

# **Top Manager's Efficacy Beliefs and Organizational Outcomes: An Application of Social Cognitive Theory**

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## **Abstract**

Top managers have been an area of active research in strategic management. The difficulty in accessing top manager has limited researchers to focusing on top manager's demographic characteristics to explore their influence on organizational outcomes. These demographic characteristics have been considered as surrogates of top manager's cognition. However this approach has critical limitations (Markoczy, 1997), and a cognitive approach will enhance our understanding of top manager's influence on the organization. Recognizing this issue, I propose a cognitive approach to top management research. Specifically, top manager's efficacy beliefs are conceptualized based on Social Cognitive Theory. Further, I develop several propositions on the effects of top manager's efficacy beliefs on organizational outcomes.

**Keywords:** top manager's efficacy beliefs, social cognitive theory, cognitive approach

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## INTRODUCTION

It has long been an important question in strategic management whether top manager matter or not (Finkelstein and Hambrick 1996). Some scholars (e.g., Aldrich 1979; Astley and Van de Ven 1983; Lieberman and O'connor 1977) have argued that top managers have little influence on organizational outcomes. Most of them have deterministic views including Population Ecology (e.g., Hannan and Freedman 1977) and Institutional Theory (e.g., DiMaggio and Powell 1983), and the like. They contend that since environments set many constraints and limits within which organizations or top executives operate, their discretion is very limited and environments mainly determine organizational outcomes. Therefore, top manager's influence is very limited and thus they do not matter.

Unlike these deterministic views, recent emerging theories have argued that organizations and top managers can play significant roles in determining their own outcomes, even if environment constraints the scope of their discretion. As the deterministic perspectives maintain, if only environments determine the organizational performance, the variance among the companies operating within the same or similar environments should be so small that we can disregard. However, this is not the case in the real business world. Even the firms in the same industry and the similar environments have different outcomes. They have different market share. Some companies generate huge economic rent, whereas others do not. Further, some companies like General Electric have achieved higher performance for a long time. These give us concrete evidence that not only environments but also firms and top managers play important role in achieving high performance.

In addition, environments and organizations probably are mutually dependent through two-way causality. As is often asserted, an organization is influenced by its environments, and the former can also affect the latter. In real business world, we can see many cases that an organization influences its environments. For example, some companies engage in lobby activities in order to influence legislation processes. Moreover, multinational companies have influenced the host country's

economic policies, especially under-developed country's policies.

Resource based theory is one of which supports this argument (e.g., Barney 1991; Castanias and Helfat 1991; Collis and Montgomery 1995; Penrose 1959; Peteraf 1993). This perspective centers on the resources that a firm has built and thus currently has. It argues that organization's outcomes are determined by its resources. One of those resources is top manager (Castanias and Helfat 1991).

Hambrick and Mason's (1984; Finkelstein and Hambrick 1996) upper-echelons theory is another that emphasizes the top manager's role. They propose that top managers make strategic decisions on the basis of their cognitions and values, and thus the organizations become the reflection of its top managers. Following their proposal, studies have demonstrated that the top management team (TMT) has significant influence on several different organizational outcomes, such as organizational innovation (e.g., Bantel and Jackson 1989; Thomas, Litschert, and Ramaswamy 1991), strategy (e.g., Chaganti and Sambharya 1987; Finkelstein and Hambrick 1990; Michel and Hambrick 1992), strategic change (e.g., Finkelstein and Hambrick 1990; Grimm and Smith 1991; Wiersema and Bantel 1992) and performance (e.g., Finkelstein and Hambrick 1990; Hambrick and D'Aveni 1992; Michel and Hambrick 1992; Miller 1991).

However, most of the previous studies on top management have focused on demography. Those studies have been justified because of at least two reasons. One is that experiences affect individual psychological and/or cognitive characteristics. The other is the difficulty in accessing top managers. Based on these justifications, they used demography as surrogates of top manager's cognition or beliefs. However, as Hambrick and Mason (1984; Finkelstein and Hambrick 1996) proposed, top managers make decisions based on their cognitions and values, and experiences cannot reflect whole top manager's psychological orientation. Moreover, Markoczy (1997) showed that demographic variables might not be useful surrogates for top manager's cognition.

