Team Faultiness and Team Creativity: 
Mediating Effect of Knowledge Sharing and Team Member Exchange

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Abstract

Purpose of the study: The purpose of this paper is to examine if team faultlines affect the creativity of the team and under what conditions, which demographic faultlines seem to be affect the most to Team Creativity. Also, to understand how deeply faultlines have been rooted in the teams of the organizations at different levels. Therefore, this study constructs and investigates a theoretical model based on Lau and Morningham (1998) linking team faultlines and Team Creativity and important mediating role of Knowledge Sharing and team member exchange plays to generate creativity among members of the teams by sideling the role affect by team faultlines.

Design/Methodology/Approach: Data was collected from Information Technology companies in India via three wave survey. The final participants included for the study numbered 358. Hierarchical regression models and a bootstrapping approach were used to test the hypothesis.

Findings: The result show and supports all three of our hypothesis that Team Faultlines negatively affect Team Creativity. Knowledge Sharing positively mediates the relationship between Team Faultlines and Team Creativity. Moreover, Team Member Exchange plays significant positive correlation and mediation process in the relationship between Team Faultlines and Team Creativity. Another finding of the study is the effect of large team size and changing teams and geographical locations of the teams’ members found to have significant effect to create Faultline based on Team Size and Location.

Research Limitation and Implication: The study reflects that to reduce team faultlines effects on the creativity of the team, organizations should focus on the practices that mitigate or take advantage of subgroup formation in the teams by effectively applying knowledge sharing and team member exchange for creativity and ultimately into achieve organizations’ success by innovation implementation.

Originality/value: Although many actions have been adopted to foster creativity in work teams in various companies and organizations, faultlines in the teams still affect creativity of the employees within a team. This study highlights the predictive power of team faultlines on team creativity and the mediating role of employees Knowledge Sharing and Team Member Exchange and its impact on team creativity.

Keywords: Team Faultlines, Team Creativity, Individual Creativity, Knowledge Sharing, Team Member Exchange, Team Diversity, Diversity, Leader Member Exchange, Knowledge Management, Knowledge System

1. Introduction

1.1. Background of Study

The inexorable globalization of today’s society has not only made the movement of goods and people ever easier it has also changed the nature of the marketplace, where firms must struggle to maintain their competitive advantage. Immigration and the internationalization of organizations are trends that make work teams in modern-day work organizations gradually diverse in terms of their demographic composition. Growing workforce diversity in organizational teams is an important task for companies, especially given the fact that efficient team work is a crucial success element for numerous organizations today (Kirkman, Rosen, Tesluk, & Gibson, 2004).

Successful management of team diversity was seen as a way to facilitate innovation processes, decision making and problem solving (Tjosvold, Hui, Ding, & Hu, 2003). A review of the literature on innovation revealed that most studies refer to innovation as a generic concept and therefore do not differentiate the two stages of innovation: the creative phase, namely the generation of new ideas and implementation phase, namely the successful implementation of creative ideas (George, 2007). Researchers and practitioners have continued their work on many fronts. In a progressively competitive global marketplace, organizations must harness their capacity to nurture innovation in order to survive and Innovation has been highlighted as an essential skill for contemporary organizations to maintain or improve efficiency in rapidly changing and challenging global environments (Choi & Chang, 2009; Hansen & Levine, 2009).

Complex and innovative tasks are usually assigned to teams, which have become the centre of modern organizations. Teams are a dominant way of doing work and bringing success to organizations by energizing innovation through creativity. Organizations are increasingly relying on multi-functional working groups and project teams to stimulate and forge innovation, solve problems and make decisions to increase responsiveness of work teams (cf. Mohrman, Cohen, & Mohrman, 1995). In many organizations, people work as a team, and creativity is often adopted in this context.

Although groups are increasingly important, group members come as independent individuals, all with their own demographic profiles, prejudices, and potential to affect group processes. In turn, from this point of view, heterogeneity is thought of as the distance between all these soloists on one or more demographic variables of interest. Several studies have...
suggested that the positive effects of teamwork are not obvious and that they are affected by the characteristics of the team and their tasks, between other factors (Balkema and Molleman 1999; Barrick, Stewart, Neubert, and Mount 1998).

