

## Emotion and Strategic Decision-Making Behavior: Developing a Theoretical Model

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### Abstract

*Emotion has been a black box in strategic decision making. There is an absence of a theoretical framework necessary for answering the question, "how do emotions affect the cognitive functioning of a strategic decision maker". The current paper addresses this central question through developing a theoretical model regarding: the mechanism by which affective response arise (through cognitive assimilation of the strategic informational environment), as well as a specification of the dynamics between affective experience and important strategic cognitive functions (cognitive simplification, cognitive complexity, and decision comprehensiveness). The model and propositions developed in this paper contribute to a more complete understanding about cognitive-affective strategic decision-making behavior; encouraging future theoretical/empirical progress in the area.*

**Key Words:** Emotion, Strategic Decision-Making Behavior, Cognitive Simplification, Cognitive Complexity, Decision Comprehensiveness

### INTRODUCTION

Strategic decision making researchers have emphasized the crucial role of strategic decisions on a firm's short- and long-term success and failure (e.g., Hambrick & Mason, 1984). Top executives and corporate leaders who make the most critical strategic decisions in corporate management are susceptible to affective experiences in their strategic decision environment at least in part because of the impact their decisions have on firm performance. Moreover, in today's global business environment (characterized by hyper-competition, turbulence, uncertainty, and urgency), corporate CEOs and executives operate within a highly stressful strategic informational world. Additionally, top executives' human capital is usually tied to the firm's performance and fate, which further increases the chance for affective response to, for example, strategic environmental changes.

Scholars on cognitive decision theory have historically emphasized the more rational aspects of decision-making, choosing to focus primarily on explanatory constructs (Papadakis & Barwise, 1997; Leonard et al., 2005), such as cognitive schema (Hambrick & Mason, 1984), cognitive selection (Schneider & Shiffrin, 1977), environmental labeling (Dutton & Jackson, 1987; Thomas, Clark, & Gioia, 1993), cognitive mapping (Hambrick & Mason, 1984), and intuitive synthesis (Miller & Ireland, 2005). Although an increasing number of researchers have shed light on behavioral aspects of decision-making such as decision framing and political dynamics (e.g., Ireland & Miller, 2004; Elbanna, 2006; Seo, Goldfarb, & Barrett, 2010), little theoretical explanation has been provided to the questions of why emotion matters in cognitive decision making or how emotion may interact with the cognitive functioning of a decision maker. In general, little is known regarding the role that affect/emotion plays in strategic decision-making behavior.

For example, in strategic decision-making settings, positive or negative feelings should have substantial influence on individuals' risk-taking behavior (e.g., Isen, 2000). Behavioral decision theorists have found that positive feelings lead to favorable evaluations about an object or phenomena, while negative feelings lead to unfavorable evaluations without objective evidence for those evaluations (e.g., Pham, 1998). In a similar vein, decision-makers under an 'illusion of control' (which may have emotional antecedents or correlates) have shown to overestimate their capabilities in ensuring the success of strategic choices (Schwenk, 1984). Other management phenomena that may involve a decision-maker's affect include the managerial bandwagon effect (Staw & Epstein, 2000), groupthink (Janis, 1982; Leonard, Beauvais, & Scholl, 2005), and corporate imitative strategy (Kim, Payne, & Tan, 2006). The current paper posits that the ambiguity and controversy centering on these managerial phenomena may be at least partially resolved from an increased understanding of cognitive-affective decision making behavior. More specifically, these topics would benefit from a specification of the mechanisms by which affectivity interplays with rational cognitive functioning.

Emotion plays an essential role within cognition because it is an unconscious and nearly automatic human response to environmental stimuli (Lazarus, 1991; Wofford & Daly, 1997). For example, when decision makers have mental representations of threat or opportunity in response to their external environment, emotive perceptions and connotations are unconsciously accompanied in cognitive functioning. Affective attributes serve as sources of motivation and influence an individual's cognitive decision-making behavior and subsequent choices (Kuhl, 1986). Effective *social* decision making may rely more heavily on emotional rather than cognitive information (e.g., Kringelbach & Rolls, 2004), and affective factors may in some contexts be more predictive of quality decisions than rational factors (Bechara, Damasio, & Damasio, 1997). Although emotion has proven to be an important intra- and inter-personal construct in various study areas, surprisingly, little academic research has been devoted to the development of theoretical models that enhance our understanding about the mechanism- how emotions play a role in cognitive decision making.

