

# DIVERSITY AND ITS EFFECT ON FIRM PERFORMANCE: A CRITICAL REVIEW

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**Abstract** *This article seeks to review the literature on 'diversity and its effect on firm performance'. Based on the extant literature of diversity, we present a framework which analyzes the effect of diversity in attributes, values, skills and knowledge and cohort membership on firm performance through group processes and its consequences. The consequences of Group processes involve decision quality, decision commitment, strategic consensus and knowledge management. We measure firm performance by financial, customer, internal processes and growth perspective.*

**Keywords:** *Diversity in attributes, values, skills, knowledge and cohort membership, decision quality, decision commitment, strategic consensus and knowledge management, Firm performance..*

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## 1. INTRODUCTION

Work-group diversity is a fact of organizational life. It is also a key concern for theory and practice in organizational behavior. Groups in organizations have become more diverse in terms of their demographic composition over the years and will continue to become more diverse in years to come (Jackson, 1992; Triandis, Kurowski, & Gelfand, 1994; Williams & O'Reilly, 1998). In addition, organizations are increasingly turning to the use of cross functional teams, thus increasingly introducing functional diversity in work groups. Because work-group diversity may have positive as well as negative effects on group performance (Guzzo & Dickson, 1996; Milliken & Martins, 1996; Williams & O'Reilly, 1998), the questions of which processes underlie these effects of diversity and how to manage these processes, which pose major challenges to organizational theory and practice.

To address this problem, Knippenberg, Dreu and Homan, 2004, propose the categorization-elaboration model (CEM), which reconceptualizes and integrates information/decision making and social categorization perspectives on work-group diversity and performance. McMahon (2010) did A Survey of Empirical Studies on Diversity and Firm Performance,

during a period of 2000-09 and gave a model to define work place diversity and firm performance relationship.

## 2. WORK-GROUP DIVERSITY

Diversity refers to differences between individuals on any attribute that may lead to the perception that another person is different from self (e.g., Jackson, 1992; Triandis et al., 1994; Williams & O'Reilly, 1998). In principle, diversity thus refers to an almost infinite number of dimensions, ranging from age to nationality, from religious background to functional background, from task skills to relational skills and from political preference to sexual preference. In practice, however, diversity research has mainly focused on gender, age, race/ethnicity, tenure, educational background and functional background (Milliken & Martins, 1996, Williams & O'Reilly, 1998). A number of researchers have proposed that the most important difference in underlying diversity dimensions is between social category diversity—differences in readily detectable attributes such as sex, age, and ethnicity—and informational/functional diversity—differences in less visible underlying attributes that are more job-related, such as functional and educational background (Jackson, 1992; Jehn, Northcraft, & Neale, 1999; Milliken & Martins, 1996; Tsui, Egan, & O'Reilly, 1992).

### 3. GROUP PROCESSES AND ITS CONSEQUENCES

Knight, Pearce, Smith, Olian, et al, (1999) integrated concepts from upper echelons, group processes and social cognition theories to investigate how demographic diversity and group processes influence strategic consensus within the top management team (TMT), where strategic consensus is defined as the degree to which individual mental models of strategy overlap. TMT diversity and group process are used in this research to predict strategic consensus. The building of strategic consensus is generally accepted as one of the first steps in the strategy formation process (Dess and Origer, 1987; Nielson, 1981; Lyles, 1981; Bourgeois, 1980, 1985; West and Schwenk, 1996). Studies of strategic consensus have either focused on its link to organizational performance (Bourgeois, 1980, 1985; Dess, 1987; West and Schwenk, 1996), or on the process of consensus formation (Priem, Harrison and Muir, 1995; Schweiger, Sandberg, and Ragan, 1986; Cosier and Rechner, 1985). Dooley and Fryxell (1999) have supported that perceptions of loyalty within teams strengthen the relationship between dissent and decision quality. Perceptions of within-team competence strengthen the relationship between dissent and decision commitment. On the one hand, some research suggests that more diverse groups have the potential to consider a greater range of perspectives and to generate more high-quality solutions than less diverse groups (e.g., Hoffman & Maier, 1961; McLeod & Lobel, 1992; Watson, Kumar, & Michaelsen, 1993). On the other hand, the greater the amount of diversity in a group or an organizational subunit, the less integrated the group is likely to be (O'Reilly, Caldwell, & Barnett, 1989) and the higher the level of dissatisfaction and turnover (e.g., Jackson et al., 1991; Wagner, Pfeffer, & O'Reilly, 1984). Heterogeneous teams, by contrast, were slower in their actions and responses and less likely than homogeneous teams to respond to competitors' initiatives. Thus, although team heterogeneity is a double-edged sword, its overall net effect was positive (Hambrick, Cho and Chen, 1996). We expected that heterogeneity, a central construct in the literature on top management, would be important in competitive decision making, conferring breadth of perspective, on one hand, but with the potential for team dissention and inefficiency (Jackson, 1992 and Sampson, 2007). It is found that hierarchical organization, such as an equity joint venture, improves firm benefits from alliances with high levels of technological diversity.