Research in the field of diversity of work has grown rapidly over the past four decades. Despite a rich history of research in this area, attempts to exploit diversity have met with mixed success and do not provide a clear unanimity on the impact of diversity of workplaces (Jackson, Joshi, & Erhardt, 2003; Milliken & Martins, 1996), suggesting a more widespread approach to the study of group diversity. Jackson et al. (2003) defined a major research gap in the review of diversity literature as less than 5% of all diversity findings questioned whether the effects of a diversity dimension depend on the presence or absence of other dimensions.

1.2. Overview on Team Faultlines

The study of team faultlines has contributed to the fact that the diversity of literature is influenced by the theory of the effects of group member properties in combination and not separately. In contrast to diversity research, faultline researchers propose not only to consider group make-up within a single attribute perspective but also to think of people as a complex set of demographics; each person in a group fits to many subgroups, such as those defined by gender, race, education, and age (Gibson and Vermeulen 2003).

Lau and Murnighan (1998) presented the group faultline model, which refers to the structure of the team's diversity and explicitly deals with the alignment of the characteristics of the team members. Recent research has shown that if more than one characteristic of the team members is salient, the faultline model has better explanatory qualities than the traditional approach of heterogeneity in predicting the effects of diversity on the results of the team (Lau & Murnighan, 2005; Li & Hambrick, 2005). The promising notion of Lau and Murnighan (1998), the group members are evaluated individually to determine how many of their demographic attributes harmonize with others to form distinct schisms.

Lau and Murnighan (2005) added a new idea to the debate. The age-old conceptual work of on demographic faultlines has led to empirical and complementary conceptual work on the theme of diversity and the traditional heterogeneity approach. They suggest that social influence occurs in social interactions where team members exchange the arguments on which their opinions are based. They suggested that it may not be the level of demographic diversity that puts pressure on cohesion, but it may be that the various demographic attributes are circulated in a team. The authors further assume that demographically similar actors tend to have similar views. The interaction of these mechanisms involves divisions of opinion in teams with strong faultlines. The perspective of the faultlines asserts that particular demographic alignments between group members influence behaviour and not the dispersion of certain demographic differences within a group. Increasing interest in the formation of subgroups based on cracking and its potential to explain the dynamics due to the distribution of the composition (Mathieu, Maynard, Rapp, & Gilson, 2008).

The results of the team faultlines research were inconclusive. Research on faultlines and subgroups presents results that are gradually incoherent (Meyer, in press). Researchers found that faultlines affect group processes, affective outcomes and performance outcomes (Bezrukova et al., 2009; Choi & Sy, 2010). A number of studies have documented the negative effects of diversity faultlines on the functioning of the group (Lau & Murnighan, 2005; Phillips, Mannix, Neale, & Gruenfeld, 2004). Recent studies have shown positive effects of certain types of faultlines on outcomes at the team level (Carton & Cummings, 2013) and regardless of direction, the effect sizes are generally low (Thatcher & Patel, 2012).

1.3. Overview on Team Creativity

Creativity is defined according to Amabile (1988), who argues that creativity is exposed when a product or service is generated both novel and useful in relation to the business to maintain its competitive advantage. Creativity has been described as the keystone of organizational change, the foundation of innovation and a crucial to organizational success (Amabile, 1996). In lots of organizations, creative capital is considered its supreme asset (Florida & Goodnight, 2005). In fact, some argue that the future success of many companies depends on their ability to exploit the creative potential of their teams (Rego et al., 2007).

As employee creativity is an important source of organizational innovation and its competitive edge (Amabile, 1988, 1996), organizations are increasingly seeking creativity in teams (Oldham, 2003). Thus, creativity management involves not only the identification of employees with a creative, but also to understand how the context of the team influences the creativity of individuals with different features. Organizations must show creativity and innovation to respond quickly to the demands of the environment and the external markets (Amabile, 1997). A common approach to achieving this goal is dependence on teams, which helps to promote creativity through effective merger of ideas (West, Tjosvold, & Smith, 2003). Practitioners recognize the importance of the creative team for organizational and innovation success (Kurtzberg & Amabile, 2001), and researchers have called for more research on inputs and preconditions that help clarify or impede the creativity of the team (George, 2008).

