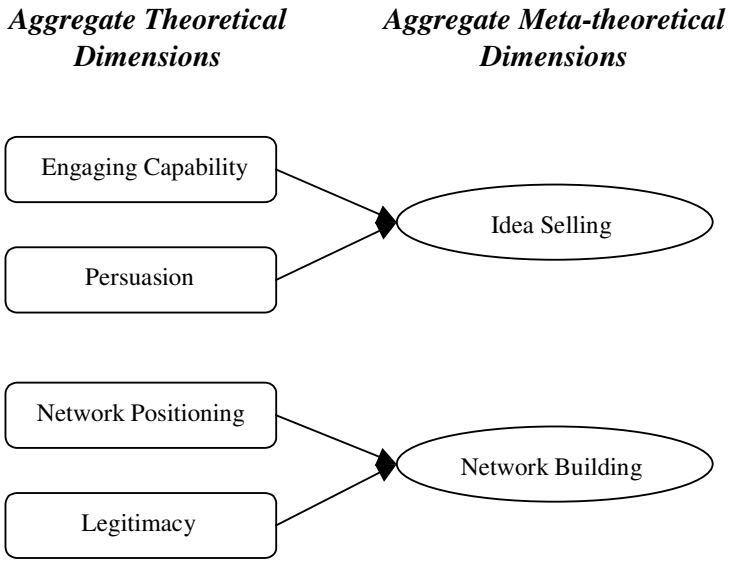
In these two last cases – network positioning and legitimacy – the aggregated theoretical dimensions referred to behaviors whereby entrepreneurs indirectly attract these resources and those who own them by means of their position in a given social network. Important resource-holders might feel an attraction to the entrepreneur because the entrepreneur occupies a brokerage position with respect to their own achievements (the others' own goals). Entrepreneurs can also become highly sought after if they possess a high status position in a given social network. In these cases, the attraction route is indirect. In sum, the "network building" route for resource attraction includes all the theoretical dimensions whereby the entrepreneur indirectly, although

deliberately, creates a position in his/her social networks, such that other people have a proclivity to search out the entrepreneur and supply him/her with the resources needed for effective new venture establishment.

DISCUSSION

It has been recently acknowledged that it takes more than "a garage and an idea" to launch a successful and effective venture (Audia & Rider, 2005). The process of creating a new business is eminently a social event, and as such, distant from the legendary picture of the isolated garage entrepreneur. Our empirically-based framework builds on this perspective by elaborating the processes through which entrepreneurs attract vital resources from key resource-holders in order to create and develop their ventures.

Figure 8: Aggregate theoretical dimensions and aggregate meta-theoretical dimensions



From the interviews we conducted, we found two main roads for entrepreneurs to attract those who have the resources they need (Figure 9). On the one hand, entrepreneurs can go directly after resource-holders and "sell" them their idea, creating an attraction effect that will bring them back to the entrepreneur in support of the venture (Figure 9a). On the other hand, entrepreneurs might attract important resource-holders indirectly by means of their position in a given social network, both in terms of structural position or network legitimacy (Figure 9b). In the first, direct route, what seems to happen is a sort of a boomerang effect where the attraction for the venture comes only after a direct contact with the resource-holder, purposively held by the entrepreneur. In the second, indirect route, entrepreneurs are sought by others without necessarily having previously contacted them. In this case, it is the resource-holder's hearing about the venture and its activity that drives them to search out the entrepreneur. The two-route framework that has emerged from our data has several theoretical and practical implications. We discuss each of these in the following paragraphs.

Figure 9: Direct (a) and indirect (b) attraction effects

To the best of our knowledge, the literature on entrepreneurship has not thus far explicitly approached direct and indirect routes that entrepreneurs can use to attract critical resources. Identifying the existence of these different routes is the main contribution of this chapter. Still, we make another theoretical contribution. We adopt a meso-level behavioral approach to analyze resource attraction in venture creation and development. Research on entrepreneurship has focused on either individual characteristics or environmental constraints. The framework we propose here highlights the relationship behavior – both direct and indirect – between the entrepreneur and his/her environment, to explain how they attract important resources for new ventures. As such, we focus neither on personality traits nor on socio-economic-cultural constraints. Instead, we stress the entrepreneurial behaviors and relationships established with the environment as an explanation for how they attract resources in their venturing activities.

