**HEC MONTRÉAL**
École affiliée à l'Université de Montréal

# Beyond Rationality :
# Top Executive Emotions and Strategy-Making

**Par**
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# Beyond Rationality : Top Executive Emotions and Strategy-Making

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## Résumé

Cette thèse explore l'influence des hauts dirigeants sur la stratégie et le succès des organisations. Il aborde la question des émotions qui a généralement été négligée dans la recherche en stratégie. L'idée générale défendue dans cette thèse est que l'on doit aller au-delà de la vision étroite du «haut dirigeant rationnel» et considérer les émotions comme un facteur clé dans les processus et les choix stratégiques. Elle contribue à la littérature en proposant trois essais sur cette question, à travers les articles 1, 2 et 3.

L'article 1 propose un modèle théorique sur le rôle des émotions positives dans la stratégie. En s'appuyant sur la théorie psychologique sur les émotions positives (*broaden-and-uild theory)*, il soutient que les émotions positives jouent un rôle clé dans l'adaptation stratégique de l'organisation. En particulier, cet article prédit que l'expérience des émotions positives au niveau du président d'entreprise (PDG) et au sein de l'équipe de haut dirigeants est susceptible d'être bénéfique pour la croissance et la rentabilité d'une organisation.

L'article 2 utilise une enquête empirique quantitative de 102 entreprises pour déterminer le lien entre l'affectivité positive du président d'entreprise (PDG), d'une part, et l'entrepreneuriat corporative et ses trois dimensions (innovation, renouveau stratégique et aventure), d'autre part. Les résultats confirment les hypothèses et montrent l'importance de l'aspect affectif et émotionnel de l'impact du PDG sur le comportement stratégique et la réussite des organisations.

L'article 3 utilise une étude longitudinale-historique et qualitative sur 20 ans de deux fondations philanthropiques, l'une publique et l'autre privée, pour examiner la façon dont les agents de changement gèrent l'anxiété liée à l'identité organisationnelle pour favoriser le changement stratégique. Le modèle théorique émergent offre une preuve du lien entre ce que nous appelons «Anxiété identitaire» et l'inertie stratégique, et détaille les pratiques utilisées par les agents de changement pour gérer cette anxiété d'identitaire.

Dans l'ensemble, cette thèse appelle à plus d'attention sur les émotions des hauts dirigeants et les mécanismes qui les relient à la stratégie au niveau organisationnel. Elle invite à explorer les conditions et les pratiques managériales qui permettent un impact positif de ces émotions sur les processus stratégiques et leurs résultats.



**Mots-clés**: Hauts dirigeants, émotion, stratégie, succès organisationnel

**Méthodes de recherche**: Conceptuel; Quantitatif; Qualitatif.

## Abstract

This thesis explores the influence of top executives on the strategy and success of organizations. It addresses the issue of emotions that has been generally neglected in strategy research. The central idea advocated in this thesis is that one must go beyond the narrow view of "the rational top executive" and consider emotions as a key factor in strategic processes and choices. It contributes to the literature by offering three essays on this issue: articles 1, 2 and 3.

Article 1 proposes a theoretical model of the role of positive emotions in strategy. Drawing on the broaden-and-build theory, it argues that positive emotions play a key role in the strategic adaptation of organization. In particular, this article predicts that experience of positive emotions at the CEO and top- management group levels are likely to be beneficial to an organization's growth and profitability.

Article 2 uses a quantitative empirical investigation of 102 firms to determine the relationship between the Chief Executive Officer's (CEO's) positive affectivity, on the one hand, and corporate entrepreneurship and its three dimensions (innovation, strategic renewal and venturing) on the other hand. The results confirm our hypotheses and show the importance of the affective and emotional aspect of the CEO's impact on organizations' strategic behavior and success.

Article 3 uses a 20-year longitudinal-historical and qualitative study of two foundations, one public and the other private, to investigate how change agents manage anxiety related to organizational identity to promote strategic change. The emergent model offers evidence of the link between what we call "Identity Anxiety" and strategic inertia and details the practices used by change agents to manage this identity anxiety.

Overall, this thesis calls for more attention to top executive emotions as well as to mechanisms that link them to organizational-level strategy. It invites future research to explore the conditions and managerial practices that would enable the positive impact of these top-executive emotions on strategic processes and outcomes.



**Keywords:** Top executives, Emotion, Strategy, Organizational-level success

**Research methods:** Conceptual, Quantitative, Qualitative

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*À mon épouse Marie-Claude et mes enfants Lauren-Line et Christian Levi pour leur patience et leurs encouragements.*

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# Chapter 1 - Introduction: Why study top-executive emotions?

This thesis investigates *how top-executive emotions influence organizational decision-making processes and outcomes*. Top executives, namely CEO's, top managers and the board of directors (Finkelstein & Hambrick, 1996), make strategic decisions which largely determine the success of their organizations, especially in often highly competitive environments. In recent decades, strategy research provided important insights on the impact of the top executives on organizational strategy and outcomes. However, the strategic effects of their emotions have been insufficiently studied.

A first stream of research, adopting the Upper echelon perspective (Hambrick & Mason, 1984), indicates that an organization's strategy is a reflection of its top executives. Their characteristics and behaviors influence strategy making and success (Finkelstein & Hambrick, 1996). For example, the composition and dynamics of management teams have an impact on decision comprehensiveness (Simons, Pelled, & Smith, 1999), strategic move in highly competitive environment (Hambrick, Cho, & Chen, 1996) and firm performance (Li & Hambrick, 2005). In recent years, there has been a great interest in the "CEO effect" (Quigley & Hambrick, 2014), with a focus on CEO personality (e.g. (Chatterjee & Hambrick, 2007; Nadkarni & Herrmann, 2010). For example, various studies indicate that narcissistic CEOs tend to make strategies that put the company at risk and affect its performance (Zhu & Chen, 2014).

A second set of research adopts a strategy process perspective (Burgelman, 1983) to study how top executives influence decision-making processes. For example, these studies found that top-executive attention (Ocasio, 1997), interpretation (Thomas & McDaniel, 1990) and sensemaking (Gioia & Chittipeddi, 1991) affect their organization's decision- making process and ability to adapt to external challenges.

A third set of research adopts the strategy-as-practice perspective to explore the daily life of top executives. The results of these studies indicate that executive practices, which may seem trivial at first glance, contribute to successful strategizing. This work indicates that practices such as discourse (Mantere, 2013; Vaara, Kleymann, & Seristö, 2006), routines (Gupta, Hoopes, & Knott, 2015; Salvato, 2009) and even Powerpoint presentations (Kaplan, 2011) have an important influence on strategy- making outcomes. Thus, top executives' everyday micro-practices appear to progressively shape organizational strategy.

The latest set of research adopts micro-foundations (Felin, 2005; Teece, 2007) and behavioral strategy (Powell, Lovallo, & Fox, 2011) perspectives to explore the effect of top executive psychological processes on the dynamic capability of organizations, i.e. ability to continuously adjust their strategic advantage to changing environments. For these studies, executive psychology, as well as the behaviors that result from them, form the basis for understanding the strategy of any organization (Gavetti, 2005).

Beyond the differences of perspective, these studies share a clear interest in top executives' cognitive and reasoning processes (Daft & Weick, 1984; Hambrick & Mason, 1984; Simon, 1997; Weick, Sutcliffe, & Obstfeld, 2005). Almost all of the hundreds, if not thousands, of studies on top executives and strategy making investigated these cognitive processes through concepts such as 'managerial cognition', 'sensemaking', 'interpretation', 'attention', 'cognitive inertia', etc. Very few studies have been devoted to the study of emotional processes in the strategic behavior of top executives. Yet, emotions are just as important as cognitions to understand the basic behavior of individuals in their interaction with their environment.

Emotions are, by definition, affective states and experiences that fulfill particular adaptation functions (Lazarus, 1991). Numerous psychological studies indicate that emotion and cognition are different but complementary mechanisms in the coping behavior of individuals to their environment (Lazarus, 1991; Zajonc, 1980). One cannot completely understand individual behavior without taking into account emotional processes. In recent years, neuroscientists have provided solid evidence that individuals cannot make decisions without emotions (Damasio, 1994). Some strategy scholars have indicated the importance of emotions in strategic decision-making processes. An example is the influential work of Eisenhardt (1989) that argues that emotions are crucial to understand strategic decision processes. Despite these findings and calls for a greater attention to emotions in decision-making, there is a paucity of strategic management studies on the role of top executive emotions. This thesis aims to help fill this gap in the literature by bringing complementary insights to the few studies that have been carried out to date.

### 1.1. Top-executive emotions and strategy making

The interest in top-executive emotions is fairly recent. In Table 1 below, I report the most significant studies published to date (Delgado-García & De La Fuente-Sabaté, 2010; Liu & Maitlis, 2014; Maitlis & Ozcelik, 2004; Vuori & Huy, 2015). These studies provide interesting contributions, which not only validate the important role of emotions in strategic processes but also provide mechanisms that underlie the link between emotions and strategy.

Maitlis and Ozcelik (2004) made an early contribution, focusing on how organizational decision processes become toxic. They studied three orchestras in the UK over a period of three years. Their results reveal that negative emotions emerge and become stronger over time as people interact with each other. This creates a context of tension around decisions that leads decision-makers to avoid some topics and fall into inertia that is detrimental to the organization. This finding shows, above all, that top executives experience emotions such as anxiety, fear, and shame which, in turn, leads to dysfunctional actions and behavior in the decision-making process.

In the same vein, Liu and Maitlis (2014) were interested in the emotional dynamics during top-management team strategizing. Using mainly video recording of seven executive meetings in a Canadian technology company, these authors scrutinized in depth the emotions displayed in strategic conversations. They found that the display of positive emotions leads to a collaborative decision process whereas the display of negative emotions leads to an unreconcilable process. They emphasize the need for positive emotional dynamics in top management teams.

Vuori & Huy (2016) focused onthe role of emotions in the relationships between top managers and middle managers. They studied how Nokia lost its leading position in the smart phone market. They found that "fear" as emotional experience at the top-executive and middle-managers level plays a key role. Top managers' externally focused fear of competitors and stakeholders pushed them to put pressure on middles managers. Conversely, middle managers internally focused fear of top managers prompted them to not share the negative information that could have informed strategic decision-making. This lack of accurate information reduced top managers' attention to external threats. They were confident that everything was going well and did not take appropriate decisions to strengthen Nokia's innovation capacity.

Lastly, Delgado-Garcia & De La Fuenté (2010) focused on CEOs. Unlike the above studies, they used a quantitative method to analyze the effect of CEOs' affective traits (emotional dimension of personality) on firms' strategy and performance. They carried out a large-scale survey of 55 CEOs of Spanish banks. Their results reveal that banks led by CEOs with a dominant positive affective traits tend to adopt strategies which deviate from the central trend in the industry. This translates into higher performance than the industry average. In contrast, banks led by CEOs with dominant negative affective traits tend to have strategies similar to others, non-distinctive, with moderate performance. These authors conclude that CEOs' emotions matter in strategic choices and organizations' ability to succeed.

**Table 1: Studies published on top executive emotions and strategy making**

| Authors (year) Journal | Perspective | Focus | Method | Key findings and contribution |
|---|---|---|---|---|
| Maitlis & Ozcelik (2004) *Organization Sciences* | Strategy Process | Top management teams | Qualitative *(Three-years longitudinal study of 3 orchestras)* | Experience of negative emotions (e.g. anxiety, anger, frustrations) gradually shape toxic decision processes. Such toxic processes create inertia and affect the quality of decisions. |
| Delgado-Garcia & De La Fuenté (2010) *Strategic Management Journal* | Upper Echelon | CEO | Quantitative *(55 banks)* | CEO's affective traits influence firm's strategy and performance. Positive affective traits fosters non-conformist (and therefore more competitive) strategies and higher performance, while negative affective traits lead to the opposite results. |
| Liu & Maitlis (2014) *Journal of Management Study* | Strategy-as-Practice | Top management teams | Qualitative *(Nine-month study of one high tech organization)* | Emotions displayed during strategic conversation shape top- executive strategizing. Display of positive emotions fosters collaborative decisions, while display of negative emotions favors unreconciled decision processes. |
| Vuori & Huy (2016) *Administrative Science Quarterly* | Strategy Process | Top managers – Middle Managers | Qualitative *(Five-year study of one organization)* | The way top managers and middle managers share emotions (fear) has an influence on the organization's ability to innovate and adapt to competitive environments. |

In summary, these studies indicate that top executive emotions are important for strategy making and success. However, their number and scopes are limited, and the role of top executive emotions remains poorly understood. There is therefore a need for more research. The aim of the current thesis is to complement previous studies using a variety of perspectives and methods to search for insights and help advance the knowledge and practice of top management strategizing.

## 1.2. An overview of the thesis

This thesis makes additional contributions to prior research by offering three articles. Figure 1 below provides an overview of the thesis that demonstrates how the three articles complement each other and contribute to the overall aims of the study. Articles 1 and 2 explore the role of positive emotions, while article 3 explores the role of negative emotions on strategy making. They use different perspectives and methods, as described below

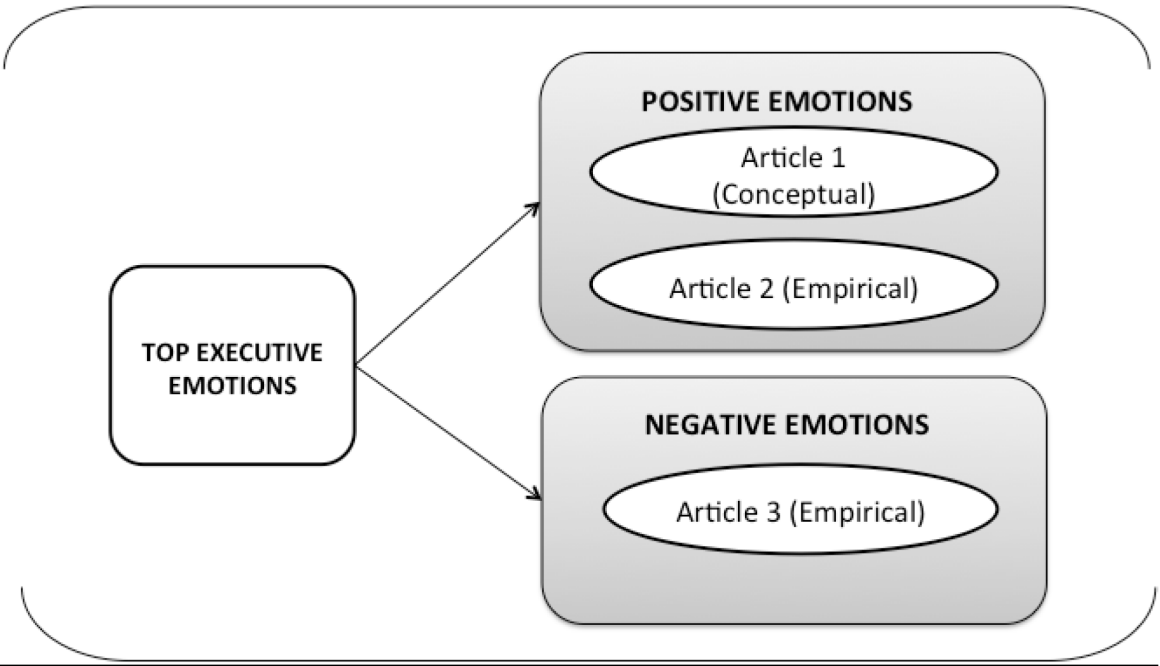
Article 1 proposes *a positive emotions perspective of strategy making and success*. It explores the overall construct of "positive emotions", which encompasses positive feelings such as determination, enthusiasm, optimism, and joy. This article is conceptual and extends conclusions of psychologists' research, in particular the "broaden-and-build theory" about the benefits of positive emotions, to the context of organizational-level strategy making. It explores the role of positive emotions in both CEOs and top management team strategic behavior and decision processes. This article offers ten theoretical propositions on the link between positive emotions and several dimensions of strategy making (e.g. innovation, diversification, comprehensiveness, and heuristics). Thus, it aims to stimulate more interest and empirical research on the role of positive emotions and to challengethe negative view that is often associated with the roles of emotions in strategic decision processes.

Article 2 provides some empirical evidence for Article 1's propositions through a quantitative study of the relationship between CEO positive affectivity and corporate entrepreneurship. The construct of "positive affectivity" refers to the experience of positive emotions across situations and time, while "Corporate Entrepreneurship" refers to some dimensions of the strategy making (innovation, renewal, and venturing). Based on a study of 102 companies from Quebec, I found a positive relationship between these two constructs. The theoretical perspective and arguments developed in Article 2 are similar to those set out in Article 1. Thus, Article 2 attests to the relevance of the theoretical proposals developed in Article 1 and encourages further empirical investigations.

Article 3 explores the role of a discrete negative emotion, which I conceptualized in terms of "Identity Anxiety". This construct refers *to anxiety related the loss of organizational identity at the top executive level*. This article complements the first two articles by adopting a thorough longitudinal qualitative approach. Based on extensivedata (more than 200 interviews and 100 observations) collected from two philanthropic organizations, this article provides a grounded theory on how to manage identity anxiety in strategic decision-making processes to promote change. Article 3 invites more attention to the study of discrete emotions in strategic processes and to the management practices of negative emotions, which could reduce their harmful effects.

In summary, these three articles complement each other by addressing different types of emotions and using different perspectives and methods to help identify the role of top-executive emotions in strategic processes and choices. In the following sections, I present these three articles (Chapter 2, 3 and 4 and then discuss their general contributions in the last section.

**Figure 1: An Integrated View of the Three Essays**




| Article | Perspective | Focus | Method | Contribution |
|---|---|---|---|---|
| Article 1: A Positive Emotions Perspective on Strategy-Making and Success | Upper Echelon | CEO and TMT* | Conceptual | Based on the "Broad-and-Build" theory, showing how positive emotions at the CEO level and top management team level contribute to more effective strategies that promote the success of organizations. |
| Article 2: The Influence of CEO Positive Affectivity on Corporate Entrepreneurship | Upper Echelon | CEO | Quantitative (102 Canadian firms) | Exploring the CEO Positive Affectivity concept and the beneficial effect for corporate entrepreneurship. In addition, exploring contingent factors that can increase or decrease this beneficial effect. |
| Article 3: Are We Losing Our Social Value? Managing Identity Anxiety During Strategic Change | Strategy Process and Practice | TMT and Board | Qualitative (20-year study of two philanthropic organizations) | Exploring the concept of Identity Anxiety and how it can hinder strategic change. Identifying management processes and practices that reduce its impact. |

**CEO = Chief Executive Officer; TMT = Top Management Team*

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## Chapter 2 - First article

# A positive-emotions perspective on strategy making and success

### 2.1. Abstract

The role of positive emotions in strategy has generally been neglected. Yet, research in psychology now shows how important they are for individual or group adaptation challenges. In this paper, we extend the debate around these findings to assess how positive emotions affect strategy-making and organizational-level success. Drawing mostly on the broaden-and-build theory, we argue that positive emotions play a key role in the strategic adaptation of organizations. We predict that the experience of positive emotions at the chief-executive-officer level influences strategy-making by fostering innovation, change, proactive orientations, diversification and mobilization of strategic resources. Similarly, positive emotions within the top management team foster comprehensiveness, creative solutions, adaptive heuristics and collaboration. Boundary conditions are discussed. The model proposed calls for more attention to the psychological and emotional microprocesses underlying an organization's strategy and success.

*Keywords:* Positive emotions; Strategy making; Top executive influence; CEO and TMT; Organizational success

## 2.2. Introduction

> The view emerging from this research is that emotion is critical to understanding strategic decision making. (Eisenhardt, 1989: 573)
>
> Positive affect—perhaps even more than negative affect—can be a driving force influencing the quality of decision-making (Hambrick, Finkelstein and Mooney, 2005: 505).

Emotions are one of the basic determinants of human behavior. As the above quotes suggest, emotions, in particular positive emotions, are, key drivers of strategic decision-making processes and could explain executive strategic behavior. Despite renewed calls by strategy scholars (Hodgkinson & Healey, 2011; Powell, Lovallo, & Fox, 2011), researchers have generally disregarded the role emotions play in executive decisions. Particularly, we know little about the beneficial or negative effect that emotions could have on strategy-making and organizational success. Driven by psychoanalysis, most research emphasizes pathology. A typical work is that of Kets de Vries & Miller (1984), who attempt to relate leaders' neuroses to strategic behavior. Yet, a considerable body of research in psychology has established that positive emotions are key to individual and group success (Fredrickson, 1998; Lyubomirsky, King, & Diener, 2005; Staw & Barsade, 1993) in organizations (Côté, 2014). It is well recognized that positive emotions play a key role in promoting individual capabilities such as flexibility, openness, creativity and innovation (Isen, Daubman, & Nowicki, 1987; Smith, Tong & Ellsworth, 2014), proactive behavior and recognition of opportunities (Fritz & Sonnentag, 2007; Mittal & Ross, 1998; Zadra & Clore, 2011), prosocial behavior, cooperation, and social influence (George, 1991; Staw, Sutton, & Pelled, 1994).

In light of this gap in the current literature, in this paper we provide a more explicit and integrated view of the effect of positive emotions at the top-executive level on organizational strategy and success. Our research question is, *How might positive emotions at the top-executive level be related to a firm's strategy and success?* In responding to this question, we build on the broaden-and-Build theory of positive emotions, upper echelon and strategic management literatures to develop a theoretical model. We conceptualize positive emotions as affective experience in the context of strategy making and consider their influence on both cognitive and social processes. Hereby, positive emotions are considered as a general rather than a discrete construct (Fredrickson, 1998). Hambrick

(1994) argued that the top person in an organization has the initiative and often dominates the decision-making process. His/her emotions are likely to play a key role and influence the emotions of all the top management team. Therefore, for the sake of clarity, we distinguish and analyze separately the Chief Executive Officer's (CEO) and the Top Management Team's (TMT) positive emotions.

Overall, our model predicts that top executives' positive emotions are beneficial to a firm's strategy and success. We examine in particular the relationship between the experience of positive emotions and important strategy-making factors—innovation and change, diversification, proactiveness, resource mobilization, comprehensiveness, creativity, heuristics and collaboration. These are identified in the strategic management literature as key contributors to a firm's success (Baum, Locke, & Smith, 2001; Chakrabarti, Singh, & Mahmood, 2007; Davis, Eisenhardt, & Bingham, 2009; Fredrickson & Mitchell, 1984; Geletkanycz & Hambrick, 1997; Li & Hambrick, 2005; Nadkarni & Narayanan, 2007; Stam & Elfring, 2008). We also discuss some boundary conditions related to the top-executive (CEO and TMT) context. In particular, we highlight the influence of managerial discretion, tenure and more broadly the environment in which strategicdecisions are made.

Our model contributes to the psychological foundations of strategic management theory (Powell et al., 2011). By drawing more attention to the importance of emotions at the top-executive level, we contribute to an improved understanding of the mechanisms by which top-level positive emotions can benefit a firm's strategy and success. We also highlight key contingent conditions that may affect, positively or negatively, such benefits. This paper also contributes to the positive-emotion school of management, in particular to the broaden-and-build and the appraisal theories of positive emotions, extending their conclusions to organizational strategy-making.

The paper is organized into three main parts. First, we provide an overview of the concept of positive emotions and guidelines on how it is used in the context of this theoretical development. Second, we present the adaptive functions of positive emotions using the lens of broaden-and-Build, as well as appraisal theories, as a way to synthesize research findings. Third, we build a theory of top-executive positive emotions effects on organizational strategy and success. Finally, we discuss boundary conditions, implications and avenues for future research.

### 2.3. The concept of positive emotions

There are diverse working definitions of positive emotions (Tugade, Shiota, & Kirby, 2014). In this section we clarify the concept of positive emotions for the purpose of the current paper. First, we distinguish positive emotions from positive affect and positive mood. The term *affect* is an umbrella concept (Barsade & Gibson, 2007) which includes mood, emotion, and affective states and traits. *Mood* refers to a feeling of something pleasant or unpleasant, which is vague, diffused and long lasting. *Emotion* refers to a brief and intense physiological response to a situation perceived in the environment. Although conceptually different, these constructs are used interchangeably in empirical research. They share similar mechanisms in explaining individual behavior. They are also hard to distinguish when considering their general effects on strategy-making. Therefore, we conflate them in our study.

Our argument is based on the behavioral effects of the general mechanisms of positive emotion. In the literature on positive emotions, there is a debate on discrete versus general effects (Tugade et al., 2014). For example, some research is focused on discrete emotions such as pride, challenge-determination and compassion (Smith et al., 2014), suggesting that each has specific meaning and effects. In this paper, in contrast, we focus on the general effects of positive emotions on strategy making and success. This is consistent with the broaden-and-build theoretical perspective adopted in developing our argument.

Another important distinction is between experienced and dispositional positive emotions. The experience of emotion refers to a spontaneous and physiological reaction which occurs when an individual encounters an emotion-provoking situation. Therefore, it is directly related to an individual's experience in his/her environment. Dispositional positive emotion refers to an individual's tendency to experience a specific positive emotion across situations and overtime. Expressions such as 'happy person' or 'jovial person' refer to dispositional positive emotions, which are anchored in the personality of the individual (Livingstone & Srivastava, 2014). Research in psychology has found that experiences of emotions play a mediating role between dispositional affects and an individual's actions (George, 1992; George & Brief, 1992). In other words, disposition produces emotion, which in turn influences action. For the sake of clarity, the theoretical framework that we present discusses primarily the influence of positive emotions as experience rather than disposition. However, this discussion may also be applied to dispositional positive emotions, given the cause-and-effect relationship between emotional disposition and the experience of emotions.

In addition, we use certain personality traits that are deemed sources of positive (vs. negative) emotions as a proxy for the understanding of individual behavior. Research in psychology suggests that there is a strong relationship between personality traits and positive emotions. Particularly, extraversion is positively related to the experience of general positive emotions, while neuroticism (also called emotional instability) is negatively related to general positive emotions (Shiota, Keltner, & John, 2006; Tan, Foo, Chong, & Ng, 2003).

Finally, we distinguish positive from negative emotions. One way to differentiate them is to consider that they are not on opposite sides of the same continuum. The circumflex model of emotions (Larsen & Diener, 1992) is often used to illustrate this difference. It clearly shows that positive affect has its own axis and continuum from low to high. This distinction makes it advisable to consider both the valence and the level of activation in the explanation of an emotion's role in behavior. Another way to distinguish positive from negative emotions is to consider their adaptive functions. Research on emotion acknowledges that both positive and negative emotions are important for individual adaptation; however, each type of emotion ensures a different function in the process (Frijda, 1988; Lazarus, 1991). For example, negative emotions are related more to human preservation and involve mechanisms such as withdrawal behavior, while positive emotions are related more to human success in problem solving and involve mechanisms such as the approach behavior (Watson, Wiese, Vaidya, & Tellegen, 1999). Taking into account the difficulties of clearly distinguishing positive from negative emotions, Smith, Tong and Ellsworth (2014: 16) suggest that beyond the subjective "feel good" for positive, and "feel bad" for negative emotions, "much differentiation can be captured by the idea that negative emotions often…serve self-protective motivational functions, whereas positive emotions…often serve appetitive functions." The appetitive function alerts the person to promising opportunities and unrealized gains. The study of both negative and positive emotion effects is needed, but here to make the task manageable, the focus of our paper is on the adaptive function of positive emotions. In the next sections, we discuss these functions and then the implications for strategy making and organizational success.