In this paper, I propose a cognitive approach to the study on top management. Mainly, three relatively new concepts in strategic management will be presented. One is *organizational efficacy* that refers to a top manager's belief in organization's

capabilities to outperform its competitors. Another is top manager's *group (collective) efficacy* that means a top manager's belief in the top management team's capabilities to perform its tasks. The last is a top manager's *self-efficacy* that refers to individual top manager's belief in his or her own ability to perform his or her jobs as a top manager. Herein, I assume that top managers understand and know what their jobs are in the organization, and what the organization requires them to do. Also, I assume that they know what the organization's business is, who its competitors are, and what is the organization's competitive advantage and disadvantage. These three are conceptualized on the basis of *Social Cognitive Theory* (Bandura 1977a, 1997b).

## SOCIAL COGNITIVE THEORY AND EFFICACY BELIEFS

Social cognitive theory (Bandura 1977, 1986, 1997) explains human behavior in terms of triadic reciprocal causation. In this model, behavior, cognitive and other personal factors, and environmental events are posited to operate as interacting determinants in dynamic fashion. Because of these bi-directional influences, people are both products and producers of environments. This theory has received noteworthy attention in recent years in the field of organizational behavior and psychology.

### Self-Efficacy

Social cognitive theory has many distinct characteristics. One of the most important is emphasizing individual self-regulatory systems. According to Bandura (1986, 1991, 1997; Wood, Bandura and Bailey 1990), human behavior is extensively motivated and regulated by the ongoing exercise of self-influence. Self-regulatory systems lie at the very heart of causal processes and not only mediate the effects of most external influences but provide the very basis for purposeful action (Bandura 1991). One of the major mechanisms of self-regulation is self-efficacy that exerts strong impact on human thought, motivation, and action (Bandura 1977, 1986, 1991, 1997).

As a key concept in social cognitive theory, self-efficacy refers to one's beliefs in one's ability to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands (Bandura and Wood 1989; Gist and Mitchell 1992; Bandura 1997). In other words, self-efficacy is one's belief how well one can perform in specific task situations (Bandura 1986).

### **Group (Collective) Efficacy**

Another efficacy belief, which has been conceptualized and well established, is group efficacy. This is a group member's belief in its capabilities to perform successfully (Bandura 1982, 1997). Similar to self-efficacy, it is a group member's belief in its own capabilities in specific situations. However, it is a group attribute, not individual attribute. Even if it may be related to member's self-efficacy belief, it is not the simple sum or average of members' self-efficacy in the group.

As mentioned above, group capabilities are not the sum of the individual member's abilities, because members interact one another. Groups can have greater capabilities than the sum of the members,' when the members cooperate with each other, display teamwork, and well organize their capabilities and efficiently use limited group resources. As a result, they can have higher capabilities than the simple aggregation of the members' capabilities. In this case, group efficacy is higher than the average of members' self-efficacy. However, if the members mainly engage in competing for the group's limited resources (e.g., power) and experience dysfunctional conflict with other members, the team's capabilities are lesser than the simple aggregation of members' because team members cannot fully and effectively display their capabilities. Accordingly, members' group efficacy is lesser than the average of their individual self-efficacy in this situation.

Group efficacy is expected to have similar effects on group's various phenomena and outcomes as self-efficacy do on individual life. As House, Rousseau, and Thomas-Hunt (1995) suggested, functional relations hypothesized at one level of analysis are expected to be similar or "isomorphic" to another. For instance, the positive relationship between goal level and

performance at individual level is expected to be found at group level as well.

Also, in his recent book, Bandura (1997) maintains that:

Perceived personal and collective efficacy differ in the unit of agency, but in both forms efficacy beliefs serve similar functions and operate through similar processes. Although members behave collectively, their actions are regulated by the psychosocial processes analyzed .... Thus, people's beliefs in their collective efficacy influence the type of futures they seek to achieve, how they manage their resources, the plans and strategies they construct, how much effort they put into their group endeavor, their staying power when collective efforts fail to produce quick results or encounter forcible opposition, and their vulnerability to discouragement. These processes that shared efficacy beliefs activate affect how well group members work together and how much they accomplish collectively (Bandura 1997, p. 764).

Moreover, studies (e.g., Bandura 1993; Peterson et al. 1996; Prussia and Kinick 1996) have shown positive relationship between collective efficacy and group performance. In their meta-analysis, Gully, Incalcaterra, Joshi, and Beaubien (2002) found the positive relationship between team efficacy and performance. These results can at least partially support their arguments.

