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ISBN: 978-967-5705-05-2. WEBSITE: www.internationalconference.com.my**TEAM FACTORS AND THE MODERATING EFFECT OF TOP MANAGEMENT SUPPORT ON PRODUCT INNOVATION PERFORMANCE: THE MALAYSIAN EXPERIENCE****Norsiah Mat ***UUM College of Business, Universiti Utara Malaysia,
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ruslan@uum.edu.my**ABSTRACT**

This study examined the relationships between team factors, namely functional diversity, trust and coordination and the moderating effect of top management support on product innovation performance. A total of 512 team members in various industries within the manufacturing companies in Peninsular Malaysia participated in this study. This figure comprised of 53 participating companies and 120 teams. The results found the difference in impact of independent variables (team factors) on different dependent variables (task-outcomes and psychosocial-outcomes). The R^2 value is higher for psychosocial-outcomes ($R^2 = .67$) as opposed to task-outcomes ($R^2 = .28$). Regarding the direct relations between independent variables and dependent variables, only coordination was found to directly relate to both task and psychosocial-outcomes. Affective trust has direct relations with psychosocial-outcomes only but not on task-outcomes. Regarding the indirect relations between the independent and the dependent variables when moderating variable (top management support) was incorporated in the relationships, it was found that top management support act as an independent for psychosocial-outcomes, i.e. quasi moderator but not for task-outcomes. Top management support moderates the relationship between functional diversity and coordination on task-outcomes, and affective trust on psychosocial-outcomes.

Field of Research: Functional diversity, trust coordination, product innovation performance, top management support

1. INTRODUCTION

Many researchers have found consensus that effective implementation of cross-functional teams is critical to new product development success (e.g., Ancona & Caldwell, 1992a, b; Boyle, Uma & Vinod, 2006; Cooper & Kleinschmidt, 1995; Jassawalla & Sashittal, 2000; Keller, 2001; Kim & Kang, 2008; Larson & Gobeli, 1989; Mat, 2008; Sethi 2000a, b; Sethi et al., 2001; Valle & Avella, 2003). The effective use of cross-functional new Product Development (NPD) teams however, requires support by various organizational groups, including senior managers, functional managers, and team members. Despite the vast literature on the functioning of teams, knowledge on the functioning of NPD teams' remain relatively limited, also knowledge about the conditions that enhance or hinder NPD teams' performance is scant. The findings from traditional group research may not be very helpful in enhancing the effectiveness of cross-functional teams because these studies are mainly applicable to groups that have members from common backgrounds which is different from heterogeneous nature of cross-functional team. Given the significance of new product development in innovation, the need to intensify NPD efforts especially for a developing country such as Malaysia is crucial. Diez and Kiese (2006) in their survey of 1600 manufacturing firms in Singapore, Malaysia (Penang) and Bangkok showed that the breadth and efficiency of innovative activities still lag considerably behind those found in 11 European regions.

This study undertakes to explore how team level factors such as coordination, trust, and functional diversity affect product innovation performance? And to see the impact of the moderating variable, top management support on product innovation performance. The study focuses on cross-functional new product development teams within manufacturing companies across industries in Malaysia that have certain level of new product development activities taking place in their organizations.

The major objectives of this paper are to:

- i. examine the effect of functional diversity, trust and coordination on the performance of product innovation.
- ii) analyze the moderating effect of top management support on the relationship between functional diversity, trust, coordination and product innovation performance.

LITERATURE REVIEW

Functional Diversity and Product Innovation Performance

Functional diversity leads to such positive outcomes as faster product development times (Eisenhardt & Tabrizi, 1995; Fredericks, 2005; Olson et al., 2001; Sarin & Mahajan, 2001; Valle & Avella, 2003), greater financial performance (Simons et al., 1999), and greater innovation (Bantel & Jackson, 1989). At the same time, functional diversity may create integration problems that impair performance due to slower response times. This is why Milliken and Martins (1996) called diversity a "double-edged sword" where diversity provides certain advantages while simultaneously producing performance impediments. Heterogeneous functional diversity expertise may also increase conflict, complicate internal communication, and hamper coordination within teams (Ancona & Caldwell, 1992; Jehn & Bezrukova, 2004). Teams consisting of individuals from different functional areas may find it difficult to develop a shared understanding of tasks (Dougherty, 1992). Besides the negative aspects of team conflict, it was

found that conflict can have a beneficial effect in tasks involving creativity or decision making but can be a hindrance for production/execution tasks (Cohen & Bailey, 1997; Jackson, 1996; Milliken and Martins, 1996).