New knowledge is the result of creative performance. In modern business, not only a high level of creative performance but a quick process to do this is one of the main goals (Hoegl and Gemuenden, 2001). Such organizations should not only
stimulate creativity and innovation among employees, but also with the development of creative and innovative teams. Researchers in creativity and innovation have recently taken an interactive approach, arguing that the situational and personal factors together contribute to the innovative teams (Choi, Anderson, & Veillette, 2009). Although the crucial role of the teams in promoting creativity has long been well-known, the question how to set up such groups remains a critical point for any new product development effort (Kazanjian et al., 2000).

1.4. Overview on Knowledge Sharing

The movement of knowledge from one team to another, usually called transmission, dissemination, distribution or more generally knowledge sharing (Bergman et al., 2004). Knowledge sharing is defined a team process and task team members with relevant ideas, suggestions and sharing information.

Sharing knowledge can be explained as a culture of social interaction, knowledge, experience and skills of employees are exchanged throughout the department or organization. Knowledge sharing involves common concepts of providing employees with access to relevant information and the development and use of knowledge networks within organizations (Hogel et al., 2003). Knowledge sharing is about capturing, organizing, re-using and transferring knowledge based on experience within the organization and that knowledge makes it available to others in organization.

Knowledge is an essential organizational source that provides a sustainable competitive edge in a competitive and dynamic economy (Davenport & Prusak, 1998). Knowledge is an important asset to organizations in today's economy. Successful organizations need to create, acquire, integrate and use dynamic opportunities (Grant, 1996).

Due to possible benefits that can be gained from Knowledge Sharing, many organizations have invested time and money in knowledge management initiatives, such as the development of knowledge management systems that use technology advanced to gather, store and spread knowledge. Sharing knowledge creates opportunities for the organization's ability to meet these needs and maximizing solutions and efficiency that provide a company with a competitive edge (Reid, 2003). In order to achieve a competitive advantage, it is necessary, but not sufficient, for organizations to rely on personnel and training systems that focus on the selection of employees who possess the particular type of knowledge, skills and helping others to acquire them (Brown & Duguid, 1991).

A company can successfully promote a culture of knowledge sharing, not only by integrating knowledge directly into business strategy, but also by changing attitude and behaviour of employees to share voluntarily and coherent knowledge promote (Connelly and Kelloway, 2003). Organizations should also consider how to convey the expertise and knowledge of experts who need to know beginners.

As an activity, knowledge economy, sharing knowledge is the basic way employees can contribute to the application of knowledge, innovation and ultimately the competitive advantage of the organization (Jackson, Chuang, Harden, Jiang, & Joseph, 2006). Sharing knowledge among employees and within and between teams enables organizations to exploit and benefit from knowledge-based resources (Cabrera & Cabrera, 2005).

Researchers have noted that sharing knowledge is personal and that making people share their knowledge effectively is difficult. As such, it is increasingly recognized that employees are not always motivated to share their knowledge with others (Kelloway & Barling, 2000). Research has shown that sharing knowledge in traditional teams is crucial to the effectiveness of the team because team members support each other.

1.5. Overview of Team Member Exchange

A focal relationship of an employee with his work teammates is (TMX), understood as "reciprocity between a member and his team regarding members' contributions to ideas, comments and assistance to other members and, in turn, reception by members of information, assistance and recognition of the other team members (Seers, Petty and Cashman 1995). Team Member Exchange addresses employee role creation process by exchanging mutual reinforcement with members of their team. The perception of an individual of exchange relationships with colleagues' working in the groups was called TMX (Seers 1989). TMX is a theoretical extension of the LMX theory, referring to the quality of the relationship between an individual and its members in the team (Dansereau et al., 1975).

However, some empirical studies have been less positive because the researchers found that an increase in demographic diversity can hinder creativity and innovation (O'Reilly & Flatt, 1989) by inducing internal friction (Pelled, Eisenhardt, & Xin, 1999) and adversely affecting the exchange of creative ideas (van Knippenberg, De Dreu, & Homan, 2004).

1.6. Problem Statement

The inconsistency has led researchers to argue that the research on the amount of heterogeneity does not adequately suggest the phenomenon and called for the development of more complex theoretical conceptualization of diversity (Knippenberg & Schippers, 2007). A theory that can help clarify the nature of the relationship between diversity and creativity of the team is the faultline theory (Lau & Murnighan, 1998). Although different are the measures in the fight against faultlines, the empirical
results show that the faultlines have an effect on the group’s process, outcomes and performance beyond the effects of diversity, but studies are not understandable, what facilitates homogeneity or heterogeneity of the team to become creative.