We accept that the two routes are not totally independent. Research has already found, for example, that social resources are sometimes leveraged to obtain other kinds of resources, such as financial ones (Starr & MacMillan, 1990). In the same way, we have affirmed that entrepreneurs can better attract vital resources by establishing partnerships and alliances with higher status organizations that grant them legitimacy. However, entrepreneurs might depend on direct attraction behaviors to achieve those partnerships and alliances. For example, entrepreneurs can frame their venture in such a way that it deliberately makes salient a common social identity with the resource-holder. In other words, engaging and persuasive behaviors toward others accounts for their indirect attraction capability. The same is true in the opposite direction. Indirect routes for resource attraction might also influence the extent and quality of direct resource-gathering behaviors. For instance, if the entrepreneur connects only to low-

density networks he probably has fewer chances to establish direct attraction behaviors. Our point is, therefore, that the two routes of the framework are analytically valuable, but both types of attraction exist in the real world in a fully integrated way.

More challenging perhaps for future research will understand the extent to which these different resource-gathering behaviors tend to occur sequentially over time. Authors have separated the entrepreneurial process into phases or steps, such as the pre-launch, launch, and post-launch phases (Shane, Locke, & Collins, 2003; Baron, 2002). All the types of resource-attraction behaviors are noteworthy for any of the phases, but some might prove more crucial in some of them. Idea selling is certainly fundamental when the venture has not yet attained a sufficient level of legitimacy and notoriety and its network position is not an advantage (pre-launch and launch phases). However, as the venture grows in legitimacy, network building will probably reduce the selling issue role in venture growth. These propositions, however, have yet to be empirically investigated.

A final contribution of this chapter is the outline of some practical implications of the two-route framework for practitioners. We believe that entrepreneurs, venture capitalists, entrepreneurship educators, and management students in general, can all benefit from approaching resource gathering by conceptually understanding the role of direct and indirect attraction behaviors.

Behaviors for increasing idea selling effectiveness involve the capabilities to engage important resource-holders in the venturing idea by making salient how they can integrate their support within their own frames of mind and personal interests. In addition, the relationship must also evidence how it relates to societal/market current issues and must trigger a positive expectancy about the outcomes of its activities for the entrepreneur, the society at large, and the resource-holders' own goals and needs.

Behaviors relating to network positioning might be achieved by the establishment of relational ties with important resource-holders and their communities. Indirect resource-gathering behaviors can also be developed through venture legitimacy enhancement. By settling on partnerships and alliances with high status organizations and communicating the venture's existence and activity, entrepreneurs are increasing an indirect route for resource attraction.

Despite these contributions, this study has some limitations. First, we did not collect longitudinal data and, as such, we could not get a deep understanding of the sequential role of each of the behaviors in the venture development. Based on the conceptual framework we presented here, future research should investigate the relationships between the venture development stage and the effectiveness of each resource-attraction behavior. Second, the data were collected two years after the beginning of the venture. Because we relied solely on data provided by entrepreneurs, there is the possibility that they gave us a biased view about their resource-gathering strategies. Because these are successful entrepreneurs, they may have interpreted their past behaviors in a different light and reconstructed those past behaviors in a positive light. To overcome these potential pitfalls, future studies on resource-attraction behaviors should start to investigate new ventures from their beginnings or even in the pre-launch phases.

CONCLUSION

Based upon a qualitative study with entrepreneurs from six new business ventures, we developed a framework to understand how entrepreneurs can attract resources to create and develop new ventures. The framework advances two distinct

resource attraction routes in entrepreneurial contexts: a direct and an indirect one. Research has approached the critical role of resources in new venture formation and entrepreneurship, but has generally focused either on the macro resource availability within a given community, or on the micro-level of how personality traits influence resource acquisition.

We build on this literature by studying the entrepreneurial behaviors that explain resource-attraction for new venture development, emphasizing the relationships that the entrepreneur establishes with important resource-holders. We do not deny the role of personality traits, nor the constraints of the social and financial environment, but have empirically found that a behavioral-focused approach brings new insights to our understanding of how entrepreneurs may gather the vital resources they need.

CHAPTER 7

GENERAL DISCUSSION AND CONCLUSIONS

Main Issues

Recent literature in the fields of positive psychology, positive organizational behavior and positive organization studies has investigated the straight relationships between positive psychological states, such as optimism, and positive behaviors, such as proactive coping and organizational effectiveness and leadership (Cameron et al., 2003; Cameron, in press). Despite the major importance of this literature, more research is needed to better understand "when" and "how" these direct relationships exist as well as when they are influenced by other variables.