Liang et al. (2007) asserts that knowledge diversity is beneficial and that value diversity is harmful to project outcome in software development. Therefore, it is useful to form teams whose members encompass a broad knowledge base. Jehn (1995), found an inverted U-shaped relation between task-related conflicts and team performance, that is too few and too intensive task-related conflicts reduce team performance. Meanwhile, Carbonell and Rodriguez (2006) have found an inverted U-shaped relationship between functional diversity and performance (task-outcome) where at a low level of functional diversity, an increase of functional diversity has a positive impact on innovation speed. However, when functional diversity becomes too high, increases of functional diversity diminish innovation speed. Thus we hypothesized that:

H1: There is a curvilinear relationship between functional diversity and product innovation performance.

Coordination and Product Innovation Performance

Teams can be seen as a mechanism for integrating various skills needed to perform complex and uncertain task successfully. From this perspective, teams provide a form of organization in which individuals with different expertise can collaborate directly on a task and, thus, achieve a very high degree of coordination among each other (Adler, 1995; Lawrence & Lorsch, 1967; Nadler & Tushman, 1988).

Kratzer, Leenders & Engelen (2004) however found contradictory findings on teams' cooperation and integration in multifunctional teams in new product development (NPD). The results show that both team cooperation and team integration is inverted U-shaped related to NPD team performance. Too low levels as well as too high levels of team cooperation and team integration impede the performance of NPD teams.

Hoegl and Gemuenden (2001), in their comprehensive study of the relationship between teamwork quality (a comprehensive concept of the collaboration in teams consist of six facets of the team work quality construct, i.e., communication, coordination, balance of member contributions, mutual support, effort, and cohesion) and project success using data from 575 team members, team leaders, and managers of 145 German software team found a significant association between teamwork quality with team performance as rated by team members, team leaders, and team-external managers. However, the magnitude of the relationship between teamwork quality and team performance varies by the perspective of the performance rater, i.e., manager vs. team leader vs. team members. Furthermore, teamwork quality shows a strong association with team members' personal success (i.e., work satisfaction and learning).

In their research of a total of 262 team members from 72 hospital project teams, Pinto and Pinto (1990) revealed that high cooperation teams differed from low cooperation teams both in terms of their increased use of informal methods for communication as well as their reasons for communicating.

Finally, cross-functional cooperation was found to be a strong predictor for task outcomes and psychosocial outcomes. Similarly, Lawrench and Lorsch (1986) have empirically supported a strong relationship between collaboration and performance. Thus, hypothesis 2 can be stated as:

H2: There is a positive relationship between coordination and new product development performance.

Trust and Product Innovation Performance

Scholars have long argued that trust can have positive effects on organizational outcomes (Barney and Hansen, 1994; Costa, 2003; Davis et al., 2000; Dyer, 1997; Morrow, Jr., Hansen, & Pearson, 2004, Sako, 1992; Zaheer et al., 1998). Empirically, researchers have examined how trust impacts organizations at the individual (McAllister, 1995), group (Korsgaard et al., 1995) and organizational levels (Davis et al., 2000). Despite increasing interest in the effects of trust on organizations, trust remains a seemingly elusive construct to measure in empirical studies.