In the present study, we examine the background of work team employees and how deep faultlines have rooted in the teams. Increase in demographic diversity assumed to bring faultlines among team members which creates subgroups within team that can hinder creativity and innovation by inducing internal friction and adversely affecting the exchange of creative ideas. Following the past research, we assume that Team Faultlines has negative impact on Team Creativity and we also assess which demographic characters has massive impact that creates faultlines in team which in the end becomes obstruction in the creative process of team members. Therefore, we inspect the role of Knowledge Sharing and Team Member Exchange as mediators which promotes creativity among team members overcoming the effects of faultlines in the team.

On these basis, we hypothesize in our study that Team Faultlines will negatively correlated to Team Creativity. Knowledge Sharing will positively mediate the role between Team Faultlines and Team Creativity. Alongside Knowledge Sharing TMX will have a positive impact on relationship between Team Faultlines and Team Creativity.

2. Hypothesis
2.1. Team Faultlines will be negatively associated with Team Creativity.
2.2. Knowledge Sharing will mediate the relationship between Team Faultlines and Team Creativity.
2.3. Team Member Exchange will mediate the relationship between Team Faultlines and Team Creativity.

3. Methodology
We chose to combine the quantitative research approach in order to benefit from methodological triangulation and to develop a richer understanding of the research topic. All participants came from an Information Technology (IT) industry companies in India. The participant companies were Indian as well as foreign companies based in India. The participants were Indians and some percentage of foreign employees working in those particular corporation. Teams had different tasks. Some teams were included of technicians and engineers in IT, finance, HR, etc.

The questionnaires were distributed to each employee separately by the appointed HR to the respective department by email or by mailing paper copies. The style of the three-wave questionnaire was chosen to distribute survey. Employees had given number of options to return their survey, resulting in a data set of 358 participants. A draft questionnaire was pilot tested by five professors to ensure that the content and wording were free of problems. The HR were given the questionnaire and asked to examine it for meaningfulness, relevance, and clarity. Questionnaire included background data of employees such as age, gender, job tenure, position, education level, tenure of the team and items related to Team Faultlines, Team Creativity, Knowledge Sharing and Team Member Exchange.

4. Results
4.1. Confirmatory Factor Analysis (CFA)
Using AMOS 20.0, we conducted a series of confirmatory factor analysis (CFAs) to investigate the distinctiveness of the study variables. We assessed model fit by the model’s overall Chi-square, root mean square error of approximation (RMSEA; Browne and Cudeck 1993), comparative fit index (CFI; Bentler 1990), and Tucker-Lewis index (TLI; Tucker and Lewis 1973). Results indicate that the 4-factor model of team faultlines, knowledge sharing, TMX, and team creativity ($\chi^2 (50) = 81.50$, $p < 0.01$, RMSEA = 0.04, CFI = 0.99, TLI = 0.99) fitted the data better than any other alternative models including a 3-factor model, two 2-factor models, and a 1-factor model (see Table 1). Hence, the results provide support for the distinctiveness of the four constructs in the current study.

<table>
<thead>
<tr>
<th>Models</th>
<th>Factors</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>4 factors: TF, KS, TMX, TC</td>
<td>81.50</td>
<td>50</td>
<td>1.63</td>
<td>0.04</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>Model 2</td>
<td>3 factors: TF + KS, TMX, TC</td>
<td>659.40</td>
<td>53</td>
<td>12.44</td>
<td>0.18</td>
<td>0.71</td>
<td>0.61</td>
</tr>
<tr>
<td>Model 3</td>
<td>2 factors: TF + KS + TMX, TC</td>
<td>1111.76</td>
<td>54</td>
<td>20.59</td>
<td>0.26</td>
<td>0.50</td>
<td>0.32</td>
</tr>
<tr>
<td>Model 4</td>
<td>2 factors: KS + TMX + TC</td>
<td>770.41</td>
<td>54</td>
<td>14.27</td>
<td>0.23</td>
<td>0.67</td>
<td>0.58</td>
</tr>
<tr>
<td>Model 5</td>
<td>1 factor: TF + KS + TMX + TC</td>
<td>1211.35</td>
<td>55</td>
<td>20.02</td>
<td>0.23</td>
<td>0.46</td>
<td>0.30</td>
</tr>
</tbody>
</table>

$N = 358$.

TF represents team faultlines; KS represents knowledge sharing; TMX represents team member exchange; TC represents team creativity.