## 2.4. Adaptive functions of positive emotions: broaden-and-build lens

Research in psychology offers several perspectives on the adaptive function of positive emotions. The broaden-and-build theory proposed by Barbara Fredrickson (1998) has been particularly influential and can be used to provide a comprehensive view on the effects of positive emotions. It has been criticized as being overly focused “on properties of positive emotion in general” while “the distinctive properties and motivation urges of different positive emotions are explicitly downplayed” (Smith, et al., 2014:16). It has, however, the advantage of providing a structured framework for the understanding of the key adaptive features of positive emotions, and it is strongly supported by numerous experimental studies in psychology that will be discussed later. The broaden-and-build perspective, perhaps supplemented by the appraisal theory (Eckman, 1984; Frijda,1986) suggests that positive emotions contribute to several adaptation functions, “including rewarding success, encouraging perseverance, sustaining engagement, promoting pair-bonding, promoting social responsibility” (Smith, et al., 2014: 16). Overall, this perspective describes the process by which positive emotions lead to adaptation. It argues that positive emotions *broaden the scope* of attention, thought and actions, which in turn allows the individual to *build resources* usable over the long run. Here we provide a brief presentation of these adaptive functions, especially those useful for describing the link between positive emotions and strategy making.

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### 2.4.1. Broaden the Scopes

The "broaden" function of positive emotions refers to their influence on cognitive processes, including cognition related to problem solving and social relations (Fredrickson, 1998).First, positive emotions broaden the scope of *visual attention*. For example, in an experimental research using global-local visual processing task, Fredrickson and Branigan (2005) demonstrate that the same individuals make global choices when they experience positive emotions (i.e. amusement and contentment) and local choices when they experience negative emotions (see also Gasper and Clore (2002) for similar experimental research).

Second, positive emotions broaden the *scope of cognition* (Fredrickson & Cohn, 2008). In other words, positive emotions influence the organization of cognition and promote cognitive flexibility, openness to new information, and integration of new information. This adaptive function has been confirmed by numerous psychological studies (Bless et al., 1996; Dreisbach & Goschke, 2004; Estrada, Isen, & Young, 1997; Fredrickson & Branigan, 2005; Isen, 2002; Isen & Daubman, 1984). In their research, Isen and Daubman (1984) effectively illustrated this broadening of the scope of cognition. They found that when individuals are induced into positive affect, they are more likely to make unusual associations, compared to the situation in which these individuals are in a negative or neutral affect state.

Another component associated with the cognitive effect of positive emotions is heuristic thinking, or the tendency of a person to do a quick comprehensive treatment and provide judgment or decision with lower margins of error (Bless et al., 1996). This heuristic thinking is opposed to systematic thinking, observed when individuals experience negative affects (Forgas, 1995). This adaptive function has been identified as particularly useful in situations of complex problem resolution and decision making (e.g. Isen, 2001, 2002).

Third, positive emotions broaden the *scope of creative actions*. This function is closely related to the previous one. A key element is the influence of positive emotions on creativity. Unusual associations, flexibility and other cognitive processes linked to positive emotions foster creativity (Isen et al., 1987). Many studies at the individual or group level in an organizational context attest to this strong relationship between positive emotions and creativity. For example, a well-known work by Amabile, Barsade, Mueller, and Staw (2005) shows that project team members with positive emotions (positive feelings about the project and teamwork) developed more new products, new processes and new solutions for clients than those with negative emotions. Similarly, Grawitch, Munz, Elliott, and Mathis (2003) studied temporary teams and found that positive emotions, as opposed to neutral or negative ones, increased the number and originality of ideas generated. Recent studies have also demonstrated the benefits of positive emotions for creativity in teams (Shin, 2014; Tsai, Chi, Grandey, & Fung, 2012).

Another influence is on variety-seeking, a tendency of individuals to vary their choices when they are in positive affective states (Kahn & Isen, 1993). Two other influences are recognition and exploitation of opportunities and proactive behavior (Baron, 2008). For example, employees who experience positive emotions act more proactively than those with negative emotions (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012; Fritz & Sonnentag, 2007).

Finally, positive emotions broaden the *scope of social cognition* (Fredrickson & Cohn, 2008). This function is important for understanding the role of positive emotions in social processes, especially in interpersonal, intra and intergroup relationships. First and foremost, positive emotions broaden attention to others and help to build close relationships, friendship and mutual trust (Waugh & Fredrickson, 2006). In a group, inducing positive emotions "broadens social group concepts and breaks down an essentialized sense of 'us versus them'" (Fredrickson and Cohn, 2008: 785).

### 2.4.2. Build Resources

The "build" function of positive emotions results from the broaden function. It helps individuals to build, overtime, "enduring resources". These resources can be physical, intellectual or social (Fredrickson, 1998). In our theoretical development, we put a special emphasis on intellectual and social resources.

One of the resources is problem-solving capability. This capability is the result of flexibility, openness, creativity and the other elements mentioned below. Together, they foster greater capabilities in problem solving (Isen, 2002) and are useful for individuals when they face adaptation challenges.

The second resource is the accumulation and use of knowledge. People who experience positive emotions demonstrate a higher learning capacity and better knowledge acquisition when compared to those experiencing negative emotions (Bryan, Mathur, & Sullivan, 1996). Openness and integration of information are factors that facilitate learning and accumulation of knowledge. In addition, it has been demonstrated that the use of knowledge by individuals differs in positive, negative or neutral affective states. Individuals experiencing positive emotions are more likely to use knowledge accumulated over time in problem solving, while those experiencing negative affect tend to seek new information (Bless et al., 1996). This function also allows individuals to develop adaptive heuristics, which is based on the relationship between positive emotions (e.g., happiness) and general knowledge structures (Bless et al., 1996).

A third resource is social support and cooperative relationship. The camaraderie, friendship, trust and other interpersonal components that promote positive emotions serve as a means to acquire social support. The individual is more willing to help others and in return secures more easily the cooperation of others and the social support required to accomplish a task. This resource is particularly useful in building relationships among employees and teamwork (Casciaro & Lobo, 2008; Niven, Holman, & Totterdell, 2012; Staw et al., 1994). For example, in a survey of employees from three organizations, Staw et al. (1994) found that employees with more positive emotions received more social support from supervisors and coworkers.

Another major resource connected to the previous one is social influence. Attention to others, openness and ease of collaboration enable individuals to enhance their social network and capacity to influence others. For example, help and attention to others foster gratitude among partners and increase social influence over them (Staw et al., 1994). The literature on leadership shows that the ability to share positive emotions with followers increases the influence over them (Damen, Van Knippenberg, & Van Knippenberg, 2008; George, 1995; Humphrey, 2002). Similarly, the ability to establish network ties helps individuals to extend their social influence, and gain access to privileged positions and resources.

In summary, positive emotions increase individuals' coping ability by promoting broad scope of attention, cognition, and social cognition, which in turn enables the building of intellectual and social personal resources. These resources are used over the long run to effectively solve problems when individuals encounter challenges in their efforts to adapt to the environment.

### 2.5. Implications for strategy making and organizational success

In this section, we propose a theory which extends adaptive functions of positive emotions to the context of strategy making and organizational performance. We combine the psychology of positive emotions as summarized by the broaden-and-build theory presented above with the literature on upper-echelon and strategic management to formulate some general propositions on the effect of top executives' positive emotions. Since the upper-echelon literature has revealed that chief executive officers (CEOs) and top management teams (TMTs) are the two main units of analysis of top-executive influence (Finkelstein, Hambrick, & Cannella, 2009; Quigley & Hambrick, 2014), we decided to focus on these two levels of analysis. Our model is summarized in Figure 1.

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#### 2.5.1. First Level of Analysis: The CEO Effect

The literature on strategic management has extensively documented that the CEO has a significant effect on the firm's strategy, meaning that s/he is the owner of the decision-making process and that his/her strategic behavior has a significant impact on organizational success (see Finkelstein et al., 2009; Miller, Kets de Vries & Toulouse, 1982). However, research on the emotional dimensions of the CEO effect remains scarce (e.g. Delgado et al., 2010) but is interesting enough to encourage more exploration of this dimension. In the context of our theory, we focus on five elements identified by strategic management research as key factors of organizational success, and we discuss possible linkages with the adaptive function of positive emotions. Overall, we argue that the experience of positive emotions at the CEO level promotes innovation and change, diversification, proactiveness and ability to mobilize strategic resources.

##### 2.5.1.1. Innovation and Change

As mentioned above, one of the main arguments of the Broaden-and-Build Theory, confirmed by the Appraisal theory, is that positive emotions enhance the ability to innovate and change through the broadening of thoughts. Building on this argument, we suggest that the experience of positive emotions will foster or enhance the CEO's ability to drive product innovation and strategic change, rather than maintain the status quo. The mechanisms underlying the relationship between positive emotions and innovation-change are mainly flexibility, openness and creativity (Smith et al., 2014).

First, openness, creativity and willingness to accept novelties are generally related to product innovation (Elenkov, Judge, & Wright, 2005). CEOs who are more open to innovative initiatives and propositions, are also prompt to incorporate new ideas into their organizations (Elenkov, Judge, & Wright, 2005; Miller & Toulouse, 1986; Nadkarni & Herrmann, 2010). In general, creative CEOs are more likely to promote innovation at the organizational level (Makri & Scandura, 2010). Hence, if experience of positive emotions builds the CEO's ability to be open and creative, we can expect that this will contribute to product innovation at the organizational level. This argument is consistent with recent empirical research findings (Baron & Tang, 2011) that dispositional positive emotions of CEO entrepreneurs are related to creativity and product innovation.

Second, flexible CEOs are more likely to lead flexible organizations and initiate strategic change. For example, Nadkarni et al. have found that a CEO's complexity of strategic schema, defined as broad versus focused scanning of the environment (Nadkarni & Narayanan, 2007), his/her personality (i.e. extraversion, emotional stability) are related to strategic flexibility (Nadkarni & Herrmann, 2010), and this flexibility, in turn, enhances strategic change (Herrmann & Nadkarni, 2014). These findings suggest that experience of positive emotions at the CEO level promotes strategic change. Hermann & Nadkarni (2014), however, introduced more nuances in the relationship of positive emotions to strategic change:

> The tendency of emotionally stable CEOs to experience positive emotions combined with emotional adjustment facilitated initiation of strategic change. Similarly, a blend of the tendency to experience positive emotions and dominance in extraversion increased strategic change initiation. However, the tendency to experience positive emotions combined with empathy and altruism in agreeableness hindered strategic change. [p. 1335]

In sum, positive emotions are likely to foster at the organizational level innovation and strategic change, but this relationship needs to be confirmed, which leads to the following propositions.

*Proposition 1: Positive emotions at the CEO level are associated with greater product innovation. They broaden the scope of cognition (i.e. openness and creativity), which in turn builds the CEO's ability to stimulate innovation.*

*Proposition 2: Positive emotions at the CEO level are associated with strategic change rather than inertia. They broaden the scope of cognition (i.e. flexibility), which in turn builds the CEO's ability to affect change.*

#### 2.5.1.2. Product-market diversification

Kets de Vries and Miller (1984), in their theory of the pathology of organizations, have suggested that CEOs' emotional behaviors are linked, at the organizational level, to product and market diversification. For instance, they contrast 'histrionic' or 'dramatic' with the 'depressive' types of pathology:

> There is a broad instead of a narrow focus, at least when it comes to product-market strategy. The firm is broadly diversified and caters to a great variety of markets. In short, the histrionic organization is very much an extension of the hysterical personality of its chief executive officer. [p. 46]
>
> Depressive firms address only one narrowly defined market, a market which is almost never redefined or broadened. [p.47]

Other studies point in the same direction, and indicate that CEOs' personalities influence firm diversification (Hiller & Hambrick, 2005; Pitcher & Smith, 2001). Pitcher & Smith (2001) showed, in a longitudinal study of a large corporation, that the 'Artist' CEO promoted a high level of diversification, while the 'Technocrat' promoted a low level of diversification. Building on the broaden-and-build theory and the appraisal theory (Smith, Tong and Ellsworth, 2014), we advance a similar idea in our model, namely that positive emotions promote product-market diversification. More specifically, positive emotions promote "adaptive behaviors such as exploration, social bonding, learning and mastery…" (Smith et al., 2014: 16). They broaden the CEO's scope of attention, thought and actions, which would be reflected in the corporate strategy by higher levels of diversification. The first mechanism is the global versus local attention. This means that the experience of positive emotions increases the CEO's ability to think in global terms. S/he would, for example, consider the growth strategy in terms of broad versus narrow market exploration, emphasizing broader geographic area exploration. These ‘broadening’ functions help to build the cognitive resources necessary to explore and venture into new markets and diversify products.

Although consistent with both the Appraisal and the broaden and build theory, this statement remains somewhat theoretical, given the lack of empirical work on the link between positive emotions and diversification. However, some studies on entrepreneurs point to such a possibility. For example, Foo, Uy, and Baron (2009) found that entrepreneurs who have daily experiences of positive affect are involved in more new-venture initiatives because of the influence of positive affect on their temporal focus. They argue that the "wide scope of attention allows individuals to attend to possible future states beyond the here and now" (Foo et al, 2009:1087).

The second possible mechanism is the variety-seeking behavior, which suggests that CEOs’ experience of positive emotions increases their willingness to seek a variety of products (Kahn & Isen, 1993). A third mechanism is related to repertoire of actions, which implies that experiences of positive emotions increase the variety of actions undertaken. Given these mechanisms, it is possible to argue that the experience of positive emotions would increase CEOs’ willingness to diversify markets and products.

*Proposition 3: Positive emotions at the CEO level are associated with greater market-product diversification. Positive emotions broaden the scope of attention and actions (i.e. adaptation through global exploration, variety seeking) which in turn builds the CEO’s willingness to promote diversification.*

#### 2.5.1.3. Proactive orientation

Proactive orientation is a more holistic behavior, which includes innovation and diversification. Smith et al. suggest that “[p]ositive emotions often serve more appetitive functions, either alerting the person to as yet unrealized gains, and motivating him or her to achieve them” (Smith et al., 2014: 16). This individual proactive orientation has also been confirmed by Kirby, Morrow and Yih (2014). In addition, the proactive orientation concerns the ability of organizations to recognize and anticipate future opportunities in their environments. Organizations that engage in such behaviors are called prospectors and are seen as entrepreneurial (Miles, Snow, Meyer, & Coleman, 1978; Miller & Friesen, 1982). These organizations tend to be pioneers in new product and market development within their industries. Such behavior is opposed to that of defenders or conservative organizations, which are less likely to anticipate and develop new products or markets. Proactive behavior is a key success factor in a dynamic and highly competitive environment (Eisenhardt, Furr and Bingham, 2010; Hambrick, 1983; Shortell & Zajac, 1990).

In our model, we predict that CEOs' positive emotions will foster proactive, rather than defensive strategic orientation. We argue that positive emotions promote proactive behavior, which in turn translates at the organizational level into proactive strategic orientations. This argument is consistent with the Appraisal and broaden-and-build theories. As already noted, positive emotions broaden the scope of perception and increase the ability to recognize a wide range of elements. This ability is a resource which would allow the CEO to anticipate events and act accordingly (Fredrickson & Branigan, 2005). Thus the experience of positive emotions builds the CEO's capacity to behave proactively (Fritz & Sonnentag, 2007), which in turn promotes proactive orientation at the firm-level (Baum et al., 2001; Hahn, Frese, Binnewies, & Schmitt, 2012).

*Proposition 4: Positive emotions at the CEO level are associated with a greater proactive orientation. Experiences of positive emotions broaden the scope of cognition (i.e. opportunity recognition) which, in turn, builds the CEO's proactive capacity.*

#### 2.5.1.4 Mobilization of strategic resources

Since the success of a strategy depends, to a large extent, on the mobilization of strategic resources, including the support and involvement of stakeholders, we have decided to include this aspect in our model. The influence of the CEO affective experience on resource acquisition has recently been the subject of theory and research. For example, Resick, Whitman, Weingarden, and Hiller (2009) found that core self-evaluation (CSE), which includes emotional stability, was connected to the influence of major US baseball club CEOs on the TMT, employees, supporters, politicians and fans. This influence leads to greater identification of these stakeholders with the organization, which in turn, helps to obtain vital resources from them. Baron (2008) argues that positive affect in entrepreneurs promotes the acquisition of financial, material and human resources. Similarly, we predict that positive emotions experienced and shared by CEOs in interpersonal relationships will promote greater mobilization of strategic resources. This prediction is consistent with the broaden-and-build theory on the social dimensions of positive emotions' adaptive function.

The experience of positive emotions enables CEOs to build social resources, mainly strategic influence and network ties. For example, the experience and the sharing of positive emotions increase the CEO's ability to mobilize followers (Avolio, Howell, & Sosik, 1999). This ability is also effective in the mobilization of external resources essential to strategy implementation and organizational performance (Geletkanycz & Hambrick, 1997). It therefore appears reasonable to predict that a CEO who displays interpersonal positive emotions will have a greater chance of exerting strategic influence and mobilizing internal and external key stakeholders and resources.

*Proposition 5: Positive emotions at the CEO level are associated with greater resource mobilization. Positive emotions broaden the scope of social cognition (i.e. social influence, network ties) which, in turn, builds the capacity to influence stakeholders and secure strategic resources for the organization.*

### 2.5.2. Unit Two of Analysis: The TMT Effect

Although the CEO holds a leading role in the top management team, focusing on this role alone may be insufficient to understand the effect of top executives on an organization's strategy and success. The dynamics of the TMT can be critical in some contexts, particularly where the power and dominance of the CEOs is low (Finkelstein et al., 2009). Therefore, it appears important to look at factors related to top-management team behavior which influence strategy making and success. Our model focuses on four key TMT-related strategic decision-making factors, namely comprehensiveness, creativity, heuristics and collaboration, identified in the literature as relevant to explain the TMT effect (Bingham & Eisenhardt, 2014; Ford & Gioia, 2000; Hambrick, 1994; Miller, 2008). Overall, we argue that experience of positive emotions at the TMT level will positively influence these four factors.

#### 2.5.2.1. Comprehensiveness

Researchers use the terminology of comprehensiveness to characterize exhaustive, inclusive and challenging strategic decisions (Fredrickson & Mitchell, 1984; Miller, 2008). In the context of our model, we predict that positive emotions within the TMT will promote comprehensiveness. Consistent with the broaden-and-build synthesis, we argue that positive emotions in top management team will promote openness to ideas, debate and constructive criticism, all of which condition comprehensiveness (Simons, Pelled, & Smith, 1999). Thus, positive emotions will broaden the scope of cognition and allow top-management team members to consider more alternatives than they would if they experience negative emotions.

The observations of Liu and Maitlis (2014) on strategic decision-making within a TMT support these assumptions. They found that positive emotions are related to generative and inclusive decision-making. Members are engaged in open discussions, resulting in multiple proposals or a thorough exploration of a proposal. In addition, members could challenge the ideas of others, including the CEO, and accept both the criticism and decisions made. In contrast, negative emotions led to factional and less comprehensive decisions. We can therefore assert

*Proposition 6: Positive emotions at the TMT level are associated to greater comprehensiveness. They broaden the scope of cognition (i.e. openness) which, in turn, builds the capacity to consider multiple alternatives.*

#### 2.5.2.2. Creative Solutions

Positive emotions foster creativity at the individual and group levels. Our model extends this relationship to the resolution of strategic issues in TMTs. We predict that positive emotions within the TMT will promote a creative resolution of problems. Creative solutions at the TMT level are characterized by novelty, value and effectiveness (Ford & Gioia, 2000). Empirical research on strategic decision processes has shown that top managers tend to prefer common solutions, which have been tested elsewhere or are part of organizational routines. For example, Nutt (1984) found that only fifteen percent among 78 cases of strategic decision processes analyzed allowed creative decisions. Significantly, however, decision processes that promoted creative solutions were more successful (Nutt, 1999).

Creativity and innovation at the TMT level are related to social processes (West & Anderson, 1996). We argue that positive emotions will play a key role in the creative process at the TMT level. We anchor this argument in both the Appraisal and the Broaden-and-build theories on the functions of positive emotions. Fredrikson and Branigan (2005) provided some evidence suggesting that positive emotions, such as happiness, are likely to increase creative, out-of-the-box thinking (Smith et al., 2014). As explained above, experience of positive emotions enhances the creative capacity of individuals, alone or in teams, through the scope of cognition. We believe that positive emotions will play the same role at the level of top managers. Baron and Tang (2011) have shown that positive emotional dispositions foster creativity and innovation among CEO entrepreneurs. Yet, there are no studies confirming such a relationship at the TMT level. However, given the large number of studies demonstrating that positive emotions promote creativity in teams (e.g (Grawitch et al., 2003; Shin, 2014; Tsai et al., 2012), we hypothesize that this relationship would also be observed in top-management teams. Thus, we suggest that positive emotions in the TMT would foster creative problem solving, and in general creative team behavior.

*Proposition 7: Positive emotions at the TMT level are associated with more creative problem solving. Positive emotions broaden the scope of cognition (i.e. creativity) and social cognition (i.e. mutual trust and safety team climate) which, in turn, builds the team's capacity to generate creative solutions.*

**2.5.2.3. Adaptive heuristics**

Adaptive heuristics are characterized by speed and focus on key and relevant choices. Eisenhardt and colleagues conducted several studies which indicate that heuristics at the organizational level are a key factor of success. Primarily, they enhance the adaptability of organizations in dynamic markets (Bingham & Eisenhardt, 2014; Bingham, Eisenhardt, & Furr, 2007; Davis et al., 2009; Eisenhardt, 1989). This allows executives to identify, select, prioritize and execute business opportunities quickly and efficiently through 'simple rule' decision processes which are unstructured and less formal (Davis et al., 2009).

While heuristics in decision making have long been considered with a negative bias, recent research has generated a different view, which considers heuristics as a cognitive resource which helps top executives to make adaptive decisions (Bingham & Eisenhardt, 2014; Maitland & Sammartino, 2015). The aforementioned authors provide knowledge-based arguments and place 'learning processes' in the core explanation of adaptive heuristics. They contend that top executives build a heuristics portfolio connected to past experience and accumulated information (Maitland and Sammartino, 2015), used to capture and quickly exploit opportunities (Bingham & Eisenhardt, 2014).

Similarly, positive emotions facilitate cooperation and collegiality, which suggests that what one sees at the individual level extends to the group behavior, as suggested by Appraisal theory scholars (Smith et al., 2014). Also, based on the arguments of the broaden-and-build theory, *it is likely* that experience of positive emotions would allow the TMT to develop and use adaptive heuristics. As mentioned above, one of the main functions of positive emotions is to help build intellectual resources, in particular the ability to acquire knowledge through learning. Positive emotions also encourage the use of accumulated knowledge to make decisions quickly, while negative emotions tend to discourage the use of information accumulated and reduce the speed and efficiency of decision-making (see Bless et al., 1996; Bless & Fiedler, 1995).

In light of these psychological mechanisms, it appears reasonable to predict that positive emotions will lead, at the TMT level, to the use of adaptive heuristics.

*Proposition 8: Positive emotions at the TMT level are associated with a greater use of adaptive heuristics. Positive emotions broaden the scope of cognition (i.e. openness, flexibility, knowledge accumulation and use) which, in turn, builds the team's capacity to develop and use adaptive heuristics.*

#### 2.5.2.4. Collaboration

Collaboration refers to the extent to which members of the TMT team are willing to work together and share resources. It is one of three components of the concept of 'behavioral integration' introduced by Hambrick (1994) in the study of top management groups and is considered a key factor of success. In addition, collaboration reflects the idea of cooperation, with which it shares the same logic of constructive social interaction leading to helping behavior and mutual support (Chen, Chen, & Meindl, 1998). This cooperation is crucial for the success of top executives and their organizations (Barnard, 1938).

Appraisal theory shows that "a number of distinctive positive emotional states serve a variety of adaptational functions, including… pair-bonding" (Smith et al., 2014: 16), which is also consistent with the broaden-and-build theory. Therefore, we predict that positive emotions would foster collaboration during strategy making. Experience of positive emotions will broaden the social cognitions of top management team members and lead them to be open with each other. The top team members would develop, with the experience of positive emotions, close relationships, trust and mutual support during debate on critical issues. In the same vein, positive emotions can act as buffers or antidotes (Fredrickson, 2001) against negative emotions experienced by TMT members when discussing "hot issues" and help to avoid framing contests or cognitive conflicts (Amason, 1996; Kaplan, 2008). Reducing the effect of negative emotions on team members' behavior would lead them to search for compromise when they disagree. Thus, disagreement or opposition to ideas in such conditions would not generate significant negative reactions. The expressions of negative emotions would not be perceived as personal attacks. For example, Liu and Maitlis (2014) observed that the use of amusement contributed to collaborative strategy and acceptance of decisions in a TMT studied:

> In the amused encounter, the leader's proposal was rejected by one team member in an amused manner. This was followed by collective amusement in the team and excited counter-arguments by team members. Through the disarming expression of amusement where tension could have prevailed, this emotional dynamic enabled an integrative strategizing process in which all team members were able to challenge and then join with their team leader to develop a decision that was eventually accepted by all parties. (p. 16)

At the TMT level, this can result in a greater propensity to work together and help others to achieve the objectives defined in the context of strategic decisions.

*Proposition 9: Positive emotions at the TMT level are associated with greater collaboration. Positive emotions broaden the scope of social cognition (i.e. attention to others, close relationship), which in turn fosters mutual support and collaboration.*

### 2.5.3 Relationship of Positive Emotions and Organizational Success

Considering what we have discussed above, we argue that top executives' positive emotions are likely to facilitate the success of their organization.

*The CEO effect*. Propositions 1, 2, 3, 4 and 5 argue that CEOs' positive emotional experiences are related to strategy making. They stimulate innovation, change, diversification, proactive orientation and mobilization of strategic resources. Empirical research has provided evidence that these factors of strategy making are related to organizational growth and profitability (see Table 2). Thus, we believe that through these factors, CEO's positive emotions have an (indirect) effect on the success of the firm. Recent studies tend to demonstrate this mediated relationship. The work of Baum et al. (2001) is instructive in this regard. In an extensive study of 307 CEOs, they found that passion, tenacity, opportunity recognition and proactive behavior, which characterize positive emotions (Smith et al., 2014), enhanced the growth of an organization's sales, size and profit. They also found that the effect is not direct but is mediated by competitive strategies. The empirical work of Delgado-García and De La Fuente-Sabaté (2010) shows a similar relationship. They found that strategic conformity to industry norms mediated the relationship between CEO's positive (or negative) emotions and firm performance. CEO's with positive emotions choose more competitive strategies, which leads to performances that deviate from the industry trends.

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Insert Table 3 about here

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*The TMT effect*. Propositions 6, 7, 8 and 9 indicate that, although success is affected by a multiplicity of variables, TMT's positive emotions contribute to organizational success. In Table 1 below, we lay out empirical studies that have linked these factors to firm performance. For example Simons et al. (1999) and Miller (2008) provide consistent evidence that comprehensiveness is positively linked to organizational performance. The same is true for creative solutions (Nutt, 1999) and collaboration (Ensley, Pearson, & Amason, 2002; Li & Hambrick, 2005), which are associated with organizational growth and profitability. In other words, positive emotions within the TMT are positively associated with a firm's success in terms of growth and profitability.

*Integrated CEO-TMT Effect*. Our model offers an integrated view of the CEO-TMT effect in order to better understand the effect of top executives' positive emotions on a firm's success. We predict two cases of joint effects. First, when the CEO has high discretion and dominates the TMT, the important strategic decisions are likely to be affected more by the CEO's preferences and less by the TMT internal dynamics. The CEO's predominant influence on strategy-making outcomes would reflect his/her strategic attitudes and behavior (i.e, innovative, diversified, proactive). In addition, the CEO's positive emotional experiences would increase his/her capacity to be open, to negotiate views and decisions with other TMT members, to induce positive emotions and to foster collaboration/cooperation among team members. When the CEO has less discretion and less dominance (Eisenhardt & Bourgeois, 1988), the TMT effect will be predominant. Positive emotions within the TMT team would lead to comprehensive decisions, creative solutions, use of adaptive heuristics and collaboration. Thus, the TMT will also generate successful strategies for the firm.

