When Is Educational Specialization Heterogeneity Related to Creativity in Research and Development Teams? Transformational Leadership as a Moderator

Shung J. Shin  
Washington State University

Jing Zhou  
Rice University

The authors examined conditions under which teams’ educational specialization heterogeneity was positively related to team creativity. Using a sample of 75 research and development teams, the authors theorized and found that transformational leadership and educational specialization heterogeneity interacted to affect team creativity in such a way that when transformational leadership was high, teams with greater educational specialization heterogeneity exhibited greater team creativity. In addition, teams’ creative efficacy mediated this moderated relationship among educational specialization heterogeneity, transformational leadership, and team creativity. The authors discuss the implications of these results for research and practice.

Keywords: team creativity, educational specialization heterogeneity (or diversity), transformational leadership, team creative efficacy

Employee creativity is crucial for organizations to succeed (Amabile, 1988; Oldham & Cummings, 1996). A review of the creativity literature shows that although the field has made considerable progress in understanding individual employees’ creativity, research on work team creativity has lagged behind (Shalley, Zhou, & Oldham, 2004). Teams are widely used at work (Campion, Medsker, & Higgs, 1993; Jackson & Alvarez, 1992), and hence the lack of research on team creativity is unfortunate. In addition, although a few studies (e.g., Jung & Avolio, 1999; Taggar, 2002) examined idea production in student groups, little field research was done to examine what factors contributed to the creativity of intact teams composed of ordinary employees (instead of top management teams or ad hoc student groups). These deficiencies prompted Shalley et al. to call for more research on team creativity in the workplace.

We answered the call by examining when and why teams’ educational specialization heterogeneity is related to research and development (R&D) teams’ creativity. A review concluded that diversity is one of the most important variables for team creativity (Nijstad & Paulus, 2003). Although important prior work (e.g., Jackson, 1992, 1996) suggested positive relations between diversity and team creative decision making, how diversity relates to creativity is still not fully understood. To better understand it, researchers have advocated examining the specific type of diversity that is most relevant to the outcomes being investigated, because not all effects of team diversity are equal (e.g., Milliken & Martins, 1996). Furthermore, most studies on knowledge-based diversity have been conducted on top management instead of other kinds of teams (Milliken & Martins, 1996). Wiersema and Bird (1993) suggested caution in generalizing results conducted with one type of teams to other types because contexts may dictate how teams notice and react to their differences. In this study, we focused on teams’ educational specialization heterogeneity because it is the most salient and important knowledge-based diversity for R&D teams’ creativity (Nijstad & Paulus, 2003).

Educational specialization heterogeneity refers to the extent to which a team consists of members with different educational specializations (the major field or discipline in which one’s highest degree was earned). It may lead to a wide range of perspectives for producing creative ideas (Milliken, Bartel, & Kurtzberg, 2003). Because creativity involves combining previously unrelated things into something new, or borrowing ideas, insights, or practices from one field and adapting or modifying them for a different field or context (Amabile, 1996), heterogeneity in educational specialization may afford teams with cognitive resources that are potentially valuable for team creativity (Jackson & Alvarez, 1992; Nijstad & Paulus, 2003).

However, the literature concerning team heterogeneity suggests that the relation between educational specialization heterogeneity and team creativity is more complex than previously thought. Educational specialization heterogeneity provides teams with only the potential to be creative, and this potential can be either realized or hindered, depending on the context (Jackson, Joshi, & Erhardt, 2003; Milliken & Martins, 1996; Williams & O’Reilly, 1998).

This study examined the possibility that the relation between team educational specialization heterogeneity and creativity is contingent upon transformational leadership. Leadership may have strong impact on team creativity-relevant processes and outcomes (Mumford, Scott, Gaddis, & Strange, 2002). Transformational leadership may be particularly relevant for team creativity (Bass, 1985; Shamir, 1990; Sosik, Avolio, & Kahai, 1997). But, surprisingly, few studies have examined whether it moderates the edu-
cational heterogeneity–team creativity relation. Indeed, Jackson et al. (2003) pointed out, “the interplay between leadership and diversity remains largely unexplored” (p. 812). Agreeing with this assessment, Dionne, Yammarino, Atwater, and Spangler (2004) stated, ‘Future research could examine the impact of transformational leadership on diverse teams.’ (p. 189).

Moreover, a critical omission in previous research concerning team heterogeneity is that there was a black box in most empirical work: The mechanisms through which heterogeneity is related to outcome variables, particularly team creativity, were rarely tested (Lawrence, 1997). To further advance researchers’ knowledge, we attempted to open the black box by theorizing and testing whether team creative efficacy is one mechanism through which educational specialization heterogeneity and transformational leadership jointly influence team creativity.

Taken together, we sought to make at least four contributions to the creativity, diversity, and leadership literatures by investigating the following: (a) antecedents of team creativity (e.g., interactive effects of transformational leadership and educational specialization heterogeneity on team creativity); (b) the interplay between leadership and diversity, which has rarely been studied (but see Somech, 2006, for an exception)—specifically, identifying transformational leadership as a particularly effective leadership style in allowing teams to leverage diversity; (c) team creative efficacy as a mediator of the moderated relations; and (d) ongoing R&D teams in Korean companies. The leadership (e.g., Elkins & Keller, 2003) and the diversity (e.g., Milliken & Martins, 1996; Wiersema & Bird, 1993) literature call for studies in cultural contexts other than the typical contexts in the United States and Europe to see whether management theories concerning diversity and leadership are generalizable to other cultures. Finally, R&D teams have been underresearched in spite of the importance of creativity and diversity in R&D teams.

Theory and Hypotheses

Following the consensus in the creativity literature (e.g., Amabile, 1996; Shalley et al., 2004), we defined team creativity as the production of novel and useful ideas concerning products, services, processes and procedures by a team of employees working together. According to this definition, creativity is different from innovation in that creativity emphasizes the production of new and useful ideas, whereas innovation primarily involves implementing new ideas throughout an organization (Amabile, 1988; Oldham & Cummings, 1996). Thus, although directly borrowing and implementing a new idea or practice invented elsewhere can be considered innovation, it is not creativity. As such, team creativity is conceptually different from team innovation.