Therefore, the purpose of this research is to develop a theoretical model that conceptualizes the mechanism through which affective responses arise in strategic information processing, and how the affective experience of a decision maker interacts with other important cognitive functions for the strategic decision maker: cognitive simplification, cognitive complexity, and decision comprehensiveness. Given the sparse theoretical establishment on emotion's role in (strategic) decision-making, the current paper contributes to the literature in documenting the elaborate interplay between cognition and affect within the strategic decision context. Following the initial model presentation, I discuss in detail the theoretical development in supporting the relationships proposed in this paper. Finally, discussion and implications for future research are provided.

### ***THEORY AND MODEL DEVELOPMENT***

Emotion refers to transient feelings or affective responses to an event, object or person. Despite a generally accepted layperson understanding of emotion (i.e., you know it when you see/feel it), its definition can vary quite a bit across researcher and discipline (Barrett, 2006). Universally, researchers do agree that there is a fundamental difference between emotion and *temperament* (temperament referring to relatively stable or long-term tendencies toward, for example, happiness or grumpiness; e.g., Kagan, 2010). Likewise, emotion and *mood* can be differentiated by the presence or absence of an event or object that elicited the person's feelings (e.g., emotions have objects of elicitation while moods do not or at least not necessarily; Parkinson, Totterdell, Briner, & Reynolds, 1996).

Therefore, emotions are linked more directly to causality (Weiss & Cropanzano, 1996) and moods are milder and long-term affective states. In this paper, emotion is defined within the specific context of interest; emotion is an affective response to environmental stimuli experienced by a (strategic) decision maker. Additionally, the two terms 'emotion' and 'affect' are used interchangeably. Although it is recognized that emotion may also play a substantial role at the interpersonal, group, and organizational levels (cf. Simons, Pelled, & Smith, 1999), these levels of analysis are beyond the scope of the current research and the current paper examines emotion at the individual level.

The structure of emotion is conceptualized fairly broadly but consistently: emotions as being characterized by a two-dimensional structure (pleasant/positive to unpleasant/negative; activated/engaged to deactivated/disengaged; cf. Barrett & Russell, 1999; Watson & Tellegen, 1985). Thus, emotions are arranged along a scale ranging from very positive (e.g., joy, excitement, enthusiasm, confidence), through neutral, to very negative (e.g., anger, fear, sadness). For the purpose of strategic decision making, emotion is here rather narrowly as high level positive or negative affect. Although this conceptualization targets a constrained range of affect, states occupying low levels of engagement (e.g., calmness, quiescence, or sleepiness – descriptors that occupy low positive/negative affect) are generally considered to be indicative of a *lack* of emotion (Watson & Tellegen, 1985). Positive and negative emotions, rather than neutral emotional states, are represented by more activated and engaged affective elements that are more influential to individual decision maker than the emotionally neutral states (Barrett & Russell, 1999).

In the following paragraphs, I discuss the model in detail and elaborate on the theoretical foundations in supporting the propositions. This model specifies the mechanism that affective responses arise through (cognitive assimilation of the strategic informational environment) and indicates the relationships of how affective experience interplays with other cognitive functions of cognitive simplification and decision comprehensiveness.

Additionally, the model delineates the moderating effect of cognitive complexity in the relationship between affective experience and cognitive simplification behavior (see Figure 1). Thus, the constructs in the model include: (a) cognitive assimilation of strategic environment, (b) positive and negative affectivity, (c) cognitive simplification behavior, (d) cognitive complexity, and (e) strategic decision comprehensiveness (see Table 1 for descriptive summaries and illustrative references for the constructs). Cognitive Assimilation of Strategic Environment

Figure 1. Affect and Cognitive Functions of Strategic Decision Maker: The Mechanism