*Proposition 10: Overall, positive emotions experienced by top executives will facilitate organizational success in terms of growth and profitability. The relationship is likely to be mediated by the strategy making factors of success identified in propositions 1 to 9.*

## 2.6. Discussion

In this section we discuss our theoretical model highlighting the boundary conditions, implications for research on emotions and strategic organization, future directions for research and implications for practice.

### 2.6.1. Boundary Conditions

The relationship between top executives' (CEO and TMT as a whole) emotions and strategy making and success depends on contextual factors which can reduce or modulate the effect. In this section we discuss those factors not in order to analyze all possible factors but to emphasize the role of some prominent factors in the strategic management literature. In particular, factors related to the economic context have dominated studies in strategy and have been the backbone of contingency theory (Lutans, 2011; Thompson, 1967). One important factor often mentioned is environmental dynamism. Another important factor is the relative power of the executive members, as measured by their influence within the organization (see Hambrick, 1994; Hayes and Hilmann, 2010). Two variables affect executive power: the tenure of top managers and their power or discretion in making decisions. Therefore, we consider in what follows the relative effects of managerial discretion, tenure and dynamism on the relationship between positive emotions and strategy-making.

#### 2.6.1.1. Managerial Discretion

Discretion refers to the extent to which a TMT has latitude of decision and action (Finkelstein & Hambrick, 1990). Top executives do not have completely free hands in their decisions. It is, however, often argued that entrepreneurs and small business executives have in some circumstances more latitude or fewer constraints than executives of large companies (Barney and Hesterly, 2008). One would expect CEO's and TMTs to have discretion which would extend their influence. For example, Haynes and Hillman (2010) have shown that CEO power moderates the effect of board capital on firm performance. A firm's strategy has a higher probability of reflecting the influence of top executives who have high discretion (Haleblian & Finkelstein, 1993; Li & Tang, 2010). This evidence suggests that positive emotions will influence strategy making processes and outcomes more when top executives' managerial discretion is high rather than low. Thus, it is likely that *discretion moderates positively the relationships (as per propositions 1-10) between CEO or TMT positive emotions and firm strategic behavior and outcomes.*

#### 2.6.1.2. Time

Our model predicts that time may reduce the benefits or work against the effect of TMT positive emotions. The results of some research suggest this relationship. Time in the TMT context is here captured by the concept of group tenure, that is to say the time TMT members have spent together. A study of 690 large US companies by Hambrick, Geletkanycz, and Fredrickson (1993) found that tenure increased the status quo. This status quo was reflected in persistence of the strategy (stable over time) and conformity with industry norms. Thus, time spent together by TMT members reduced the likelihood of the adoption of new and distinctive strategies. Hambrick et al. (1993) found that the status quo was sustained by the psychological investment and socialization of top managers, which acted to limit recognition of alternatives. Other research conducted on emotions and decisions (e.g. Knight, 2013) within teams has advanced arguments which strengthen the effect of time on top managers' power to act.

Over time, positive emotions may favor the status quo. First, positive emotions contribute to the persistence of behavior. Individuals in a state of pleasure tend to persist in the behavior that gives them pleasure (Fredrickson, 1998). Specifically, positive emotions can reduce the effort of searching for alternatives in some contexts. For example, Knight (2013) found that positive emotions favored exploratory behavior at the beginning of the project, but this exploration decreased at later stages of the project. Compared to individuals with negative emotions, those with positive emotions were more likely to evaluate their earlier decisions as satisfactory and consequently to spend less effort finding new alternatives.

Second, by promoting higher-level socialization and cohesion over time, positive emotions can reduce debate and the challenging of ideas. Time tends to further strengthen this interpersonal relationship through a process of spiraling self-reinforcement (Walter & Bruch, 2008). Individuals tend to create conditions to maintain and strengthen this link. One consequence is the avoidance of situations that may undermine interpersonal bonds, such as opposition to ideas from other TMT members. In this context, TMT members tend to be less persistent in following divergent ideas and easily align their opinions with those of the majority or of the CEO's. Thus, with time, the effect of positive emotions on the alternative generation and challenging of ideas may be reduced or negated.

Third, positive emotions can increase the persistence of strategic directions through emotional attachment, which reflects high investment in positive emotions that individuals develop over time. It represents a psychological investment in an object. Research shows that emotional attachment at the top-manager level leads to persistence of ideas and limits the generation of new alternatives. For example, Koppius, Germans, and Vos (2005) found that emotional attachment within the TMT limited alternative generation, with only one solution being proposed when several were needed. In short, over time, TMT's positive emotions may limit the ability of team members to generate appropriate and adaptive strategies to changing environments. Time moderates the effect on strategy making of positive emotions within TMTs. The more members spend time together, the less their strategic decisions will be creative and comprehensive. This time effect does not affect collaboration within TMTs which are based on reinforcement of interpersonal bonds, acceptance of ideas and mutual support. Nevertheless, the effect of time may be less important in cases in which the team sets up formal practices that promote the generation of alternatives and the challenging of ideas (Devil's Advocacy). This discussion can be summarized by saying that *Time (more specifically TMT tenure) would negatively moderate the relationships (as per propositions 1-10) between CEO and TMT positive emotions and firm strategic behavior and outcomes.*

#### 2.6.1.3. Environmental Dynamism

The link between emotions at the top-executive level and a firm's strategy and success is also affected by environmental dynamism. Although positive emotions can be beneficial in any context, we argue that they are more beneficial in a dynamic than in stable environment (see table 2). By dynamic environment we mean rapidly changing, unpredictable, and highly competitive conditions. We derive this argument from the evidence of previous studies confirming that the success factors discussed in our theoretical model are more beneficial in this type of context.

Adaptive heuristics, innovations and changes, proactivity, diversification and creativity are essential for success in shifting environments. Conversely, they may be less necessary, or even counterproductive, in stable environmental contexts (Baron & Tang, 2011; Covin & Slevin, 1989; Davis et al., 2009; Nadkarni & Narayanan, 2007; Wan & Hoskisson, 2003).Comprehensiveness, collaboration and mobilization of strategic resources can be beneficial in both dynamic and stable environmental contexts (Barrick, Bradley, Kristof-Brown, & Colbert, 2007; Eisenhardt & Bourgeois, 1988; Fredrickson & Mitchell, 1984; Geletkanycz & Hambrick, 1997; Li & Hambrick, 2005; Miller, 2008; Peng & Luo, 2000; Priem, Rasheed, & Kotulic, 1995). These factors seemed more beneficial in a dynamic environment. Thus, we predict that environmental dynamism will positively moderate the relationship between top executives' positive emotions and a firm's success. The more dynamic the environment, the stronger will the positive link between positive emotions and the success of the firm be. More generally, *environmental dynamism would positively moderate the relationships (as per propositions 1-10) between CEO or TMT positive emotions and firm strategic behavior and outcomes.*

### 2.6.2. Implications for theory on strategy and emotions

This paper intended to make a contribution to the emerging literature on the psychological foundations of strategic management (Felin & Foss, 2005; Hodgkinson & Healey, 2011) and behavioral strategy (Powell, 2014; Powell et al., 2011) by showing that the micro-level emotional processes can influence strategy and the success of organizations. Preliminary evidence suggests that emotions at the top-executive level have implications at the macro level (Delgado-García & De La Fuente-Sabaté, 2010). This invites researchers to consider the possibility of a link between emotions and organizational-level outcomes. In this vein, our theorizing provides details on how emotional processes are related to these macro-level outcomes.

In addition, we make a contribution to the literature on positive emotions, specifically to the developing appraisal and broaden-and-build theories, which demonstrate that positive emotions are clearly differentiated from negative emotions and that their effects are important to consider. In particular, we built the argument that the effects of positive emotions apply to the context of strategy making and firm success. Fredrickson (1998) has called for paying more attention to positive emotions because of their benefits for individuals, groups and collectivities. Our model responds to this appeal by synthesizing and extending the extant psychology literature, showing in the process how positive emotions may be beneficial at the organizational-level, rather than merely at the individual or group levels. In addition, we contribute to this literature on positive emotions by introducing nuances when considering the effect of positive emotions on the success of organizations. Organizational success is affected by many factors, but we can say that emotions also have an additional positive effect. The effect, however, has to be contextualized. In particular, we highlighted some important boundary conditions related to TMT power characteristics and environmental conditions (e.g. discretion, tenure and environmental dynamisms), which can enhance or reduce the benefits of positive emotions.

### 2.6.3. Future Research Possibilities

The model we provide opens the way to new empirical investigations. It relates top executives' emotions to key factors of strategy making (e.g. product-market diversification, comprehensiveness). These elements provide windows to further explore the effect of emotions on strategy making. Empirical studies, such as Baron &Tang's (2011) and Delgado-García and De La Fuente-Sabaté's (2010) could help provide an improved understanding of these relationships. In addition, researchers can explore the possible linkages between emotions and other aspects of organizational strategy (e.g., dynamic capabilities, competitive strategies, competitive advantage).

In our model, we treated positive emotions as a general rather than a discrete construct. However, we recognize the relevance of looking at the effects of discrete emotions as well. As argued in appraisal theory, each positive emotion has a specific function in human behavior, and it is necessary to understand precise specific effects beyond the global impact on a firm's strategy and success. Moreover, it may be important to look at positive emotions that produce effects contrary to those described in our models in order to make our understanding of boundary conditions more precise. In their paper, Smith et al (2014:21) discuss "challenge/determination" as a positive emotion: "If appraisals of high coping ability is unrealistic, the emotion can promote failure… If the situation is dangerous, it can promote bodily harm…" This suggest that there is much do to more fully explore the nuances of the effects of positive emotions.

We also recognize the key role of negative emotions. Negative emotions can have benefits in decision-making (Kouamé, Oliver, & Poisson-de-Haro, 2015; van Knippenberg, Kooij-de Bode, & van Ginkel, 2010). Furthermore, the reality of organizations is based on a necessary interplay between positive and negative emotions. It is important that researchers consider this issue further to understand the role of negative emotions in the strategy process in order to achieve a more precise understanding of the effects of top executive emotions on strategy making.

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**Table 2:**
**Components of the adaptive function of positive emotions***

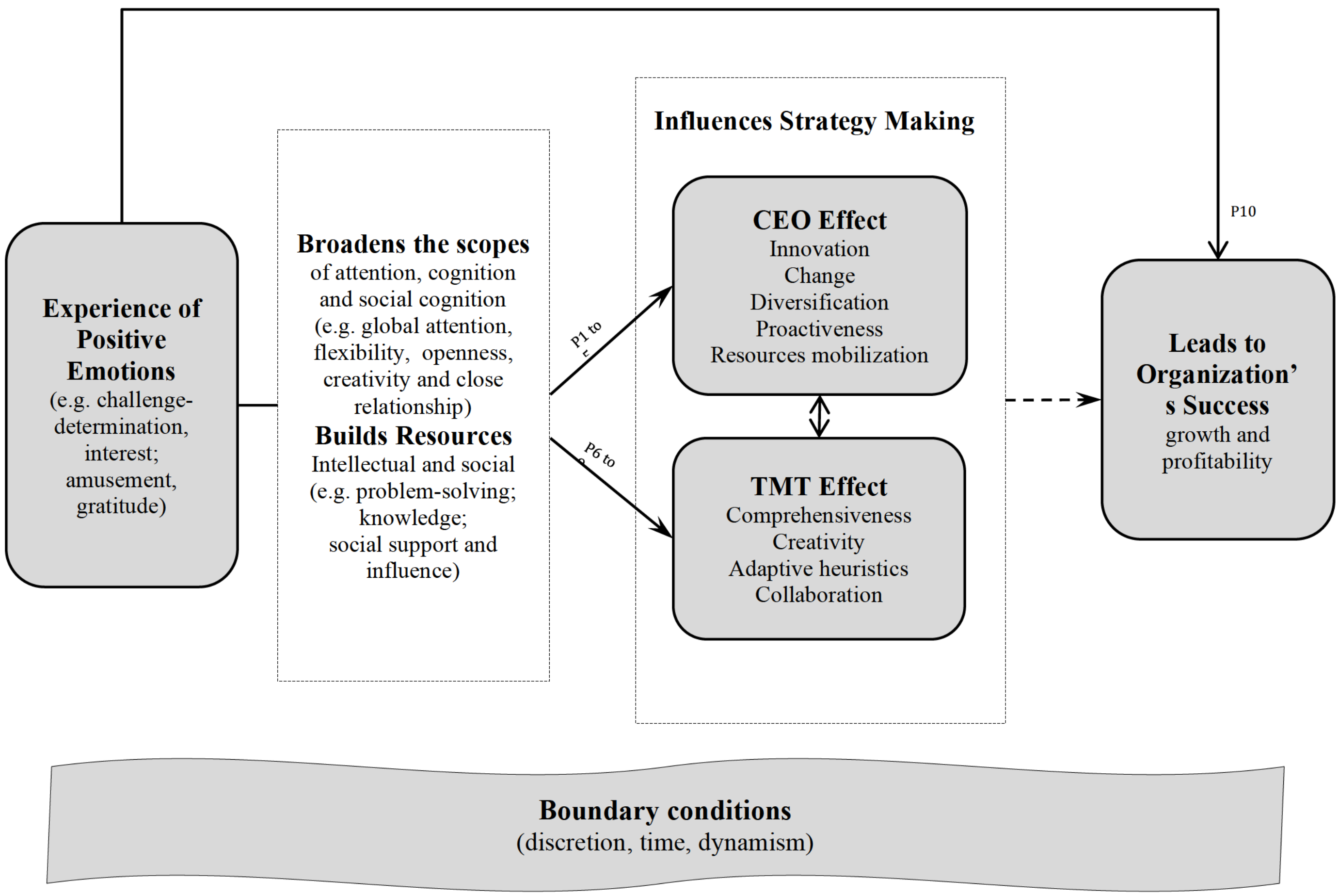
| Adaptive functions | Sample of psychological research | Key findings and conclusions |
|---|---|---|
| ***Broaden the scope*** | | |
| *Scope of attention* | Fredrickson and Branigan, 2005; Gasper and Clore, 2002 | Positive emotions foster global (vs. local) task processing and choice. |
| *Scope of cognition* | Bless et al., 1996; Dreisbach & Goschke, 2004; Estrada, Isen, & Young, 1997; Fredrickson & Branigan, 2005; Isen, 2002; Isen & Daubman, 1984. | Positive emotions foster flexibility, openness and adaptive heuristics |
| *Scope of creative actions* | Isen et al., 1987; Grawitch, Munz, Elliott, and Mathis, 2003; Shin, 2014; Tsai, Chi, Grandey & Fung, 2012 | Positive emotions foster creativity at individual and group-levels |
| | Kahn & Isen, 1993 | Positive emotions foster variety-seeking |
| *Scope of social cognition* | Waugh & Fredrickson, 2006; Staw et al., 1994 | Positive emotion foster attention to others and help to build close relationships, friendship, and mutual trust. |
| ***Build Resources*** | | |
| *Intellectual resources* | Isen, 2001, 2002; Isen et al., 1987; Estrada, Isen, & Young, 1997 | Positive emotions build problem-solving capabilities |
| | Bryan, Mathur, & Sullivan, 1996; Bless et al., 1996; Bless & Fiedler, 1995 | Positive emotions foster accumulation and use of knowledge |
| *Social resources* | Casciaro & Lobo, 2008; Niven, Holman, & Totterdell, 2012; Staw et al., 1994; | Positive emotions foster social support and cooperative relationships |
| | Damen, Van Knippenberg, & Van Knippenberg, 2008; George, 1995; Humphrey, 2002 | Positive emotions foster social influence |

* The broaden-and-build theory provides more adaptive functions, but here we focus on what is relevant toour theoretical model.

**Table 3:**
**Environment and firm key success factors**

| Factors of success | Most suitable Environment | Sample of empirical works |
|---|---|---|
| Heuristic decisions | Dynamic | Eisenhardt (1989);<br>Davis, Eisenhardt & Bingham (2009);<br>Bingham & Eisenhardt (2007) |
| Innovation and change<br>Creative solutions | Dynamic | Nadkarni & Narayanan (2007)<br>Baron & Tang (2011)<br>Galasso & Simcoe (2011) |
| Diversification | Dynamic | Wan & Hoskisson (2003)<br>Chakrabarti, Singh, & Mahmood, (2007) |
| Proactivity | Dynamic | Baum, Locke & Smith (2001)<br>Covin & Selvin (1989)<br>Hambrick (1983) |
| Comprehensiveness | Dynamic and Stable | Fredrickson and Mitchell (1984)<br>Miller (2008)<br>Priem, Rasheed & Kotulic (1995) |
| Collaboration | Dynamic and Stable | Eisenhardt & Bourgeois (1988)<br>Ensley, Pearson and Amason (2002)<br>Li and Hambrick (2005) |
| Resource mobilization | Dynamic and Stable | Geletkanycz & Hambrick (1997)<br>Stam (2008)<br>Resick et al. (2009) |

**Figure 2:**
**Adaptive effect of positive emotions on strategy making and organizational success: A theoretical model**



Chapter 3 - Second article

# The influence of CEO positive affectivity on corporate entrepreneurship

## 3.1. Abstract

Using an empirical investigation of 102 firms, this study determines the relationship between the Chief Executive Officer's (CEO's) positive affectivity, on the one hand, and corporate entrepreneurship and its three dimensions (innovation, strategic renewal and venturing) on the other hand. Innovation, venturing and the meta-construct of corporate entrepreneurship have a significant positive relationship with the CEO's positive affectivity, as measured by the CEO himself/herself (self-reported) and by other senior managers (other-reported). Strategic Renewal has a significant positive relationship only in the other-reported measure of CEO positive affectivity. CEO power strengthens this positive influence of CEO positive affectivity on corporate entrepreneurship. These results show the importance of the affective and emotional aspect of the CEO's impact on strategic behavior of organizations and their success.

*Keywords:* CEO positive affectivity, corporate entrepreneurship, innovation, strategic renewal, venturing, emotion, CEO effect.

### 3.2. Introduction

Chief executive officers (CEOs) have a significant effect on performance of organizations (Mackey, 2008; Quigley & Hambrick, 2014). One of the avenues explored by researchers to explain this effect is the relationship between CEO personality and firm strategy (Chatterjee & Hambrick, 2007; Hayward & Hambrick, 1997; Hiller & Hambrick, 2005; Miller & Toulouse, 1986; Nadkarni & Herrmann, 2010). From this perspective, CEO positive affectivity has recently emerged as a construct that may explain strategic behavior of CEOs, particularly as observed in the study of Delgado-García and De La Fuente-Sabaté (2010). Positive affectivity is a dimension of personality that reflects individuals' tendencies to experience and express positive affects across time and situations. An impressive body of psychological research has established the validity and importance of positive affectivity in the behavior of individuals (Watson, Clark, Mclntyre, & Hamaker, 1992), especially when making decisions in organizations (Forgas & George, 2001; Isen & Baron, 1991).

Despite the potential of positive affectivity to explain strategic behavior, very few empirical studies have addressed the link between CEO positive affectivity and firm strategy. The study of Delgado-García & De La Fuente-Sabaté (2010) is an exception. To fill this gap, we develop hypotheses relating CEO positive affectivity and corporate entrepreneurship and study factors that may moderate this relationship.

Corporate entrepreneurship refers to situations in which firms regularly innovate, develop new markets and renew their competitive strategy in order to survive and outperform the competition (Zahra, 1996). Corporate entrepreneurship is related to firm entrepreneurial or proactive strategy, as opposed to conservative or defensive strategy (Miles, Snow, Meyer, & Coleman, 1978; Miller & Friesen, 1982). Corporate entrepreneurship is associated with organizations' success, especially in turbulent environments (Covin & Slevin, 1989; Zahra & Covin, 1995). Given its umbrella nature, corporate entrepreneurship is an important dimension for understanding firm strategy. Several studies have consistently established that corporate entrepreneurship is related to CEO personality (Miller & Toulouse, 1986; Simsek, Heavey, & Veiga, 2010). However, the relationship with CEO positive affectivity has received little attention. Entrepreneurship researchers did study the relationship between positive affectivity and some entrepreneurial behavior. For example, (Baron & Tang, 2011) showed that entrepreneurs' positive affectivity is connected to firm-level innovation. However, these studies have not focused on the overall construct of corporate entrepreneurship, which covers several sub-dimensions. In addition, the primary foci of these studies were CEO entrepreneurs, not all CEOs.

As a first step, we explicitly and systematically test the relationship between CEO positive affectivity and corporate entrepreneurship building blocks. To do this, we clarify the construct of corporate entrepreneurship and build it as a composition of several distinct sub-dimensions. Then, we study the link of positive affectivity with each of these sub-dimensions. In a second step, we test the link with the meta-construct of corporate entrepreneurship. In a third step, we test the moderating effect of CEO power. Doing so, we provide a clearer and more precise view of the relationship between CEO positive affectivity and corporate entrepreneurship.

This article is organized as follows: First, we present the theoretical background on CEO positive affectivity and firms' corporate entrepreneurship. Then, we formulate hypotheses about their relationship. Given the importance of CEOs for corporate entrepreneurship, we also explore the moderating role played by CEO discretion through CEO power and firm size. Second, we discuss the research methodology used to test these hypotheses. Finally, we present and discuss the results.

## 3.3. Theoretical background and hypotheses

### 3.3.1. CEO Positive Affectivity

Positive affectivity is a personality dimension which influences the behavior of individuals in organizations (George, 1992; Staw, Bell, & Clausen, 1986). Positive affectivity refers to an affective disposition, which results in a propensity of individuals to experience positive affective states across time and situations (Watson et al., 1992). Conceptually, the authors use several other terminologies, such as trait positive affect, positive dispositional emotions or positive emotionality, to designate positive affectivity. In addition, psychologists have shown that positive affectivity is closely related to certain personality traits, particularly extraversion and openness to experience (Shiota, Keltner, & John, 2006; Watson & Clark, 1992), which have themselves been related to firm strategy (Herrmann & Nadkarni, 2014; Nadkarni & Herrmann, 2010; Peterson, Smith, Martorana, & Owens, 2003). However, positive affectivity remains a distinct construct built exclusively on the affective dimension of personality.

Affect scholars represent positive affectivity on a continuum from low to high. Individuals high in positive affectivity are active and engaged and experience emotions such as being enthusiastic, and feeling excited. Individuals low in positive affectivity, on the other hand, tend to be inactive and disengaged, with emotions such as being tranquil and sleepy (Larsen & Diener, 1992; Watson, Wiese, Vaidya, & Tellegen, 1999). Thus, positive affectivity is not the opposite of negative affectivity. It is rather seen as independent of negative affectivity, with which it forms the "big two" dimensions of individual affective dispositions. Another conceptual consideration is the distinction between positive affectivity and positive affective states—moods and emotions (George, 1991). Positive affectivity is a personality disposition that determines a general trend in the overall behavior of the individual. Affective states play a mediating role between positive affectivity and behavior, in the sense that positive affectivity determines positive affective states, which in turn influence the behavior in a given situation (George, 1992). Given this mediating role, researchers commonly use the effect of affective states as an indicator of the effect of positive affectivity on individual behavior.

Interest in the effect of CEO positive affectivity on firm strategy is recent. The work of Staw and Barsade (1993) provided the first indication that positive affectivity can play a role in the strategic behavior of executives. They studied MBA students involved in a managerial decision-making exercise to show that positive affectivity fosters decisiveness and managerial performance. Daniels (1999), Mittal and Ross (1998) and Ashton-James and Ashkanasy (2008) argued that positive or negative affects influence strategic decision-making processes and outcomes. However, the works that have explicitly addressed CEO positive affectivity are those of Barsade, Ward, Turner, and Sonnenfeld (2000) and Delgado-Garcia and colleagues (Delgado-García & De La Fuente-Sabaté, 2010; Delgado-García, de la Fuente-Sabaté, & de Quevedo-Puente, 2010). In a survey of 62 CEOs of the largest US companies, (Barsade et al., 2000) found that positive affectivity influences team dynamics in the decision-making process. CEOs with positive affectivity tend to adopt a participative style when they perceive the same affective traits among members of the top management group. Delgado-García and De La Fuente-Sabaté (2010) have made the most direct contribution by testing the relationship between CEO positive affectivity and firm strategy and performance. They found that the positive affectivity of the CEO's of Spanish banks positively relates to strategy nonconformity (deviation from the industry trend), which leads to typical performance. CEO negative affectivity, in contrast, is associated with strategy conformity and sub-par performance. These works confirm that CEO positive affectivity is a valid construct in studying the effect of CEO personality on firm strategy, as are other personality traits such as extraversion, neuroticism, hubris and narcissism (Chatterjee & Hambrick, 2007; Hayward & Hambrick, 1997; Miller, Kets De Vries, & Toulouse, 1982).

In this work, we focus on the link between CEO positive affectivity and corporate entrepreneurship, a relationship overlooked in previous studies but suggested by Delgado-García and De La Fuente-Sabaté (2010). Their results show, for instance, "that positive affects lead to innovative decisions and negative affects to more careful and conservative ones" (p. 570). Their work, however, focused on the drivers of differentiation strategy and only tangentially addresses corporate entrepreneurship through its innovation sub-dimension.

Another study, adopting an entrepreneurial perspective, investigates the relationship between affective dispositions and entrepreneurial behavior. It concludes that positive affectivity plays a key role in explaining entrepreneurial behavior (Baron, 2008). The author uses a conceptual review to show that the positive affect of entrepreneurs promotes better opportunity recognition or design, an ability to secure the strategic resources required for their project's success and an ability to be effective in highly dynamic environments. In an empirical study, Baron and Tang (2011) found that positive affectivity is related to entrepreneurs' creativity, and in particular at the firm level to innovative new venture actions. These studies confirm that positive affectivity is relevant for understanding entrepreneurial behavior in organizations. However, they focus on "entrepreneurs who found new ventures and who, therefore, make decisions, take actions, and identify opportunities individually rather than as part of a team or group" (Baron, 2008: 328). This is different from the many CEOs who operate in structured organizations (either small or large) with management teams and a formal system of governance. In addition, these studies have dealt sparsely with various other aspects of organizations' entrepreneurial behavior.

In our present study, we use an Upper Echelon perspective, which considers the CEO as a dominant actor within the top management group (Hambrick, 1994; Hambrick & Mason, 1984) in order to formulate and test hypotheses on the role of CEO positive affectivity in corporate entrepreneurship.

### 3.3.2. CEO positive affectivity and corporate entrepreneurship

Corporate entrepreneurship is an umbrella concept which can be described using three dimensions: innovation, strategic renewal and venturing (Zahra, 1996). Initially this concept was addressed by strategy scholars in terms of firm entrepreneurial strategy, an overarching concept covering innovation, proactiveness and risk taking (Miles et al., 1978;

Miller, 1983). A related concept is entrepreneurial orientation, used by researchers in entrepreneurship to explain a new entry into a market (Lumpkin & Dess, 1996). Research has consistently provided evidence that corporate entrepreneurship is a key determinant of the competitiveness and long-term performance of organizations, especially in dynamic environments (Zahra & Garvis, 2000).

The present research focuses on factors driving corporate entrepreneurship. Much of the literature that has addressed this issue found that CEO personality plays a key role. For example, Miller et al. showed that locus of control, flexible personality and need for achievement have a positive influence on corporate entrepreneurship, in particular innovation, proactiveness and risk taking (Miller et al., 1982; Miller & Toulouse, 1986). CEO core self-evaluation (Simsek et al., 2010) and CEO Narcissism (Wales, Patel, & Lumpkin, 2013) are also related to entrepreneurial orientation.