#### **Top Manager's Efficacy Beliefs**

In the context of an organization, capabilities can be classified into three distinct categories. One is individual participant's ability (e.g., capabilities to use statistical technique in order to analyze data on consumer demand) which clearly lies in each individual member. Another is team capabilities (e.g., marketing capabilities) which lie in a group. These capabilities may be related to individual capabilities. However, because of group dynamics (e.g., interaction among group members, conflict, power, etc.), team capability is not the simple sum of the individual member's abilities. In the similar vein, organizational capabilities (e.g., new product development) which lie in an organization itself are different from team capabilities as well as

individual capabilities. On the basis of these three distinct capabilities, we can conceptualize three different efficacy beliefs of a top manager. In other words, a top manager can build his or her efficacy beliefs in himself/herself, top management team, and organization.

In sum, we can classify capabilities in the context of organization into three distinct categories; that is, *individual abilities*, *group capabilities*, and *organization's capabilities*. Hence, we can conceptualize a top manager's three distinct efficacy beliefs, such as top manager's efficacy belief in self, TMT, and organization. It is clear that each top manager has his or her own self-efficacy belief. Also, as a member of top management team, top manager builds his or her own efficacy belief in TMT. Further, I posit that each top manager evaluates organization's capabilities. This evaluation is the basis for his or her efficacy belief in organization he or she is working for. Even if this is relatively new concept, we can define this in similar way in which we define the other two efficacy beliefs. That is, organizational efficacy can be conceptualized as top manager's belief in the organization's capabilities to create competitive advantage and achieve high performance.

Some may argue that organization's capabilities are not different enough from top manager's abilities or top management team's capabilities, because they can influence a variety of organization's characteristics and finally organization can be considered as a reflection of top managers (Finkelstein and Hambrick, 1996; Hambrick and Mason, 1984). However, as an on-going concern, an organization's current capabilities has been built, developed, and accumulated through its history which is not directly related to its current top manager(s). As a result, the current capabilities of an organization are different from the current top manager's capabilities.

Moreover, organization's capabilities are determined by not only top managers, but also other members in the organization and the related environment (e.g., suppliers). Hence, even if top managers play important roles in determining organization's capabilities, an organization's capabilities are different from top manager's and top management team's. For instance, new product development capabilities reside in organization itself, not top managers or top management team. Accordingly, top

manager's efficacy belief in organization is different from top manager's self-efficacy and efficacy belief in TMT. Herein, I do not deny that top managers can influence organization's capabilities. Instead, an organization's current capabilities are different from the current top manager's and top management team's.

### **TOP MANAGER'S EFFICACY BELIEFS AND ORGANIZATIONAL OUTCOMES**

All these three top manager's efficacy beliefs are expected to influence a variety of outcomes including individual and organization's outcomes. In this section, I mainly discuss the relationship between these three efficacy beliefs and organizational level outcomes (e.g., strategy), rather than top manager's individual level outcomes (e.g., satisfaction).

#### **Efficacy Beliefs and the Forecast of the Organization's Future**

According to organizational behavior literature, self-efficacy influences attentional and thinking processes in self-aiding or self-hindering (Wood and Bandura 1989). People with high efficacy belief are task-oriented in taxing situations and use their analytical thinking ability efficiently, whereas people with low efficacy belief tend to turn their attention inwardly and their personal deficiencies and thus do not use their abilities efficiently. In addition, those who have strong efficacy envision success scenarios that provide positive guides for their activities and performance. However, those who have weak efficacy belief visualize failure scenarios that undermine and impair their activities and performance. This can be applied to top managers. Top managers having high efficacy beliefs tend to think positively since they believe that they and their organization have enough capabilities to accomplish their tasks or goals. Therefore, we can expect that top managers who have high efficacy beliefs are more likely to envision success scenario and thus forecast the future more favorably than others are. Among three efficacy beliefs, top manager's efficacy belief in organization efficacy belief has the strongest, most significant relationship to the forecast of the



organization's future.

**Proposition 1:** Top manager with high efficacy beliefs forecast the organization's future more favorably than those with low efficacy beliefs do. Top manager's efficacy belief in organization is the most strongly, significantly related to the favorable forecast of the organization's future among three efficacy beliefs.