Psychological sciences have often seen this "phylogenetic" development of new research fields, showing that this is not a totally new issue raised by positive psychological studies. In fact, social attitude research in social psychology, for instance, Fazio (1990) has described the development of research as the sequential answer of the questions "*is* there a relation between attitudes and behavior?" to the "*when* does the relation exists?" to the "*how* do attitudes guide behavior?". In the emerging field of POB, researchers have also started to test the question "is there a relation between psychological capital and subsequent behavior?", in other words, they have started to study if positive psychological capital actually influences individual and organizational behavior and performance (Luthans et al., 2007, 2005).

As happened in other research fields, though, the growing evidence that positive psychological capabilities do often positively impact human and organizational behavior, did not obliterate other results that showed just the opposite, as summarized in the Chapter 3 of this thesis. Given this, we started this piece of work in 2004, just in the

moment where the "when" studies were about to emerge. The first empirical study reported here is, then, a study of such a kind.

We started by trying to answer the research question of *when do positive psychological states impact positive behavior?* The results from our first study indicated that the relationships between positive psychological states, such as optimism, and positive behavior, such as proactive coping, do exist, but that these relationships are fuzzy and yet unknown to a great deal. In the first study reported here, we have found evidence that pessimistic psychological states can also play a positive role in reducing passive behavior. This showed that the relationships between someone's psychological capital and his/her positive behavior may not always be as straightforward as taken in advance. The adaptive benefits of optimism and pessimism may depend, for example, on the more or less passive personality of individuals (a "when" kind of result). For individuals with a proactive personality trait, optimism seems to strengthen their proactivity. But for individuals with a passive personality pattern, pessimism might, in fact, act as a trigger to action, reducing passivity and reinforcing positive behavior.

Compelled by these results, we then moved further to investigate a "how" kind of research question. Specifically, we were interested in understanding *how does positive psychological states impact positive behavior?* As such, we decided to investigate the effect of inducing in others positive psychological states such as optimism – which we called *alter-optimism* – in their propensity to seek out the inducers for advice-giving, problem-solving and innovation. In other words, because we did not get a direct answer to the "when" question, we moved from the level of positive psychological states considered at an individual level towards an inter-personal and relational level of analysis, mirrored in the option to study the effects of optimism induction (alter-optimism) instead of analyzing optimism as an individual personality

state or trait. The results from our second empirical study confirmed that higher alter-optimistic individuals (e.g., those who are more skilled at inducing optimistic psychological states in others) are more able to attract them to discuss an innovation issue, to seek out for advice and to solve a job-related problem, evidencing that the way to understand "how" positive psychological capabilities impact individual and organizational behavior should lie at the kind of relationship and relational behavior, instead of considering solo individual characteristics.

Along our way in this research project, the change in focus towards a relational lens was actually co-occurring within a broader set of perspectives and authors that were emerging in positive social science research (Dutton & Ragins, 2007). In positive organizational topics such as energizing relationships (Quinn, 2007), meaningfulness (Kahn, 2007) and leadership (Fletcher, 2007), researchers are now turning their attention into their understanding of how positive individual and organizational behavior can be promoted by inter-personal relationships.

For this reason, we moved even further into a third empirical study in order to understand not only (1) *how do positive psychological states impact positive behavior*, but also (2) *how do positive psychological states are used to attract other people through relationships to impact positive organizational development*. In the process of trying to find a preliminary answer to this intriguing question, we devised a model of *how* successful entrepreneurs attract other in order to make their new ventures grow. We found that, in their efforts to attract significant others to support their business goals, entrepreneurs undertake a series of strategic behaviors that are crucial to their venture development and growth, such as showing to others "where they get in" and making them feel absolutely essential (engaging capability), creating a positive outcome-expectancy for the resource-holders (persuasion), broadening the heterogeneity and

quantity of their social networks (network positioning), or establishing alliances and partnerships with larger and higher status organizations (legitimacy). These strategic behaviors, in turn, could be categorized in two main attraction routes – idea selling and network building.

Research in the field of both energizing networks and high-quality connections have stressed similar categories of behaviors. In a grounded study reported by Cross and Parker (2004) based in a series of semi-structured interviews, for example, energizing relationships were related to five fundamental dimensions of behaviors: (1) focus in a compelling vision, stressing action possibilities instead of becoming closed in past and present conditions; (2) emphasizing as meaningful the contributions of people, creating opportunities for others to enter conversations and problem-solving debates in ways that they can be heard and taken into account; (3) full engaging others, by first hearing what they are saying and then appropriately bringing knowledge and expertise to help them; (4) acknowledging progress, making people believe that their thoughts and actions really matter; and (5) communicating a belief in the goals set up, both by showing integrity and the absence of hidden agendas and by demonstrating congruence between words and action. Several of these behaviors, such as engaging others and emphasizing their contributions, are also among the categories that we have found in our third empirical study.