TMT heterogeneity is of utmost importance to firms that operate in industries characterized by high velocity environments. Heterogeneity generates tension or a gulf that constrains the information exchange and thus adversely affects firm performance (Ancona & Caldwell, 1992). Researchers have found that heterogeneous teams cause

less social integration and communication frequency and high turnover in top management teams (Wagner, Pfeffer, & O'Reilly, 1984). Diverse viewpoints, different thinking wave-lengths, uncommon vocabularies, paradigms, and objectives often make a heterogeneous team a net liability to the organization (Hambrick, Cho, & Chen, 1996).

Olson, Parayitam and Nicholas W. Twigg (2006) suggested the complex view of the relationship between TMT observable characteristics and firm performance mediated by strategic choice: merger and acquisition activity and internal innovation. Age diversity is negatively related to strategic choice and functional heterogeneity is positively related to strategic choice.

Previous researches such as, social identity theory and similarity/attention perspectives have often been used, particularly at the dyad and group levels of analysis, to explain the potential negative consequences of cultural diversity on outcomes (Dwyer, Richard and Shepherd, 1998; Jehn, Northcraft, and Neale, 1999; Neale, Northcraft, and Jehn, 1999; Pelled, 1996; Tajfel, 1982; Tajfel and Turner, 1985; Tsui, Egan, and O'Reilly, 1992; Williams and O'Reilly, 1998), while the knowledge-based view and decision-making perspectives have been used to suggest that diversity promotes creativity and improves decision-making effectiveness, and hence lead to superior performance (Cox, Lobel, and McLeod, 1991; Pelled et al., 1999).

This paper gives a holistic approach to diversity literature, and tries to give a process map which connects various kind of diversity to firm performance in measurable terms. It includes a vertical approach of group processes, its consequences in terms of firm performance. Researches have been concluded the specific variables, mediators impact on the diversity consequences in terms of long term effect like deviant behavior of individuals turnover, absenteeism, performance, strategic changes, which directly or indirectly influence the firm performance. The objective of this paper is to integrate the literature on diversity and including some new dimensions on group processes and its consequences.

In contrast to Pfeffer (1983), other research (Gist, Locke and Taylor, 1987; Smith *et al.*, 1994) suggests that the study of intervening group processes is important. With regard to strategic consensus, Langfield and Smith (1992) proposes that social (i.e., group) processes will have an important effect on the development of shared cognitive maps. Ford and Baucus (1987) suggest that individual cognitive interpretations will be shaped by the personal contexts in which the individual operates. The study of potentially intervening group processes is still important as their effects on the organization may be easier to control or alter than the effects that arise from the group's demographic characteristics. In addition, group processes may, in fact, be useful in overcoming some of the potentially negative consequences of demographic diversity.

Therefore, we also examine a set of intervening models to assess whether inclusion of two group process measures—interpersonal conflict and agreement-seeking—improves the explanation of strategic consensus, and, if so, which intervening model is most appropriate to the data.

Bunderson and Sutcliffe (2002) conclude that the construct of functional diversity can be conceptualized in different ways and that these different conceptualizations have very different implications for team process and performance. Our examination of two different forms of functional diversity—dominant function diversity and intrapersonal functional diversity confirmed this expectation.