+ represents two factors merge into one.
$\Delta \chi^2$ tests are between the 4-factor model and each alternative model.

* $p < 0.05$; ** $p < 0.01$. 
4.2. Descriptive statistics and correlations

Table 2 presents the means, standard deviation, and correlation for study variables. Results showed that team faultlines were negatively related to team creativity (\( r = -0.44, p < 0.01 \)), knowledge sharing (\( r = -0.33, p < 0.01 \)), and TMX (\( r = -0.37, p < 0.01 \)). Both knowledge sharing (\( r = 0.51, p < 0.01 \)) and TMX (\( r = 0.56, p < 0.01 \)) had a positive correlation with team creativity. The above results provide evidence for the further verification our hypotheses.

4.3. Hypotheses test results

4.3.1. The direct effect (Hypothesis 1)

Hypothesis 1 predicted a negative relationship between team faultlines and team creativity. Results in table 3 showed that team faultlines indeed had a negative direct relationship with team creativity (\( \beta = -0.33, p < 0.01 \)) after controlling for employees’ gender, age, education, tenure, position, team size, and team tenure. Thus, Hypothesis 1 was supported.

4.3.2. The mediating effect of knowledge sharing (Hypothesis 2)

In Hypothesis 2, we stated that knowledge sharing will mediate the relationship between team faultlines and team creativity. Following Baron and Kenny's (1986) steps for mediation, we conducted multi-step regression procedure to test Hypothesis 2. As shown in Table 3, first, knowledge sharing (mediator) was regressed on team faultlines (independent variable), and this relationship was found to be significant (Model 4: \( \beta = -0.34, p < 0.01 \)). The regression results also showed that team creativity (dependent variable) was significantly associated with team faultlines (Model 1: \( \beta = -0.44, p < 0.01 \)) and knowledge sharing (Model 2: \( \beta = 0.22, p < 0.01 \)). Furthermore, after knowledge sharing was taken into account, the regression results also showed that team creativity (dependent variable) was significantly associated with team faultlines (Model 1: \( \beta = -0.44, p < 0.01 \)) and knowledge sharing (Model 2: \( \beta = 0.22, p < 0.01 \)). Furthermore, after knowledge sharing was taken into account, the direct effect of team faultlines on team creativity became weaker but still significant (Model 2: \( \beta = -0.17, p < 0.01 \)), which suggests partial mediation.

To further assess the significance of the mediation, we utilized the approach of Hayes (2013) to test for indirect effects. As predicted, the formal two-tailed significance test (assuming a normal distribution) demonstrated that the indirect effect was significant (\( \text{Effect} = -0.21, \text{Sobel}\ z = -0.19, p < 0.01 \)). Bootstrap results (Bootstrap sample size = 1,000) also confirmed the Sobel test, with a bootstrapped 95% bias corrected confidence interval (CI) around the indirect effect not containing zero (-0.29, -0.15). Taken together, Hypothesis 2 received support.

4.3.3. The mediating effect of team member exchange (Hypothesis 2)

In Hypothesis 3, we stated that TMX will mediate the relationship between team faultlines and team creativity. Following Baron and Kenny’s (1986) steps for mediation, we also conducted multi-step regression procedure to test Hypothesis 3. As shown in Table 3, first, TMX (mediator) was regressed on team faultlines (independent variable), and this relationship was found to be significant (Model 6: \( \beta = -0.38, p < 0.01 \)). The regression results also showed that team creativity (dependent variable) was significantly associated with team faultlines (Model 1: \( \beta = -0.44, p < 0.01 \)) and TMX (Model 2: \( \beta = 0.51, p < 0.01 \)). Furthermore, after knowledge sharing was taken into account, the direct effect of team faultlines on team creativity became weaker but still significant (Model 2: \( \beta = -0.17, p < 0.01 \)), which suggests partial mediation.