In line with these studies and drawing on top executive research, as well as research in psychology and entrepreneurship, we argue that CEO positive affectivity influences corporate entrepreneurship and its three sub-dimensions: innovation, strategic renewal and venturing.

#### 3.3.2.1. Dimension 1: Innovation

Innovation refers to the creation and introduction of new products, processes and/or systems (Zahra, 1996). An emerging body of research suggests that CEO positive affectivity can be an impetus for innovation (e.g. Delgado-Garcia and De La Fuente-Sabaté, 2010; Baron and Tang, 2011, Baron et al., 2011). For example, Baron and Tong's (2011) study of CEO entrepreneurs found that positive affectivity increases firm-level innovation. The influence of CEO positive affectivity is carried through two psychological mechanisms: creativity and openness to others' ideas. Psychologists have provided strong evidence that positive affective states influence cognitive processes that lead to such behaviors. Positive affect promotes creativity by influencing cognitive organization (Isen & Daubman, 1984; Isen, Daubman, & Nowicki, 1987). Thus, CEOs high in positive affectivity are expected to be more creative (Baron and Tong, 2011). As a result, they are also more likely to promote innovation at the organizational-level (Baron & Tang, 2011;

Elenkov, Judge, & Wright, 2005; Miller & Toulouse, 1986; Nadkarni & Herrmann, 2010). In addition, positive affect influences openness to experience (Estrada, Isen, & Young, 1997), which in a management setting drives openness to new ideas and experimentation. CEOs' creativity and openness to experience determine innovation at the firm-level. They are likely to be more open to innovative propositions and activities, and also be more prompt to incorporate new ideas into their organizational practices (Elenkov, Judge, & Wright, 2005; Miller & Toulouse, 1986; Nadkarni & Herrmann, 2010).

*Hypothesis 1: CEO positive affectivity is positively associated to firm-level innovation.*

**3.3.2.2. Dimension 2: Strategic Renewal.**

Strategic renewal refers to the change in business orientation and competitive strategies and the acquisition of new capabilities to boost the company's operations and create value for stakeholders (Zahra, 1996). As argued for innovation, positive affectivity promotes strategic renewal by influencing cognitive processes. In particular, positive affects are related to individuals' cognitive flexibility (Estrada, Isen, & Young, 1997), which in turn is related to their ability to drive strategic change at the organizational level (Herrmann & Nadkarni, 2014). Flexible CEOs are more likely to lead flexible organizations and initiate strategic change. For example, Nadkarni et al. have found that the complexity of CEO's strategic schemas, defined as generating broad versus focused environment scanning (Nadkarni & Narayanan, 2007), is related to strategic flexibility (Nadkarni & Herrmann, 2010), which is in turn related to strategic change (Herrmann & Nadkarni, 2014). These findings suggest that positive affectivity at the CEO level would promote strategic renewal, for example through changing competitive strategies and/or acquiring new organizational capabilities to compete with rival firms.

*Hypothesis 2: CEO positive affectivity is positively associated to firm-level strategic renewal.*

#### 3.3.2.3. Dimension 3: Venturing

Venturing, the last dimension of corporate entrepreneurship, is defined by Zahra (1996) as the entry into new business fields, in both existing and new markets. We expect that CEO positive affectivity will be positively related to venturing for two reasons. First, positive affect broadens the scope of attention and increases the propensity to act (Fredrickson, 1998), which induces activities such as exploring or taking personal initiative. Such behaviors can be reflected in the entrepreneurial behavior of the CEO. For example, Delgado-García, Rodríguez-Escudero, and Martín-Cruz (2012)'s study of 335 entrepreneurs shows that affectivity influences goal orientation. The authors conclude that positive affectivity induces entrepreneurs to state broad and ambitious goals, while negative affectivity leads them to state a narrower set of goals. Also, Foo, Uy, and Baron (2009) found that entrepreneurs high in positive affectivity are more likely to engage in a venture effort. Second, positive affectivity predisposes individuals to be proactive (Fritz & Sonnentag, 2007). At the firm level, CEO proactive behavior results in venture growth (Baum, Locke, & Smith, 2001). Thus, we can deduce that positive affectivity predisposes the CEO to engage in exploration of new ventures such as product and markets diversification or launching a new business.

> *Hypothesis 3: CEO positive affectivity is positively associated with corporate venturing.*

#### 3.3.2.4. Meta-construct of corporate entrepreneurship

Hypotheses 1, 2 and 3 raise the possibility that CEO positive affectivity could affect corporate entrepreneurship as a meta-construct. In addition to the previous argument on the influence of positive affectivity on cognitive processes, it is useful to consider a link between positive affectivity and CEO leadership. One of the responsibilities of a CEO is to critically assess and validate, when appropriate, others' ideas and initiatives. CEO's therefore promote corporate entrepreneurship through their leadership practices. A key study by Ling, Simsek, Lubatkin, and Veiga (2008) clearly established the influence of CEO leadership on corporate entrepreneurship. In a study of 152 firms, the authors found that CEOs' transformational leadership promotes corporate entrepreneurship. Research has also shown that CEO positive affectivity enables such a positive and transformational leadership (Rubin, Munz, & Bommer, 2005). Leaders who are high in positive affectivity are able to create stimulating working conditions (Humphrey, 2002) and foster creative and innovative ideas within their teams (Amabile, Barsade, Muller and Staw, 2005). Such leaders can promote new business avenues through innovation, research and development (Pirola-Merlo, Hartel, Mann and Hirst, 2002). They have great positive influence on their followers and can effectively impel changes (Bono & Ilies, 2006). In sum, this CEO leadership style can greatly contribute to corporate entrepreneurship by stimulating entrepreneurial behavior at the top-management team level. Given this empirical evidence, we expect CEO positive affectivity to positively impact corporate entrepreneurship.

*Hypothesis 4: CEO positive affectivity is positively related to corporate entrepreneurship.*

### 3.3.3. The moderating effect of CEO power

A wide range of studies of the "CEO effect" have shown the need to take into account contingency factors. One of these factors is CEO power, defined as the extent to which 'CEOs' will' can be exerted (Finkelstein, 1992). This power is induced or facilitated by several factors related to the organizational context: ownership, organizational structure, expertise and prestige. Power is central in top management team dynamics and organizational decision making (Child, 1972; Salancik and Pfeffer, 1974). The distribution of power in the top management team can confer high power to CEOs and enable them to assert their dominance in strategic choices (Helenblian & Finkelstein, 1993; Eisenhardt & Bourgeois, 1988). We argue here that CEOs' power will positively strengthen the influence of CEOs' positive affectivity on the meta-construct of corporate entrepreneurship and its three dimensions.

Powerful CEOs have more opportunities to turn their preferences into decisions during strategic decision-making, at both the top-management-team (Eisenhardt & Bourgeois, 1988; Finkelstein, 1992) and board-of-directors levels (Haynes & Hillman, 2010). When making strategic choices in high-stake issues, board members' preferences can take precedence over those of the CEO, when the latter's power is low. For example, Zajac & Whespal (1996) reported that when board members' power is greater than the incumbent CEO's power, their preference dominates the selection and choice of a new CEO. The opposite occurs when the incumbent CEO has greater power than the board. More generally, when the CEO's power is high, the influence of the board on strategic choices is low (Haynes & Hillman, 2010). This can have crucial implications for the sub-dimensions of corporate entrepreneurship, such as innovation, strategic renewal and venturing. As argued earlier, the influence of CEOs' positive affectivity on these dimensions lies in their ability to influence strategic ideas and decisions. The adoption of innovations, strategic renewal and venturing may necessitate negotiations and "power games" among top managers and with the board of directors. Therefore, a CEO who has strong power with a greater latitude of decision will be better able to transform his/her preferences for such entrepreneurial activities into decisions. In contrast, a CEO with weaker power will be more constrained and would be less able to translate his/her preferences into strategic decisions, especially when some board members disagree. This is likely to reduce the CEO's ability to drive innovations, strategic renewal, and venturing.

*Hypothesis 5A: CEO Power strengthens the positive relationship between CEO positive affectivity and firm-level innovation.*

*Hypothesis 5B: CEO Power strengthens the positive relationship between CEO positive affectivity and firm-level strategic renewal.*

*Hypothesis 5C: CEO Power strengthens the positive relationship between CEO positive affectivity and corporate venturing.*

*Hypothesis 5D: CEO Power strengthens the positive relationship between CEO positive affectivity and the meta-construct of corporate entrepreneurship.*

## 3.4. Methods

### 3.4.1 Sample and data collection

We collected data from 303 CEO's and senior managers of 102 companies in Quebec, a Canadian province . The size of these firms' business revenues varies between \$1 million and \$6 billion, with an average of \$344 million and a variance of \$917 million. The number of employees varies between 9 and 21000, with an average of 1154. Seventy percent of these firms have a workforce of more than 500 employees. The average age of these enterprises is 48 years, indicating that they are well established. These firms belong to a variety of industries, including manufacturing, technology, retail, pharmaceutical, aviation and transports, and energy.

We used multiple routes to obtain these companies' access approval. We contacted eight organizations, which manage networks of CEOs (Network of small and middle companies CEOs, Network of large companies, chamber of commerce, and business schools). Six of these agreed to provide contacts with 193 of their members. To ensure their participation, we used a letter of reference from influential people in these CEO networks. Fifty-three percent (53%) of the CEO's contacted accepted their participation in the study. This ratio of acceptance is much higher than the 12% average observed in previous studies.

The questionnaire that we used was pre-tested with 27 respondents (12 CEO's and 15 senior managers) who were not included in the research sample. We made minor adjustments to the questionnaire to reflect the reality of the Quebec business environment and of company size. In addition, since the province of Quebec is both English and French-speaking, we developed a French version of the questionnaire using back-translation procedure.

To ensure quality responses, all the questionnaires were filled during interviews with the CEO's. These interviews lasted 45 to 60 minutes on average, and enabled the CEO to have a better understanding and appreciation of the survey items relating to corporate entrepreneurship in their companies. To reduce response bias related to a single respondent, generally associated with common variance bias (see Podsakoff et al., 2003), we asked CEOs for access to members of their top-management team. We sent part of the questionnaire to the CFO (Chief Financial Officer), COO (Chief Operating Officer) or the most senior manager after the CEO. They responded to the same questions as their CEO regarding corporate entrepreneurship, financial resources and the organization's past performance. In addition, another part of the questionnaire was addressed to other senior managers. They responded exclusively to questions related to CEO personality and affectivity. Via a secure survey website, we received a response rate of 80%.

Thus, the final number of respondents is 303 CEOs and senior managers. Average tenure in their position is 13.02 years (SD = 10.43). This suggests that they generally have a well-developed knowledge of the issues addressed. Of the CEOs, 45% were firm founders or family members, 24% were owners after acquisition of the company and 30% were professionals hired by the boards.

### 3.4.2. Measures

#### 3.4.2.1. Corporate entrepreneurship and its dimensions

Corporate entrepreneurship was evaluated with a 12-item scale from Ling et al. (2008), initially developed by Zahra (1996). The initial number of items was 15; however, after the pretest with 27 senior managers, we removed 2 items not adapted to the reality of smaller companies. An exploratory factor analysis with the varimax rotation after the data collection made it possible to validate the three sub-dimensions of corporate entrepreneurship (factors loading more than .50). We removed an item that had a loading problem with the sub-dimensions. Table 1 provides the results of this exploratory factor analysis. As can be seen on Table 1, *Innovation* includes 4 items ($\alpha$ = .83), which indicate, for example, the extent to which the company has pioneered the development of breakthrough innovations in its industry. *Strategic renewal* is also described by 4 items ($\alpha$ = .75), including the extent to which the company has redefined the industries in which it competes. The last 4 items describe the third sub-dimension, *Venturing* ($\alpha$ = .70). We asked, for example, to what extent the company "has entered new markets." For all of these items, respondents were asked, "over the past three years, how would you rate your company's entrepreneurial activities?" The scale ranged from 1 to 7 (1 = Not at all or to a small extent; 7=to a great extent). To test the reliability of the summated scales, it is recommended to use the Cronbach's alpha test. The test is a numerical coefficient of reliability, which checks whether the variables used are likely to provide stable and reliable responses when repeating the test. The alpha varies between 1 (the perfect reliability) and 0. In our case, the Cronbach's alpha for the meta-construct corporate entrepreneurship is a strong .85.

The data used for the analysis is derived from the CEOs' responses. Following Zahra (1996)'s suggestion, we checked the lack of response bias by comparing each CEO's responses to those of the COO, CFO or other senior manager. This comparison was possible for 60 firms out of 102, which is more than in Zahra's (1996) test. We found a significant correlation between the two measurements ($\beta$ = 0.53, P <0.01). Following recent empirical practices, we tested the validity of the meta-construction of corporate entrepreneurship as a second-order model. The model is a first order factor in a formative design. This confirmatory analysis (CFA) produced a good fit: $\chi^2$ (102.57, df = 51, P <0.001), CFI (0.94), IFI (0.94), RMSEA (0.08). This is comparable to previous studies (Burgers & Covin, 2015) and demonstrates the validity of this key construct.

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**3.4.2.2. CEO Positive Affectivity.**

We used two measures of CEO positive affectivity: one self-reported by the CEO, and the other other-reported, provided by senior managers without the presence of the CEO.

*Self reported measure*. This evaluation was done using a 10-item scale from PANAS developed by Watson & Clark (1988), which is widely used to study affectivity. On a scale from 1 to 5 (1 = not at all or very slightly; 5 = extremely), CEOs indicated to what extent they generally feel that way, that is, how they feel on average. Examples of emotions included enthusiastic, determined, and active. This measure captures the extent to which CEOs have a high level of positive affects ($\alpha = 0.78$).

*Other reported measure.* This measure captures the extent to which others perceive the CEO's affectivity. We used a reduced form of the PANAS, with a set of 5 items out of the 10 (Mackinnon et al., 1999). This modified scale retains the items that saturate the positive affectivity measure the most. We were able to obtain this measure for 72 firms, with a number of 1 to 3 respondents. In 80% of the cases, we used the aggregate responses (more than two respondents per firm). To ensure that performing the aggregation was possible, we had to demonstrate that the meanings sought were shared among members of the group. To do so, and in agreement with common practices, we used the agreement index (Rwg) of James, Demaree and Wolf (1984). We found an Rwg of 0.85, which is greater than the minimum of 0.70 generally considered acceptable. We have also calculated the inter-class correlation ICC 1 and 2, which respectively indicate "the reliability of individual ratings" and "the reliability of a group average rating." We found an ICC1=0.607, ICC2=0.76, which indicates that reliability is acceptable. The Cronbach's alpha coefficient for this measure is an acceptable 0.73.

#### 3.4.2.3. CEO Power

This construct was measured using an index which includes six indicators reflecting the structural, ownership and prestige power. Following previous research (Zajac and Westphal, 1996; Haynes & Hillman, 2010, Cannela & Chen, 2001, Zhu & Chen, 2015), we used CEO duality, Board appointment, Inside directors, Outside directors, CEO's stock ownership and Outside Directors' Ownership as indicators. *CEO Duality* corresponds to the fact that the CEO is also the board chairperson and is measured by a dummy variable (1 for duality, 0 otherwise). The number of boards of which the CEO is a member outside his company measures *Board appointment*. This takes into account the boards of for-profit and not-for-profit organizations. *Inside directors* is measured by the percentage of inside directors board members. *Outside director*s corresponds to the percentage of directors unrelated to management, appointed after the CEO's appointment. *CEO's stock ownership* is the percentage of shares held by the CEO. *Outside directors' ownership* is the percentage of shares held by outside directors. The CEO power index is the arithmetic sum of the standardized values of these indicators.

#### 3.4.2.4. Control variables

Based on previous studies we have controlled for industry, firm, and CEO characteristics that can be or have been associated with corporate entrepreneurship. Thus, we controlled firm size, firm age, past performance, liquidity, type of industry, CEO tenure and CEO negative affectivity. *Firm age* is measured by the number of years since the company was founded. *Firm size* is measured by the number of employees. We used the standardized value of these two variables in our analysis. *Type of industry* was measured as the industry in which the company conducts its main activity. Following Zahra (1996), firms were classified into 8 major industries: retail, manufacturing, communications, IT, finance and insurance, construction, consulting services and others. *Past performance* was measured by asking the CEO to say how much ROI (return on investment) performance over the past three years was above the industry average. The answer was checked against those provided in response to the same questions by the CFO, COO or another Senior Manager. We found clear consistency, with a strong correlation ($\beta = 0.52$, $P < 0.01$) among the responses provided. *Liquidity* refers to the extent to which the firm has financial resources, measured with an item from Miller & Friesen (1983). We asked the CEO to rate the abundance of financial resources (capital) for their company. As this was self-reported, our triangulation using comparative responses of CFO or other managers indicates a strong correlation ($\beta = 0.43$, $P < 0.01$). *CEO Tenure* measures the CEO's number of years in his/her current position. We used a standardized value in the analysis. *CEO Negative Affectivity* is measured by using the same tools and procedures as the CEO Positive affect. We used PANAS for the self-reported negative affectivity (Cronbach's $\alpha = 0.81$). We used the PANAS short form for the other-reported. The level of agreement between the respondents is acceptable (Rwg = 0.78, ICC1 = 0.64, ICC2 = 0.79). The Cronbach's alpha coefficient for the PANAS short form was 0.74.

### 3.5. Analyses and results

Table 2 provides the sample descriptive statistics, in particular the means, standard deviations and correlations between key variables. The mean of positive affectivity 4.13 (out of a maximum of 5) is consistent with similar recent studies (e.g. Baron and Tong, 2011). We can see in Table 2 that there is a significant correlation between the dependent variable and the independent variable related to corporate entrepreneurship, which suggests the possibility of multicollinearity. We have computed the VIF to check for such a possible bias. In all models, the VIF (variance inflation factor) was below 1.5, and the average was 1.3. This is much below the recommended threshold number of 10 (Burgers and Covin, 2015). Thus, multicollinearity is not an issue for this study.

To test our hypotheses we performed a four-step hierarchical regression analysis (Cohen, Cohen, West, and Aiken, 2003): (1) control variables only; (2) added the main variable, self-reported CEO Positive Affectivity, (3) added the moderator CEO Power, and (4) added the interaction of Self-reported CEO Positive Affectivity and CEO Power. We also performed a simple regression analysis with other-reported CEO positive affectivity in order to validate the effect of the main variable, self-reported CEO positive affectivity. In these analyzes we used the mean-centered value of all variables. The results of these analyses are reported in Table 3. Models 1, 5, 9 and 13 report the regression result of the control variables. Models 2, 6, 10, and 14 report the regression results with the self-reported measure of the CEO positive affectivity, while Models 3, 7, 11 and 15 report the results of the analysis with the other-reported responses. We recall that the other-reported measure is used to increase the reliability of the measure. It is also used to control the common method bias associated with both self-reported data and with the fact that the CEO's evaluated in the same questionnaire positive affectivity and corporate entrepreneurship. This was recommended by Podsakoff et al. (2003) in their review of common method variance problems. The other models (models 4, 8, 12 and 16) test the CEO power moderation effect.

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Insert table 5 about here

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The models in Table 3 show that the relationships between control variables and corporate entrepreneurship are generally consistent with expectations. They are either significantly related to our dependent variables/constructs or show no statistically significant relationships, which suggest that we can neither assert nor dismiss any of the relationships. Specifically, past performance has a positive relationship with corporate entrepreneurship, in particular strategic renewal and venturing. Size and age have a positive relationship with innovation, but no significant relationship with the other dimensions. Liquidity, type of industry, CEO tenure and CEO negative affectivity show no significant relationship with Corporate Entrepreneurship. It is especially interesting to note that CEO negative affectivity has no significant relationship with corporate entrepreneurship and its three dimensions in both self-reported and other-reported models.

When examining the relationship of corporate entrepreneurship construct and its components with the explanatory variables, we found support for all the hypotheses. As shown in Table 3, hypothesis 1 which predicts a positive relationship between CEO positive affectivity and innovation is supported in both self-reported model 2 ($\beta = 0.54$, $P < 0.10$) and other-reported model 3 ($\beta = 0.34$, $P < 0.10$). Hypothesis 2 is supported in the other-reported model 7 ($\beta = 0.35$, $P < 0.10$), but not in the self-reported model 6. These results suggest that the positive relation between CEO positive affectivity and strategic renewal is significant but not firmly supported by the data. It is also possible that the self-report relationships are understated, as suggested by Cote and Buckley (1987) and confirmed by Podsakoff et al. (2003). On these bases, we are confident that other-reported measures are a reliable representation of the relationship. Hypothesis 3, which predicts a positive influence of CEO positive affectivity on venturing, is supported in both self-reported model 10 ($\beta = 0.65$, $P < 0.05$) and other reported model 11 ($\beta = 0.55$, $P < 0.01$). Finally, hypothesis 4, which indicates a positive influence of the CEO positive affectivity on the meta-construct of corporate entrepreneurship is supported in both self-reported model 14 ($\beta = 0.47$, $P = 0.06$) and other-reported model 15 ($\beta = 0.41$, $P < 0.01$). In short, taken individually and together, the dimensions of corporate entrepreneurship have a significant and positive relationship with CEOs' positive affectivity. However, the relationship with strategy renewal is less strong than with innovation, venturing and the overall construct of corporate entrepreneurship.

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Insert table 6 about here

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All the hypotheses that predict the moderating effect of CEO Power are supported. Hypothesis 5.A that argues for a moderating effect of CEO Power on the CEO positive affectivity-innovation relationship and hypothesis 5.C that predict the moderating effect on the CEO positive affectivity-venturing relationship are supported, respectively, with $\beta=0.70$, $P<0.10$, and $\beta=0.72$, $P<0.10$. Hypothesis 5.B, which suggests the moderating effect of the CEO Power on the CEO positive affectivity-strategic renewal relationship, is supported with $\beta=0.81$, $P<0.05$. Similarly, hypothesis 5.D which stipulates a moderating effect of CEO power on the relationship between the CEO positive affectivity and the meta-construct of corporate entrepreneurship is supported with $\beta = 0.74$, $P <0.05$. Figures 1, 2, 3 and 4 illustrate this interaction in conditions of low and high levels of CEO positive affectivity (-1 and 1 standard deviation). Under low power conditions, the effect of low CEO positive affectivity is stronger, while in high CEO power conditions the effect of high CEO positive affectivity is stronger. Thus, this interaction effect of CEO positive affectivity and CEO power is supported when the dimensions of corporate entrepreneurship are taken separately and together in terms of meta-construct.

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Insert figures 3, 4, 5 and 6 about here

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## 3.6. Discussion

The results of this study, carried mostly with medium and large companies, indicate that CEO positive affectivity has an influence on corporate entrepreneurship. These results extend those of previous studies with new insights on the link between the emotional dimension of the CEO personality and the strategic behavior of organizations.

First, previous studies have suggested a relationship between CEO positive affectivity and innovation, notably through the study of entrepreneurs only (Baron and Tong, 2011). Our study provides further evidence by finding that there is a generalized positive and significant effect of CEO positive affectivity on firm-level innovation. CEOs with a dominant positive affect in their personality have more personal and relational resources to promote innovation. As said before, psychologists have indicated that positive affectivity reinforces creativity and openness to the ideas of others (Isen & Daubman, 1984; Estrada, Isen, & Young, 1997). Thus, it is possible to envisage that these positively minded CEO's, being open to others' new ideas, have a greater capacity to recognize and encourage innovative ideas. They would probably be willing to support, in particular, senior managers and professionals in charge of product and service innovation within their companies.

Second, our findings indicate that CEO positive affectivity has a positive influence on strategic renewal. Previous research has focused on other aspects of CEO personality, such as extroversion or emotional stability (Harman et al, 2010), which are close to positive affectivity. For example, Herrmann and Nadkarni (2014) found that emotional stability, which is strongly related to positive affects, influences strategic change. However, our study is the first to directly test the link between CEO positive affectivity and strategic renewal. Our results are consistent with recent psychological theories which suggest that positive affects generate more flexibility (Estrada, Isen, & Young, 1997) and promote adaptive behaviors (Fredrickson, 1998) such as strategic renewal.

Third, our study is the first to investigate the relationship between CEO positive affectivity and venturing. The results provide solid evidence that CEO positive affectivity is an impetus for venturing activities, such as creating new entities and expanding into new markets. Previous studies have found that positive affectivity is related to the venture commitments of entrepreneurs, who use positive affect to signal that the venture may continue (Foo et al., 2009). Other mechanisms may be considered. For example, positive affects foster global attention, variety seeking (Fredrickson, 1998), and the recognition of opportunities (Baron, 2008). All of these factors predispose the CEO to promote organizational exploration and expansion to new horizons such as new markets.

Fourth, our results provide the first empirical evidence for the positive and significant influence of the CEO positive affectivity on the meta-construct of corporate entrepreneurship. In the early studies on corporate entrepreneurship, Miller et al. (1982, 1983, 1986) found a relationship between CEO personality and corporate entrepreneurship, but they focused on dimensions such as flexibility and locus of control. More recently, Ling et al. (2008) suggested that CEO transformational leadership has an effect on corporate entrepreneurship. These authors argue that transformational leadership could be strongly related to CEO positive affect. However, the design of their research was not focused on this emotional dimension of personality.

Finally, our results indicate that the effect of CEO positive affectivity on corporate entrepreneurship is stronger with more rather than less powerful CEO's. What is interesting is that this moderation effect is especially pronounced for the meta-construct of corporate entrepreneurship and strategic renewal but appears to be less significant for innovation and venturing. Therefore, our results provide a finer assessment of the moderating effect of CEO power. These results also call for more attention to contingency factors in the study of the influence of CEO positive affectivity on firm-level outcomes.

Overall, our study contributes to understanding the CEO effect on corporate strategic behavior. This work is the only one which is designed primarily to test the link between CEOs' positive affective personality and strategic behavior of medium and large companies. Delgado-Garcia et al. (2010) also addressed the relationship of CEO affective tendencies and strategic behavior. Their work focused on the effect on performance and strategic conformity in Spanish banks. Our results support the importance of affects and emotions in the behavior of CEOs and their impacts on strategic behavior at the organizational-level. Our study covers companies from several industries and is focused on positive affect. It clearly shows that the influence of CEO positive affectivity is valid for medium and large companies in all sectors. This study also contributes to the debate in the upper-echelon literature about the effect of the CEO on organizational success (Fitza, 2017, Quigley and Graffin, 2016). Attention in the literature has focused on questioning the CEO's effect on performance. For example, Fitza (2016) argues that this effect is due to chance. Focusing on the characteristics of corporate entrepreneurship is particularly relevant to top management effects, which are more directly related to some of the adaptive functions of positive affects (e.g. creativity and innovation, ability to drive change, etc.). By focusing on corporate entrepreneurship, we were able to demonstrate the CEO's direct impact on the organization's ability to respond to its competitive environment and on the likelihood of its success.

Our results also have *practical implications*. Using the cases of 102 companies in several sectors of activity, this study suggests that CEO positive affectivity has a significant positive impact on innovation, strategic renewal and venturing at the organizational level. Several studies have firmly shown that these dimensions of corporate entrepreneurship determine organizational success (Zahra and Garvis, 2000). In other words, the CEO's affective personality can be crucial to the success of the organization. One way to capitalize on the effect of positive affectivity is through the process of CEO selection. The literature on strategic delegation (Sengul, Gimeno & Dial., 2012) indicates that the choice of an executive to lead the destiny of an organization is critical for an organization's ability to adapt and thrive. Thus, this choice must take into account the CEO's affective dimensions. This would capture his/her capacity to face competition and ensure the organization's success. Another improvement could come through self-management practices. This study shows that CEOs with lower levels of positive affect could have greater difficulty in boosting their organization's entrepreneurial behavior. Awareness of this limit could stimulate these CEOs to search for ways to limit the negative effect of their emotional personality on the success of the organization.