Given the competitive requirements for speed, quality, and strategic initiatives, it is crucial for firms to build strong collaborations (Anand & Delois, 2002). The success of such collaborations depends on the strength of the relationships on firm-to-firm, group-to-group and individual-to-individual levels (Morrow, Jr., Hansen, & Pearson, 2004). Without trust it is not possible to have a relationship, be it interpersonal or interorganizational collaborations. The need for cooperation and commitment to get better results at the least expense has been stressed as well. In her study in three social care institutions in the Netherlands, Costa (2003) found support for a multi-component structure for trust and its importance to the functioning of teams and organizational performance. Trust was also positively related with perceived task performance and with team satisfaction. Lee (2004) found no direct relationship between trust and propensity to pursue incremental and innovative improvements for individuals whose organizational identification (OI) is weaker. On the other hand, for the group of employees whose OI scores are high, the relationship between trust and continuous improvement was positive. In their study, Morrow, Jr., Hansen, and Pearson (2004) found positive relationships between cognitive and affective trust on performance within cooperative organizations. Erdem and Ozen (2003) found a strong positive relation between affective dimension of trust and performance (team planning, solving problems and continuous improvement in quality). More clearly, as the affective dimension of trust between the team members rise, the performance that expresses planning, solving problems and improving the quality continuously increases, while critical mistakes decrease.

Thus we hypothesized that:

H3: There is a positive relationship between trust (cognitive and affective trust) and product innovation performance.

The Moderating Effect of Top Management Support in the Relations Between Team Factors (Functional diversity, Trust and Coordination) and NPD Performance

The importance of top management support for successful NPD is widely acclaimed in the literature. For example, Cooper et al. (2004) highlight that senior management behavior, encouragement and commitment to the NPD effort differentiates high from low NPD performance. Smith and Reinertsen

(1998) and Swink (2000) suggest various ways that senior managers can increase the chances of successful new product development. These activities include, for example, clarifying strategic intent by providing vision, direction, enthusiasm, priority, and access to required resources; initiating the project; and solidifying agreements between key NPD functions. However, none of these studies consider top management support as a moderator in the relationship between aspects of new product development teams and NPD performance. However, a study by Swink (1999) and Akgun et al. (2007) include top management support as contextual variable that act as a moderator in team context. Swink (1999) studied the effects of development team integration process on new product manufacturability did hypothesized that top management support positively moderates the influences of project acceleration on new product manufacturability. The result of his study confirmed the hypothesis. Akgun et al. (2007) in their study of 96 NPD projects found that when a high degree of management support is seen during the project, team crisis positively influences team learning, speed-to-market and new product success, and team anxiety positively impacts speed-to-market. Interestingly, when low management support was noted during the project, it was found no association between team crisis and anxiety, and project outcomes. Thus hypotheses 4 can be stated as:

H4a: Top management support moderates the relationship between functional diversity and new product development performance.

H4b: Top management support moderates the relationship between coordination and new product development performance.

H4c: Top management support moderates the relationship between trust (cognitive and affective) and new product development performance.

RESEARCH FRAMEWORK

Based on past literature, the proposed research model is presented in Figure 1.

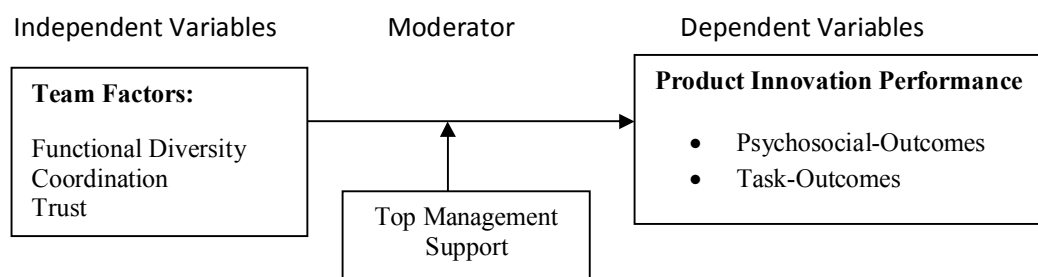


Figure 1: Research Framework

The independent variables are team factors namely functional diversity, coordination and trust. Functional diversity is conceptualized as the number of functional areas represented on the team whose members are fully involved in the project. As the number of functional areas represented on the team increases, so does the variety of ideas and perspectives brought to the team. Coordination is

conceptualized as a mechanism for integrating various skills needed contributing from different functional areas to perform complex and uncertain tasks successfully. Trust encompasses of cognitive-based and affective based. This research argue that trust evolves from a pattern of careful, rational thinking (cognitive -based), coupled with an examination of one's feelings, instincts and intuition (affect-based). This suggests that trust develops from a process of thinking and feeling, on the part of the trustor.