Educational Specialization Heterogeneity, Transformational Leadership, and Team Creativity

Creativity requires seeing things from different perspectives, finding fresh solutions to old problems, and combining previously unrelated processes, products, or materials into something new and better (Mumford & Gustafson, 1988). According to the value-in-diversity thesis, because with more heterogeneity in disciplines studied and specializations by team members teams may have a wider range of information and perspectives, one might expect that more heterogeneity always leads to greater creativity (Bantel & Jackson, 1989; Pelled, Eisenhardt, & Xin, 1999). Also, information and decision-making theories suggest that heterogeneity leads to increased cognitive processing and better use of information (e.g., Watson, Kumar, & Michaelsen, 1993). But cumulative research results have shown that heterogeneity does not always lead to desirable team outcomes such as creativity (see Jackson et al., 2003; Lawrence, 1997; Milliken & Martins, 1996; Williams & O’Reilly, 1998, for reviews). For example, according to relational demography theory (Tsui & O’Reilly, 1989) and self-categorization theory (Turner, 1982), heterogeneity may decrease liking (Tsui & O’Reilly, 1989), effective communication (Smith et al., 1994), cohesiveness (Harrison, Price, Gavin, & Florey, 2002; Smith et al., 1994), and psychological attachment (e.g., Tsui, Egan, O’Reilly, 1992); and increase conflict (Jehn, Northcraft, & Neale, 1999; Pelled, 1996) and turnover (Jackson et al., 1991). These negative reactions are likely to negatively affect team processes and creativity (Milliken et al., 2003).

In dissecting the complex relations between team heterogeneity and creativity, it appears that team creativity imposes competing demands on a team. On one hand, it requires the availability of a wide array of information and perspectives. On the other hand, it requires that team members work effectively together to actually share the information and perspectives that they possess, to provide one another with intellectual stimulation, and to cooperate with one another in coming up with new and better ideas. Thus, the key is to minimize the negative effects of diversity on team interactions while keeping the benefits of diversity (West, 2002).

The creativity literature suggests that leadership is a key aspect of the context that affects team creativity (Mumford et al., 2002). As one of the most influential leadership theories in contemporary research (Judge & Bono, 2000), transformational leadership is theorized to enhance team outputs (Bass & Avolio, 1990) because it elevates team identification and motivation by increasing the intrinsic valence of team goal accomplishment, communicating visions, and emphasizing collective outcomes (Bass, 1985; Shamir, House, & Arthur, 1993). Also, transformational leadership encourages team members to view problems from new perspectives and provides individual consideration (Bass, 1985). Thus, transformational leadership appears to be most suitable in managing R&D teams to leverage diversity and strive for creativity. We now turn to more detailed theoretical analyses on how transformational leadership can lead teams with heterogeneous educational specializations to exhibit greater creativity by minimizing the negative effects of diversity on team creativity-related processes while encouraging team members to utilize the benefits of diversity.

Members who strongly identify with their teams are likely to share their skills, knowledge, and ideas and to debate their ideas constructively with the other members so as to contribute to their team’s success. When their team identification is low, members are less likely to reveal their ideas. Furthermore, the low team identification may reduce the level of trust within the team, which, in turn, would lead to low psychological safety—“a shared belief that the team is safe for interpersonal risk taking” (Edmondson, 1999, p. 354)—among team members (Milliken et al., 2003). For example, the perceived differences resulting from different educational specializations may make team members reluctant to speak their own ideas because of fear of being embarrassed or rejected (Mum-
ford & Gustafson, 1988), and may even create faultlines, which may lead to more conflict and less communication within the team (Lau & Murnaghan, 2005).

In addition, team members with different educational backgrounds may prefer to carry out tasks in different ways, which would cause conflict (Jehn, 1997; Jehn, Chadwick, & Thatcher, 1997). Task-oriented conflict, caused by job-related diversities such as educational specialty heterogeneity, can spill over to become relationship-oriented conflict, which would cause negative reactions and interactions among members, damaging team creativity (Jehn, 1997; Janssen, van de Vliert, & West, 2004). Furthermore, informational or functional differences may cause detrimental social categorization, which in turn may harm teams’ interactions such as sharing and elaborating creative ideas (van Knippenberg, De Dreu, & Homan, 2004).

Even though we cannot directly test all of these numerous possible mediators in one single study, we theorize that transformational leadership provides a social context that minimizes the negative effects of being different on the team creativity-related processes so that diverse teams can engage in positive team creativity-related processes. Transformational leadership behaviors include inspirational motivation, idealized influence, intellectual stimulation, and individualized consideration (Bass, 1985). First, transformational leaders provide inspirational motivation and exert idealized influence—they articulate a compelling vision and serve as a role model to energize the teams they lead and to motivate the teams to perform beyond expectations (Bass, 1985). By emphasizing the importance of working together as a team, these leaders tend to increase team members’ awareness of task interdependence and the meaningfulness of the common goals (Shamir, 1990). Additionally, by exhibiting idealized behaviors, leaders install in team members the belief that membership with the team will enhance their social identity, and consequently the members are more likely to identify with their team (van Knippenberg, 1999). Excited and energized by their leaders’ compelling vision, the teams are likely to focus on their superordinate common goals and to leverage their differences toward accomplishing those common goals instead of letting their differences hinder their cooperation and working together as a team. The positive effects of shared vision and common goals on team processes and output have been supported (Campion et al., 1993; Van der Vegt & Janssen, 2003). The main task of R&D teams is to create new and better products and services, and their leaders’ main job is to lead them to be creative. Thus, for teams with high educational specialization heterogeneity, their leaders’ inspirational motivation and idealized influence should enhance their team identification, which will enable them to effectively work together to be creative.

Second, by helping their teams to better utilize differences, transformational leaders can enhance the team creativity-related processes. The leaders’ intellectual stimulation directs their teams’ attention toward discovering new and better ideas and exploring and experimenting with new approaches (Bass & Avolio, 1990; Shin & Zhou, 2003), which may also lead the team members to feel the necessity for coming up with creative ideas, and in turn to more readily appreciate one another’s different perspectives. Thus, for teams with high educational specialization heterogeneity, their leaders’ intellectual stimulation will enable them to work together to leverage their diverse perspectives and combine their ideas into something new and useful.