D. Knight et al. (1999) has been concluded that when interpersonal conflict is high then strategic consensus will be low. Another important group process identified in previous research is the manner in which groups make decisions. As noted above, prior studies (Schweiger *et al.*, 1986, 1989) found that groups using agreement-seeking behaviours achieved higher levels of consensus than groups using processes that incorporated structured systems of task-oriented conflict.

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Dissent within strategic decision-making teams was measured by two items based on Rahim's (1982) Intragroup Conflict Inventory. These two items asked the extent to which strategic decision makers openly expressed a difference of opinion during the process of making the decision (Dooley and Fryxell, 1999).

The speed of organizational moves has also received increasing attention (Smith and Grimm, 1991; D'Aveni, 1994), because the firm's speed in making its moves allows it to achieve early advantages in its initiatives, often putting its competition on the defensive (Stalk, 1988; Eisenhardt, 1989). Although we expect top management team heterogeneity to have positive effects on action propensity and magnitude, we expect that it will slow an organization's speed in executing its actions. Communications and decision making in a heterogeneous team are cumbersome because of the disparate perspectives and vocabularies (O'Reilly, Caldwell, and Barnett, 1989).

Dooley and Fryxell (1999) support that perception of loyalty within teams gives strength to the relationship between dissent and decision quality. Perceptions of within-team competence strengthen the relationship between dissent and decision commitment. The loyalty and competence items were based on Butler's (1991) Conditions of Trust Inventory.

The competence items measure the extent to which team members were perceived as being skillful and reliable in performing their jobs.

Hambrick & Mason (1984) posit that strategic choices (e.g. mergers and/or acquisitions) consistent with environmental demands will lead to positive outcomes. Firms engage in acquisition activity with the intention of enhancing performance; thus, a positive relationship can be expected between acquisition activity and firm performance. There is support that post-acquisition performance is positive (Ravenscraft & Scherer, 1987; Kedia, 2002). Further, recent research shows that acquisitions restore vitality in an organization, which in turn, positively affects firm performance (Vermilion, 2005). Internal innovation is another strategic choice that is made by firms and this is reflected through spending on Research and Development (R&D) inputs. Lawless and Anderson (1996) point out in their study of microcomputer manufacturing firms, that innovation is related to firm performance in dynamic environments. Further, innovation speed enhances the organizational performance (Lawless & Anderson, 1996) and increased R&D spending is positively related to firm performance (Chaney & Devinney, 1992).

The top team can thus be considered as the aggregate informational and decisional entity through which competitive moves are made. These moves depend on the team's scanning of the environment; recognizing problems and opportunities and interpreting other external stimuli; developing potential moves; negotiating, refining, and selecting moves; and implementing decisions (Mintzberg, Raisinghani and Theoret, 1976; Fredrickson and Laquinto, 1989). Because top management team heterogeneity can be expected to influence these internal processes in ways that substantially affect competitive behaviors, we examine the relationships between top management team heterogeneity and three major dimensions of a firm's actions and responses: (1) its competitive propensity, or its relative tendency to undertake actions and respond to competitors' actions, (2) the competitive magnitude, or the relative scale and significance of the firm's actions and responses, and (3) competitive speed, or how quickly the firm implements its actions and responds to others' actions. In doing this, we distinguish between actions and responses as qualitatively different types of decision situations that are affected in different ways by top management team heterogeneity (Hambrick, Cho, Chen 1996)

Another important group process identified in previous research is the manner in which groups make decisions. As noted above, prior studies (Schweiger *et al.*, 1986, 1989) found that groups using agreement-seeking behaviors achieved higher levels of consensus than groups using processes that incorporated structured systems of task-oriented conflict. With regard to strategic consensus, Ford and Baucus (1987) suggest that individual cognitive

interpretations will be shaped by the personal contexts in which the individual operates. Even if Pfeffer (1983) is correct, the study of potentially intervening group processes is still important as their effects on the organization may be easier to control or alter than the effects that arise from the group's demographic characteristics.

Focusing on the moderating effects of internal and external contexts. Cannella, Park and Lee (2008) investigated the effect of co-location of TMT members and environmental uncertainty on the TMT diversity-firm performance relationship. Based on a study of 207 U.S. firms in 11 industries, the study concluded that the effects of TMT functional diversity on firm performance would be more positive as the proportion of TMT members with offices in the same location increases. The effects of intrapersonal functional diversity would also be more positive as environmental uncertainty increases (McMahon, Williamson, 2010).