### **Efficacy Beliefs and the Level of Organization's Goal**

People willingly conduct challenging activities and pick social environments they believe they are capable to manage. On the other hand, they avoid activities or environments they judge they cannot cope with. People's choice is well illustrated in research on the relationship between self-efficacy and career choice and in research on the relationship between self-efficacy and goal level people set. Numerous studies have demonstrated that one's self-efficacy positively affects the level of goal that he or she sets (e.g., Bandura and Wood, 1989; Locke, Fredrick, Lee, and Bobko, 1984; Taylor, Locke, Lee, and Gist, 1984; Wood, Bandura, and Bailey, 1990). These can be applied to top manager's efficacy beliefs. Moreover, since top manager with high efficacy forecast future more favorably than the others do as hypothesized, they are expected to set the higher organization's goals than others. Further, since organizational capabilities are most directly related to organizational goals, top manger's efficacy belief in organization is most significantly, strongly related to the level of the organization's goal.

**Proposition 2:** Top manager's efficacy beliefs are positively related to the level of organizational goals. Top manager's efficacy belief in organization has the strongest relationship with the organizational goal among the three efficacy beliefs.

### **Efficacy Beliefs and the Organization's Strategy**

Top managers are responsible for formulating strategies, which are tools to achieve organizational goal. They decide how to use the organization's limited resources more efficiently to achieve

high performance. For instance, they make decisions on strategic choice, resource allocation and the like. Top manager having high efficacy belief may choose more active, aggressive, or offensive strategies. Taylor, Locke, Lee, and Gist (1984) showed that self-efficacy is related to type A personality which is characterized by aggressiveness or competition orientation. Moreover, since top manager with high efficacy belief think that they can do better than competitors or they can outperform their competitor, they are more likely to take more aggressive strategic actions to increase market share and economic rent than those with low efficacy beliefs. For example, top manager with high efficacy beliefs invest more in advertising to increase market share. Also, they invest more in research and development to make the competitors' technology quickly outdated. In the similar vein, they are more likely to launch new products more frequently than the others do. Therefore, we can hypothesize that top manager's efficacy beliefs are positively related to the aggressiveness of the organization's strategy and to the number of the strategic actions the organizations take or initiate to compete against its rivals. In addition, when their competitors attack, they are more likely to react faster than others, since they believe they have high enough capabilities to beat their competitors.

**Proposition 3:** Top manager's efficacy beliefs are positively related to the aggressiveness of strategy which is operationalized by advertising expenditure, RandD expenditure, the frequency of launching new product, and the like.

### **Efficacy Beliefs and Strategic Decision Making**

In the situation of uncertainty where considerable psychological stress (e.g., anxiety, fear) can be evoked, many people have difficulty in making decision (George 1980). In uncertain situation, people cannot exactly predict the results of the decisions because they do not have enough information. In other words, it is not unusual that people do not find and compare all possible alternatives and that they have difficulty in making decisions in such a situation. They have natural

proclivity to procrastinate making decisions (Eisenhardt 1989) until they can have enough information. In those situations, people have high level of anxiety and low confidence. Thus, it is important to overcome this anxiety and low confidence so as to make good and fast decisions (Eisenhardt 1989).

Top manager usually make decisions in such uncertain situations. When they should make decisions, they do not have enough information they need and enough time to survey information. This is typical situation when top managers play their roles. Hence, top managers should have high confidence and overcome anxiety in order to make good and fast decisions.

As Bandura (1991, 1997; Wood and Bandura 1989) posited, efficacy belief can influence the level of stress and depression people feel in the face of difficulties, and using of attentional and thinking process in self-aiding or self-hindering. In taxing situation, top manager with strong confidence feel less stress and depression, and thus focus on the decisions which they should make, instead of doubting their abilities to cope with the situations, which leads them to prevent them from using their capabilities efficiently. This can lead them to collect more information and consider more alternatives within given period of time. Similar relationship has been found in the job choice literature. The stronger the people's self-efficacy, the more career options they consider to be possible (e.g., Hackett and Betz 1981; Lent and Hackett 1987). In other words, their decision making can be more comprehensive. On the other hand, the high anxiety and depression that the top manager with group efficacy feel deter them to use their capabilities in self-aiding and/or efficient manner, which lead them to postpone making decision until last minute. Therefore, top manager with strong efficacy beliefs are expected to make faster decisions than the other top manager with weak efficacy beliefs.

**Proposition 4:** Top manager's efficacy beliefs are positively related to the speed and comprehensiveness of his or her decision making.