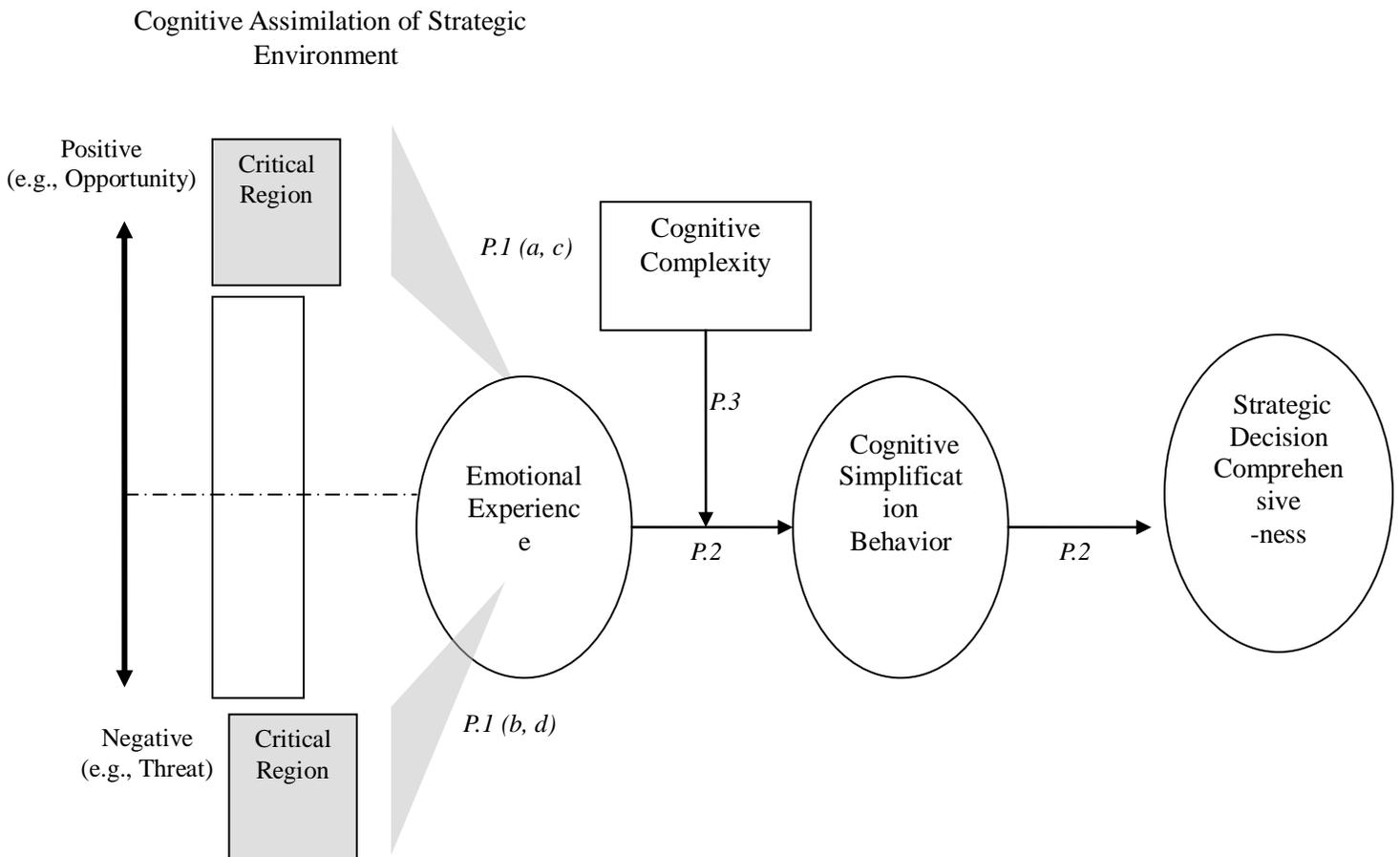


Table 1. Constructs and Definitions in the Model

Construct	Definition	Variables	References
Cognitive assimilation	Decision-maker's mental representation of strategic environment	Mental labeling (e.g., threat and opportunity)	Corner et al. (1994) Dess and Beard (1984) Jackson and Dutton (1988)
Emotional experience	Decision-maker's automatic and unconscious emotional experience	Intensity of positive and negative affectivity	Barrett (2006) Cropanzano et al. (2003) Shiv and Fedorikhin (1999) Kagan (2010)
Cognitive complexity	Mental capacity in perceiving options and processing information	Cognitive complexity	Schneire (1979)
Cognitive simplification behavior	Cognitive simplification behavior in strategic information searching and processing	Anchoring, Referencing	Schwenk (1984) Hitt and Tyler (1991) Kahneman and Tversky (1984)
Strategic decision comprehensiveness	The extent to which individual decision-makers are exhaustive and inclusive in information processing	Analytical comprehensiveness, Integrative comprehensiveness	Fredrickson (1984) Goll and Rasheed (1997) Schwenk (1995)