Finally, leaders’ individualized consideration assures the teams that individual members’ needs and wants are heard and considered, individuality and unique points of views are valued, and individual expression is encouraged (Bass, 1985). As such, transformational leaders encourage teams to seek creative ideas without the fear of being penalized. Consequently, the teams are less likely to fear ostracism and more likely to feel safe in sharing and discussing their ideas among their members. Thus, for teams high on educational specialization heterogeneity, their leaders’ emphasis on helping them to develop capabilities, and valuing and respecting individuality, should encourage them to both develop and share different ideas and viewpoints associated with different educational specializations and backgrounds, and to develop capabilities as a team, which ultimately would lead to greater team creativity. Taken together, we predict the following:

**Hypothesis 1:** The relationship between educational specialization heterogeneity and team creativity is moderated by transformational leadership in such a way that teams’ educational specialization heterogeneity is more positively related to team creativity when transformational leadership is high than when transformational leadership is low.

**Team Tenure, Transformational Leadership, and Educational Specialization Heterogeneity**

Is the impact of transformational leadership on the educational heterogeneity–team creativity relation equally important no matter what team tenure is? Prior theory and research suggest not. The leadership literature suggests that over time, a team can develop leadership capacity within the team, which entails shared and distributed leadership among the team’s members (Day, Gronn, & Salas, 2004). It is important to note that external intervention can facilitate a team’s development of this shared and distributed leadership capacity. A key precondition of the team’s leadership capacity is shared collective identity as a team and motivation to work together toward an exciting common goal (Day et al., 2004). In addition, team members need to possess or acquire leadership skills so that they are capable of performing shared and distributed team leadership. It is interesting to note that, as theorized previously, transformational leadership is likely to help a team to develop collective identity, to create motivation toward accomplishing a common goal, and to develop skills and capabilities to get the job done (Bass, 1985). Once the team has developed shared leadership capacity, transformational leadership may no longer be necessary.

Based on this theoretical reasoning, and consistent with the leadership literature, we maintain that the aforementioned positive effects of transformational leadership on the relation between educational specialization heterogeneity and team creativity will be weakened for teams with longer tenure. Following the terminology in the leadership substitute theory (Howell, Dorfman, & Kerr, 1986), team tenure may work as a neutralizer on the positive relation among transformational leadership, educational heterogeneity, and team creative efficacy. With longer team tenure, teams may gradually internalize the teaching and influences of their leaders and develop shared and distributed leadership capacity in
the team (Day et al., 2004), and the role of transformational leadership will become less important for their creativity:

**Hypothesis 2:** There is a three-way interaction involving team tenure, transformational leadership, and educational specialization heterogeneity in such a way that the positive moderating role of transformational leadership on the relation between educational specialization heterogeneity and team creativity will be stronger for teams with shorter tenure than for teams with longer tenure.

**Contributions of Team Creative Efficacy to Team Creativity**

To explore the psychological mechanism underlying these moderated relations, we also investigated whether team creative efficacy mediates the relations among educational specialization heterogeneity, transformational leadership, team tenure, and team creativity. In essence, the argument is that transformational leadership enables teams with higher educational specialization heterogeneity to be more creative via boosting the teams’ creative efficacy. Before we theorize the mediating role of team creative efficacy, however, it is necessary to first look at contributions of team creative efficacy to team creativity, because little research has explicitly defined this construct and linked it to creativity at the team level (Tseng, 2001).

The literatures on creativity and efficacy beliefs suggest that team creative efficacy is critical for team creativity (Ford, 1996). Drawing from them, we defined team creative efficacy as team members’ shared beliefs in their teams’ capabilities of producing creative ideas. Team efficacy (i.e., collective efficacy when the unit of focus is teams) refers to a team’s shared belief in its ability to perform in a particular situation (Bandura, 1997). Prior theory has highlighted the importance of team efficacy for team performance (Lindsley, Brass, & Thomas, 1995), which received empirical support (Gully, Incalcaterra, Joshi, & Beaubien, 2002).

Team creative efficacy is an independent construct that is conceptually different from each team member’s self-efficacy regarding his or her own capabilities to be creative, although collective efficacy may be correlated with self-efficacy (Bandura, 1986). Unlike individuals’ self-efficacy, “perceived collective efficacy is an emergent group-level attribute rather than simple aggregation of perceived individual efficacies” (Fernández-Ballesteros, Díez-Nicolás, Caprara, Barbaranelli, & Bandura, 2002, p. 108). Through socialization and interactions at the team level, a team develops shared interpretations of situations and events, including the beliefs regarding their collective capabilities (Ford, 1996). Such collective beliefs subsequently contribute to a team’s collective action (Morgeson & Hofmann, 1999). Thus, the collective beliefs that team members have developed via collective interactions are quite distinguishable from the individual beliefs that they experience as isolated individuals (Lindsley et al., 1995).

Whereas the concept of group potency is concerned with shared beliefs in the group’s general effectiveness (Campion et al., 1993; Guzzo, Yost, Campbell, & Shea, 1993), team creative efficacy is a team’s belief in its capabilities of performing a specific task—producing new and useful ideas. To predict a specific outcome (i.e., team creativity), a specific efficacy measure (i.e., team creative efficacy) is much more effective and hence necessary than a general measure of collective beliefs (Gibson, Randel, & Earley, 2000). Indeed, prior research has suggested that to truly understand whether efficacy beliefs contribute to a given domain in terms of both content and level of analysis, one needs to examine the corresponding domain-specific efficacy beliefs, not general efficacy (Gibson et al., 2000; Tierney & Farmer, 2002). Accordingly, we focused on a type of specific team efficacy beliefs and used a scale that made explicit the content domain and level of analysis.

We argue that team creative efficacy is critical for team creativity because it is closely related not only to team members’ motivation but also to team creativity-related processes. The team, creativity, and efficacy literatures converge in suggesting that team creative efficacy contributes to team creativity by boosting team members’ motivation. Bandura (1997) argued that collective efficacy influences team members’ motivation to act: what they choose to do, how much effort they exert on the chosen tasks, and whether they persist when obstacles prevent them from successfully completing the tasks. Indeed, researchers have deemed efficacy beliefs as one of the most important determinants of work motivation (Bandura, 1986; Stajkovic & Luthans, 1998) and a key aspect of motivation for creativity (Ford, 1996). When team members have high levels of efficacy expectations specifically targeted at creativity, they are likely to achieve high levels of creativity. This is because creativity requires the teams to be willing to break away from traditional ways of doing things and take risks to challenge the status quo, to put forth effort to produce truly new and useful ideas, to coordinate and help one another as a team, and especially to persevere in the face of obstacles (Amabile, 1988; Zhou & George, 2001).