To further assess the significance of the mediation, we utilized the approach of Hayes (2013) to test for indirect effects. As predicted, the formal two-tailed significance test (assuming a normal distribution) demonstrated that the indirect effect was significant (\( \text{Effect} = -0.26, \text{Sobel}\ z = -0.97, p < 0.01 \)). Bootstrap results (Bootstrap sample size = 1,000) also confirmed the Sobel test, with a bootstrapped 95% bias corrected confidence interval (CI) around the indirect effect not containing zero (-0.35, -0.18). Taken together, Hypothesis 3 received support. Regression results also showed that team creativity (dependent variable) was significantly associated with team faultlines (Model 1: \( \beta = -0.44, p < 0.01 \)) and knowledge sharing (Model 2: \( \beta = 0.22, p < 0.01 \)). Furthermore, after knowledge sharing was taken into account, the direct effect of team faultlines on team creativity became weaker but still significant (Model 2: \( \beta = -0.17, p < 0.01 \)), which suggests partial mediation.

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Table 2  Mean, standard deviation, and correlation for the variables studied

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Gender</th>
<th>Age</th>
<th>Education</th>
<th>Tenure</th>
<th>Position</th>
<th>Team size</th>
<th>Team tenure</th>
<th>TF</th>
<th>KS</th>
<th>TMX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.39</td>
<td>0.49</td>
<td>1</td>
<td></td>
<td>1</td>
<td>0.11*</td>
<td>1</td>
<td>0.05</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.90</td>
<td>0.81</td>
<td>0.11*</td>
<td>1</td>
<td>0.05</td>
<td>1</td>
<td>0.13*</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1.71</td>
<td>0.61</td>
<td>0.05</td>
<td>0.11</td>
<td>0.13*</td>
<td>1</td>
<td>0.05</td>
<td>1</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>2.39</td>
<td>1.0</td>
<td>-0.01</td>
<td>0.69*</td>
<td>0.05</td>
<td>1</td>
<td>0.05</td>
<td>1</td>
<td>0.05</td>
<td></td>
<td></td>
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<tr>
<td>Position</td>
<td>4.33</td>
<td>0.8</td>
<td>-0.09</td>
<td>0.53*</td>
<td>-0.05</td>
<td>-0.49**</td>
<td>1</td>
<td>-0.09</td>
<td>-0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team size</td>
<td>16.2</td>
<td>6.7</td>
<td>0.03</td>
<td>0.24*</td>
<td>-0.13*</td>
<td>0.31**</td>
<td>0.26**</td>
<td>1</td>
<td>0.20**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Team tenure</td>
<td>2.04</td>
<td>1.7</td>
<td>-0.06</td>
<td>0.31*</td>
<td>0.03</td>
<td>0.46**</td>
<td>-0.20**</td>
<td>0.20*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TF</td>
<td>2.11</td>
<td>0.8</td>
<td>0.08</td>
<td>-0.09</td>
<td>0.02</td>
<td>-0.08</td>
<td>0.11*</td>
<td>-0.02</td>
<td>-0.06</td>
<td></td>
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<tr>
<td>KS</td>
<td>3.89</td>
<td>0.8</td>
<td>0.11*</td>
<td>0.15*</td>
<td>0.03</td>
<td>0.11*</td>
<td>0.01</td>
<td>0.03</td>
<td>0.13*</td>
<td></td>
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<tr>
<td>LMX</td>
<td>3.90</td>
<td>0.7</td>
<td>0.07</td>
<td>0.15*</td>
<td>0.08</td>
<td>0.13*</td>
<td>0.03</td>
<td>0.02</td>
<td>0.14*</td>
<td></td>
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<tr>
<td>TC</td>
<td>3.82</td>
<td>0.8</td>
<td>0.06</td>
<td>0.16*</td>
<td>0.08</td>
<td>0.10</td>
<td>-0.04</td>
<td>0.06</td>
<td>0.11*</td>
<td></td>
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</tr>
</tbody>
</table>

N = 358.

TF represents team faultlines; KS represents knowledge sharing; TMX represents team member exchange; TC represents team creativity.

*p < 0.05; **p < 0.01.

size = 1,000) also confirmed the Sobel test, with a bootstrapped 95% bias corrected confidence interval (CI) around the indirect effect not containing zero (-0.35, -0.18). Taken together, Hypothesis 3 received support.

1. Discussion
In this study, we identified a new antecedent of team creativity, namely, team faultlines in the India context. Furthermore, we explored the mediating roles of knowledge sharing and TMX in the relationship between team faultlines and team creativity. We found that: (1) team faultlines had a negative correlation with team creativity; (2) both knowledge sharing and TMX partially mediated the relationship between team faultlines and team creativity.