### **Cognitive Assimilation of Strategic Environment and Affective Perception**

Environmental scanning is the beginning stage of the strategic decision-making process (e.g., Milliken, 1990). The informational activity is aimed at identifying the major issues and problems facing the company and serves as an informational base for further environmental interpretation, problem identification, and alternative choice generation. Environmental scanning, thus, involves the collection of both external and internal sources of information. For example, intelligence to external environment comes from customers, competitors, suppliers, and industry associations. Decision makers must also balance this with internally sourced information from their managers and employees, as well as data from their management information systems. Environmental scanning is a part of interactions between the strategist and its environment. Behavioral decision theorists primarily reject objective views of normative decision-making (e.g., Tversky & Kahneman, 1974). Decision makers are limited in cognitive capacity; therefore, their perceptions are dominated by a more subjective and interpretive view of the informational world. That is, strategic decision makers' informational activities are embedded in both the inner context such as psychological and cultural factors and the outer context of the firm (Pettigrew, 1992). Moreover, due to cognitive limitations, decision-makers simplify ambiguous and complex information through mental labeling (Schwenk, 1984). Decision-makers unconsciously ascribe meaningful labels or mental representations (i.e., cognitive assimilation) to their environmental conditions to reduce cognitive complexity (e.g., Corner, Kinicki, & Keats, 1994).

Mental labeling is an internal representation of environmental conditions. Within this process and included among these environmental representations are mental labeling of threat and opportunity (e.g., Dutton & Duncan, 1987). For example, external environments that are characterized by high complexity, dynamism, and low munificence are typically labeled as "hostile" or "threatening environment" (Dess & Beard, 1984). On the other hand, in simple, stable, and munificent environments, decision makers are able to more easily access, discern, prioritize, and resolve information, and thus get feelings of control and confidence. Perceived feasibility is associated with control and a higher probability of resolving issues, which often leads to mental representation of opportunity. Just as previous research suggests some common labeling occurs based on external environmental conditions, similar labeling occurs with interpretation of internal conditions. Unfavorable internal conditions, such as low resource availability, limited firm capabilities, low leadership power, and substantial internal organizational inertia are often associated with negative mental labeling of 'threat'.

I suggest that the cognitive assimilation (e.g., labeling of opportunity and threat) in environmental scanning is not separated from affective mental functioning. Human mental system is not only composed of cognitive rational functions, but rather it is a cognitive-affective mental mechanism (e.g., Rottenstreich & Hsee, 2001). According to a cognitive theory of emotions (Simon, 1967), emotions can be viewed as interruption mechanisms in a cognitive system, which directs an individual's attention and rearranges priorities (Leventhal, 1984). Elster (1996: 1394) mentioned, "emotions interfere with rationality, affecting our objective observation of the situation." Howard (1993) emphasizes the complementary relationship between rationality and emotions, by discussing emotion as a major player in the decision-making process. Such arguments suggest that decision making is neither purely rational nor one-directional, but rather an interaction of emotional and cognitive computations (Berkowitz, 1993; Judge & Ilies, 2004).

Although individuals are not always cognizant of emotion either good or bad, they can typically recognize environmental stimuli as being pleasant or unpleasant. Moreover, strategic decision makers unconsciously experience positive and negative affect when they have mental labeling or representations of 'opportunity' and 'threat' in cognitive assimilation process. I argue that emotions are based on some cognitive assimilation and categorization (e.g., labeling) of environmental stimuli given the cognitive-affective mental function. That is, the cognitive assimilation in response to informational environment elicits affective responses that can consist of either positive or negative emotional experience in varying intensities. Current perspectives on emotion in fact focus on such contextual elements as being fertile breeding grounds for the elicitation and manifest expression of emotion (Niedenthal, Krauth-Gruber, & Ric, 2006). Therefore, I posit that cognitive assimilation of strategic environmental stimuli is related to affective experience of a decision maker.

**Proposition 1.** Emotions will be elicited through cognitive assimilation of strategic informational environment.

**Proposition 1a.** Strategic decision makers will experience positive affect when labeling the external environment as opportunity.

**Proposition 1b.** Strategic decision makers will experience negative affect when labeling the external environment as threat.

**Proposition 1c.** Strategic decision makers will experience positive affect when labeling the internal environment as opportunity.

**Proposition 1d.** Strategic decision makers will experience negative affect when labeling the internal environment as threat.