### **Efficacy Beliefs and Organizational Performance**

Goal setting literature (e.g., Locke and Latham 1990) has well

demonstrated the positive relationship between self-efficacy and individual performance. In addition, group efficacy predicts group performance (e.g., Bandura 1993; Peterson et al. 1996; Prussia and Kinick 1996). Based on these results, top manager's efficacy beliefs are expected to predict organizational performance.

Unlike other members in the organization, top managers are directly responsible for organizational performance. The ultimate goal of top managers is creating competitive advantage and thus achieving high organizational performance. Accordingly, the organizational performance itself can be an important index of how well top managers are doing their tasks, that is, their effectiveness. In addition, top manager with high efficacy beliefs exert more efforts and preserves longer to achieve high performance than the others do. Also, they can use their limited resources more efficiently because they can concentrate on what they should do, instead of distracting their limited cognitive resources (Bandura 1997). Moreover, as hypothesized above, top manager's efficacy belief can lead positive process outcomes, which finally lead to high organizational performance. Altogether, top manager's efficacy beliefs are expected to predict organizational performance. Further, I hypothesize that top manager's efficacy belief in organization can have the strongest positive relationship with the organizational performance among three efficacy beliefs, since it reflects the organization's capabilities which can be more directly related to the organizational performance than the other two efficacy beliefs.

**Proposition 5:** Top manager's efficacy beliefs are positively related to organizational performance. Top manager's efficacy belief in organization is the strongest positive relationship with organizational performance among three efficacy beliefs.

## DISCUSSION

In this paper, a cognitive approach to top management research has been proposed. Most of previous research on top management teams has considered top manager's demographic variables as surrogates of top manager's cognition or

psychological characteristics with some noteworthy exception (e.g., Smith et al. 1994; Reger and Huff 1993). Based on this assumption, researchers have examined the effect of top management on organizational performance. More strictly, they examined the relationship between top management's demographic characteristics and organizational outcomes. This approach has been justified by the difficulty in accessing to top managers. However, as Hambrick and Mason (1984) and Finkelstein and Hambrick (1996) asserted, even if demography and experience can be considered a good proxy of cognition and other individual factors (e.g., personality), we need cognitive approach to more fully understand top managers' effects on organizational performance. Moreover, Markoczy (1997) showed that demography explains less than 20% of variance of manager's cognition. Based on this finding, she argued that demographic variables may not be useful surrogates for top manager's cognition.

Recently, strategic researchers have paid attention to top manager's cognition (e.g., Porac and Thomas 1990; Porac, Thomas, and Baden-Fuller 1989; Reger and Huff, 1993). Along with this current research stream, in this paper, I proposed a cognitive approach. Mainly, Social Cognitive Theory has been applied to examine the effects of top managers on organizational outcomes. At first, three efficacy concepts have been introduced, top manager's efficacy beliefs in self, TMT, and organization. These three concepts were applied to explain top manager's effects on organizational outcomes such as the speed of decision making, the aggressiveness of organization's strategies, and finally organizational performance. Most propositions on organizational outcomes reflect the meso-level approach (House et al. 1995), where a top manager's efficacy beliefs are expected to influence a variety of organizational level outcome dimensions.

In order to test propositions suggested in this paper, the measurement tool needs to be developed and a level of analysis issue should be clarified. In this paper, I mainly propose effects of a top manager's efficacy beliefs (individual level variables) on both individual and organizational level outcomes. Again, I adopted a meso-level approach (House et al. 1995). Of course, it is common that top managers work as a team. In such a situation, a researcher needs to operationalized efficacy beliefs at

a group level, i.e., top management team's efficacy beliefs, which is a group level attribute. Thus, when testing the propositions developed in this paper, a researcher needs to determine the level of concept and analysis more clearly.

In this article, I suggested a cognitive approach to top management team research. Mainly, I applied social cognitive theory, especially efficacy concepts, to better understand the effects of top manager. I developed top manager's three efficacy concepts and their effects on organizational effectiveness. Of course, future empirical research is needed to test the proposition developed in this study. Also, future research needs to develop the antecedents of top manager's efficacy concepts. For instance, team compositions and demographic characteristics of top management team may be related to their efficacy beliefs, which in turn influence organizational outcomes. In short, this study illustrates the utility of different approaches to top management team research and indicates that integrating different theoretical lenses such as social exchange theory (Bandura 1977a, 1997b) to understanding the top management team process may be a fruitful future research direction.

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