1.1. Implications for theory
First, the first hypothesis of the present research hypothesized that Team Faultlines will be negatively associated with Team Creativity is accepted. Faultline theory has otherwise also been regarded as a crucial theory to determine the nature of the relationship between diversity and team creativity as stated in several researches such as Lau & Murnighan (2005), Li & Hambrick (2005), and Thatcher, Jehn, & Zanutto (2003). Although previous researchers have proposed to apply faultline theory to team creativity domain in different settings, empirical study to verify the relationship between team faultline and team creativity is limited, especially in India. As such, our findings contribute to the
team creativity literature by identifying the availability of team faultline as a possible preditor variable.

Second, the hypothesis tested for the research contemplating the knowledge sharing and its mediating role on the relationship between Team Faultlines and Team Creativity showed a positive outcome. Researchers such as Osterloh and Frey (2000) have also assigned a critical importance to Knowledge sharing in organizations and the relationship between and among individuals, which occur written correspondence, face-to-face communications, documenting, organizing and capturing knowledge for others (Cummins, 2004; Pulakos et al., 2003). These claims presented by the current research as well as previous researchers further substantiate the landmark argument made by Argote (1999) indicating that in case if knowledge remains un-shared, the cognitive resources available within a team remain largely underutilized. Further, the analysis showed that knowledge sharing has a significant positive correlation with team creativity as well. This can be illustrated with the high correlation displayed by the variables (of .706). Darroch and McNaughton (2002) also claimed that the promotion of knowledge among the employees in organizations contributes towards the generation of new ideas and new business opportunities for the firm. These contributions are further found to facilitate the wide-ranging innovation activities across the firm. A similar claim was also presented by Jantunen (2005) who asserted that positive knowledge sharing culture inculcated within an organization significantly contributes towards the improvement of innovation capability and creativity.

Third, the other mediating variable considered, namely Team Member Exchange also showed a similar trend. The variable recorded a mean of 3.9006 which explains this positive Mediating Role of Team Member Exchange on Team Faultlines. The research thus accepts the hypothesis that Team Member Exchange relationship mediates the relationship existing between Team Faultlines and Team Creativity. The essence of team member exchange lies in the very definition of teams which imply the necessary presence of proximal co-worker relationships which have powerful implications for the employee attitudes and behaviors at work (Ilgen, 1999). The engagement of the team members in high-quality Team member exchange has been associated with psychological and socio-emotional resources, which then influence the strength of the relationship between organizational identification and work outcomes. Thereby, indicating that both knowledge sharing and team member exchange relationship are crucial mediators in the wake of the challenge of increasing workforce diversity faced by organizational teams in companies. As further argued by Kirkman, Rosen, Tesluk, & Gibson (2004), effective team work is a crucial success factor for most organizations in the present context.

Last, the literature reviewed has widely shown that faultlines have been recognized as an integral way to open up consideration of demographic dissimilarity between the various subgroups found within an overall group (Lau and Murnighan, 1998). These dissimilarities have been further claimed to be sourced from a varied set of variables such as gender, age, nationality, education, knowledge, etc. The analysis conducted for the present research has shown that out of all the variables, Team Size is the one which has the most influential role to play in the

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<thead>
<tr>
<th>Table 3</th>
<th>Results of Hierarchical Regression Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TC as dependent variable (β)</td>
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<tr>
<td>Model 1</td>
<td>Model 2</td>
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<td>Gender</td>
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<td>Education</td>
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<td>Tenure</td>
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<td>Position</td>
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$N=358.$

TF represents team faultlines; KS represents knowledge sharing; TMX represents team member exchange; TC represents team creativity.

$^* p < 0.05; ~ ^* * p < 0.01.$
relationship between Team Faultlines and Team Creativity. This is indicated by the highest mean value and standard deviation obtained by the variable Team Size, i.e., 16.2 and 6.791 respectively. In addition to Team Size, the other six variables considered for the study were noted to have a low range of average means ranging from 1.39 to 4.33. Thus, as can be seen there is a wide difference in the significance of Team Size and the other variables on the relationship between Team faultlines and team creativity, although all variables displayed positive values.