We conclude this study by highlighting some of its limitations and suggesting future research directions. First, the results show that the link between CEO positive affectivity and some components of corporate entrepreneurship needs to be confirmed. In particular, we found that the correlation between CEO positive affectivity and strategic renewal is weak. This does not surprise us when we know that positive affectivity may promote change, while creating long-term inertia because of satisfaction with previous decisions or emotional attachment to strategic priorities (Knight, 2013; Kisfalvi & Pitcher, 2003). However further investigation needs to be done in order to confirm these results.

Second, we have designed our research to test only the effect of positive affectivity on the three dimensions of corporate entrepreneurship. Although we clearly showed that the effect is significant, there may be variables moderating the relationship. For example, we found here that CEO power plays a moderating role. This result indicates that there is a need for further exploration to confirm this link and to identify possible contingency factors, which may moderate the effect of CEO positive affectivity on corporate entrepreneurship and its dimensions.

Third, Baron et al. (2011) advanced the idea of negative effects of the positive affectivity on the strategic behavior of organizations. They propose an inverted U-shaped relationship between CEO positive affectivity and innovation. We have not designed our study to explore this inverted U-shaped relationship. Our results show that CEO positive affectivity has a significant effect on corporate entrepreneurship; however, these results leave room for researchers who would like to push this analysis in search of finer relationships, revealing in particular the intensity effect of positive affectivity.

Finally, our study focused on companies operating in a North American context, particularly in Canada. The results are similar to those found in other contexts, such as in Europe (e.g. Delgado-Garcia, et al., 2010). However, in view of the still very limited number of studies that have addressed this issue of affects at the CEO level, more research in different contexts is needed to consolidate the generalizability of these findings.

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**Table 4:**
**Confirmatory Factor-Item Loadings of Corporate Entrepreneurship Dimensions Measures**

| Items | Loading |
|---|---|
| Over the past three years, how would you rate your company's entrepreneurial activities? The extent to which your company engaged in... | |
| Innovation | |
| 1. has spent heavily (well above the industry average) on product or service development | .85 |
| 2. has introduced a large number of new products or services to the market | .75 |
| 3. has pioneered the development of breakthrough innovations in its industry | .65 |
| 4. has spent on new product or service development initiatives | .85 |
| Strategic renewal | |
| 5. has recognized operations, units, and divisions to ensure increased corporate coordination and communication | .69 |
| 6. has redefined the industries in which it competes | .58 |
| 7. has introduced innovative human resource programs | .80 |
| 8. has been first in the industry to introduce new business concepts and practices | .74 |
| Venturing | |
| 9. has entered new markets | .63 |
| 10. has established or sponsored new ventures | .61 |
| 11. has found new niches in current markets | .72 |
| 12. has created new semi and autonomous units | .72 |

**Table 5:**
**Descriptive Statistics and Correlations of key variables[a]**

| Variables | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Corporate Entrepreneurship | 4,68 | 0,95 | | | | | | | | |
| 2. Firm Age | 48,50 | 39,90 | 0,06 | | | | | | | |
| 3. Firm Size | 1154,46 | 3 164,88 | -0,06 | 0,22 | | | | | | |
| 4. Liquidity | 4,76 | 1,37 | 0,20 | 0,17 | 0,07 | | | | | |
| 5. Past performance | 4,73 | 1,48 | 0,29 | 0,05 | 0,21 | 0,44 | | | | |
| 6. CEO Tenure | 13,02 | 10,43 | 0,07 | 0,08 | -0,19 | 0,13 | -0,03 | | | |
| 7. CEO Power | 0,00 | 2,06 | 0,11 | -0,16 | -0,29 | 0,00 | -0,10 | 0,49 | | |
| 8. CEO Negative Affectivity | 1,90 | 0,48 | 0,05 | -0,11 | 0,04 | -0,17 | -0,12 | 0,11 | 0,08 | |
| 9. CEO Positive Affectivity | 4,13 | 0,41 | 0,24 | -0,03 | -0,01 | -0,13 | 0,29 | -0,14 | -0,09 | 0,06 |

Correlations greater than 0.18 at $p$ <0.05, greater than 0.21 at $p$ <0.01, greater than 0.44 at $p$ <0.001, n = 102

## Table 6:
## Results of Regression Analysis for Main Effect of CEO Positive Affectivity and Moderation Effect of CEO Power

| **Variables** | **Innovation** | | | | **Strategic Renewal** | | | | **Venturing** | | | | **Meta-construct of Corporate Entrepreneurship** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 | Model 10 | Model 11 | Model 12 | Model 13 | Model 14 | Model 15 | Model 16 |
| *Constant* | 0.08 | 0.09 | -0.03 | 0.17 | -0.15 | -0.15 | -0.22 | -0.09** | -0.10 | -0.08 | -0.01 | -0,3 | -0.06 | -0.05 | -0.81 | 0.17 |
| | (0.19) | (0.18) | (0.23) | (0.19) | (0.20) | (0.19) | (0.24) | (0.20) | (0.20) | (0.20) | (0.24) | (0.76) | (0.15) | (0.15) | (0.18) | (0.15) |
| *Control variables* | | | | | | | | | | | | | | | | |
| Firm Age | 0.00 | 0.00 | 0.01 | 0.01† | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.00 | -0.00 | -0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Firm Size | 0.00*** | 0.00*** | 0.00** | 0.00*** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Liquidity | 0.06 | 0.11 | 0.08 | 0.9 | 0.03 | 0.05 | 0.04 | 0.30 | 0.10 | 0.16 | 0.11 | 0.14 | 0.06 | 0.10 | 0.09 | 0.09 |
| | (0.09) | (0.10) | (0.11) | (0.10) | (0.10) | (0.10) | (0.12) | (0.10) | (0.10) | (0.10) | (0.12) | (0.10) | (0.08) | (0.08) | (0.09) | (0.08) |
| Past performance | 0.12 | 0.05 | 0.09 | 0.08 | 0.20* | 0.17† | 0.22† | 0.20* | 0.24** | 0.16† | 0.21† | 0.18† | 0.18** | 0.13† | 0.17† | 0.15* |
| | (0.09) | (0.09) | (0.11) | (0.09) | (0.10) | (0.10) | (0.12) | (0.10) | (0.10) | (0.10) | (0.12) | (0.10) | (0.07) | (0.08) | (0.09) | (0.08) |
| Type of industry | -0.02 | -0.2 | -0.03 | -0.04 | 0.40 | 0.04 | 0.03 | 0.03 | 0.03 | 0.20 | -0.01 | 0.01 | 0.02 | 0.01 | -0.00 | 0.00 |
| | (0.04) | (0.04) | (0.04) | (0.04) | (0.40) | (0.04) | (0.05) | (0.04) | (0.04) | (0.04) | (0.05) | (0.04) | (0.03) | (0.03) | (0.04) | (0.03) |
| CEO Tenure | 0.00 | 0.00 | -0.02 | -0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | -0.00 | 0.00 |
| | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) | (0.02) | (0.01) | (0.00) | (0.00) | (0.02) | (0.01) |
| CEO Negative Affectivity (self-reported) | 0.14 | 0.10 | | 0.16 | 0.32 | 0.30 | | 0.40 | 0.20 | 0.15 | | 0.24 | 0.22 | 0.18 | | 0.03 |
| | (0.24) | (0.24) | | (0.24) | (0.25) | (0.25) | | (0.25) | (0.25) | (0.25) | | (0.26) | (0.20) | (0.20) | | (0.12) |
| CEO Negative Affectivity (Other reported) | | | -0.09 | | | | 0.17 | | | | -0.06 | | | | 0.00 | |
| | | | (0.18) | | | | (0.19) | | | | (0.20) | | | | (0.15) | |
| *Independent variables and Interaction* | | | | | | | | | | | | | | | | |
| CEO Positive Affectivity (self-reported) | | 0.54 | | 0.43 | | 0.30 | | 0.06 | | 0.65* | | 0.51 | | 0.47† | | 0.12 |
| | | (0.30) | | (0.30) | | (0.32) | | (0.32) | | (0.31) | | (0.32) | | (0.25) | | (0.32) |
| CEO Positive Affectivity (Other reported) | | | 0.34† | | | | 0.35† | | | | 0.55** | | | | 0.41** | |
| | | | (0.18) | | | | (0.20) | | | | (0.20) | | | | (0.15) | |
| CEO Power | | | 0.15* | 0.22 | | | 0.07 | -0.07 | | | 0.04 | -0.05 | | | 0.09 | 0.27 |
| | | | (0.08) | (0.16) | | | (0.08) | (0.17) | | | (0.08) | (0.17) | | | (0.06) | (0.20) |
| CEO Positive Affectivity (SR) x CEO Power | | | | 0.70† | | | | 0.81* | | | | 0.72† | | | | 0.74** |
| | | | | (0.36) | | | | (0.39) | | | | (0.38) | | | | (0.30) |
| $R^2$ | 0.15 | 0.18 | 0.27 | 0.22 | 0.11 | 0.11 | 0.14 | 0.06 | 0.12 | 0.16 | 0.23 | 0.20 | 0.12 | 0.16 | 0.23 | 0.21 |
| *Adjusted* $R^2$ | 0.09 | 0.11 | 0.16 | 0.14 | 0.04 | 0.04 | 0.02 | | 0.06 | 0.09 | 0.12 | 0.11 | 0.06 | 0.09 | 0.12 | 0.13 |
| $F (R^2)$ | 2.34* | 2.51** | 2.49** | 2.62** | 1.63 | 1.47 | 1.14 | 1.68† | 1.91† | 2.26* | 2.10* | 2.20* | 1.92† | 2.17* | 2.03* | 2.44**† |
| $\Delta R^2$ | | | | 0.03 | | | | 0.04 | | | | 0.03 | | | | 0.05 |
| $F(\Delta R^2)$ | | | | 3.75* | | | | 4.35* | | | | 3.53† | | | | 6.29** |

† P< 0.10, * P < 0.05; ** P < 0.01; *** P < 0.001; N=102 (model 1, 2, 4, 5, 6, 8, 9, 10, 12, 13, 14 and 16); N = 72 (model 3, 7, 11 and 15).
Unstandardized coefficients reported with standard errors in parentheses.

**Figure 3:**
**The Interaction Effect of CEO Positive Affectivity and CEO Power on Innovation**

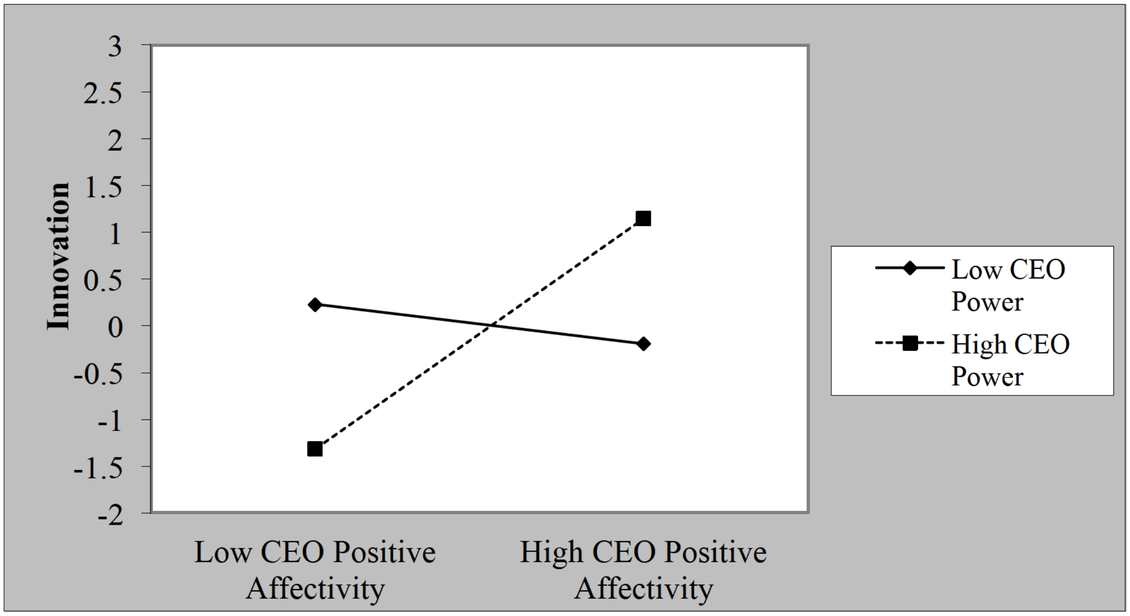



**Figure 4:**
**The Interaction Effect of CEO Positive Affectivity and CEO Power on Strategic Renewal**

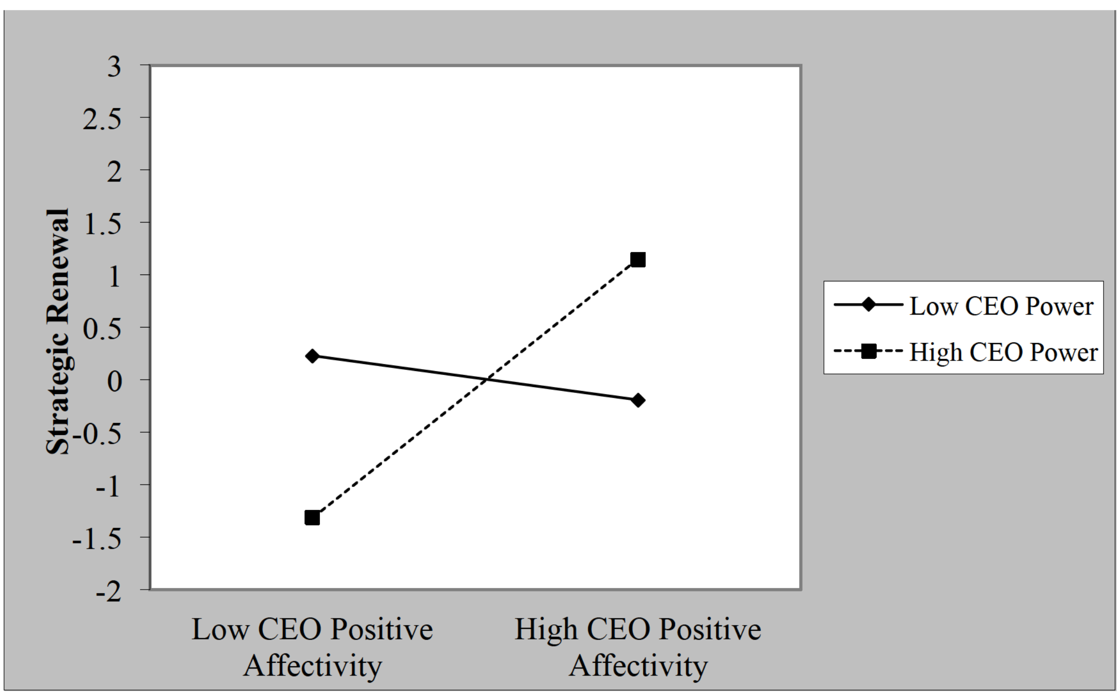


**Figure 5:**
**The Interaction Effect of CEO Positive Affectivity and CEO Power on Venturing**

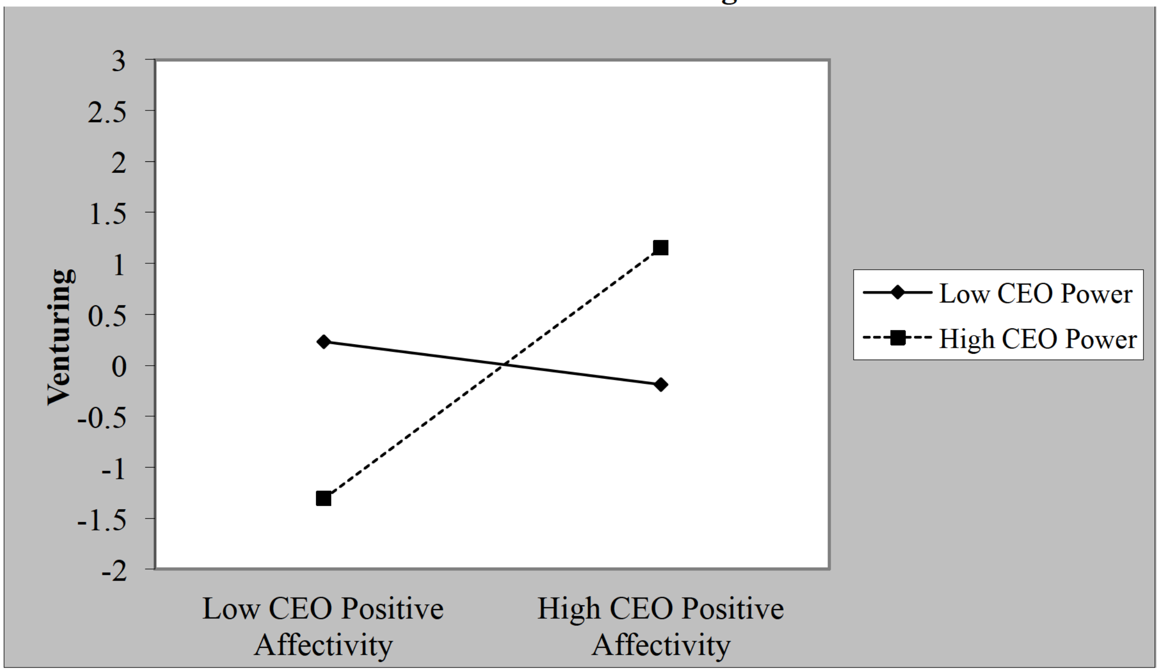
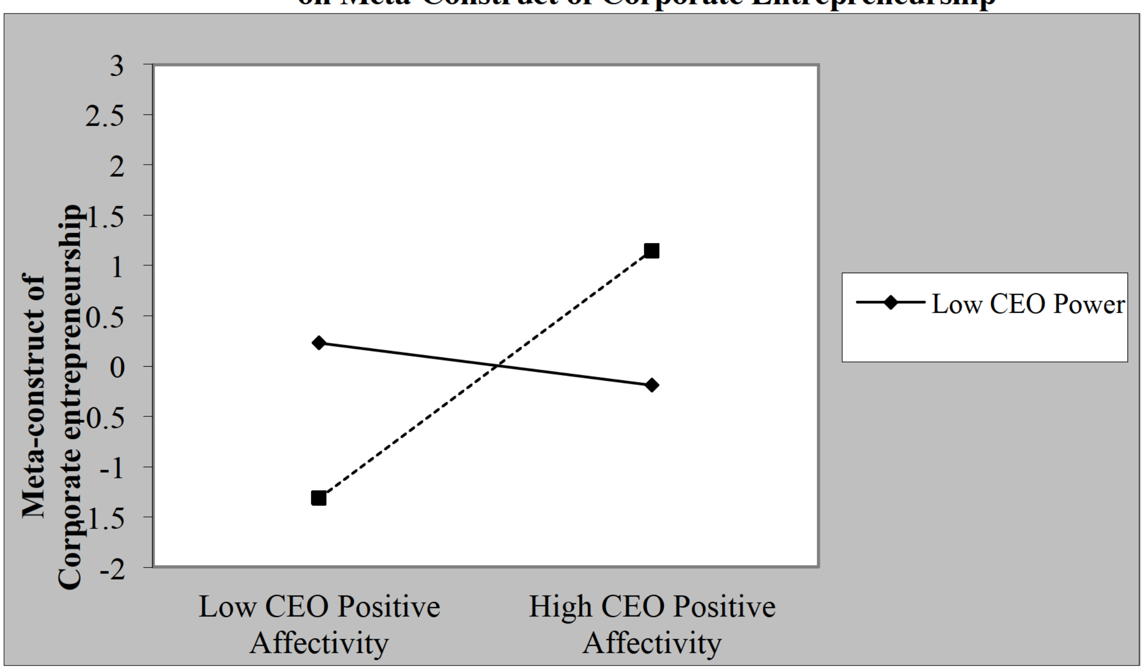



**Figure 6:**
**The Interaction Effect of CEO Positive Affectivity and CEO Power on Meta-Construct of Corporate Entrepreneurship**



## Chapter 4 - Third article

# Are we Losing our social value?
# Managing identity anxiety during strategic change

### 4.1. Abstract

Using a longitudinal qualitative study of two foundations, one public and the other private, we investigate how change agents manage anxiety related to organizational identity to promote strategic change. The emergent model offers evidence of the link between what we call "Identity Anxiety" and strategic inertia and details the practices used by change agents to manage this identity anxiety: recomposing strategic teams, changing the focus of the anxiety and generating viable alternatives. Furthermore, this model offers a perspective on how anxiety management practices contribute to organizational identity adjustments in response to pressures for change. We discuss the implications for theories on strategic change, organizational identity and emotion management in organizations. Practical implications for the management of foundations and other types of organizations are also discussed.

*Keywords:* Organizational Identity, Identity Anxiety, Emotion, Strategic Change, Philanthropic Foundation

## 4.2. Introduction

Organizational scholars have demonstrated that organizational identity is related to strategy, and changes in strategy often involve changes in identity (Ashford & Mael, 1996; Barney et al., 1998; Rughase, 2006). Organizational identity refers to what the organization's members consider central, distinctive and enduring (Albert & Whetten, 1985). It is seen as 'the essence' of the organization, serves as the foundation of organizational strategy (Ashford & Mael, 1996) and may contribute to its competitive advantage (Fiol, 1991). Organizational identity may also be an impediment to strategic change (Bouchikhi & Kimberly, 2003; Fiol, 2001; Reger, Gustafson, Demarie, & Mullane, 1994; Tripsas, 2009). For example, from a case-study of several leading companies, including Moulinex and Polaroid, Bouchikhi and Kimberly (2003) conclude that companies may fall into an "identity trap." They observe that "a strongly anchored identity can become a trap when it so constrains strategic options that the organization cannot cope effectively with a changing environment. In such cases, unless managers work to transform the company's identity, genuine strategic change is not possible or may never result in sustained improvements in the company's performance" (p. 22). Numerous empirical studies have documented this relationship between organizational identity and strategic change (e.g. (Dutton & Dukerich, 1991; Gioia & Thomas, 1996; Ravasi & Schultz, 2006; Tripsas, 2009). Some studies have confirmed the link between identity inertia and organizational inertia (e.g. (Tripsas, 2009), while others have documented the process of identity change in the context of strategic change (Dutton & Dukerich, 1991, Gioia & Thomas, 1996).

Despite this work, little is known about how the shift from inertia to change is managed. Gioia, Patvardhan, Hamilton, and Corley (2013) observe that to address such a question, a longitudinal study is required. In addition, studies to date have mainly focused on cognitive processes such as sensemaking, sensegiving (Corley & Gioia, 2004; Gioia & Thomas, 1996; Weick, Sutcliffe, & Obstfeld, 2005) and cognitive inertia (Tripsas, 2009). Little attention has been paid to emotional processes. Yet, emotions are often instrumental to identity issues (Brown & Starkey, 2000; Dutton & Dukerich, 1991; Fiol & O'Connor, 2002; Howard-Grenville, Metzger, & Meyer, 2013; Huy, 2011; Walsh & Bartunek, 2011). For example, emotions are related to defensive responses to organizational identity threats (Dutton & Dukerich, 1991) and are important in building a shared understanding of organizational identity (Howard-Grenville et al., 2013). Our longitudinal in-depth study of two foundations, one private and the other public, is an attempt to fill the gap. The primary purpose of foundations is to contribute to social change. Our preliminary investigations in these organizations revealed that identity is an important strategic issue that is generally regarded as a strength but that can also lead to an 'identity trap.' Furthermore, anxiety related to organizational identity, here called *identity anxiety,* emerges as an important source of organizational inertia. Through ongoing investigations within these organizations, we were able to observe how anxiety was managed to promote strategic change, and we developed a grounded theory on how anxiety can be managed to promote change.

Our process model first provides evidence of the link between identity anxiety and strategic inertia and then describes the mechanisms by which anxiety management is carried out to produce change. In addition, the link between organizational identity and strategic change is documented. Our findings show that it was difficult to significantly change strategy without changing identity. Attention to microprocesses of identity change highlights the role of anxiety management at the top-leadership level, including board members and senior managers. Furthermore, our first-order analysis offers an opportunity to better understand strategic change practices within philanthropic organizations. Overall, our theoretical model contributes to advance theory on strategic change, organizational identity, emotion management, and practices in the management of foundations and other organizations.

This article is organized as follows: First, we present the theoretical background on organizational identity, strategic change and identity anxiety. Second, we present the methodology, which is based on a qualitative study spanning a twenty-yearperiod. Third, we present an overview of the two cases studied and detail the findings. Finally, we discuss the theoretical and practical implications.

## 4.3. Theoretical background

### 4.3.1. Organizational Identity and Strategic Change

There are two main lines of research on organizational identity in relation to strategic change. The first focuses on how organizational identity impedes strategic change and leads to organizational inertia (e.g. (Fiol, 2001; Fiol & Huff, 1992; Tripsas, 2009). In these studies the core organizational identity is composed of different attributes such as core value (Gagliardi, 1986), core ideology and competence (Fiol, 2001; Ashforth & Meal, 1996). A major change in the external environment could make identity 'obsolete' and require an adjustment. However, organization members, especially top managers, may be unable or unwilling to change. They may develop a strong attachment to the identity claims of the organization (Dutton, Dukerich, & Harquail, 1994), which leads them to rejectany attempt to change. Tripsas' (2009) study of Linco, a technological company, is an example of cognitive inertia difficulties when trying to change organizational identity. In such circumstances, reluctant organization members use different cognitive tactics (Elsbach & Kramer, 1996) or deceptions (Phillips & Kim, 2009) to resist external change pressures, and any attempt to change core identity (Tripsas, 2009).

The second line of research deals with how organizational identity change occurs in the context of strategic change. This research focuses less on the resistance to identity change and more on the identity transformation processes which promote strategic change (e.g. Gioia & Corley, 2004; Gioia & Thomas, 1996; Dutton & Dukerich, 1991). These scholars argue that identity change, though destabilizing for organization members, is necessary for the organization to adapt to environmental changes (Gioia, Schultz, & Corley, 2000). Top managers take change decisions when they become aware of the need to adapt identity to external changes (Gioia & Thomas, 1996; Dutton & Dukerich, 1991), especially when identity inertia threatens the organization's ability to compete (Wang, Wezel, & Forgues, 2015). Change takes the form of identity adjustments (Dutton & Dukerich, 1991) or identity work (Tracey & Phillips, 2015) to meet external demands. Change generally affects meaning and labeling (Corley & Gioia, 2004). Change of meaning often creates identity ambiguity, which encourages managers to pursue identity management practices that enable identity and strategic change, such as sensegiving (Corley & Gioia, 2004) or discursive practices (Chreim, 2005).

These studies have generated productive insights, but some key areas remain underexplored. In particular, two important questions have received little attention. The first is how transition from inertia to change occurs. Research has shown that the need to improve public image and legitimacy (Dutton & Dukerich, 1991; Gioia & Thomas, 1996) and the loss of performance (Tripsas, 2009) are important stimuli. Ravasi and Schultz (2006) indicate that to facilitate change, i.e. reconcile the old identity with the new, managers are more likely to build on culture. However, managerial practices to overcome resistance to identity and strategic change, especially at the level of senior leaders, remain underexplored. The second question deals with emotional processes. While scholars recognize the key role of emotions in these changes (e.g. Dutton & Dukerich, 1991), empirical investigations are scarce (Howard-Grenville et al., 2013). Our research on identity anxiety in the context of strategic change addresses these two key questions.