If we conclude on the basis of above literature that group processes and consequences includes *Decision quality* in terms of formulation, Implementation, execution speed, task information and, dissent, *Decision commitment* in terms of loyalty, interpersonal trust, task motivation, task ability, *Strategic consensus* in terms of merger acquisition, Innovation, competitive move, Interpersonal conflict, agreement seeking and *Knowledge management* in terms of Knowledge sharing, supporting creation, capture and dissemination of knowledge, information, organization learning. Group processes consequences as decision quality, decision commitment, strategic consensus and knowledge management also influence firm performance, which can be measured in measurable terms (Financial perspective, customer perspective, process perspective, and learning and growth perspective). On the basis of literature review, we posit that:

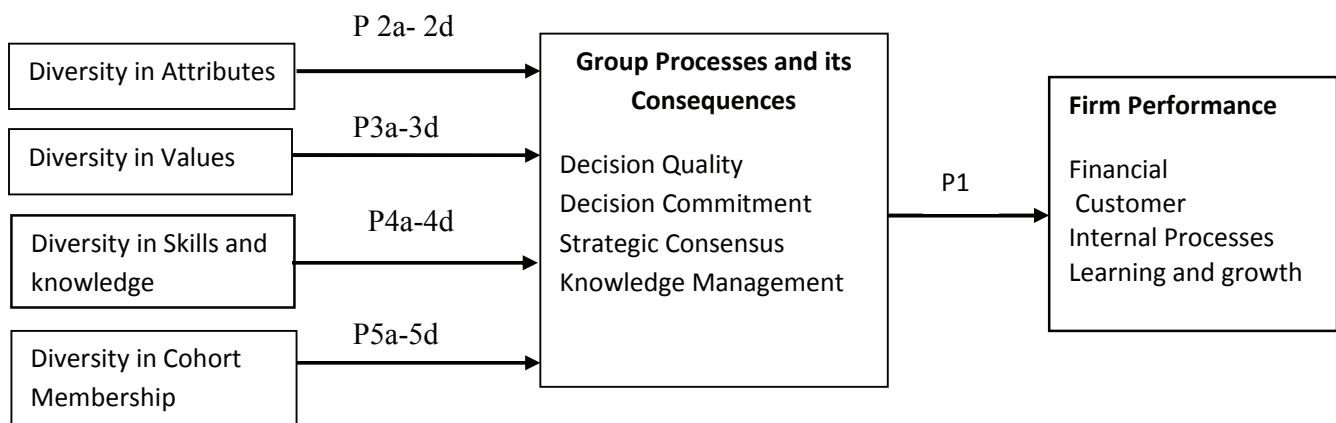
**Proposition 1:** *Different types of Diversity affect Firm performance, which is mediated by group processes and consequences.*

More specifically, if cognitions or mental models of the individual manager are based on his/her past experiences and values as Kiesler and Sproull (1982) suggest, then differences in experience should result in differences in mental models. Thus, if past experiences are represented by a surrogate measure – demography - we expect differences in demography to be related to differences in managers' cognitions. For example, a Marketing vice-president might have a different mental model of organizational strategy than a Finance vice-president (e.g. 'first on the market' vs. 'Profits through tight cost control'). Therefore, the literature suggests a direct effects model (diversity-group processes-strategic consensus ) whereby diversity in functional position, age, education, and employment tenure will be negatively related to the level of strategic consensus (Knight et al,1999). Building on the idea of dominant coalition (Cyert & March, 1963), the upper echelons theory posits that observable characteristics of TMTs (e.g. educational background, functional background, age) are the proxy measures of psychological factors (e.g. values, cognitive style, and cognitive content) that influence strategic choice.

Diversity in observable attributes such as race, ethnic background, age, gender, nationality, cultural diversity affects the firm performance through the group processes like decision quality, decision commitment, strategic consensus and knowledge management. In sum we propose that

**Proposition 2a-***Decision quality will mediate the diversity in attributes and firm performance.*

**Proposition 2b-***Decision commitment will mediate the diversity in attributes and firm performance.*



**Figure (i):** Diversity: A Holistic Approach

**Proposition 2c-***Strategic consensus will mediate the diversity in attributes and firm performance.*

**Proposition 2d-***Knowledge management will mediate the diversity in attributes and firm performance.*

A key premise underlying theory and research on multifunctional teams (such as management teams and cross-functional project teams) is that team members with backgrounds and experience in different functional areas bring different but complementary knowledge and expertise to their teams. The different functional experiences of team members therefore represent important resources from which a team can draw as it solves problems and makes decisions (Bunderson 2003).