In addition, team creative efficacy may relate to team creativity-related processes because motivation is critical for team processes. For instance, van Knippenberg et al. (2004) suggested that motivation was rarely studied in diversity research even though it was central for effective cognitive processes. Also, Gilson and Shalley (2004) emphasized the importance of team processes in achieving team creativity. For a diverse team to be creative, team members should effectively interact with one another, which requires them to be highly motivated to process their ideas and perspectives (van Knippenberg et al., 2004). Team creative efficacy as an emergent state (i.e., a product of team process experiences) and new inputs to subsequent team processes (Marks, Mathieu, & Zaccaro, 2001) may influence whether teams will engage in creativity-conducive processes (e.g., Drazin, Glynn, & Kazanjian, 1999; Ford, 1996). With high levels of shared beliefs about their team’s creativity capacity, the team members are likely to actively exchange and share their ideas and perspectives, and to combine or rearrange their ideas into something new and useful. Also, team creative efficacy is likely to encourage team members to engage in and sustain these creativity-conducive activities by providing them with confidence and conviction. Thus, teams high on creative efficacy are likely to engage in appropriate team creativity-related processes to achieve high levels of team creativity.

**Hypothesis 3:** Team creative efficacy is positively related to team creativity.

**Team Creative Efficacy as a Mediator**

As discussed earlier, educational specialization heterogeneity provides a necessary but not sufficient condition for team creativ-
ity. Essentially, for teams with high educational specialization heterogeneity to realize their creative potential, they need to have high levels of team creative efficacy in order to actually make the choice of engaging in creative activities, and to stay on course no matter how many challenges the teams face until they successfully produce creative ideas. Consistent with Chen and Bliwise’s (2002) idea that leadership is important in predicting collective efficacy, we argue that transformational leadership facilitates the development of team creative efficacy in teams high on educational specialization heterogeneity.

Previous theory and research have suggested that teams often rely on cues from the context to form collective views of their capabilities, and leaders constitute one of the most influential aspects of the social context in the workplace (Bandura, 1986; Lindsley et al., 1995). Because team creative efficacy is concerned with the teams’ beliefs and expectations that they can work together to achieve creative outputs, when teams are plagued by limited social integration, dysfunctional conflict and politics, and reduced commitment to the team (all of which are common pitfalls that heterogeneous teams may encounter; Milliken & Martins, 1996; Williams & O’Reilly, 1998), teams are likely to have low confidence and low expectations concerning their collective capabilities to be creative.

In contrast, when they are led by transformational leaders, teams with high levels of educational specialization heterogeneity are likely to discover and appreciate the cognitive resources they possess—the divergent information and perspectives rooted in team members’ different educational specializations—and come to believe that they will work effectively together to accomplish their common creative goals. This is because the transformational leaders’ intellectual stimulation, individualized consideration, charisma, and idealized influence tend to direct the teams’ attention toward thinking out of the box and being creative (Bass & Avolio, 1990; Shin & Zhou, 2003), foster the development and expression of unique viewpoints, make salient the teams’ common goals (Shamir et al., 1993), energize the teams to work together to accomplish these goals, and align team members’ individuality and uniqueness with collective identity and accomplishment (Bass, 1985). Through these leaders’ behavioral modeling and verbal persuasion, teams with high levels of educational specialization heterogeneity are likely to develop high confidence and expectations concerning their creative capabilities.

In sum, the foregoing arguments indicate that team creative efficacy is one mechanism that underlies the relationships among educational specialization heterogeneity, transformational leadership, and team creativity. Thus, we predict the following:

Hypothesis 4: Team creative efficacy mediates the moderated relationship among team educational specialization heterogeneity, transformational leadership, and team creativity.

Hypothesis 5: Team creative efficacy mediates the moderated relations among team educational specialization heterogeneity, transformational leadership, team tenure, and team creativity.

Method

Sample and Procedure

Data were collected as a part of a larger project on creativity. We collected the data from 75 R&D teams in 44 Korean companies of various sizes in the industries of cable manufacturing, compressors, construction design, defense technology, electronics, information technology, networking, software, and telecommunication. The Korean R&D teams constituted an interesting and valuable context for studying diversity: They were highly homogeneous in terms of ethnicity (all members were Korean) and gender, and educational specialization diversity was very salient to team members (educational background is one of the most important criteria for judging individuals in Korean society).

The teams were considered intact because team members worked interdependently to develop new and better products and services. All 331 members in 81 teams were invited to participate in the survey, and 288 (87%) of them provided usable responses. Of the remaining 43 employees (13%), either they or their supervisors did not respond. The 288 members (plus 75 supervisors) were from 75 teams: 37 teams were from large and established companies, and 38 were from small and new venture companies. Compared with the established companies, the new venture companies were relatively young (less than 2 years in operation) and small (from 4 to 13 employees). The participation rates of the teams were greater than 75%.

The average number of respondents per team was 4. We found that 89% had bachelor’s degrees or master’s degrees, 3% had doctoral degrees, and the rest did not report their education level. The average age was 31 years. The average company tenure for employees working in the new ventures and the established companies was 1 year and 5 years, respectively. There were 31 women (11%) and 257 men (89%) in the sample.

To minimize potential common method biases, we collected the data from two different sources. Team members rated team creative efficacy and their immediate supervisor’s transformational leadership, and the supervisors rated their teams’ creativity. The supervisors were direct leaders of the teams. Thus, they were proper raters of team creativity, and the team members had sufficient interactions with them to evaluate their leadership behaviors.

Measures

We created Korean versions of all measures by following the commonly used translation–back translation procedure (Brislin, 1980).

Team creativity. Consistent with the creativity literature, this variable was measured by four items assessing three aspects of team creativity that are meaningful in R&D settings: newness of idea, significance of idea, and usefulness of idea (Amabile, 1996). For each item, the supervisors were asked to indicate, on a 7-point scale ranging from 0 (poorly) to 6 (very much), the extent to which the team being rated was creative compared with other similar
R&D teams. Supervisor ratings are widely used and accepted in the creativity and innovation literature (Van der Vegt & Janssen, 2003; Zhou & Shalley, 2003). Sample items were “How well does your team produce new ideas?” and “How useful are those ideas?” We averaged responses to the four items to create a measure of team creativity (Cronbach’s $\alpha$ at the individual level = .79).