Similarly, in the emerging field of high-quality connections, Dutton (2003) and other colleagues (e.g., Dutton & Heaphy, 2003), have outlined several features of social interactions that also trigger positivity in social relationships. These include (1) respectful engagement, referring to "being present to others, affirming them, and communicating and listening in a way that manifests regard and appreciation of the other's worth (Dutton, 2003, p. 22) (2) task enabling, that comprises the use of

strategies to facilitate the successful performance of others, such as giving time for others to experiment and learn, encouraging them to continue and serving as a role model, and (3) acting with trust, meaning acting towards others in a way that conveys belief in one's integrity, dependability and benevolence.

Although these authors have pointed several behavioral strategies to induce positivity in others, we believe their work could be even more structured and conceptually organized. In fact, a structured bi-factorial model such as that advanced in our third empirical study has never been proposed up to now and is one of the major contributions of the present thesis.

In the whole, thus, the three studies presented in this thesis allowed us to sequentially answer the following question: *when and how do positive psychological states impact positive behavior and positive organizational development?* Each of our three studies points empirically founded tentative answers to this question. In each of them, we have highlighted both limitations and main contributions that they individually make to theory in positive management and positive organizational studies. In the following pages we will center our discussion in the implications of our main findings for future research in these areas of study, particularly for leadership research.

Limitations and Implications for Future Research

Previous to our underscoring of the core implications of the conclusions we have reached with these studies, we must analyze a general limitation of this thesis. The specific limitations of each of the studies, particularly methodological limitations, have been addressed in turn in the presentation of each of them. However, we would like to stress here a particular limitation that is related to the use of different methodologies in

the three studies (quantitative research, social network analysis and qualitative research), all with very different epistemological roots (Barley & Kunda, 1992, 2001; Borgatti & Foster, 2003; Eisenhardt, 1991a; Eisenhardt, 1991b).

Although this can be arguably acceptable as a research approach if one takes the assumption that a research methodology should fit the research goals and not the researcher's interest and options, it is sometimes sustained that this reflects a non-commitment of the researcher with a single epistemological approach. Some of these authors see a methodological option and its epistemological fundaments as a matter of a researcher's commitment – acquired through socialization practices – and not as a means-ends issue, contingent with the research goals (Van Maanen & Barley, 1984).

We prefer to see methodological options as a consequence of the research question and, as a result, we see as positive the use of different methodologies to explore a phenomenon – positive behavior in organizations. However, we are pretty aware that this is a controversial and not yet solved discussion and we acknowledge here our difficulty to deal conclusively with this issue.

Despite this, the thesis has fruitful conclusions, implications and insights for future research. We discuss them in the following paragraphs, highlighting the main implications of our studies to the emerging field of positive leadership.

Implications for Positive Leadership

The conclusions drawn from both the empirical studies and the theoretical elaborations of this thesis are insightfully useful to understand the on-the-edge conceptions of positive leadership. Leadership has been an intriguing theme in the fields of management and organizational psychology and one of the most researched topics in

science (Stogdill, 1974). Through very different lens, authors have addressed the issue of leadership as a personality trait (Stogdill, 1948), a behavioral repertory (Yukl, 1998; Blake & Mouton, 1964), a situational-contingent strategy (Hersey & Blanchard, 1988), or a transformational capability (Bass, 1999). In these approaches, tough, the authors have generally opted to focus on the ability of leaders to overcome employee's resistances, fears and other obstacles that impede workers to achieve the desired performance standards.

In the last years, positive approaches to leadership have come to appear by stressing the role of leaders as promoters of higher positive psychological capabilities in their followers (Avolio & Luthans, 2006). In line with this, several authors have acknowledged that a major factor affecting positive psychological capital development is leadership (Gardner & Schermerhorn, 2004; Hollenbeck & Hall, 2004; Luthans & Avolio, 2004). Specifically, authentic leadership provides stronger insight about how to promote positive outcomes in a workforce (Gardner & Schermerhorn, 2004; Luthans & Avolio, 2003). Authentic leadership is "a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-regulated positive behaviour on the part of leaders and associates, fostering positive self-development" (Luthans & Avolio, 2003, p.243). Research has evidenced that a leader's support of this kind leads to positive outcomes both for employees (e.g., job satisfaction, positive mood) and for organizations (e.g., commitment, reductions in withdrawal behaviour, performance) (Gardner & Schermerhorn, 2004).

According to their model of *Authentic Leadership Development*, Luthans and Avolio (2003) have asserted that these behavioural outcomes result from two key antecedents: positive psychological capacities and positive organizational contexts.