Hambrick, Cho, and Chen (1996) explores the executive origins of firms' competitive moves by focusing on top management team characteristics, specifically on team heterogeneity, rather than on the more often studied environmental and organizational determinants of such behaviors. Arguing that competitive actions and responses represent different decision situations, we develop propositions about how heterogeneity may enhance some competitive behaviors but impair others.

Building on this basic premise, a great deal of research has examined how the distribution of functional backgrounds on a team relates to team decisions and outcomes (e.g., Bantel & Jackson, 1989; Hambrick, Cho, & Chen, 1996; Murray, 1989; Sutcliffe, 1994). Drawing from theory and research on team demography and social influence, Bunderson (2003) proposes two mechanisms whereby functional background can promote intrateam involvement: an expertise effect (particular combinations of functional experience can provide valued knowledge and expertise) and a similarity effect (shared functional experiences can facilitate liking and trust).

So we can see that researches say that knowledge management plays a great role in group process consequences, which affects firm performance. This is a factor which is not very frequently used in researches but in terms of organization learning, valued knowledge and expertise, dissemination of information can be leveraged by diversity to improve firm performance. So, we can add a new dimension in group processes and its consequences which basically tells about the expertise sharing. In sum, we propose that

**Proposition 3a-***Decision quality will mediate the diversity in attributes and firm performance.*

**Proposition 3b-***Decision commitment will mediate the diversity in values and firm performance.*

**Proposition 3c-***Strategic consensus will mediate the diversity in values and firm performance.*

**Proposition 3d-***Knowledge management will mediate the*

*diversity in values and firm performance.*

Various studies demonstrate that organizations are the reflection of top managers. Finkelstein and Hambrick (1996) have noted that from 1984 to 1996, over two hundred studies concerning upper echelons theory were published, and researchers have continued to focus on this timely topic (Zhang and Rajagopalan, 2003; Peterson, Smith, Martorana, & Owens, 2003; Simsek, Veiga, Lubatkin, & Dino, 2005). On the positive side, the imputed logic is that having a heterogeneous team enhances the knowledge base, cognitive abilities and overall problem-defining and problem-solving skills of the group (Bunderson, 2003; Hambrick, Cho & Chen, 1996). In fast changing, dynamic environments, information processing requirements call for identification of greater adaptive capabilities, thus favoring heterogeneous teams (Harrison, Price, Gavin, & Florey, 2002). So we propose that

**Proposition 4a-***Decision quality will mediate the diversity in skills and knowledge and firm performance.*

**Proposition 4b-***Decision commitment will mediate the diversity in skills and knowledge and firm performance.*

**Proposition 4c-***Strategic consensus will mediate the diversity in skills and knowledge and firm performance.*

**Proposition 4d-***Knowledge management will mediate the diversity in skills and knowledge and firm performance.*

**Proposition 5a-***Decision quality will mediate the diversity in cohort membership and firm performance.*

**Proposition 5b-***Decision commitment will mediate the diversity in cohort membership and firm performance.*

**Proposition 5c-***Strategic consensus will mediate the diversity in cohort membership and firm performance.*

**Proposition 5d-***Knowledge management will mediate the diversity in cohort membership and firm performance.*

## 4. CONCLUSION

The paper tries to see together the observable and underlying diversity, its impact on firm performance through various group processes and its consequences. Firm performance varies at different level of organization. so for a complete view that how diversity influence in financial, customer, processes (operations) and learning and growth perspective to measure firm performance most of the researches give a relationship between diversity and firm performance in limited terms . So this paper is an attempt to provide a wide picture of diversity and firm performance.