**Educational specialization heterogeneity.** Consistent with the diversity literature, the educational specialization heterogeneity of each of the R&D teams was measured by using Blau’s (1977) index of heterogeneity, $1 - \Sigma (P_i)^2$, where $P_i$ is the portion of a team’s members in the $i$th category (e.g., Wiersema & Bantel, 1992). There were 24 areas of educational specialization represented in our sample. The categories were created based on the Korean educational system. Sample areas included business administration, information systems, design, chemistry, oceanography, computer engineering, electronic engineering, and mechanical engineering. These areas were also verified during interviews with management at the participating companies. On their questionnaires, team members were asked to select, from a list of 24 areas printed on the questionnaires, the areas in which they had earned their highest degrees. No one checked more than one area. We then calculated each team’s educational specialization heterogeneity by following the Blau formula. The minimum and maximum heterogeneity indexes (theoretically ranging from 0 to 1) were 0 and .86, respectively, and the average heterogeneity was .41.

**Transformational leadership.** Transformational leadership was measured by using the Multifactor Leadership Questionnaire (MLQ 5X-Short; Bass & Avolio, 1995), which has four items for each subdimension of transformational leadership: idealized influence (attributed), idealized influence (behavior), inspirational motivation, intellectual stimulation, and individual consideration. On a 5-point scale ranging from 0 (not at all) to 4 (frequently, if not always), team members indicated how frequently each statement described their immediate supervisor. Because prior research has shown that a single higher order construct adequately captured the variance in the subdimensions of transformational leadership (e.g., Judge & Bono, 2000), and that the subdimensions did not exhibit discriminant validity in predicting outcomes (e.g., Bycio, Hackett, & Allen, 1995; Shin & Zhou, 2003), we averaged the 20 items to create a single index tapping transformational leadership (Cronbach’s $\alpha$ at the individual level = .93).

**Team creative efficacy.** Team creative efficacy was measured with three items adapted from the creative self-efficacy scale (Tierney & Farmer, 2002). We prompted the participants to focus on their teams when they answered these questions by emphasizing that questions in this particular section concerned their teams. In addition, we modified the items so that the referent point was the team. Specifically, referring to the team level, the modified items tapped team members’ beliefs in their teams’ capabilities of being creative. For example, “Regarding my team, my team has a knack for further developing the ideas of other teams.” On a 7-point scale ranging from 0 (strongly disagree) to 6 (strongly agree), team members indicated how strongly they agreed with these statements about their team. We averaged the three items to create a team creative efficacy score (Cronbach’s $\alpha$ at the individual level = .89). Aggregating individuals’ ratings of their team’s collective efficacy is well supported in the literature (e.g., Gibson et al., 2000).

**Average team tenure.** We measured team tenure by asking “How long have you been in your present team?” Then we followed the common practice in the diversity literature (e.g., Wiersema & Bantel, 1992) of averaging team tenure of the team members to obtain a team tenure score for each team.

**Control variables.** We included several control variables in the statistical analyses. First, we controlled for type of company (i.e., established or new venture). This was because team creativity might be influenced by company size (West & Anderson, 1996). In addition, compared with employees at established companies, employees at new ventures might depend mainly on their leaders for guidance in their work behaviors because fewer well-established rules and policies might exist in new ventures.

Second, to partial out any potential confounding effects of task requirements on the relations being tested, we created three dummy variables to control for the type of R&D tasks performed by the teams. These variables were created based on Keller’s (1992) categorization of R&D tasks: basic or nonmission research, applied or mission-oriented research, new product or process development, and technical service or existing product development.

Third, because we examined team creativity in Korea, it was necessary to control for potential cultural effects on team creativity. The literature on cross-cultural psychology has suggested that the concept of saving face is important when one considers team processes and outcomes in the East Asian countries (Earley, 1997) such as Korea. More specifically, previous cross-cultural research has suggested that face saving or the desire to maintain interpersonal harmony in East Asian countries may explain the low creativity scores on some creativity tests found in some Asian samples (Markus & Kitayama, 1991). Thus, face-saving tendencies may affect team creative efficacy and team creativity because teams with high levels of face saving may be less likely to reveal their different perspectives and opinions for fear of being embarrassed. We measured face saving with two items on a 7-point scale ranging from 0 (strongly disagree) to 6 (strongly agree). These items included “I’m embarrassed when my weakness or mistakes are revealed to others.” After averaging responses to the two items for each employee (Cronbach’s $\alpha$ = .71), we averaged the scores across team members to create a team-level index of face saving.

Finally, we included team size, work independence (“The work I usually do is a group project rather than an individual project”), age, gender, and team tenure heterogeneity as control variables to partial out their potential influences on team processes and outcomes (e.g., Harrison et al., 2002; Jackson et al., 2003; Van der Vegt & Janssen, 2003).

**Results**

Means, standard deviations, and correlation coefficients for all measures at the team level are reported in Table 1.

**Discriminant Validities**

A series of confirmatory factor analyses was conducted at the team level to examine the discriminant validity of team creativity and team creative efficacy measures. These analyses were conducted separately for each of the measures because different sets of respondents (i.e., supervisors and team members) provided the measures. We ran a series of one-factor versus two-factor models.
in nested pairs and conducted chi-square difference tests to compare which model better fit the data (Netemeyer, Johnston, & Burton, 1990).

To establish discriminant validity for the team creativity measure, we used four items adapted from Keller (1992) to measure regular team performance in R&D settings (e.g., project quality and project performance; Cronbach’s \( \alpha = .79 \)). We found that a two-factor model (i.e., team creativity and regular team performance as two separate factors) provided a significantly better fit than a one-factor model (i.e., creativity and regular performance as the same factor). \( \chi^2_{\text{difference}}(1) = 7.63, p < .01 \). In addition, in the hypothesized model, all loadings were statistically significant as expected.

To establish the discriminant validity of team creative efficacy, we measured general collective efficacy by using four items adapted from Shner et al.’s (1982) general self-efficacy measure (Cronbach’s \( \alpha = .77 \)). A sample item was “Regarding my team, when unexpected problems arose, I’m sure we can handle them.” Results showed that a two-factor model (i.e., team creative efficacy and general collective efficacy as two separate factors) provided significantly better fit than a one-factor model (i.e., they were the same factor), \( \chi^2_{\text{difference}}(1) = 3.84, p < .05 \). Additionally, in the hypothesized model, all loadings were statistically significant as expected. All in all, these confirmatory factor analysis results demonstrated that the team creativity and team creative efficacy measures had satisfactory discriminant validity. The full confirmatory factor analysis results are available on request.