The dependent variable is product innovation performance which encompasses of task and psychosocial outcomes. Task outcomes refer to the traditional measures of project success, such as meeting schedules, achieving performance goals and remaining within budget restrictions. Psychosocial outcomes or 'soft' aspects, in contrast refer to how departments or individuals involve in an implementation effort feel about working with other project team members, the extent to which they feel the time devoted to the project was worthwhile and whether they were proud of the project's outcome.

The moderating variable, top management support is conceptualized as the extent to which top management: 1) recognize the importance of the project to the organization; 2) value the contribution of the team to the project; 3) allocate adequate resources to accomplish the project; and 4) publicly 'talked up' the project to others in the organization.

METHODS

Respondents

The manufacturing sector was selected based on the MASTIC 2000-2001 National Survey of Innovation (MASTIC, 2002), which has shown that nearly 89% of innovators were located in the manufacturing sector. Due to the lack of sampling frame and the need to identify organizations with some level of innovation, a purposive sampling known as judgment sampling was used. This research covers the geographical areas of Kedah, Penang and Selangor. Fifty-three companies comprising of 120 new product development teams with 521 individual participants across industries participated in this research. This study is a correlation study. The unit of analysis is the project team. The criteria of team was: a team that composed of members representing different functional areas, developing a new product or a revision of an existing one and taking the product through the entire development task.

Measures

A questionnaire was used to gather the information required for the study. The questions asked in the questionnaire were adapted from instrument developed by Erdem & Ozen (2003) to measure trust; Hoegl & Gemuenden (2001) to measure coordination. Measures for trust and coordination were tapped on 5-point Likert Scale ranging from 1=Strongly Disagree to 5=Strongly Agree. To measure task-outcomes, the measurement instrument used was adapted from the work of Wheelwright and Clark (1992); Hauptman and Hirji (1996) and Tatikonda & Montoya-Weiss (2001). To measure psychosocial outcomes, instruments developed by Van de Ven, Delbecq and Koenig (1976) and Reukert and Walker (1987) was employed. The measures of task and psychosocial-outcomes were tapped on 7-point Likert Scale ranging from 1=strongly disagree to 7=strongly agree. Team functional diversity was measured with an entropy-based diversity index that shows the degree of distribution across functional areas

using the mathematical equation defined by Teachman (1980) and used by Ancona and Caldwell

(1992a): $H = -\sum_{i=1}^s P_i(\ln P_i)$. For team functional diversity, if there are n possible functional areas

included in a team, P_i is the probability that a representative of the i th functional area is in the team. That is, P_i represents the fractional share of the team that is assigned to each functional area. When an area is not represented, the value assign to it is 0.

Data Analysis

Factor analysis was carried out to verify the construct validity of the measures. To test the internal consistency, reliability analysis was conducted on the factors extracted using Cronbach alpha reliability coefficients. For the purpose of this study, the cut-off point of .60 (Nunnally & Bernstein, 1994) was used as indicators of internal consistency. A hierarchical multiple regression analysis was carried out to test the hypotheses developed in the study.

FINDINGS AND DISCUSSION

Factor Analysis

A factor analysis with varimax rotation was performed to validate whether the items in each section loaded into the expected categories. The results show three distinctive factors for cognitive trust, affective trust and coordination, as well as two distinctive factors for NPD performance, which differentiated task and psychosocial outcomes. For cognitive, affective, and coordination the total variance explained was 24.7%, 25.6%, and 26.3% respectively. For task and psychosocial outcomes, the total variance explained was 35.13 % and 46.43% respectively. The overall Cronbach Alpha's value for cognitive trust, affective trust and coordination was .97, .95, and .77 respectively. The Cronbach Alpha's value for psychosocial and task outcomes was .87 and .84 respectively. The KMO for independent and dependent variables was satisfactorily above .60.