As opposed to the previous literature which has strongly held the claim that gender diversity plays an integral role in the creative process of teams owing to its ability to lead to frictions, the current research results indicating a lower mean value of gender (at 1.39) does not strongly support such claims. The major claim made by these researches supporting this relationship indicates the friction that develops between the male and female subgroups as a result of the gender faultlines which is held responsible for reducing the communication considered mandatory for team creativity. Another factor which has been asserted by researchers such as Pearsall, Ellis, & Evans, (2008) is the age-based faultlines which influences the cognitive dimension of collective team energy. However, the present research also fails to present a strong finding regarding the age despite its otherwise positive result. As opposed to these, team tenure and position also emerged as strong determiners or factors for Team Creativity in the research findings, with an average mean of 2.04 and 4.33 respectively. Regarding education, it has been claimed that the diverse educational backgrounds of workers encourage categorization of the team members on the basis of the differences in educational backgrounds. This has been further claimed to hamper the information exchange and high-quality decision making in such organizations (Jackson & Joshi, 2004; Williams & O’Reilly, 1998). The present research also showed a positive correlation between education and team faultlines, indicating that as the educational levels of individuals in subgroups increase, there is a greater divide among them. However, in addition to this, a slightly higher correlation was also demonstrated between Education and Team creativity as well as the two mediating variables (Knowledge sharing and Team member Exchange relationship). A similar claim was put forth by researchers including Jackson & Joshi 2004, and Wiersema & Bantel (1992) who argued that the usage of such interpersonal differences by the team members with diverse educational backgrounds indicates that such members are better at resolving their complex tasks owing to the multiplicity of the available knowledge. This has been deemed to lend the team a wide range of diverse viewpoints, stimulating inspiring discussions, mutual learning, and more creative and innovative solutions.

1.2. Practical Implications
The researchers suggested that managers try to grab creative teams against the formation of subgroups in the early stages of interaction by enhancing the team's identification with their team rather than of their subgroup. Information about employees’ education and conscientiation of team members can be easily collected during the selection process and can be used to efficiently assemble functional teamwork. Leaders should be counselled to carefully consider the tasks of their group, the communication structures and individual characteristics of the members. The team's composition must be clearly noted in the attention of the weakening of faultlines. The focus on learning individual creativity must emphasis on the slope of individuals to participate in learning combined with the emphasis on team learning. Managers and organizations must consider other approaches that encourage teams to use creative work processes and standardize manners. The positive effect of cognitive trust on the relationship between culture of collaboration and creativity of a team suggests that managers must recognize the importance of perception of trustworthiness and competence members of the team and of their colleagues. We advise managers to invest in team design, not just relying on individual features such as creative personality, but also to integrate functional diversity into the conditions of individual team selection. Achieving a strong relationship between management and employees while expressing the importance of knowledge sharing for the success of the organization as a whole. Provide effective rewards for sharing knowledge behaviours taking into account changes in needs and employee goals is recommended. We also suggest managers that increase the level of participation in decision-making and the boundaries between organizational stages in order to minimize easier flow of information.

2. Limitations and Future Research
Future research would improve the validity of results including other companies, industries and products from other countries and culture. A larger sample would test the ability to test interaction between different levels and increase confidence. Future research should use, as far as possible, employee survey information and interviews to better understand how team identification and other contextual variables outline the effects of the collective values on group faultlines. Future research should try to improve the non-response problem by translating a survey into the local language where it will be collected. Experimental Research projects designs will also be useful to realise the differences in goals orientations that because disparities in individual creativity. The emphasis on future long-term impact research is that it is important that employee responses be temporary factors or if such responses were sustainable on knowledge sharing behavior of employees. Stir in qualitative research methods in further...
action, methods such as qualitative comments and design of longitudinal and quasi-experimental research is suggested. Progress in building formal measures theoretical components of the faultline model, such as faultline strength, distance, will also expand the systematic study of faultlines and effects on creativity. Future research should investigate how the differences in groups with subgroups based approach can be compared to groups with a targeted attitude of particular type of team members across a whole group in the research of creativity. Future studies would take into account, for example, the effects of faultlines on creativity of each individual in a particular group and not only take into account creativity in the team. Future research can analyse the impact of these factors of team level creativity for better understanding.

3. Conclusion

Even though recent studies have shown positive impact of team faultlines on various processes, we find faultlines still have many negative roles to play on creativity of the teams in organizations. Our results justify the role of Knowledge Sharing and Team Member play as a mediator to mitigate the effects of faultlines on team creativity. We propose future researchers to find more solutions to foster creativity in the teams either by diminishing or making use of affective faultlines on the creative processes of the teams in the organizations to enhance their growth.

4. References