### Aggregation for Team-Level Analysis

All analyses were conducted at the team level. Even though the scales already referred to the team level (Lindsay et al., 1995), we checked empirically the appropriateness of aggregating the responses of individual team members to the team level by assessing three criteria: (a) We computed estimates for intrarater reliability or the intraclass correlation index to see whether team membership accounted for significant variance in the measures (Bartko, 1976); the estimates of intraclass correlation were relatively high as compared to those in other studies (James, 1982); team creative efficacy, .26; and transnational leadership, .30; (b) we calculated another type of intrarater reliability estimate (Shrout & Fleiss, 1979) to get the reliability of the mean ratings of the measures within a team compared to other teams: team creative efficacy, .59; and transformational leadership, .63; and (c) we analyzed interrater agreement (James, Demaree, & Wolf, 1984). Using the James et al. (1984) formula, we first calculated the interrater agreement of each of the scales for each of the teams and then averaged the estimates across the 75 teams. The means and medians were as follows: team creative efficacy, .83 and .87; and transformational leadership, .93 and .96, respectively. In sum, these results met or exceeded the levels of reliability and agreement found in previous research that has dealt with aggregation issues (e.g., Campion et al., 1993). Thus, aggregating the responses to the team level was appropriate.

### Hypothesis Testing

We ran hierarchical regression analyses to test the hypotheses. To minimize any potential problems of multicollinearity, we cen-
tered the predictor variables before calculating the cross-product terms (Aiken & West, 1991). We entered the variables into the regression analysis at four hierarchical steps: (1) the control variables; (2) educational heterogeneity, transformational leadership, and average team tenure; (3) the two-way interaction terms; and (4) the three-way interaction term. Table 2 summarizes the results (see Model 1). In support of Hypothesis 1 (positive interaction between transformational leadership and educational specialization heterogeneity on team creativity), the beta associated with the Educational Specialization Heterogeneity × Transformational Leadership interaction was statistically significant and positive (β = .29, ΔR² = .06, p < .05). Figure 1 shows that the pattern of this interaction was consistent with what was hypothesized. However, the beta associated with the three-way interaction (Average Team Tenure × Transformational Leadership × Educational Specialization Heterogeneity) was not statistically significant (β = −.31, p > .05), failing to support Hypothesis 2.

Hypothesis 3 predicted that team creative efficacy would be positively related to team creativity. Hypotheses 4 and 5 predicted mediated moderation (Muller, Judd, & Yzerbyt, 2005): Team creative efficacy would mediate the previously mentioned two-way and three-way interactions, respectively. According to Baron and Kenny (1986) and Muller et al. (2005), to show mediated moderation, three conditions must be met: (a) The coefficient associated with the interaction term (e.g., Educational Specialization Heterogeneity × Transformational Leadership) should significantly affect the dependent variable (i.e., team creativity; see Model 1); (b) after controlling for the other predictor variables, the coefficient associated with the interaction term should significantly affect the mediator (i.e., team creative efficacy; Model 2); and (c) after controlling for the mediator, the coefficient associated with the interaction term on team creativity should be reduced in magnitude (partial mediation) or become nonsignificant (complete mediation; Model 3).

Supporting Hypothesis 4, the results showed that (a) in Model 1, the coefficient associated with the Educational Specialization Heterogeneity × Transformational Leadership interaction was significant for team creativity (β = .29, ΔR² = .06, p < .05); (b) in Model 2, after controlling for all other predictor variables, the coefficient associated with the Educational Specialization Heterogeneity × Transformational Leadership interaction was significant for team creative efficacy (β = .23, ΔR² = .04, p < .05); and in Model 3, after controlling for the Team Creative Efficacy × Table 2

Summary of Regression Analysis Results

<table>
<thead>
<tr>
<th>Step: Independent variable</th>
<th>Model 1: Team creativity</th>
<th>Model 2: Team creative efficacy</th>
<th>Model 3: Team creativity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Control variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company type</td>
<td>−.08</td>
<td>.09</td>
<td>−.15</td>
</tr>
<tr>
<td>Team size</td>
<td>.08</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td>Basic</td>
<td>.01</td>
<td>−.01</td>
<td>.03</td>
</tr>
<tr>
<td>Applied</td>
<td>.00</td>
<td>−.05</td>
<td>.06</td>
</tr>
<tr>
<td>New development</td>
<td>.32</td>
<td>−.11</td>
<td>.42*</td>
</tr>
<tr>
<td>Average face saving</td>
<td>−.13</td>
<td>−.19</td>
<td>−.10</td>
</tr>
<tr>
<td>Age heterogeneity</td>
<td>.07</td>
<td>−.04</td>
<td>.05</td>
</tr>
<tr>
<td>Gender heterogeneity</td>
<td>.27</td>
<td>−.10</td>
<td>.33*</td>
</tr>
<tr>
<td>Team tenure heterogeneity</td>
<td>.02</td>
<td>−.19</td>
<td>.08</td>
</tr>
<tr>
<td>Work interdependence</td>
<td>.07</td>
<td>.25*</td>
<td>.03</td>
</tr>
<tr>
<td>ΔR²</td>
<td>1.14</td>
<td>.18</td>
<td>.14</td>
</tr>
<tr>
<td>Step 2: Main variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESH</td>
<td>1.11</td>
<td>.08</td>
<td>.07</td>
</tr>
<tr>
<td>Average team tenure</td>
<td>2.10</td>
<td>.28</td>
<td>.13</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>.23</td>
<td>.59*</td>
<td>.04</td>
</tr>
<tr>
<td>ΔR²</td>
<td>1.10</td>
<td>.23*</td>
<td>.10</td>
</tr>
<tr>
<td>Step 3: Two-way interaction terms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Team Tenure × ESH</td>
<td>1.03</td>
<td>.29*</td>
<td>−.09</td>
</tr>
<tr>
<td>Average Team Tenure × Transformational Leadership</td>
<td>2.19</td>
<td>−.42*</td>
<td>.42</td>
</tr>
<tr>
<td>Transformational Leadership × ESH</td>
<td>.29*</td>
<td>.23*</td>
<td>.18</td>
</tr>
<tr>
<td>Team Creative Efficacy × Transformational Leadershipa</td>
<td>ΔR²</td>
<td>.12*</td>
<td>.12</td>
</tr>
<tr>
<td>Step 4: Three-way interaction term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Team Tenure × Transformational Leadership × ESH</td>
<td>−.31</td>
<td>−.26</td>
<td>−.12</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Mediator: Team creative efficacy</td>
<td>—</td>
<td>—</td>
<td>.42*</td>
</tr>
<tr>
<td>ΔR²</td>
<td>—</td>
<td>—</td>
<td>.42*</td>
</tr>
<tr>
<td>R² for total equation</td>
<td>1.95 (17, 48)</td>
<td>3.55 (17, 53)</td>
<td>2.10 (19, 46)</td>
</tr>
</tbody>
</table>