Positive psychological capacities driving authentic leadership include confidence, hope, optimism and resilience (Gardner & Schermerhorn, 2004; Luthans & Avolio, 2003). Stimulating positive states in organizations imply, thus, developing in first place positive authentic leadership.

In the same way, Cameron (in press) has recently defined *positive leadership* as "the ways in which leaders enable positively deviant performance, foster an affirmative orientation in organizations, and engender a focus on virtuousness and eudemonism" (p. 8). In his view, positive leadership has three connotations. First, it refers to the facilitation of performance that produces outcomes that dramatically exceed expected performance and not "simply" common and desired performance standards. Second, it refers to an affirmative bias that is oriented towards enabling thriving and flourishing more than toward obstacles and impediments. Third, it refers to facilitating the emergence of what is best in individuals – their eudemonic intrinsic good, in Aristotelian terms.

Given the emergence of these new positive theoretical assumptions one might wonder how positive leaders promote positive psychological states in their followers in order to achieve outstanding and extra-ordinary individual and organizational results. The findings from the third empirical study reported here is a starting point to advance our understanding of how this happens. It proposes that inducing "good vibrations" in others in order to get their support for our undertakings (i.e., to exert a leadership effect) might be achieved through two quite different routs – idea selling and network building – and future research should investigate this two-route model in a broader set of leadership contexts.

Finally, the results from our empirical studies also have implications for a contemporaneous theory on leadership: leader-member exchange theory (LMX). LMX

theory has proposed for decades that more attention should be devoted to "relationship-based" approaches to leadership (Graen & Uhl-Bien, 1995). However, this research has investigated the antecedents and consequents of the quality of leader-member exchanges more than reflected in what is at stake in these particular exchanges (Gerstner & Day, 1997). When it did, researchers have stressed mostly role-taking, role-making and the perceptions of justice as explaining the quality of the leader-member exchange (Scandura, 1999).

Our own research adds to this literature by pointing that the ability to induce positive psychological states and improve positive psychological capital in others – such as alter-optimism – can be seen as an important facet of LMX. In some sense, the call for a theory of leadership that is truly "relationship-based" is still along its way and researchers should strive to maintain their efforts in understanding more on this subject.

Concluding Remarks

The main goal of this thesis was to understand *why and how positive psychological states impact positive behavior and positive organizational development*. In the pursuit of this aspiration, we felt that we have come to make a contribution to strengthen the fields of positive psychology and positive organizational studies. This was true within the Portuguese borders, but also throughout Europe and globally too.

Following the pioneering book by Cunha, Rego and Cunha (2007) published in Portuguese, other publications in the Portuguese language have addressed the topics of positive organizations and positive organizational behavior. These are the cases of a recent publication by Cunha, Rego, Lopes and Ceitil (2008), and a special issue on the

topic of Positive Organizational Behavior in the scientific publication *Comportamento Organizacional e Gestão* (Lopes & Cunha, 2007).

In addition, several international publications are now being published regarding positive psychology and positive organizational studies by Portuguese researchers, such as the recent works by Rego, Cunha and Oliveira (2008), Lopes and Cunha (forthcoming), Palma, Cunha, and Lopes (forthcoming), and Rego, Cunha and Lopes (forthcoming). These examples are not intended to be exhaustive and other publications are at the moment being prepared for publication.

At a European level, likewise, there have been initiatives aimed at promoting the study of what is better in people and organizations. Energized by their "passion for knowledge" regarding positive organizational functioning (Kaiser, Müller-Seitz, Lopes, & Cunha, 2007), several authors, including ourselves, have undertaken the leading role of convening a track at the European Academy of Management (EURAM) Annual Conferences of 2007 and 2008, joining synergies to establish robust roots of the field of positive organizational studies in Europe. These efforts are actually going further in that some of these European authors are now recognized as co-leading the development of the field, publishing with world-class authors in books published internationally by prestigious organizations such as the Cambridge University (Lopes & Cunha, Kaiser, & Müller-Seitz, 2008).

This thesis is just one more small contribution to this growing movement towards positive approach to organizing. Some of the theoretical essays and empirical studies presented in the thesis have already joined the exciting work that is being accomplished in this new area of scientific inquiry (Lopes & Cunha, 2008; Lopes et al., 2008). Their contributions and implications for future research have also been pointed in this thesis in the hope that they can inspire novel researcher n the filed.

In sum, we hope that the reading of this thesis has made you feel the *good vibrations* of this fascinating and emerging field of study and we invite you to become an active contributor to the cause of making the endeavor of positive organizational behavior and humanistic management an impactful approach in our challenging society.

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