#### 4.3.2. Identity Anxiety

We conceptualize *identity anxiety* as anxiety related to organizational identity. It results fromconcern about an "existential" loss, which leads to resistance actions designed to preserve the threatened organizational identity. This conceptualization is based on the definition of anxiety and theory of individual emotions and on anxiety theories related to organizational identity and behavior. In his book *The Meaning of Anxiety*, May (1950) provides seminal insights, in particular that "[a]nxiety is the apprehension cued off by a threat to some value which the individual holds essential to his existence as a personality" and that "[t]he threat is to something in the "core or essence" of the personality" (p.191). Thus, as an emotional experience, anxiety is related to a loss of essence, the "fear of becoming nothing," a fear of "psychological death." As a result, anxiety naturally leads to resistance to the threat. When an individual's identity is threatened, existential questions (Petriglieri, 2011) and strong anxiety (Smith & Lazarus, 1990) are generated leading to resistance as a coping behavior.

Similarly, threats to organizational identity are likely to generate anxiety. As explained earlier, identity gives value and essence to an organization. Faced with a situation that threatens organizational identity, organizational actors, especially senior leaders, may experience identity anxiety. Taking a psychodynamic perspective, Brown and Starkey (2000) argue that the threat to organizational identity generates anxiety that induces an "ego-defense" behavior. The pressure for change in organizational identity is experienced as an attack against its self-concept, which creates discomfort and anxiety, called 'anxiety-provoking identity change'. This process leads top managers to protect themselves against anxiety, using defense mechanisms such as denial, rationalization, idealization, fantasy, and symbolization. This reaction leads to identity inertia (Brown & Starkey, 2000) and resistance to any substantial strategic change.

### 4.3.3. The Management of Identity Anxiety

Given the loss of essence with which anxiety is associated, identity anxiety can be a strong factor in the resistance to identity change. The management of this anxiety is therefore crucial to promote change. The literature on emotion management (Huy, 2002; Kaplan, Cortina, Ruark, LaPort, & Nicolaides, 2014) offers some insights into practices that can be applied to the management of identity anxiety. It suggests a top-down approach with "leaders as emotion managers" (Kaplan et al, 2014) who must create conditions to influence subordinates' emotions, behavior and attitudes toward change. Huy's (2002) study of emotion-management practices in a context of radical strategic change provides some indications on practices related to identity anxiety. Noticing that "radical change challenges organization members' self-identity and meaning ... which triggers anxiety" (Huy, 2002: 41), middle managers, to drive change, used emotion-management practices such as organizing information meetings, mourning sessions, and one-to-one listening.

While these studies provide insights into anxiety management practices in the leader-subordinate relationship, it remains to be studied what happens when leaders are themselves anxious. How should identity anxiety at the level of senior leaders such as CEOs, and members of the board of director be managed? Brown and Starkey (2000) suggest self-management practices at the top management-team level that involve acceptance of an identity change through 'critical self-reflectivity', 'dialogue' and an 'attitude of wisdom'. These suggestions remain theoretical and have not yet been investigated empirically. Therefore, the focus of our research is on the management of identity anxiety and on its relationship to strategic change and organizational adaptation. Our research question is thus: *How is identity anxiety at the top levels managed to promote strategic change?* This question also indirectly concerns how the identity shift from inertia to change occurs in the context of strategic change.

## 4.4. Methods

### 4.4.1. Research setting

We studied two typical North American foundations, using a qualitative longitudinal approach, suitable for building a grounded theory (Glaser & Strauss, 1967; Locke, 2001). The first is a Regional Public Foundation, here called ReFound. The financial resources of this organization come from various donors, mainly from locally-headquartered companies (80% of the donations), and community members. Hence, one of the two sets of activities of ReFound is to raise funds from these donors. The other is to invest these funds, more than 50 million dollars per year, in the social development of the community. The second organization is a billionaire private foundation, here called BiFound. Unlike Refound, BiFound's financial resources are provided by the founder, a family of entrepreneurs. The funds, more than one billion dollars, are invested, and the proceeds are used for social investment. The other difference is in the form of governance. ReFound is governed by representatives of the entire community, including stakeholders from business, politics and the labor force, while BiFound is governed by members of the founding family and coopted representatives of local institutions. The two foundations have similar purposes that some organizational scholars have recently called "Grand Challenge" (George, Howard-Grenville, Joshi & Tihanyi, 2016) (George, Howard-Grenville, Joshi, & Tihanyi, 2016), i.e. the fight against poverty in their community. ReFound is active in a metropolis with more than four million inhabitants, while BiFound operates at the state level, covering a population of more than eight million inhabitants. Leaders of these two organizations share the ambition to bring significant social change by alleviating poverty. The two foundations also face significant strategic challenges in their relationships with the external environment.

The research began in 1997 when the leaders of the regional public foundation (ReFound), faced with environmental changes, approached one of the authors to help them reflect on the future of their organization. At that time, that author took both consultant and researcher roles to understand that organization. After a year-long consultancy agreement, he kept in regular contact with the leaders of that organization and took part in the most significant strategic meetings during the twenty years that followed, as a participant or non-participant observer. Given his experience with this public foundation, that author was approached in 2011 by BiFound, which was also facing challenges in its relationship with the external environment. With both the perspective of a consultant and the concerns of a researcher, he investigated BiFound's activities between 2011 and 2016. The second author was invited to join the investigation as a non-participant observer at ReFound in 2011 and BiFound in 2014.This research was thus conducted with an insider-outsider approach (Gioia, Price, Hamilton, & Thomas, 2010). In the course of the observations, it became more and more evident that the issue of organizational identity took a prominent place in the strategic challenges of these two organizations. What most intrigued us was the anxiety associated with organizational identity issues and its influence on leaders' behavior. The focus of this work was directed toward a better understanding of the role played by anxiety and of its management. The data used were collected over this period of twenty years between 1997 and 2016. Figure 1 shows the chronology of relevant events and data collection

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#### 4.4.2. Data Collection

We conducted 233 formal interviews and 119 observations. In addition, we collected a considerable number of documents.

##### 4.4.2.1. Interviews

As shown in Figure 1, semi-structured interviews were conducted over different periods between 1998 and 2016. At ReFound, those interviews were done between 1998 and 1999, then between 2010 and 2016. At BiFound, they were carried out from 2014 to2016. These interviews were conducted with board members, top-management team members, middle managers and major internal and external stakeholders. Key actors such as the Chairpersons, CEOs, senior managers and consultants were interviewed several times over the course of events. For example, each of the CEOs and senior managers was interviewed 5 to 8 times. At an early stage of the research, the questions were more general. A sample from the first interview questions is, "What are the biggest threats you perceive to the future of your organization? What are your main concerns? " The questions were adapted after the preliminary analysis (Corley and Gioia, 2004) and especially after the iterative analysis focused our attention on identity anxiety. At that stage, we explored further how identity anxiety was managed. Examples of questions asked included, "What helped reduce your concern about the loss of your organization's identity?" and "Why did you agree to end the status quo?" These interviews lasted between 30 and 120 minutes. 80%were recorded and transcribed. In addition to those formal interviews, numerous informal interviews were conducted.

#### 4.4.2.2. Observations

These observations took place from 1996 to 2016 at ReFound with a greater frequency during periods of strategic analyses and reflections. At BiFound, observations were made between 2011 and 2016. These observations were mostly made during meetings of strategic committees, executive committees and boards of directors. The duration of these meetings was between 30 minutes and eight hours, with an average of three hours. As mentioned above, one of the authors wasa non-participant observer, while the other was a participant observer. Detailed and comprehensive hand-written notes were taken on what was said and done during those meetings.

#### 4.4.2.3. Documents

We had access to the most significant strategic documents within these organizations over the period of study. We also collected meeting minutes, as well as archival documents (e.g. books, reports) about these organizations.

The triangulation of these interviews, observations and documents allowed us to construct a narrative of events which we used as raw material for theory building.

### 4.4.3. Data Analysis

We carried out constant comparative analyses of data from ReFound and BiFound, going back and forth between data and theory, in order to build an emergent theory (Glaser & Strauss, 1967). In the first stage, we traced the chronology of events, key moments of decision and the most significant actors in the process following the method recommended by Langley (Langley, 1999). We distinguished three major periods of strategic transition in each organization during whichquestioning about organizational identity took place. We also traced the actions of nineteen key actors at ReFound and eighteen at BiFound during these periods. The importance of these actors is demontrated by their influence on the strategic decision process, as assessed by top management team members (see tables 1 and 2 below). That stage also helped to produce a narrative of key events.

In the second stage, we traced the evidence of identity anxiety. Our interactions with actors in the research field intuitively made us aware of anxiety related to organizational identity. The analyses consisted of demonstrating that anxiety from data and showing how it evolved over time at the individual level and how it manifested within the senior leader groups. To provide a solid basis for this analysis, we reviewed literature on anxiety (e.g. May, 1950) and the main theories on emotions related to anxiety (e.g. Appraisal theory). An iteration of this literature with the data allows to determine three key components of the manifestation of identity anxiety. The first is 'perceived organizational identity threat', which concerns the question of "what" provokes anxiety (May, 1950). This is consistent with the literature on emotion, which indicates that *an appraisal of 'threat'* is the core relational theme of anxiety (Smith & Lazarus, 1990) and that this cognitive process is part of emotion experience (Frijda, 2005). As Lazarus (1991b) argues, "Remove the provocation ... and the emotion no longer exists " (p. 824). This component also allows to pinpoint the focus of anxiety. For example, informants distinguish anxiety related to 'organizational identity' from anxiety related to 'organizational performance'.

The second component is 'Existential Worries' which we use to group the first-order themes from data, i.e. 'worry about the loss of meaning' and 'worry about the loss of relevance'. This conceptualization is also based on the literature. In particular, Lazarus (1991: 829) suggests that "the goal content relevant to anxiety is existential, that is, centered on meanings and a sense of identity that the individual has constructed". The third component is what we term 'identity protection', which corresponds to the psychological motive and actions related to anxiety i.e. "avoid potential arm " (Smith & Lazarus, 1990) to organizational identity. This terminology has also been used in identity literature to characterize individuals' actions in reaction to threats against their personal identity (Petriglieri, 2011). Here we use it in the sense of protecting the organization's identity.

In the third stage, we sought to understand how this identity anxiety was managed in the two organizational settings. We first proceeded with an open coding that produces an in vivo or first-order concepts (Corley & Gioia, 2004) based on interviews, observations and documents. These first-order concepts reflect what informants said (Van Maanen, 1979). We then proceeded to axial coding (Corbin & Strauss, 2008) which consisted of generating second-order themes that integrated first-order concepts. An example of these second-order themes is "emergence of change agents," which groups first-order concepts 'newcomers' and 'function-threatened managers'. The final structure of the data is shown in Figure 2.

In the fourth stage, we grouped second-order themes into overacrhing theoretical dimensions (e.g. Anxiety management practices) that we used as bases for the emerging theory (Corley & Gioia, 2004). We then integrated all this into a theoretical framework that indicates the dynamic link between second-order themes (Locke, 2001), and explains how the management of identity anxiety promotes strategic change. That stage was done iteratively with the existing theories (e.g. Brown & Starkeley, 2000) to consolidate the emerging theory and ensure its robustness.

Throughout these analyses, we followed the trustworthiness criteria recommended by Lincoln and Guba (1985). In particular, to avoid interpretation bias and ensure the quality of the analysis, the coding was first done by the non-participant author who then presented and discussed this coding with the participant author. Subsequently, a sample of the data was submitted to the coding of an external colleague, who is both qualitative and organizational identity scholar, who did not participate in the research.. There was a high level of agreement with the initial coding. Finally, these coding and interpretations have been validated by key informants, including those who have left the organizations. At ReFound, this was submitted to six members of the top management team including the current and the past CEOs, the vice presidents and a consultant. At BiFound this was submitted to the CEO and three vice-presidents. The positive feedback from these informants gave us confidence in the evidence and management of identity anxiety. In the following section, we give an overview of the two cases before presenting the detailed findings of our investigations.

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### 4.5. Case overview: from inertia to change

#### 4.5.1. The Regional Public Foundation

The Regional Public Foundation (ReFound) was created in the early 1970s, following the merger of five main charitable community organizations. At that time, there was a rift between the different ethnic communities, particularly Anglophone, Jewish and Francophone. Each community had its own charitable organizations and competed with the others to raise funds from local businesses. Leaders of these communities decided to merge the charitable organizations into one philanthropic public foundation. ReFound has thus become the major philanthropic organization in the region and has secured the exclusive right to fundraising from businesses. Its specific history made "solidarity" the core of ReFound's identity, an identity legacy that has been transmitted to the different generations of leaders and employees over the years.

In the 1990s and 2000s, a major shift in the philanthropic environment threatened ReFound's core identity. With the emergence of corporate social responsibility, consumer pressure for responsible practices urged companies to practice strategic philanthropy. This trend was also encouraged by management gurus such as Porter & Kramer (1999, 2002), who argued that firms should create both social and financial value through philanthropic actions. This change resulted in the increasing willingness of companies to publicize their philanthropic actions, the causes supported and the results achieved. To achieve this, the companies have asked ReFound to allow them to dedicate their donations to specific causes, consistent with their social responsibility policies. This practice, while legitimate, was seen as a threat to ReFound's Identity. It required adopting practices seen as inimical to the core idea of "solidarity." This threat generated strong identity anxiety among ReFound's Senior Leaders. For fifteen years, this identity anxiety pushed these leaders to resist pressures from firms, with organizational inertia in the face of environmental change. Table 1 traces three major periods of identity questioning in the face of pressures from environmental shifts. In this table, we put an emphasis on the key actors involved in the decision-making regarding maintaining or changing the identity.

During the first period (1998-2003), the leaders raised the questions of "who are we?" "what businesses' demands for designated donation mean for our identity?", "do we want to change our identity?" The decision not to change the identity was made. This decision was agreed upon by senior leaders, including the CEO, Senior managers, and board members, who had a significant influence on the decision-making process. In the second period (2008-2010), the issue of the changing or maintaining of identity was raised again. At that time, pressures for change from companies were intensified. The impact started to be felt in fundraising results. ReFound leaders again chose to not respond favorably to the companies' demands. However, some leaders had begun to change their minds on the issue, but they had less weight in the decisions, and the status quo was maintained. During the third period (2013-2015), the same issue was raised again with even more pressures. This time, leaders felt that they had to change the "status quo". The decision was unanimous, initiating a shift in ReFound's identity and strategy, described by informants as a "historic moment."

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#### 4.5.2. The Billionaire Private Foundation

The Billionaire Private Foundation (BiFound) was founded in 2000 by a successful entrepreneur who had built his fortune in telecoms from the 1960s to the 1990s and in the late 1990s decided to sell his companyUsing more than $1 billion from the proceeds, he decided to create a philanthropic foundation. The entrepreneur believed that he could significantly influence living conditions and alleviate poverty on a national scale. However, the national context was not favorable to foundations like BiFound. In the early stages, the legitimacy of BiFound was contested by some social actors. Community actors were critical of venture philanthropy initiatives such as BiFound, which were viewed as‘philanthropic capitalism.’ The pressure from these external actors became more acute when BiFound officially positioned itself as an ‘influencer’ of governmental and public policies. The history of BiFound can be divided into three key periods (see Table 2).

In the first period (2002-2009), the foundation progressively adopted governmental partnership as key to its identity. Between 2002 and 2004, the primary questions were "what do we want to do?", "who do we want to be?" as an organization. At that time, the choice had been to define BiFound as an influencer of government policies. The founder-entrepreneur wanted to make the foundation a key instrument of social development at the national level. Most of the coopted leaders shared his vision and agreed with this strategic choice. Unlike in the case of ReFound, there was no pressure for change from external actors. This was rather a period of self-initiated identity questioning and formation. However, some senior managers believed that there was a risk of disagreement and resistance to this identity positioning from external actors. Later, between 2006 and 2009, the foundation negotiated partnerships with the government, which helped to its influence on governmental and public policies. This generated opposition from different community actors, including community organizations, social movements, trade union, and political parties, which was perceived by BiFound's leaders as a threat to their core beliefs, i.e. achieving impactful social change by influencing government actions and raised concerns among senior managers. The second period (2010-2012) gave rise to questions about this identity positioning. The decision was to maintain the current identity. Some of the leaders had begun to think that it might be important to consider other possibilities for identity positioning. However, their weight was insufficient to influence the decision for change. Those who were anxious about the loss of BiFound's basic ideology argued for the status quo. Among them the founder and some members of the board, who dominated strategic decisions. During the third period (2013-2015), the same question was raised again under external pressures. This time, senior leaders opted for change. All leaders, the founder included, were now in agreement for a change in identity positioning and consequently the core ideology.

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Thus, in both cases, senior leaders have moved from resistance to acceptance of identity change. What interests us in this evolution is the role played by anxiety. In Tables 1 and 2, we traced the focus of anxiety and noted that change had evolved from a dominant focus on identity (what we called identity anxiety) to a focus on performance (for ReFound) and organizational capacity (for BiFound). This change was made possible through anxiety management practices. In the following section, we present in detail the results, highlighting the evidence of identity anxiety, triggers and practices of anxiety management and outcomes.

### 4.6. Findings

Our analysis reveals the same patterns of behavior at ReFound and BiFound. Thus, we have integrated findings from these two organizations to show how identity anxiety is managed to promote strategic change. Figure 2 shows the structure of the findings. First, we show the three components that form the evidence of identity anxiety. Table 3 provides illustrations from empirical evidence. Second, we present triggers, practices and outcomes of the management of identity anxiety. Table 4 provides additional illustrations from field research.

#### 4.6.1. Evidence of Identity Anxiety

As noted earlier, anxiety occurs when an individual perceives a threat to what s/he considers "core" or "essence" to his/her existence, which leads to resistance (May, 1950). In other words, anxiety as an emotional experience is triggered by such cognitive processes as appraisal, which leads to coping behavior (Lazarus, 1991, Fridja, 2005). At ReFound and BiFound, we observed these patterns of behavior that reflected identity anxiety related to organizational identity. We grouped these patterns into three components: perceived organizational identity threat, existential worries, and identity protection.

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##### 4.6.1.1. Perceived Organizational Identity Threat.

Our results indicate that there was a threat to elements identified in the literature as constituting core identity (Collins & Porras, 1994; Fiol, 2001; Gagliardi, 1986). At ReFound, the perception focused on core values, while at BiFound the focus was on core ideology.

*Threat to Core "Social" Values.* Since its inception, ReFound has been defined as an instrument of 'solidarity'. The values of solidarity and mutual help have played a key role in the way leaders define the foundation. It was with pride that senior managers repeatedly stated that ReFound is “the unique place where all community members sit” to discuss poverty issues. Given this solidarity value, ReFound leaders opted not to allow donors to “designate” their donations to specific organizations or causes, unlike other public foundations in the country which allowed donors to do so. The practice of allowing donors to designate their donations to specific targets, which was very limited during 1980s, became common in North America in the 1990s. An internal report indicated that "during the period of 1990 to 1995, designation as a whole increased by 58.7 per cent" where it was permitted. Seizing on this trend, some companies in the region began asking ReFound to allow them to designate their donations. This persistent demand was interpreted as a threat to ReFound's core value of solitarity, as one of our informants commented, "we cannot say that we are in solidarity with the community if we support the sexiest causes and leave less attractive ones."

*Threat to Core "Social" Ideology*. At BiFound, the threat was different and related to senior leaders' vision of their organization. During the first two years of the foundation, they frequently asked: "who do we want to be as an organization?" In this quest for identity, BiFound's leaders (accompanied by the consulting firm McKinsey) organized in 2001 a tour to learn from the experience of similar North American foundations. At the end of the learning tour, the founder and other senior managers were convinced that the impact of the foundation will be greater if they influence public policy. As one of our informants argued, they developed the ideology that to make a difference at the national scale, it was necessary to influence government and public policy. In 2002, this ideology was formally inscribed as the 'vision' of the foundation. "This vision reflects how the organization was defined at the very beginning", explains a Senior Manager. The vision was reformulated a few years later, but the core ideology remained dominant in all of the foundation's subsequent actions. From 2004, the foundation initiated collaborative projects with the government with the aim of influencing governmental policies and practices—a kind of institutional work (Lawrence, Hardy, & Phillips, 2002). Between 2006 and 2009 this collaboration became more significant, following a philanthropic joint-venture with the government to co-create three funding organizations. This partnership accounted for more than 80% of BiFound's investments. It generated a strong public protest from some community actors, trade unions, community organizations, and opposition politicians. These external actors demanded the end of the partnership with the government and the cessation of BiFound's influence on the government's social actions. This was perceived by BiFound's senior leaders as a threat to the realization of their core ideology.

#### 4.6.1.2. Existential worries

Although we distinguish "worry" from "threat perception" for theorizing purposes, both are intrinsically connected and evolve together over time. These existential worries take here two forms.

*Worry about the loss of meaning is the first form.* This feeling was very noticeable among ReFound's senior leaders. It is experienced by the leaders as a loss of 'who we are as an organization', and 'what is our soul'. Expressing this feeling, one Senior Leader strongly asserted that responding to donor demands would be to "disguise what ReFound is". In this period of concern, senior management had been very active in expressing these 'worries' to several internal and external stakeholders. For example, during a strategic meeting in 1998, the CEO stated, "We are worried about the trend related to companies' requests to designate their donations". Another senior manager asserted, "We would have raised more money if we had accepted donors' designation demands, but the social and community value would have been lost".

At BiFound, this feeling was more subtle and was not publicly displayed. However, for leaders, responding to external demand for change would impede "reaching a great impact" and merely play an ordinary role. As one of the Senior Leaders explains:

> "Our approach is always based on the mission of preventing poverty. We believe that if we act upstream, if the government acts upstream it will provide an equal opportunity for everyone... I think this is the way (influencing the government) with the greatest potential for results. We put all our efforts in that direction.""

*Worry about the loss of relevance* is the second form of these worries. The feeling of loss of relevance was more present at ReFound. The acquiescence to firms' demands would transform ReFound into a ''transmission channel'' with no real added value to the community's social development. The feeling of programmed death characterized this anxiety. As one of the senior leaders warned in a private interview, it would "destroy" the organization.

In both cases, we noted that growing threats increased anxiety and prompted leaders to take action. This feeling of anxiety was not ephemeral and was not to disappear overnight. It was lasting, because the threat was expected to persist.

#### 4.6.1.3. Identity Protection

The reaction of senior leaders in both organizations was to resist external demand and take action to protect their organization's identity. Their actions took two forms:

*Affirming and Maintaining identity*. At ReFound, the leaders engaged in a substantive debate about the organization's identity over the period of 1998-2003. This debate began as strategic reflections on the distinctive character of ReFound and gave birth in 2000 to a strategic guideline, which focused mainly on affirming ReFound's solidarity value and finding a new label, "Bridge builder," to express this identity. Subsequently, a large consultation was initiated with all major stakeholders about donor pressures for designated donations. The decision was to reject those requests. In addition, they decided to affirm ReFound's values of solidarity through a new concept of donation called ''solidarity donation,'' as opposed to ''designated donation.'' A document produced for this purpose underlined that "if there is one thing that truly embodies ReFound's values, convictions and vision, it is The Solidarity Donation. A gift of this nature is a donation with no strings attached which unites the giver with all other donors. It reflects the desire of all ReFound's donors to join in order to make a real difference.'' In 2008-2010, the issue resurfaced during a strategic thinking exercise. The decision was to maintain the solidarity donation because "this approach is always relevant to have the greatest possible social impact, and it is apparent in ReFound's image platform" (excerpt from the strategic guidelines resulting from this reflection). Our data indicate the same behavioral pattern at BiFound. The partnership with the government was maintained over a period of seven years, despite external pressure for the end of that partnership.

*Advocating and Educating on Identity.* Both organizations have engaged in these actions. BiFound developed media campaigns to defend the partnership with the general public. It also engaged in advocacy in political forums to demonstrate the value of the partnership. The communication department was mandated to change the public perception of the partnership with the government. At ReFound, in addition to defending the model of solidarity donations, senior leaders decided to start educating donors. The CEO took advantage of all public forums available to educate company leaders about the need for solidarity-based philanthropy.

The behavior of senior leaders in both organizations over that period was intriguing. ReFound's leaders were aware of the risk that this refusal to respond to business demands could negatively affect their financial performance, but they chose not to respond. In the same vein, BiFound's senior leaders stated that they were aware that refusal to respond to public demand would exacerbate the problem of legitimacy and public image. However, they decided not to respond. Our interpretation is that the worry associated with the loss of meaning and social relevance was stronger than the worry for financial performance or legitimacy.

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#### 4.6.2. Triggers of Identity Anxiety Management

In both organizations, it became clear that identity anxiety had led to a vicious cycle of organizational inertia (Gagliardi, 1986, Tripsas, 2009), so no substantial strategic changes could be made. In the view of our informants, strategic change was focused on peripheral elements, such as improving marketing and communication, which had no significant effect. For example, at ReFound, "the CEO defended the status quo, and the whole strategic planning exercise was to find a way to not change anything", asserted one of our informants. Thus, managing identity anxiety had become an important strategic issue. However, this was difficult given the identity anxiety of Senior Leaders themselves. This situation resembles what institutional scholars call the paradox of embedded agents (Battilana, Leca, & Boxenbaum, 2009; Zietsma & Lawrence, 2010), in which the actors who make the institutions must change this institutions from within. Two elements made it possible to manage this identity anxiety—the loss of organizational performance and capability and the emergence of change agents.

##### 4.6.2.1. Loss of organizational performance and capability

The loss of performance and organizational capacity motivated some actors to allow identity change initiatives.

*Decline of organizational financial performance.* At ReFound, the decline of financial performance was the main trigger of identity change initiatives. This decline began in 2007, after more than ten years of strong growth in annual fundraising revenues. The crisis of 2008 aggravated the situation, with a significant decline in the level of donations. The years that followed did not improve this financial performance, making it increasingly difficult to mobilize donations from companies. Between 2012 and 2013, ReFound has reached its largest lifting deficits since its inception. Our informants explained that this decline was not merely due to the 2008 financial crisis but mainly due to the rejection of donors' requests to designate their donations.

*Loss of organizational capability.* At BiFound, change motivation was linked to a loss of organizational capacity. After the creation of the three funding organizations in partnership with the government, a number of operational problems began to emerge. The three organizations served the same clientele with different requirements, which created duplication and dysfunction in the implementation of strategies. In addition, collaboration with the government has prompted the emergence of a conflict of institutional logic (Battilana & Dorado, 2010) between governmental logic and the philanthropic logic. This clash of logics led BiFound senior leaders to make decisions inconsistent with its strategies. Our informants argue that this has seriously affected the strategic and operational capacity of the organization and reduced the effectiveness of social development actions. For example, in a private interview, a middle manager explained, "I think that BiFound was eaten by the government. A foundation should be able to finance innovative projects that no one else would, and take risks. But we could not because of the partnership."

Despite these problems, senior leaders, especially those with the most important decision-making power, including the CEO of ReFound and the Founder-Chairman of BiFound, were pushing for maintaining the core identity. However, the pressure for performance and organizational capacity led to the emergence of change agents.

#### 4.6.2.2. Emergence of Change Agents

Previous studies of organizational identity tend to treat upper echelons as homogeneous groups (Corley, 2004). In the case of ReFound and BiFound, our results indicate that managers did not deal homogeneously with identity anxiety. We identified two categories of upper echelon members who emerged as change agents.

*Function-Threatened Managers*. The first category concerns managers who had their departmental mission questioned by the losses of performance and efficiency. At ReFound, these were the managers in charge of raising funds who were unable to fulfill their mission. For example, in 2000 the campaign director resigned because she anticipated that the resistance to donor demand would lead to loss of financial performance. She had unsuccessfully attempted to convince other managers to modify the core identity. Following the decline between 2008 and 2011, the campaign managers were increasingly echoing to senior leaders donors' demand for change . One of the managers in charge of the campaign explains that his team is in contact with donors every day and feels more than anyone else in the organization that the resistance to donors' demand is unsustainable in the long term. At BiFound, the Senior Manager in charge of the organization's strategic capability emerged as change agent. He took the initiative to bring about change because he "needed to ensure coherence with the foundation's mission, which the partnership did not allow".