Note. Standardized coefficients are reported for the final step in each model. Dashes indicate that the values are not applicable. ESH = educational specialization heterogeneity.

* This term was included to test the mediated moderation (Hypothesis 4).

**p < .05. ***p < .01.
Transformational Leadership term and all of the other predictor variables, the coefficient associated with team creative efficacy was significant for team creativity (β = .42, ΔR² = .09, p < .01), which also supported Hypothesis 3; and (c) in Model 3, after controlling for team creative efficacy, the coefficient associated with the Educational Specialization Heterogeneity × Transformational Leadership interaction became nonsignificant (β = .18, p > .10), indicating that team creative efficacy completely mediated the relation between the two-way interaction and team creativity. However, the coefficients associated with the three-way interaction were neither significant for creativity (β = - .31, p > .10; Model 1) nor significant for team creative efficacy (β = - .26, p > .10; Model 2), failing to support Hypothesis 5.

Although we did not hypothesize one, we found a significant interaction between team tenure and educational specialization heterogeneity on team creative efficacy (β = .29, ΔR² = .04, p < .05). Figure 2 shows the nature of this interaction: For teams with longer tenure, there was a positive relation between educational specialization heterogeneity and team creative efficacy; for teams with shorter tenure, this relationship was negative.

**Discussion**

We theorized and found that (a) transformational leadership moderated the relation between educational specialization heterogeneity and team creativity in such a way that when led by transformational leaders, teams high on educational specialization heterogeneity exhibited greater team creativity; (b) the new construct—team creative efficacy—was positively related to team creativity; and (c) team creative efficacy mediated the moderated relation among team educational specialization heterogeneity, transformational leadership, and team creativity.

**Team Heterogeneity and Creativity**

Thus, this study makes theoretical and empirical contributions to the creativity and the diversity literatures in several ways. First, we focused on educational specialization heterogeneity as the main diversity variable to examine the relation between team diversity and creativity. Prior research suggests choosing the proper heterogeneity variable on the basis of its conceptual relevance to the outcomes of interest, because effects of heterogeneity variables are not all equal (Pelled, 1996; Williams & O'Reilly, 1998). For creativity of R&D teams such as those in our sample, educational specialization heterogeneity was the most relevant heterogeneity variable because it provides different perspectives, knowledge, and skills required for the teams to be creative (Williams & O'Reilly, 1998). Second, to better understand the effects of diversity on team creativity, we examined conditions under which heterogeneity delivered intended effects and conditions under which such effects were weakened or diminished (Lawrence, 1997; Williams & O'Reilly, 1998). Our results show that transformational leadership enabled the teams to utilize cognitive resources associated with team heterogeneity.

Third, by defining and testing the positive association between team creative efficacy and team creativity, this study contributes to the creativity literature. Efficacy beliefs have been suggested as a key factor in enhancing creativity because they tend to increase the levels of effort and persistence crucial for successfully generating new and useful ideas (Bandura, 1986; Ford, 1996; Stajkovic & Luthans, 1998). Although Sosik et al. (1997) studied the effects of group potency on idea generation with undergraduate students, no studies have investigated the effects of creativity-specific collective beliefs on team creativity in organizational settings. Thus, the present study not only theoretically develops the construct of team creative efficacy by integrating the efficacy and the creativity literatures, but also empirically demonstrates the relation between it and team creativity with ongoing teams in different industries.

Finally, this study demonstrates that team creative efficacy mediated the interaction effects on team creativity. Given the large number of team processes that have been theorized to link diversity to team outcomes, and the surprisingly scant support that team processes have been shown to mediate effects of diversity (e.g., Jackson et al., 2003), our findings about the mediating effects of team creative efficacy also advance researchers' understanding of...
why the moderated relations among educational specialization heterogeneity, transformational leadership, and team creativity occurred. Diversity researchers have emphasized the need to conduct more research that will open the black box, which has been a significant gap in diversity research (Lawrence, 1997). Team creative efficacy is an emergent state (Marks et al., 2001) that is the product of team interactions and processes, and it can lead to subsequent team processes and outcomes. Our study suggests that identifying key emergent states is a welcoming addition to the search for team processes as mediators.

Notably, Somech (2006) studied relations among leadership, team heterogeneity, and team innovation. However, there are substantial differences between her study and our study. First, we looked at different leadership theories and constructs (transformational leadership vs. participative/directive leadership). The leadership theory and construct examined in our study—transformational leadership—is one of the most influential leadership theories in contemporary research (e.g., Judge & Bono, 2000). Second, we investigated educational specialization heterogeneity in R&D teams, whereas Somech examined functional heterogeneity in primary care teams whose tasks were quite different from those of R&D teams. Third, regarding the mediator, instead of team reflection we examined team creative efficacy, one of the most important and yet underresearched constructs in the creativity literature (Farr & Ford, 1990). These differences notwithstanding, it is important to recognize that both studies move creativity and diversity research forward by revealing the interplay between leadership and diversity on creativity, and the mediators explaining these relations, both of which have rarely been documented in the literature.