### ***Emotional Experience and Cognitive Functions of Strategic Decision Maker***

Previous researchers on cognitive decision making have suggested that emotions influence individuals' choices, often impairing decision-making ability (e.g., Hambrick, Finkelstein, & Mooney, 2005; Berridge & Winkielman, 2003; Gray, 1999). For example, Seo and Barrett (2007) provided empirical evidence that positive and negative feelings from gains and losses of stock investment may directly affect individual risk-taking choices without cognitive assessment of the risk. Similarly, Au, Chan, Wang, and Vertinsky (2003) found that foreign exchange traders experiencing positive emotions placed larger bets, but those with negative feelings made more conservative choices. Cognitive decision theorists in the past argued that positive feelings lead to favorable evaluations of an object or phenomena, while negative feelings lead to unfavorable evaluations—even without objective evidence for the evaluations (Pham, 1998; Zajonc & Markus, 1982). Also, when faced with threatening environments, individuals show rigid and restrictive information processing behaviors (Staw, Sandelands, & Dutton, 1981).

The negative influence of affectivity on individuals' decision-making ability would derive from the interaction between affective response and cognitive simplification behavior. That is, reduced levels of cognitive complexity due to mental resources assigned to affective response stimulate the decision maker to further simplify informational environment. Researchers on strategic decision making suggest that a heuristic approach is useful in some informational environments such as strategic decision contexts with informational overloads and highly complex environments (Sadler-Smith & Shefy, 2004; Eisenhardt & Zbaracki, 1992). However, in many cases cognitive simplification (e.g., analogy and anchoring on previous experience) can cause a systematic bias in decision-making processes by creating information biases (Schwenk, 1984).

Thus, I suggest affective experience of strategic decision maker to be an additional potential contributor to the information-processing behavior. A reduced level of cognitive complexity, caused by the intervention of positive and negative feelings, may coincide with greater cognitive simplification behavior. That is, positive and negative affectivity leads decision makers to rely more on their cognitive schemas, assumptions, and experience, rather than on purely rational analyses of available data. Affective experiences from cognitive assimilation of the strategic environment lead to attitudinal and behavioral responses increasing cognitive simplification behavior in information searching and processing, which in turn lowers decision comprehensiveness of a strategic decision maker. Previous researchers emphasize that decision comprehensiveness defined as informational and analytical comprehensiveness leads to higher decision quality (e.g., determining the correct or best solution to the problem) highlighting the importance of decision comprehensiveness on strategic effectiveness (e.g., Priem, Rasheed, & Kotulic, 1995).

**Proposition 2.** Affective experience from cognitive assimilation of strategic environment will increase cognitive simplification behavior, which in turn will be negatively related to strategic decision comprehensiveness.

**Moderating effect of cognitive complexity.** Emotions are lower-order reactions that are, to some degree, under the control of higher-order mental structures controlling thinking, reasoning, and consciousness (Elster, 1996). This is true despite the speed of affective reactions being faster than higher-order cognitive functions (LeDoux, 1996). As such, higher-order cognitive functions can intervene with emotions and strengthen or weaken lower-order emotional responses (Berkowiz, 1993). Thus, emotions are based on one's cognitive antecedent (Elster, 1996). Previous findings suggest that cognitive complexity, which is defined as the mental capacity in perceiving options and processing information (Schneire, 1979), is closely related to the analytical comprehensiveness (Fredrickson & Mitchell, 1984; LeDoux, 1996). I argue that individuals who lack cognitive complexity would be expected to be more susceptible to the heuristic characteristics of the emotions and therefore less likely to engage in complex computation of information. Lower levels of cognitive complexity may stimulate the decision-maker to further simplify the situation to reduce internal mental complexity and stress.

In other words, a decision maker with limited cognitive resources would be expected to engage in less analytical complexity under conditions of emotional states; however, the decision maker who is characterized by a large mental capacity *may* not suffer from these limitations. This interaction essentially influences the relationship between affective experience and cognitive simplification behavior. Therefore, I consider strategic decision maker's cognitive complexity to be a potential moderator in the linkage between affective experience and cognitive simplification behavior. These relationships suggest the following proposition.

**Proposition 3.** Cognitive complexity will moderate the relationship between affective experience and cognitive simplification behavior, with the relationship being weaker when the decision maker has higher levels of cognitive complexity.