*Newcomers*. Another category of these emerging agents was newcomers that is senior leaders who were not present in the organization during the period when resistance around the organization identity was crystallized. They felt less identity anxiety and were more open to questioning the identity in the face of performance or capability loss. This was the case of the new Chairman of ReFound who took office in 2012 when the decline in performance became more visible.

The action of these emerging change agents was crucial to break the vicious circle of inertia caused by identity anxiety. Their role was mainly to manage this anxiety to get the other senior leaders to accept identity shift.

#### 4.6.3. Anxiety Management Practices

Taking a psychodynamics perspective, Brown & Starkey (2000) advanced the idea of 'self-management' of anxiety to allow top managers to move from identity defense to change. In the case of ReFound and BiFound, this self-management was not sufficient. It required a 'management of others', i.e. management of anxiety directed towards others rather than self.' The decision-makers who had the most weight in these two organizations, namely the founder-chairman of BiFound and the CEO and most influential senior managers of ReFound, were the ones with high levels of identity anxiety. Emerging change agents felt that actions were needed to reduce the inhibitory effect on identity shift. These change agents used different managerial practices to gradually bring about an organizational identity shift. We have identified three important practices for managing anxiety: recomposing strategic teams, changing the focus of anxiety, generating viable alternatives.

##### 4.6.3.1. Recomposing Strategic Teams

It was not surprising that changes at the strategic teams level contributed to strategic changes at ReFound and BiFound. The literature in management indicates that the recomposition of top executive teams fosters strategic changes (Goodstein & Boeker, 1991; Wiersema & Bantel, 1992). However, this literature has focused on cognitive processes, especially on change in the mental model (Barr & Huff, 1992; Senge, 1990). Little has been said about the emotional processes associated with these changes. We have observed that the recomposition of the management teams favors strategic change, because of the change in the emotional dynamics around the decisions. This recomposition of strategic teams occurs at the level of top management team, strategic committee and board of directors.

*Top management team recomposition.* At ReFound, the CEO had high power in decision-making. One of the informants said it was difficult to discuss the "epidermal" identity change issue with this CEO. In 2011, this CEO decided to retire after 20 years at the head of the organization. In a private interview at that time, this CEO told us that she hoped that the organization would find a replacement who would continue to protect core identity by sticking to solidarity donations. However, the hiring committee chaired by the new Chairperson (change agent) opted for a person willing to question the identity. In a recent interview, this Chairperson told us, "We needed to bring in a person who would change things ... because pressures were too great and we could not stand idly by." The arrival of the new CEO made it possible to re-examine the situation. She was not excessively emotionally attached to solidarity donations, and that lack of identity anxiety allowed her to search for alternative solutions. She told us in a private interview, "When I arrived, ReFound people told me that solidarity was something sacred that should not be touched. I know it's important, but as an engineer and a rational person, I felt it had to be questioned."

At BiFound, the founder transmitted his position as CEO to his son in 2009. Unlike the CEO of ReFound, he stayed in the organization as Chairman of the board. This change moved the center of identity anxiety towards the board of directors and allowed the top management team to come up with alternative solutions. The role of the senior manager in charge of BiFound's strategic capability (change agent) was fundamental in the use of this recomposition as a means for change, as he explains: "I seized the arrival of the new CEO to ask questions about the partnership model". In the opinion of other informants, the arrival of this new CEO was decisive because he was less emotionally attached to the core ideology and therefore more open to questioning it. However, his power in decision-making remained limited, due to the presence of the founder as Chairman.

*Strategic committee recomposition* is another element that has strongly contributed to the reduction of anxiety around organizational identity. In both organizations, the choice of persons on these committees was crucial At ReFound, individuals who had been appointed to lead the strategic committee were largely less emotionally attached to the core identity. For example, the co-chair of the committee was the chairman (change agent). The principal consultant who was appointed to lead the process was known to be in favor of changing the solidarity donation policy before her hiring. Some people who had participated in previous identity reflections, those of 2003 and 2010, and who were known for their identity anxiety were not directly involved in these strategic committees. Among the new members of the Strategy Committee, several were external strategic volunteers who were alsoexecutives in donor-companies and were thus free from identity anxiety. In the opinion of some informants, this re-composition reduced the effect of identity anxiety and balanced the exchanges within these strategic committees.

*Board recomposition*. At BiFound the issue of how to compose the strategic teams was less decisive, as the identity anxiety center had moved from the top management team to the board. The re-composition of the board helped to reduce identity anxiety. According to our informants, the arrival between 2012 and 2014 of new board members, relatively free from emotional attachment to the core ideology, balanced somewhat the debates at the level of the board. A senior manager explained that "There are new board members who are not afraid to ask questions about the partnership", and another argued that "this change at the board level has influenced the decision not to renew the partnership."

Thus, the arrival of new senior leaders free of identity anxiety was key to effecting identity shift. The resistance to that shift is similar to the mental model which causes senior members of a team to struggle to modify pre-existing patterns and accept novelty (Senge, 1990). The same phenomenon applies not only to cognitive change but also to identity anxiety. Here it is the difficulty to make an emotional shift, to get rid of identity anxiety.

#### 4.6.3.2. Changing anxiety focus

In both organizations, the recomposition of strategic teams had the advantage of rebalancing emotional dynamics around decision-making. However, that was not enough to bring about an identity shift. Another element played a key role, namely changing the focus of anxiety. This was done mainly through consultants' alarming diagnostics and change agents' alarming rhetoric.

*Consultants' alarming diagnostics*. At ReFound, the new CEO (change agent) organized a meeting in March 2014 with members of the management team and board of directors to make a decision on "the idea of change". At that point, it was not a matter of finding a solution but deciding whether the status quo should be maintained or changed. At this meeting, the CEO organized a workshop to address questions such as, "What are our concerns?" "Are we worried enough (about financial loss) to change?" To elevate organizational awareness, the CEO used KPMG, a leading consulting firm, to diagnose the situation. The consultants' report presented at that meeting revealed an alarming picture. For example, the report said, "Proximity to the cause (designated gift or donation) is a top priority for all generations...In 2013, all segments are in decline... That threat puts the organization at risk ... The possibility of "micro" losses within several Top-100 companies is an even greater threat." In retrospective interviews, that meeting was described as crucial by several participants because it legitimized the acceptance of identity change. One of the top managers most anxious about organizational identity told us after the meeting, "We knew all this before, that the loss was important. But coming from such a credible consulting firm ... it was a strong signal that the status quo was no longer an option." Following the meeting, the CEO got the nod from the board to start a strategic thinking exercise to come up with solutions.

The same practices were used at BiFound by change agents to start looking for possible solutions. In 2011 and 2012, the Manager in charge of BiFound's strategic capacity convinced the new CEO to undertake a diagnostic of the first ten years of the organization. That exercisewas "an opportunity to review achievements" but also "to ponder the future of the foundation". He hired consultants, highly regarded for their expertise in social and governmental issues, who produced a report on the Foundation's ability to influence the government. At the same time, another consulting firm was hired to produce a report on government partnership benefits and dysfunctions. The two reports were used to engage the founder and the Board of Directors in a search for solutions. The reports were alarming, pointing to the need for change. For example, the consultants' report indicated "the risk of phagocytosis ... the foundation can no longer play its role." This report also highlighted a strategic paradox, as the partnership with government was undermining BiFound's philanthropic identity. It increased concern about the loss of organizational capability, more forcefully confirming that the "status quo posed a great risk ".

*Change agents' alarming rhetoric*. In both organizations, this practice was used during meetings of the strategic committees and the board. Change agents used the results of the consultants' diagnosis and their own experiences to continually point out the risks of resisting change. The following excerpt from a strategic committee meetings at ReFound illustrates this

> The foundations of ReFound crumble ... The threat is serious. [...] How serious? If we do not move, we are going to be on the defensive and have to contend with an irreversible erosion. [Change agent, Meeting with strategic committee, April 2014]
>
> Why change what works well? We just saw it. For the first time all sources of income are in the red.... Is it urgent? Yes. The base crumbles. The status quo would precipitate the decline. [Change agent, Meeting with board of directors, September 2014]

The rationale behind the effort made by change agents to shift the focus from identity anxiety to performance and capability is explained here by a consultant in an interview from April 2014:

> Top management has a healthy dose of anxiety (about loss of performance). A kind of paranoia, but one that is healthy. If you do not have this, you will not act ... That's why they started the process (search for solution). We can feel their anxiety about the future, there is apprehension and uncertainty. Now we (consultants) are in a dynamics of change management.

Overall, these efforts have increased anxiety about organizational performance and capability, but identity anxiety also remained high. The period was a moment of inner tensions in which senior leaders had to deal with antagonistic sources of anxiety (identity vs. performance-capability). Most of them were now convinced that it was necessary to respond to the external demand for change, but at the same time, they were anxious to protect the organization's identity.

#### 4.6.3.3. Generating viable alternative

Our data indicate that generating viable alternatives led to the identity shift. This was done through two practices:  acceptable alternative searching and risk assessment.

*Acceptable alternative* is a solution that at minimum meets these two competing demands: the need to preserve core identity and the need to increase organizational performance and capability. In the case of ReFound, the proposed alternative was "directed donations," a kind of middle-of-the-way between solidarity donations (core value) and designated donations (external demand). This alternative was introduced by the new CEO and consultants as an optimal solution. At BiFound, the solution was to find other forms of partnerships that would have an impact on community development. This shifted focus from government to social development networks and groups. According to our informants, the latter were seen as equally important as public policies for change of social practices.

*Risk assessment* has been used to reassure anxious managers of the viability of alternatives. At ReFound this was done through benchmarks with other North American public foundations. In May and June 2014, there was a tour of a dozen foundations which implemented similar solutions, with "80% of donations made on solidary bases."  These results were presented to the strategic committee and board members to reassure them that alternatives are available. Interviews with managers and board members, just after these presentations, confirmed that that risk assessment greatly reduced identity anxiety.

At BiFound, this was done through tests of the alternative. Pilot projects carried out with some social development networks yielded encouraging results. These were presented to the top management team in June 2014 and later used as arguments to convince the founder and Board members that change to the core ideology was acceptable. In an interview at that time, the CEO explained that

> We had some projects unrelated to formal partnerships (with the government). They brought realistic and effective practice changes. It appeared that we could do that across the country, and achieve our goal ... For the board of directors, that meant: there are other effective ways to influence practices in the socio-community system of the nation....

In both cases, these actions helped reduce anxiety related to the current organizational identity and fostered acceptance of new alternatives.

#### 4.6.4. Outcome: Adjusted Identity

In both organizations, the management of anxiety enabled a shift in organizational identity. This change took the form of an adjustment to external demands while preserving the essence of the core identity. This adjustment was achieved with external actors through *identity reconciliation*.

##### 4.6.4.1. Identity Reconciliation.

It was clear to the promoters of change that “the loop had to be closed” by ensuring that the new positioning of identity was acceptable to external actors. Two key actions ensured that reconciliation.

*Validation with key external actors.* At ReFound, in the weeks following acceptance by senior leaders, the CEO and consultant met with major companies (donors) to present the new alternative. As one informant told us, this activity was mainly aimed at obtaining their acceptance.

The issue was important because accepting this new alternative could potentially help ReFound reduce its performance loss. The CEO thus emerged out of these meetings with great satisfaction: "Acceptance was total". As a result, top management team members and the board of directors felt "comfortable" definitively adopting the new identity positioning. At BiFound, this validation took more time. For three months, top managers organized meetings with social actors. Their positive reactions helped to legitimize the new alternative.

*Public Communication.* Another element, important for reaching public actors, was public communication. Although used in both organizations, these activities were more important at BiFound than at ReFound. According to a BiFound senior manager, this was crucial as BiFound needed to improve its public image and legitimacy. Several media campaigns were carried out to inform the public about the end of the partnership with government, and the desire to work more closely with networks of social development actors. A public survey conducted a few months later confirmed that there was acceptance of BiFound's new identity positioning.

In a later interview, managers of the two organizations affirmed that the modified identity had greatly improved their relationship with external actors, while enhancing performance at ReFound, and organizational capacity at BiFound.

## 4.7. Discussion

The case of ReFound and BiFound shows that identity anxiety can limit the abilityof an organization to adapt to its environment. Managing this anxiety can help to overcome inertia and promote change. In this section, we summarize the theoretical links in a process model of identity anxiety management and then discuss the implications for theory and practice.

### 4.7.1. A grounded model of identity anxiety management

Our results have highlighted how anxiety functions within these organizations to produce strategic inertia. This occurs through a vicious cycle of identity anxiety, with (1) perception of threat to organizational identity that triggers (2) worries about loss of meaning and relevance, which in turn lead to (3) protection of identity in response to the perceived threat. The reproduction over time of this vicious cycle underlies organizational inertia, which limits the ability to adapt to external demands.

Managing this anxiety can overcome resistance and promote change. This is made possible by events that trigger identity anxiety management. Organizational inertia contributes to a loss of organizational capabilities and performance. This motivates the emergence of change agents, who typically arise from among those whose departmental mission is directly affected or from among new leaders. These agents manage identity anxiety and promote change. First, they recompose strategic teams, i.e. the top management team, the board of directors and the strategic committees. Second, they change the focus of anxiety to increase anxiety about performance and organizational capabilities. Third, they stimulate the generation of viable alternatives, preserving core identity and mitigating risk. These achieve the effect of reducing identity anxiety. Finally, identity is adjusted to respond to external demands. The new identity is finally validated with key stakeholders and communicated to the general public. Figure 3 summarizes this emerging theory.

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Insert figure 9 about here

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#### 4.7.2. Contribution to theory

##### 4.7.2.1. Organizational Identity and Strategic Change

As pointed out earlier, empirical work has found that organizational identity can promote organizational inertia (Fiol & Huff, 1992; Reger et al., 1994; Tripsas, 2009). Bouchikhi and Kimberley (2003) found that organizations are often victims of an identity trap that blocks strategic change. As Tripsas (2009) found, it is difficult to overcome resistance to organizational identity change, so organizational inertia persists for a long time.

Our results confirm and extend these findings. We noted a persistence of the same strategy for fifteen years at ReFound despite strong external pressures for change and eroded financial performance. At BiFound, we observed the same phenomenon with the persistence of organizational identity. For seven years, there was resistance to external demand for change. Inertia gradually affected the organizational capacity to drive social change. This suggests that identity-related inertia prevents strategic change and adaptation.

Our results confirm these past results and make additional contributions. First, unlike previous research, we have focused attention on emotional mechanisms. We found that identity anxiety is a key element in the relationship between organizational identity and inertia. Identity anxiety is different from the "cognitive inertia" described in previous research (e.g. Tripsas, 2009). Existential worries, an emotional component of identity anxiety, are a powerful engine which pushes individuals to strongly resist external demands. In this case, cognitive strategies such as sensemaking or sensegiving (Corley & Gioia, 2004) to manage identity change may be ineffective in the attempts to overcome resistance (Tripsas, 2009). In view of these results, identity anxiety appears as a critical avenue to explore in order to understand strategic change. The experience of both organizations provides evidence that managing anxiety is an important lever to move from the status quo to change.

Our results also provide insights on the transition from identity claims (Albert & Whetten, 1985) to identity change (Gioia et al., 2000). Ravasi & Schultz (2006) and Gioia et al (2013) called for a more global understanding of these processes, often treated as separate. Previous research found that organizational image (Dutton & Dukerich, 1991) or loss of organizational performance (Tripas, 2009) motivates change. Although these are important factors, our results indicate that they are not sufficient. For example, despite the threat to image and legitimacy, BiFound executives took seven years before switching from the old identity to a new one. In the case of ReFound, several managers continued to defend the maintaining of identity despite financial losses. This longitudinal study over fifteen years has shown that other factors are important for generating identity shift. We noted that the emergence of change agents at the level of senior leaders is necessary to break the vicious cycle of inertia. This provokes a gradual weakening of the identity coalition and promotes change. More important, the task of these change agents can prove unsuccessful if they do not resort to practices surrounding the current identity aimed at managing the anxiety. Thus, the fundamental contribution of this research is to show that the transition from inertia to change requires active management within the team of senior leaders and that this management largely concerns identity anxiety.

#### 4.7.2.2. Emotion-Management practices.

As previously stated, emotion management theory provides some avenues for managing identity anxiety (Kaplan et al., 2014, Brown & Starkey, 2000, Huy, 2002). The little research that has been done on the issue suggests a top-down approach, in which a leader is an emotion-manager for subordinates (Kaplan, 2014). This results in practices such as face-to-face listening and meetings to reassure employees (Huy, 2002). Our findings indicate that this model works less effectively in the cases of ReFound and BeFound, in which the senior leaders themselves were anxious. Another strategy described in the literature is 'self-management' at the senior leaders' level through critical self-reflexivity, dialogue and wisdom (Brown & Starkey, 2000). In both organizations, we noted that these practices were not present. Practices were neither simply top-down nor focused on self-management. Rather, they were multi-directional (top-down, bottom-up and peer-to-peer) within the senior management group. This management of anxiety was mainly "management-of-others". The main actors who manage others were change agents who emerged during the process. In the case of BiFound, these agents were members of the top management team who had to manage anxiety at the board level. In the case of ReFound, the change agents were the Chairman, fundraising manager and new CEO. In the case of the CEO, she had to manage the top management team, as well as some board members. This finding provides additional insight on the actors of emotional management within organizations.

We also noted that the means used to manage anxiety were both structural and interactional. Structural means concern the recomposition of strategic teams. This recomposition reduced anxiety around identity. Since emotional experience is subjective and specific to each individual (Lazarus, 1991a), it turns out that replacing individuals changes the emotional dynamics around organizational identity. In particular, new senior leaders less attached to the organization's history were less anxious about identity. Their arrival in the group and the departure of others helped to reduce identity anxiety. This has created a more favorable climate for new solutions. The other element is interactional means, which is the practice—intriguing for us—of changing the focus of anxiety. Previous research treats anxiety as unidirectional, i.e. promoting organizational inertia (Maitlis & Ozcelik, 2004; Staw, Sandelands, & Dutton, 1981). However, we noted that change agents used anxiety as a means for change. They used alarming diagnoses to increase anxiety about performance or capability losses and used other approaches to reduce anxiety about identity. Thus, anxiety related to identity impedes change, while anxiety related to the loss of performance stimulates change. These findings invite a consideration of the management of anxiety, and perhaps other emotions, from the angle of 'what' motivates the emotion (May, 1950). The precise determination of the source of the emotion experienced can make it possible to calibrate strategies (e.g. increasing or decreasing) to obtain the desired behavior. Finally, we noted that risk assessment is another practice contributing to the management of anxiety. Our results clearly indicate a need to pay attention to the management of emotion in the context of change.

### 4.7.3. Managerial Implications

The interest of this study lies partly in the fact that it concerns both private and public foundations. It is remarkable that, despite their differences, the same phenomenon of Identity Anxiety occurred in both organizations. The results indicate that the senior leaders of both foundations legitimately protected the "core social value" and "the core social ideology" of their organizations. However, this protection has become a barrier to the adaptation of these organizations to their environments. Managers have developed excessive anxiety about identity, worrying about losing social value or the essence of the ideology pursued. This led them to resist any change attempt, which has aggravated the situation over time and made these organizations vulnerable. These results suggest that this phenomenon is likely to occur in other public and private foundations. Therefore, foundation leaders, as well as practitioners, must be aware of this phenomenon of identity anxiety and find ways to mitigate it.

This phenomenon is also likely to occur in any other organization, especially when internal identity is seen as antagonistic to external identity (Tripsas, 2009) or market identity (Wang et al., 2015). The influence of anxiety on individuals' behavior appears to be universal. In similar situations, senior managers are likely to develop the same patterns of behavior. Identity anxiety prevents managers from searching for solutions. They tend to reject any attempt to fundamentally question organizational identity. Yet the case of ReFound and BiFound shows that it may be possible to find creative solutions, which reconcile competing demands. In the final period of our study, Managers found a way to respond to external demands while at the same time somewhat preserving the core identity. These findings invite us to pay attention to identity anxiety and to find appropriate management practices to reduce its negative impact on the organization's adaptability to its environment.

### 4.7.4. Limitation and future research

This research is limited to only two organizations within a single sector, which limits its generalization. However, as explained above, there is reason to believe that these same phenomena could be observed in other organizations. The psychological mechanisms that link emotional processes to the behaviors of individuals are universal. We encourage further research on identity anxiety and its management in other organizations and in different organizational contexts to consolidate and refine our results. More broadly, we encourage further research on emotional processes and other microprocesses that are involved in change to identify how their management can help move from inertia to strategic change.

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**Figure 7: Key events and Data Collection**

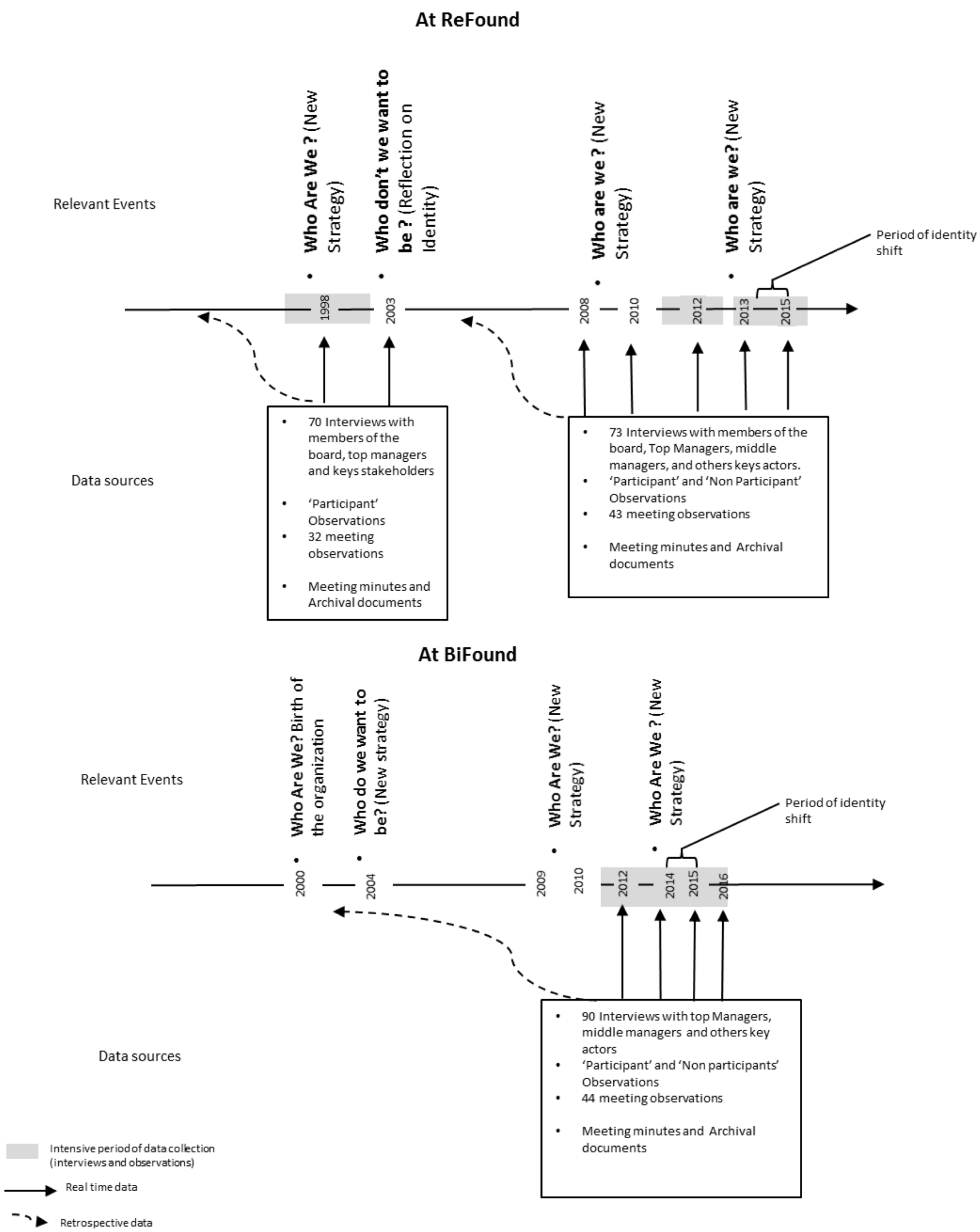


**Figure 8 : Data Structure**

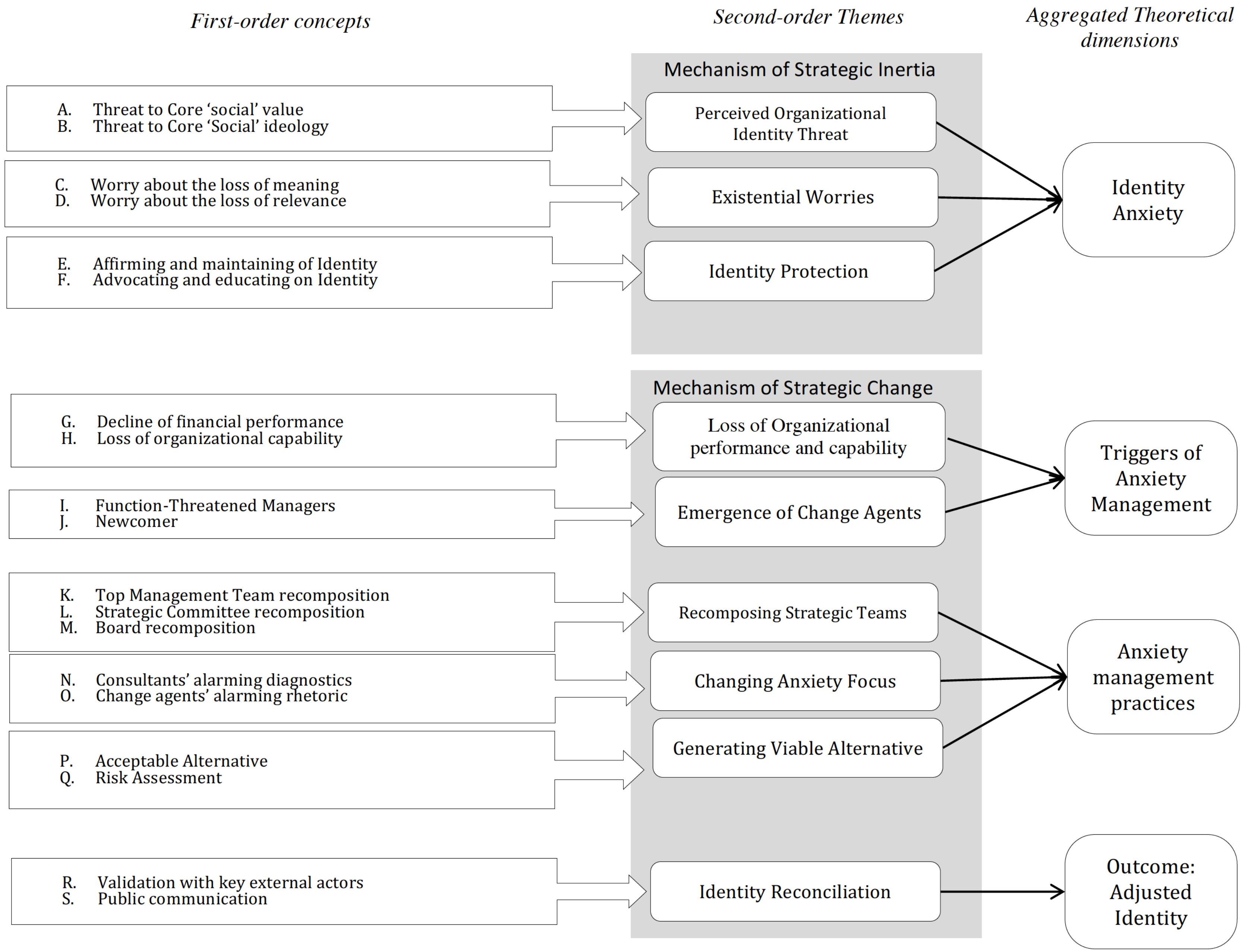
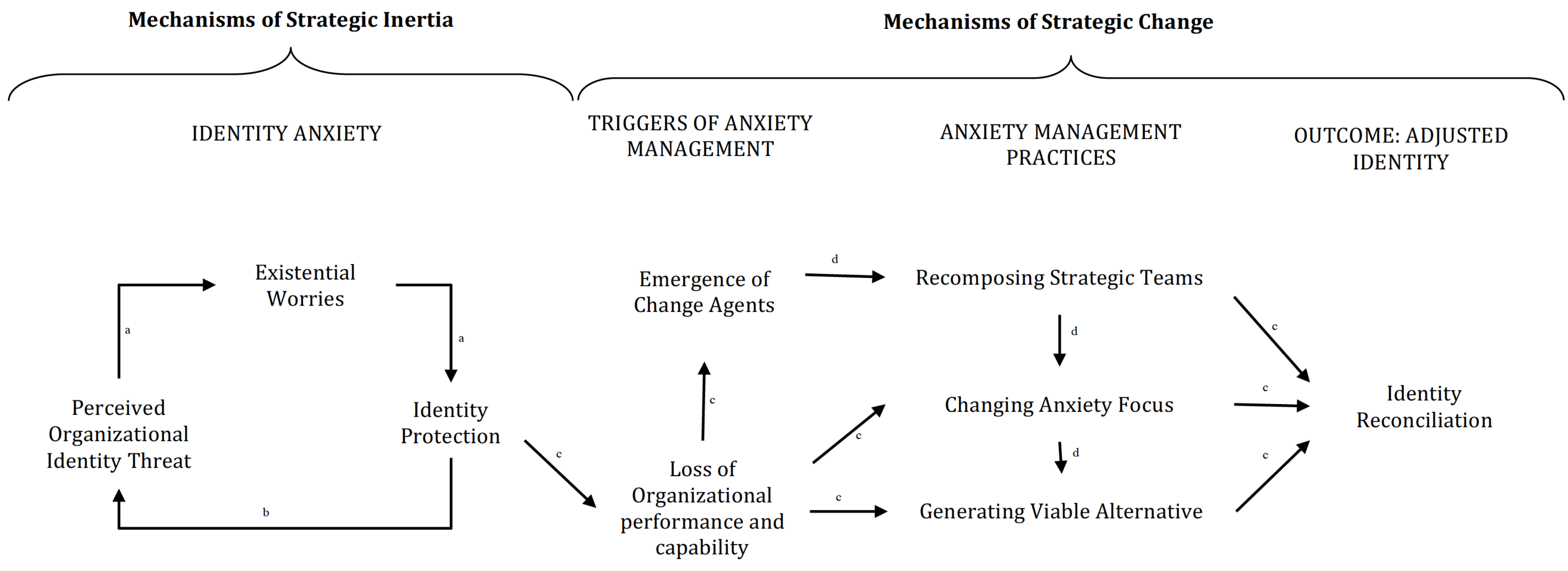