Group processes and its consequences vary according to situations. Different researches focus on different perspective of group processes. Here we define mainly four

processes and its consequences in terms of decision quality, decision commitment, strategic consensus and turnover and knowledge management. Decision quality defines the group processes like - Implementation, execution speed, task information and, dissent. Decision quality measures how the group responses towards a common goal, how they execute their work once decision has been taken place, how they work for the implementation of strategic decisions. Decision quality will be affected by improper task information, which can slow the execution speed and can increase dissent. Decision commitment defines the group processes like loyalty, interpersonal trust, task motivation, task ability. The intrinsic motivation of employees, their interpersonal trust and loyalty towards their organization results the decision commitment.

Strategic consensus and Turnover defines group processes like Merger acquisition, Innovation, competitive move, Interpersonal conflict, agreement seeking. Strategic choices like merger and acquisition, innovation and competitive move provides strategic consensus and positively related to firm performance. If interpersonal conflict and agreement seeking increases beyond a certain limit, it becomes unhealthy for organization. Sometimes turnover increases because of diversity in group. Knowledge management is more about Knowledge sharing, supporting creation, capture and dissemination of information organization learning, individual strength (expertise). Diversity in group members provides a set of skills in different field which can provide a complete set of information and organization learning. We have tried to see the effect of diversity on the firm performance mediating through different group processes.

## 5. DISCUSSION AND FUTURE WORK

The proposed model tries to test the different level of diversity and its effects on firm performance having a mediating effect of group processes and consequences in terms of decision quality, decision commitment, strategic consensus and knowledge management. Diversity has a rich literature but it is seen in literature that it is difficult to operationalizes the diversity measures and its direct or indirect effect on firm performance. We have tried in this paper to measure the diversity in measurable terms as observable diversity of attributes can be measured by age gender, race, ethnic background or culture and nationality basis while underlying diversity can be measured by personality, socioeconomic background, educational background, functional background, industry experience, organizational tenure and so on. While the group processes like formulation and execution decides the quality of decision through a diverse group, loyalty, interpersonal trust, task motivation and task ability decides the commitment towards decisions, strategic consensus on various decisions as merger and acquisition, competitive move, agreement seeking and knowledge

management through creating, sharing, communicating and disseminating. So we can measure the diversity and process measures. We have tried to measure the firm performance as Balanced score card measures which reflects financial, customer, processes and learning perspective. It is always good to make quantitatively measures so that we can make clear interpretations. We can test this model in future studies and also edit and delete some overlapped construct. In present time most of the organizations follow cross functional and top management teams for taking critical decisions, so if we would be able to connect diversity with firm performance we can to the growth of the organization.

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## Appendix 1: Review of Extant Literature on Diversity

Authors	Nature of sample	Dependent variables studied
Milliken, Frances J., Martins, Luis L (1996)		Multiple effects of diversity in organization groups
Hambrick, Theresa Seung Cho, And Ming-Jer Chen (1996)	32 U.S. airlines over eight years	The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves
Bunderson and Sutcliffe (2002)	sample of business unit management teams	Functional diversity in management: process and performance effects
Knight, L. Pearce., Smith, Olian, Sims, Smith and Flood (1999)	76 high-technology firms in the United States and Ireland were	Top management team diversity, group process and strategic consensus.
Richard, Murthi and Kiranismailli (2007)	a firm-level, 6-year longitudinal analysis	Racial diversity on intermediate and long term performance :the moderating role of environmental context
Knippenberg and De Dreu and Homan		Work Group Diversity and Group Performance: An Integrative Model
Nishii, Anne Gotte, Jana Raver (2007)	260 U.S. organizations	Upper Echelon Diversity, the Adoption of Diversity Practices, and Organizational Performance
Olson, Parayitam, Twigg (2006)	66 firms from the telecommunication industry	Mediating Role of Strategic Choice Between Top Management Team Diversity and Firm Performance
McMahon, Williamson (2000-2009)	Survey Of Empirical Studies On Diversity And Firm Performance,	A review of academic research on workplace diversity and firm performance published in nine leading Journals in the field of management during the period 2000-2009
Rachelle C. Sampson, 2007	a sample of 463 R&D alliances in the telecommunications equipment industry	R&D alliances and firm performance :the impact of technological Diversity and alliance Organization on innovation
J. Stuart Bunerson, 2003	sample of business unit management teams	Team member functional background and involvement in management teams :direct effects and moderating role of power centralization