Although not hypothesized, our results show a significant Team Tenure × Educational Specialization Heterogeneity interaction on team creative efficacy. With longer team tenure, team members might hold the collective belief that the negative effects of educational specialization heterogeneity on team creativity have faded, and the perceived positive effects remain. Thus, their shared belief in their team’s creativity capability (i.e., team creative efficacy) might grow to higher levels with longer team tenure. But this interaction was not significant for team creativity. One possible explanation is that the costs and benefits of diversity offset each other when teams have longer tenure. On one hand, Harrison and colleagues have argued that the longer the team tenure, the less the negative effects of surface-level diversity (i.e., heterogeneity concerning overt or easily detectable demographic characteristics) on team cohesion (Harrison, Price, & Bell, 1998) and social integration (Harrison et al., 2002). On the other hand, team tenure may reduce the positive relation between team heterogeneity and creativity because the team members have gotten used to one another’s perspectives and ideas and can easily anticipate and deflect oppositions to their ideas (i.e., decreased task conflict; e.g., Pelled et al., 1999). Ultimately, it might be an empirical question concerning the time frame in which team members start to use the mediating variable instead of team reflection. Third, we investigated the mediating role of team creative efficacy, which was not considered by Somech.

In addition, although we did not hypothesize this mediating team creative efficacy interaction with team tenure and educational specialization heterogeneity, our cross-sectional design supported this mediating interaction. The data showed that the Team Tenure × Transformational Leadership interaction was neither significant for team creative efficacy (β = .26, p > .05) nor significant for team creativity (β = .31, p > .05), although the directions were as hypothesized. The lack of support for the three-way interactions may be due to low statistical power (power = .29 and .28, for team creative efficacy and creativity, respectively, significance level set at .05).

Limitations, Future Research, and Practical Implications

Although the hypotheses were based on theory and our results supported many theoretical predictions, our cross-sectional design could not unequivocally determine the direction of causality. For instance, it is possible that team creative efficacy was affected by these teams’ past success or failure in creativity. In addition, leaders who were more transformational might have attracted and selected more creative followers to join the teams they led. Future research using longitudinal or experimental design is needed to directly demonstrate the direction of causality.

In addition, although we avoided potential common method biases by collecting the data from two different sources, as with most creativity studies (Zhou & Shalley, 2003), we did not have any objective measures of creativity. Because the teams in the sample were in different industries, it was not feasible to collect objective team creativity measures that would have allowed for a fair comparison across industries. The creativity literature accepts the use of proxy measures such as management ratings to measure creativity (Elkins & Keller, 2003; Zhou & Shalley, 2003). Even though one might still wonder whether there was response bias in the supervisors’ ratings of creativity, this did not appear to be the case in our study because the ratings had a wide range (2.25–6 on a 7-point scale) and the teams were not competing against one another in front of upper management. As an extra caution, we ran the same regressions but used team regular performance rated by the supervisors as the dependent variable. Had the supervisors’
ratings not reflected creativity, but instead positive feelings the supervisors had toward their teams, then we would have gotten the same results as when creativity was the dependent variable. The results of the supplemental analyses were totally different from those obtained in our main analyses in which team creativity was the dependent variable: The Transformational Leadership × Educational Specialization Heterogeneity term was not significant (β = .22, p > .05), and team creative efficacy was not related to regular performance (β = .18, p > .10). Thus, there did not appear to be any serious rating biases. Future research could further address this issue by replicating our results with objective creativity measures collected from teams in the same industries.

Another limitation is that we could not directly test other possible mediators such as conflicts (Jehn et al., 1999; Pelled et al., 1999), internal task process and external communication (Ancona & Caldwell, 1992), social integration (Harrison et al., 2002; Smith et al., 1994), communication (Smith et al., 1994), social networks (Reagans, Zackman, & McEvily, 2004), psychological safety (Edmondson, 1999), group identification (Milliken et al., 2003), and group reflexivity (Tjosvold, Tang, & West, 2004). There is a mosaic of team processes that are potentially related to team creativity (Nijstad & Paulus, 2003; West & Anderson, 1996), which makes it difficult to test all of the process variables in a single study and to inform managers. Thus, researchers could choose to test emergent states that are of central concern to their studies instead of attempting to include numerous process variables in one single study. Because our central concern was whether transformational leadership could help teams high on educational specialization heterogeneity to fully utilize their cognitive resources to exhibit greater creativity, examining a team emergent state—team creative efficacy—was useful in furthering our knowledge on why transformational leadership exerted the moderating effects. One logical step along this line of inquiry is to examine the temporal sequencing of team processes (e.g., having common goals, cooperating, engaging in teamwork, expressing unique viewpoints with psychological safety, having collective identity, etc.) and the emergent state of team creative efficacy.

Also, we did not control for the team members’ earned lower degrees and previous work experience, which might have influenced team members’ knowledge domains and their team dynamics for creativity. However, it does not appear that in our sample there were any systematic biases resulting from not controlling for these variables, because there was no selection bias. More important, as hypothesized, we found significant Educational Specialization Heterogeneity × Transformational Leadership interaction for team creativity. The highest degree specialization is one of the most influential team diversities on the R&D teams’ creativity-related dynamics.

Finally, our data were collected from Korea. To determine the generalizability of our results, they should be replicated with samples from different cultures. There are several ways in which results obtained in Korea might differ from those from different cultures. First, Cha (1994) argued that Korea has a collectivistic culture that focuses on group-level psychological states and interdependent self-construal. In this culture, employees might focus more on the collective aspects of motivation and cognition such as collective efficacy rather than on self-efficacy (Schaubroeck, Lam, & Xie, 2000). Second, team creative efficacy might be more readily influenced by leaders in high power-distance cultures such as Korea than in low power-distance cultures (e.g., Earley, 1999). These interesting possibilities may be directly investigated in future comparative studies comparing employees from collectivistic cultures with employees from individualistic cultures, and employees from high versus low power-distance cultures.

These limitations notwithstanding, our study provides practical implications. As more and more organizations assemble heterogeneous teams in an attempt to boost creativity in R&D, it is vital to inform managers that heterogeneity does not guarantee creativity. Our results show that for teams high on educational specialization heterogeneity, managers should exhibit transformational leadership in order to help the teams to fully benefit from the diverse cognitive resources available to them. The results also imply that to fully take advantage of diverse cognitive resources, team members should share strong beliefs concerning their teams’ creative capabilities. By being informed that team creative efficacy is one mechanism explaining the moderated relation among educational specialization heterogeneity, transformational leadership, and team creativity, managers may search for other practices that serve to boost teams’ shared beliefs in their capabilities to be creative and, consequently, to boost team creativity.

References


TEAM HETEROGENEITY AND CREATIVITY


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