**FIGURE 9:**
**Identity Anxiety Management: A Theoretical Model***




* a = triggers; b = responds to; c = Leads to; d = uses

## Table 7: Transition Periods at ReFound*

| Actors | 1998-2003: Adopting 'Solidarity Donation' | | | | 2008-2010: Maintaining 'Solidarity Donation' | | | | 2012-2015:Transforming 'Solidarity Donation' | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Role** | **Weight** | **Dominant Anxiety Focus** | **Agree?** | **Role** | **Weight** | **Dominant Anxiety Focus** | **Agree?** | **Role** | **Weight** | **Dominant Anxiety Focus** | **Agree?** |
| Actor 1 | CEO | 4 | ID | Yes | CEO | 4 | ID | Yes | | | | |
| Actor 2 | Top Manager | 3 | ID | Yes | Senior Advisor | 3 | ID | Yes | | | | |
| Actor 3 | Top Manager | 3 | ID | Yes | Top manager | 4 | ID | Yes | Top manager | 2 | ID → PF | Yes |
| Actor 4 | Top Manager | 3 | ID | Yes | | | | | | | | |
| Actor 5 | Top Manager | 2 | PF | No | | | | | Consultant | 4 | PF | Yes |
| Actor 6 | Middle Manager | 3 | ID | Yes | Top Manager | 2 | ID | Yes | | | | |
| Actor 7 | Board Member | 3 | ID | Yes | Advisor | 1 | ID | Yes | Board Member | 2 | ID | No |
| Actor 8 | Co-Chair | 3 | ID | Yes | Board Member | 1 | ID | Yes | Committee Member | 2 | ID → PF | Yes |
| Actor 9 | Consultant | 2 | ID | Yes | Consultant | 2 | ID | Yes | Board Member | 2 | ID → PF | Yes |
| Actor 10 | Advisor | 3 | ID | Yes | Advisor | 4 | ID | Yes | | | | |
| Actor 11 | | | | | Board Member | 2 | ID | Yes | Co-Chair | 3 | ID → PF | Yes |
| Actor 12 | | | | | Middle Manager | 2 | ID | Yes | Top manager | 2 | ID → PF | Yes |
| Actor 13 | | | | | Middle Manager | 1 | PF | No | Middle Manager | 3 | PF | Yes |
| Actor 14 | | | | | Middle Manager | 1 | ID | Yes | Middle Manager | 2 | ID → PF | Yes |
| Actor 15 | | | | | Board Member | 2 | ID | Yes | Committee Member | 2 | ID → PF | Yes |
| Actor 16 | | | | | | | | | Co-Chair | 4 | PF | Yes |
| Actor 17 | | | | | | | | | Chairman | 3 | ID → PF | Yes |
| Actor 18 | | | | | | | | | CEO | 5 | PF | Yes |
| Actor 19 | | | | | | | | | Board Member | 2 | ID → PF | Yes |

Anxiety focus: ID = Identity; PF = Performance
Weight in the decision-making: 5 = Extreme; 4 = Very high; 3 = High; 2= Moderate; 1 = Low
** Four senior managers and one consultant validated this assessment.*

## Table 8: Transition Periods at BiFound*

| Actors | 2002-2009: Adopting 'Governmental Partnership' | | | | 2010-2012: Maintaining 'Governmental Partnership' | | | | 2013-2015: Transforming 'Governmental Partnership' | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Role** | **Weight** | **Dominant Anxiety Focus** | **Agree?** | **Role** | **Weight** | **Dominant Anxiety Focus** | **Agree?** | **Role** | **Weight** | **Dominant Anxiety Focus** | **Agree?** |
| Actor 1 | CEO & Chairman | 5 | ID | Yes | Chairman | 5 | ID | Yes | Chairman | 5 | ID → CAP | Yes |
| Actor 2 | Board Member | 2 | ID | Yes | | | | | | | | |
| Actor 3 | Board Member | 2 | ID | Yes | CEO | 3 | ID | Yes | CEO | 4 | ID → CAP | Yes |
| Actor 4 | Board Member | 2 | ID | Yes | Board Member | 2 | ID → CAP | No | Board Member | 2 | CAP | Yes |
| Actor 5 | Board Member | 2 | ID | Yes | Board Member | 2 | ID | Yes | | | | |
| Actor 6 | Board Member | 2 | ID | Yes | Board Member | 3 | ID | Yes | | | | |
| Actor 7 | | | | | Board Member | 3 | CAP | No | Board Member | 4 | CAP | Yes |
| Actor 8 | | | | | Board Member | 2 | CAP | No | Board Member | 3 | CAP | Yes |
| Actor 9 | | | | | | | | | Board Member | 3 | CAP | Yes |
| Actor 10 | | | | | | | | | Board Member | 3 | CAP | Yes |
| Actor 11 | Top Manager | 2 | ID | Yes | Top Manager | 2 | ID | Yes | | | | |
| Actor 12 | Top Manager | 2 | CAP | No | Top Manager | 2 | CAP | No | Board Member | 2 | CAP | Yes |
| Actor 13 | Middle Manager | 2 | ID | Yes | Top Manager | 2 | ID → CAP | No | Top Manager | 3 | CAP | Yes |
| Actor 14 | | | | | Top Manager | 1 | ID → CAP | No | Top Manager | 2 | CAP | Yes |
| Actor 15 | | | | | Top Manager | 1 | CAP | No | Top Manager | 2 | CAP | Yes |
| Actor 16 | | | | | Middle Manager | 1 | CAP | No | Middle Manager | 1 | CAP | Yes |
| Actor 17 | | | | | | | | | Top Manager | 2 | CAP | Yes |
| Actor 18 | | | | | | | | | Middle Manager | 1 | CAP | Yes |

Anxiety focus: ID = Identity; CAP = Capability
Weight in the decision-making: 5 = Extreme; 4 = Very high; 3 = High; 2= Moderate; 1 = Low
** Three senior managers validated this assessment.*

## Table 9: Illustrative Evidence of Identity Anxiety

| Theme | Representative Quotations from ReFound | Representative Quotations from BiFound |
|---|---|---|
| Perceived Organizational Identity Threat | A.1. Designated denotation is perceived as threat to core social value: "The designated donation is a threatening trend. If everyone wants to give to what is glamorous, what will remain for the homeless and other people?" *(Int., 1997)*<br>A.2 "In the external environment, there are opportunities but also dangers: Companies are attracted by designated donations. It has the advantage of making firms more visible and increasing effectiveness to their public relations activities." *(Obs., 1998).* | B.1 Illustrative pressure from external actors: "Several community organizations objected to partnership with the government adoption. Similarly, various parents from disadvantaged backgrounds criticized BiFound's approaches. The Trade Unions was ironic about BiFound's influence on government policies. And the project received similar criticisms from the opposition parties." *(Arch., 2011)*<br>B.2 Pressure from external actors is perceived as threat to core ideology (i.e. BiFound as influencer of government policies): "Our fundamental value added at the time was to get decision-makers to make the decisions they had to make (influencing government)... there was however a threat hanging over the value of this operation". *(Int., 2014).* |
| Existential Worries | C.1 "A major trend is that philanthropy is becoming a tool for marketing and business enhancement, and this is destroying it! My biggest concern is this great recuperation of philanthropy by corporations... That worries me a lot." *(Int., 2011)*<br>C.2 "Q: What are your concerns? R: A striking event that destroys what we do. It would be a pity if we lost sight of the essence of what we are as an organization." *(Int., 1998).*<br>C.3 "We are going to jeopardize our identity as organization" *(Obs., 2002)*<br>D.1 "Regarding designated donation and ReFound's identity, "the question is: what is ReFound's added value in this process? The added value of ReFound is the analysis of needs and the distribution of funds to beneficiaries. If we put the ReFound hat over the designated donations, we dispense with our specific contribution." *(Int., 1998)* | C.4 "This partnership is 'a must!' You cannot ignore the government that offers service to poor people ... It will be much stronger if done in partnership with the government and If we progress together. Perhaps a little slower for the Foundation, but, I think, much more sustainable. (Expressing worry about not realizing major changes without the partnership). *(Int., 2014).*<br>C.5 "If you want to influence an improvement in the policies or systems that are in place, you have to do it with the main player (the government) as well. If they work with us, I think it can facilitate potential changes." (Also expressing worry about not realizing major changes if the partnership with the government is abandoned). *(Int., 2014).* |
| Identity Protection | E.1 "We see in the social responsibility movement, a marketing aligned with a specific cause (designated donation) that serves the interests of business ... We are pressured by corporate leaders to respond to their needs. For ReFound, it is important to remain faithful to our values" *(Obs., 2002.)*<br>E.2 "With solidarity donation we were able to express what we meant by not accepting designated donations. It put an expression, a word on what ReFound is. The solidarity donation was an answer to this concern. ReFound needed to protect its identity." *(Int., 2016)*<br>F.1 "Our best defense: convincing leading donors. If they truly trusted ReFound's leadership, it could help." *(Obs., 1998)*<br>F.2 "Emphasizing donor education ... keeping in mind the community rather than donors." *(Obs., 2002)* | E.3 "Faced with the contestation, BIFOUND sought to be recognized as a legitimate, credible, innovative and unifying actor, to play its role of influence... the strategy of influence was aimed at having its services recognized by specialists, decision-makers, stakeholders, the media so that they adopt actions and change their behavior"*(Arch., 2011).*<br>E.4 "Two and a half years ago, we came to the board with fairly severe criticism of the partnership model, saying that maybe it was time to consider stopping. They reacted negatively ... they were reluctant to abandon the partnership." *(Int, 2014)* |

**Table 9: Illustrative Evidence of Identity Anxiety Management and Outcomes**

| Theme | Representative Quotations from ReFound | Representative Quotations from BiFound |
|---|---|---|
| | **Triggers of Identity Anxiety Management** | |
| Loss of organizational performance and capability | G.1 "From 2012, there is a decrease in corporate donations. In 2013, all segments are in decline." *(Arch., 2014)*<br>G.2. "The result of the 2012 fundraising campaign was alarming enough to tell me that it was necessary to devote myself to it". *(Int., 2014)* | H.1 "The partnership with the government, conceived as a lever that will increases resources and legitimacy, has in fact reduced the organization's capacity to act. *(Arch., 2012)*<br>H.2 "We did a lot of things, but overall things were neither clear nor consistent. The mode of execution was ineffective." *(Int., 2014)* |
| Emergence of Change Agents | I.1 "For the fundraising director (emerging change agent), everything had to be done to get the funding. For him, solidarity donation was a brake on fundraising activities. *(Int., 2016)*<br>I.2 "Comments from emerging change agent: "All of this came gradually from my meetings with business leaders (in 2012)... what I saw with my own eyes and heard. The CEO of a bank said 'you would have to change your model, otherwise you will be in trouble'. Then the CEO of a large IT company said he was for the designated donation ... I thought to myself if the business leaders were starting to talk to us so directly, we had to find a solution." *(Int., 2016)*<br>J.1 A new chairman, 2 new members of the top management team, and 60% of the members of the strategic committee are new senior leaders *(Obs., 2014)* | I.3 The change agent triggered the process: "This began in 2009 with the evaluation of the risks of non-coherence... Afterwards, there was observation of bureaucracy, and difficulties to come to terms with the government." *(Int., 2014)*<br>I.4 "This began in 2009 when the senior manager in charge of strategic capability (initiator of change) had echoes from the milieu." *(Int., 2014)*<br>J.2 Arrival of three new members on the Board of Directors *(Obs., 2014)* |
| | **Anxiety Management Practices** | |
| Recomposing Strategic Teams | K.1 "The change started only after the departure of the CEO and its senior advisor, the master sensegivers. As long as they were there, solidarity was non-negotiable... The senior advisor was the old wise guardian of ReFound's values and meaning." *(Int., 2016)*<br>L.1 Comment from the main consultant in the change process: "If we just had the board of directors and the executive committee, we would not have been able to effect change ... If I did not have the strategic committee (with new members), I would have produced a beautiful report, without significant change. They would have maintained the solidarity donation philosophy." *(Int., 2016)* | K.2 Comments from change agent: "The new CEO took office in 2009. I felt he was a player who could move us forward in change. BiFound was at a crossroads, it was time to give an important to move ahead. I went to see him and said: This is ten years since the founding of BIFOUND ... it is necessary to make an assessment for improvements." *(Int., 2014)*<br>M.1 "The Board of Directors has also changed. Its composition had changed. There are board members who were against the partnership with the government. They were just waiting for the time to put that subject on the table." *(Int., 2016)*<br>M.2 Comment from change agent: "The arrival of new members of the board changed the equilibrium. The remarks that we reported to the board of directors were understood by these new members. They really changed the dynamics of the board and I think that is key to the decision to change." *(Int., 2016)* |

| | | |
|---|---|---|
| Changing Anxiety Focus | N.1 Alarming rhetoric from a Consultant: "The base of ReFound crumbles. Only one in five donors decided to make a donation. The threat is really there! Corporate donations stagnated and then began to go down. The past is no guarantee of the future! In 2013, all sources of donations are down. There is a downward movement!" *(Obs., 2014)*<br>N.2. Alarming rhetoric from a consultant: "Are we worried enough to change? The employees are reluctant. We do not respond to business trends. Is the problem serious? Yes! What we are proposing is not competitive. Is it urgent? In 2013, everything is in red, the base is in decline." *(Obs., 2014)*<br>O.1 Alarming rhetoric from a Senior Leader: "The problem I have is that we benefited so far from a privileged position. I am afraid that we could be marginalized." *(Obs., 2014)*<br>O.2 Alarming rhetoric from another Senior Leader: "Solidarity donation is good, but we will lose some of our donors. The problem is that the market is changing." *(Obs., 2014)* | N.3 Alarming consultant's report: "Finally, association with the government, despite its apparent advantages, is a strategic drift that can have serious consequences for the survival and the capacity of action of BiFound." *(Arch, 2012)*<br>N.4 "Consultants' report led to a debate on the question: You made the bet, you might be able to influence government action, but isn't the reverse happening?" (This debate has fueled worries about the loss of organizational capability, and also organizational identity). *(Int., 2014)*<br>O.3 "In the last two years we have been progressively informing the board about the difficulties with the partnership, and I think they are now fully aware of that. I think what has made change possible is the question "Are we a partner of government or the community?" And there is discomfort in being associated with the government doing public action that goes against what BiFound is trying to defend. There is inconsistency, which is of great concern for the board" *(Int. 2014)* |
| Generating Viable Alternative | P.1 "I think we are moving towards in a direction that will not unduly change ReFound's nature. At this point, I think it will not change the nature of our work too much!" *(Int. 2014)*<br>Q.1 "Risk Assessment; Benchmarking with other foundations: Last week, we met other foundations for their feedback ... To summarize, there is no impact on social action (social value)" *(Obs., 2014)*<br>Q.2 "We thought about the opportunities and risks ... The other foundations say that the envisioned solutions will not affect funding structure (social value) ... I am quite comfortable with the decision because the risk is reduced. This is preferable to the status quo." *(Obs., 2014)* | P.2 "The board of directors asked us to work on an option B, if we do not renew the partnership with the government ... For us, both scenarios are acceptable and accepted. We will rebalance. We will look for other partners. It's going to be interesting!" *(Int. 2014)*<br>Q.3 Risk Analysis Session: "We must reassure the board of directors that by disengaging from the partnership with the government, we are not going to a black hole. The worst mistake is getting things done too fast. We might end up out! The other mistake is to rush to the new model. We should avoid negative perceptions from outsiders!" *(Obs., 2014)*<br>Q.4 "They (the board members) gave us the green light to continue and kept discussion risk management" *(Int., 2014)* |
| | **Outcome: Adjusted Identity** | |
| Identity Reconciliation | R.1 "The people we met are great donors, who have a long philanthropy history.... Our primary objective was to seek their support. They all said, at first glance, "It must change!"... and the proposed "directed donations" was seen as acceptable." *(Int., 2014)*<br>S.1 "The new solution attracts almost unanimous support from the people consulted. The direct relationship with donors appears to be unavoidable." *(Arch., 2015)* | R.2 "We received positive feedback from people who had at least some reservations, or even some hostility towards BiFound and the partnership. ... I think that all this will contribute to redefine the image and the relationship of BiFound with some stakeholders who had reservations. It's going to be the good side of the end of partnerships ... Legitimacy, independence, control over our philanthropic raison d'être in the noblest sense ... I sincerely feel we're going to be able to be ourselves, at last! So that is major, it' is the transition to adulthood, I would say." *(Int. 2015)*<br>S.2 "We did a survey ... There is an improvement in the perception of the foundation. People feel that the foundation is in the process of freeing itself from its relationship with the government. There was some enthusiasm among some of the people we met. For the foundation it is a real opportunity to renew its relationship with its stakeholders." *(Obs., 2015)* |

## Chapter 5 - General discussion and conclusion

The purpose of this thesis was to explore the relationship between top executive emotions and organizational strategy making. More specifically, I conducted three studies to clarify the role of positive emotions (article 1 and 2) and negative emotions (article 3) on strategy-related outcomes. In this general discussion, I present theoretical and practical contributions and limitations, as well asfuture research.

### 5.1. Contribution to theory on emotions and strategy

Previous studies have shown that top executives' emotions play an important role in organizational strategic behaviour and ability to adapt (Maitlis & Ozcelik 2004, Liu & Maitlis, 2014; Vuori & Huy, 2016). This thesis confirms these conclusions and adds new knowledge by focusing on the effect of CEO's and TMT's' positive and negative emotions on outcomes.

First, previous scholars have shown that positive emotions enhance the competitiveness and performance of firms (Baron & Tang, 2011; Delgado-García & De La Fuente-Sabaté, 2010). However, no specific theory has been proposed to explore in depth the mechanisms that link positive emotions and strategy making. Article 1 provides a more exhaustive view through what I have called *"a positive emotions perspective of strategy making and success."* I describe the mechanisms that link positive emotions to different dimensions of strategy making (e.g. innovation, change, creativity, and comprehensiveness). Going beyond the pathological view of executive emotions (Maitlis & Ozcelik, 2004; Simon, 1987), our theory encourages researchers to consider the positive role that emotions can play.

Second, this thesis provides empirical evidence on the link between CEO positive affectivity and corporate entrepreneurship. Previous research has indicated that CEO personality is related to Corporate Entrepreneurship (Miller & Friesen, 1983; Simsek, Heavey, & Veiga, 2010). However none of these works explicitly dealt with the effect of CEO positive affectivity. Thus, this thesis provides the first empirical evidence that experience of positive emotions across time and situations at the top executive level, especially at the CEO level, explains the organizations' strategic behaviour and success.

Third, this thesis makes it possible to highlight the phenomenon of identity anxiety as a factor that can hinder the adaptation of organizations to their changing environment. Our research is the first empirical work on this phenomenon. Previous empirical studies have shown that anxiety (Maitlis and Ozcelik, 2004) or job anxiety (Mannor, Wowak, Bartkus, & Gomez-Mejia, 2016) play an important role in executive decision-making processes. However, no link has been established with organizational identity issues. In this thesis, I have not only provided evidence on the existence of this phenomenon but also highlighted practices that help to manage this identity anxiety during strategic change.

In short, this thesis adds new knowledge in the form of concepts, mechanisms and empirical evidences on the link between top executive emotions and organizational-level strategy.

## 5.2. Contribution to strategic leadership practices

Research on top executives has enabled the development of strategic leadership practices to enhance the positive impact of senior leaders on organizational strategy and performance (Finkelstein & Hambrick, 1996). The results of the current thesis add related implications. Our findings could help improve executive selection, management of top executive teams, and executive education and coaching.

### 5.2.1. Executive selection

The selection of top executives is crucial for organizational competitiveness (Finkelstein & Hambrick, 1996). In particular, the principle of strategic delegation (Sengul, Gimeno, & Dial, 2011) invites board members to select a CEO whose profile maximizes its positive impact on firm strategy and performance. Article 2 of this thesis indicates that CEOs with a high Positive

Affectivity have a significant impact on the organization's ability to innovate, renew its strategy and undertake new development initiatives. These results support previous findings (e.g. (Delgado-García & De La Fuente-Sabaté, 2010) and make it advisable to consider this emotional dimension in the selection of CEO's.

### 5.2.2. Management of top executive teams

The dynamics of top executive teams are seen as an important factor influencing organizational strategy and performance (Li & Hambrick, 2005). Article 1 of this thesis suggests some conditions under which the dynamics of the top executive team can have a positive impact. It proposes that positive emotional dynamics within the top executive team promote creativity, heuristics, comprehensiveness and collaboration during decision-making. To strengthen and go beyond the findings of earlier research, this article synthesizes the literature and posits that positive emotional dynamics foster a better strategic decision-making process (Liu & Maitlis, 2014). This invites CEOs to pay attention to these factors and to create conditions for positive emotional dynamics within their executive groups. More generally, it invites CEOs and other members of the executive group to practice positive leadership for a greater impact on their organization's strategy and success.

### 5.2.3. Executive education and coaching

In general, different coaching programs and practices are offered to assist in the development of top-executive leadership. For example, some executive education centers have developed training programs in emotional intelligence and social intelligence (Goleman, 1995, 2007). This thesis offers new knowledge, which can help improve these types of executive education programs and coaching. For example, I have highlighted in Article 3 the phenomenon of *identity anxiety*, which is likely to be observed in most organizations facing strategic challenges. It is therefore important to educate top executives about the risks associated with this phenomenon. I have also identified practices to manage such anxiety and respond to changing environments.

These practices go beyond the self-management of emotions often advocated by emotional intelligence practitioners. It requires the management-of-other emotions. Furthermore, it highlights structural and contextual elements that are used to manage emotions at the top level. I invite practitioners to pay attention to such practices and suggest the need to develop case studies and appropriate materials for related executive education.

#### 5.2.4. Limitation and future research

I end this thesis by discussing some limitations and avenues for future research. I have made an effort to produce three articles with various perspectives, approaches and theoretical contributions, but the limited space of this thesis does not make it possible to address all research questions about top-executive emotions. A first example is the role of negative emotions. I developed in Article 1 a general theory on the effect of positive emotions. For consistency reasons, I chose to not make proposals about the effect of negative emotions. Future studies could explore in depth the role of negative emotions and propose specific theoretical frameworks. One possible research avenue is to examine *in what contexts negative emotions can have positive impact on strategy making*. Research in psychology has shown that the same negative emotion can have negative or positive effects depending on context (Van Kleef & Cote, 2007). It can be interesting to extend these studies to the context of strategy making.

A second example is the joint effect of positive and negative emotions. Research in psychology suggests a dual-turning perspective, i.e. how positive and negative emotions interact over time to produce specific behaviors (George & Zhou, 2007). I have not addressed this question of the interaction of emotions in this thesis and invite future researchers to incorporate it into their research agenda in order to obtain a more complete view of the role of emotions in strategy making processes.

A third interesting example is the role of discrete emotions. Each emotion has its own specific adaptive function (Lazarus, 1991) which can have particular implications for strategy making. Article 3 of this thesis offers an example through the study of anxiety related to organizational identity. In the same vein, Vuori and Huy (2015) have studied “fear” as a factor that hampers innovation at the organizational level. Other positive emotions (e.g. determination, optimism and enthusiasm) and negative emotions (e.g. anger, frustration, mistrust and shame) can play specific roles in strategy making, which are not easy to discern since they are not discrete. I invite future researchers to focus their attention on these emotions.

Finally, in this thesis, I mainly studied top executives in the context ofof North American culture. All the organizations studied are located in Canada.  It may be productive to extend these studies to other cultural and institutional contexts such as Asian or African business environment.

### 5.3. Conclusion: beyond global rationality

In this thesis, I dealt with an important issue for organizational strategy making—the role of top executive emotions. This issue has been left aside by strategy research, which has focused instead on top executive cognition and global rationality (Simon, 1990). The implicit postulate behind prior research was that rationality is necessary and sufficient to ensure the effectiveness of strategy making. Top-executive emotions have therefore often been seen as a barrier to rationality, as a disruptive element of cognitive processes. In this thesis, I invite researchers and practitioners to go beyond this negative and pathological view of top-executive emotions. I argue that it is important to transcend the postulate of global rationality and to consider emotions as essential elements in strategic decision-making processes. In doing so, I offer a positive perspective on the role of emotions while recognizing that in some cases emotions may hamper strategy. I invite more research to develop practices that can enhance the positive effect of top executive emotions on organizational strategy. I hope this thesis will stimulate more scholarly interest in the roles of managers' emotions in organizational strategy and outcomes.

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