### **DISCUSSION AND FUTURE RESEARCH**

More than two decades of research focusing on behavioral decision theory has produced an enormous body of knowledge. However, there still seems to be more ambiguity than clarity about certain aspects of cognitive-affective decision-making behavior and subsequent choices (George, Chattopadhyay, Sitkim, & Barden, 2006; Slovic, Finucane, Peters, & MacGregor, 2002; Meindl, Stubbart, & Porac, 1994). Much of the ambiguity is, of course, a result of studying the 'black box' of human mental functions, which is a very complex integrative system of cognitive computation and affective perception. The theoretical model in this paper aims to answer the research questions, "why emotions matters in strategic decision context" and "how it affects cognitive functions of a strategic decision maker".

Given the scant research attention paid to the questions above, the model developed in this paper contributes to a more complete understanding about cognitive-affective (strategic) decision-making behavior by explaining the mechanisms that emotion plays a role in strategic decision context. The model theoretically explains that cognitive assimilation of strategic environmental conditions elicits affective experience of a decision maker. The emotional experience of decision maker has a role in increasing cognitive simplification behavior due to the interaction between cognition and affect in mental functioning, which in turn lowers decision-maker's decision comprehensiveness. The model also suggests that cognitive complexity moderates the relationship between affective experience and cognitive simplification behavior, mitigating the impact of emotional experience on decision comprehensiveness.

I believe that the theoretical incorporation of affective element into existing strategic decision theories should enhance the understanding of (cognitive-affective) strategic decision-making behavior and explain a significant source of variance in strategic choices. Considering substantial effects of affect on human motivation and thought process, theoretical conceptualization on the functions of affect in strategic decision making should reduce much of the ambiguity about corporate strategic behaviors, such as turn-around strategy (e.g., Staw et al., 1981), strategic group dynamics (e.g., Feigenbaum & Thomas, 1995), corporate imitative behaviors (Kim et al., 2006), and strategic referencing (Feigenbaum, Hart, & Schendel, 1996).

For example, Kim et al. (2006) suggest that organizational decision makers who perceive favorable external and internal environments are likely to seek heterogeneous strategies in the industry but pursue similar strategies and organizational forms when the decision maker perceives unfavorable environment leading to a more homogeneity at the population level. Other research findings also emphasize the affective element in strategic decision making that a sense of confidence increases the potential for taking more strategically adaptive actions seeking changes (Thomas et al., 1993; Gioia & Chittipeddi, 1991). Risk-aversion or risk-taking behavior may also result, in part, from affective experience, rather than simply being a strategic action that results from the cognitive computations. Together, these studies highlight the importance of affectivity in strategic management and decision-making process. Therefore, the theoretical conceptualization on the functions of affect in strategic decision context should supplement the existing theoretical prescriptions about cognitive-affective (strategic) decision making behavior, paving a way to further theoretical and empirical development in the area.

From a practical standpoint, it would be worthwhile for practitioners to devise ways to reduce the impact of emotional experience on decision making, especially for strategists facing today's highly competitive and turbulent global business environment. That is, strategic managers need coping skills to reduce the intensity of affective response. Practitioners may develop training programs that can be a help in reducing the emotional response to their informational and environmental stimuli.

For example, simulations have been useful training tools for military leaders by indirectly exposing them to diverse strategic circumstances. Another regulatory and ability-based individual difference would be the emotional intelligence, (e.g., Mayer & Salovey, 1997). Emotionally intelligent decision makers would better understand and manage their emotion mitigating the influence of emotion on decision ability. From an organizational perspective, small and entrepreneurial business leaders, in particular, may be more susceptible to affective response in their decision-making processes because such decision-makers are more closely involved in the ownership but also lack professional advising and monitoring services that exist in large, established organizations. For instance, demographic diversity of top management team in large, established corporations reduces CEOs' emotional reactions having a positive impact on firm performance (Kisfalvi and Pitcher, 2003).

The proposed theoretical model requires empirical testing. Emotion, in general, is complex and multidimensional than a single definition; it is even more difficult to accurately measure (Ashill and Jobber, 2010). For example, expressed feelings may not match very well with those actually experienced since emotional experiences may be managed or distorted through coping behaviors (Bodenhausen, 1993). Emotion tends to be a relatively short and unconscious arousal in most cases, and some executives may hesitate to express the intensity of their emotional experiences. Different cultural backgrounds and personalities are common sources that further complicate the study of emotions (Kuhl, 1986). Also, the researcher observing subject's emotional response needs to identify the subject's psychological urgency and motivational potency of the response. Thus, empirical testing of the model should try to capture the latent nature of emotion. In conclusion, theoretical development and empirical testing on the role of affective element in strategic decision-making settings should reduce much of the ambiguity associated with cognitive-affective strategic decision-making behavior and choices.

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