Profile of Respondents and Project Teams

The distribution of samples on demographic characteristics is based on (N=521). Majority (77.2%) of the respondents were males. In terms of race, 51 per cent were Malays, followed by Chinese (42%), Indians (3%), Germans (2%), Japanese (.8%) and Taiwanese (.6%). Respondents varied greatly in their age and profile. The majority (61.2%) of the respondents had bachelor degree. Thirty-five percent (35%) were engaged in Research and Development tasks, followed by Design (27%), Manufacturing and Operational tasks (14%), Marketing (11%) and Procurement, Quality, Maintenance, logistics and IT made up the rest. This covers the range of functional areas typically represented in an NPD team. Their tenure in the present company also varied greatly with majority (60%) having worked in the company for 7-12 years. The project teams' profile is based on (N=120). In terms of geographical location, majority (58.3%) of the companies were Penang based. Ninety percent of the teams considered themselves to be innovative. The majority (51.3%) worked in the electronics and electrical based industries and sixty-three percent of the participating project teams were found in Multinational companies.

Hierarchical Multiple Regression Analysis

Two sets of 4-step hierarchical multiple regressions were conducted separately for each of the new product development performance (perceived task-outcomes and psychosocial-outcomes). In the first step, two control variables were simultaneously entered into each of the hierarchical regression analysis. This was done to remove any confounding effects that these variables might have toward the dependent variables. The independent variables were entered in the second step. The moderator was entered in the third step to examine whether the relationship between the dependent and the independent variables changes resulted from addition of the moderator. Lastly, the interaction between the predictors and the moderator entered the fourth step to test the moderation effects. Table 1 and 2 summarizes the results of the two hierarchical regression analyses for perceived task-outcomes and psychosocial outcomes.

Table 1**Results of Hierarchical Regression on Task-Outcomes**

VARIABLES	Beta1 (Step 1)	Beta2 (Step 2)	Beta3 (Step 3)	Beta4 (Step 4)
Control Variables				
Group size	.08	.12	.12	.17
Tenure in Group	.01	.06	.06	.02
Independent Variables				
Cognitive Trust		.10	.10	2.03
Affective Trust		.07	.07	.82
Coordination		.42***	.43***	3.31***
Functional Diversity:				
Linear		-1.2	-1.2	-1.4
Squared		1.3	1.3	-2.0
Moderator				
Top Management Support (TMS)			-.01	1.75
Interaction Term				
CognitiveTrust*TMS				-2.0
AffectiveTrust*TMS				-.84
Coordination*TMS				-4.57*
Functional Diversity: Squared*TMS				3.82*
R ²	.00	.21 **	.21**	.28**
Adjusted R ²	-.01	.16	.15	.20
R ² Change	.00	.20	.00	.08
F value	.47	4.17	3.62	3.51

Sig. F.Change	-63	.00**	.92**	.03**
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Note: * $p < .05$; ** $p < .01$, *** $p < .001$

Table 2

Results of Hierarchical Regression on Psychosocial-Outcomes

VARIABLES	Beta1 (Step 1)	Beta2 (Step 2)	Beta3 (Step 3)	Beta4 (Step 4)
Control Variables				
Group size	-.01	-.04	-.06	.01
Tenure in Group	-.12	-.04	-.02	.04
Independent Variables				
Cognitive Trust		.03	.03	.36
Affective Trust		.16**	.16**	2.18*
Coordination		.67***	.49***	1.52
Functional Diversity:				
Linear		-.36	.01	-.07
Squared		.55	.15	2.18
Moderator				
Top Management Support (TMS)			.28***	3.56
Interaction Term				
CognitiveTrust*TMS				-.35
AffectiveTrust*TMS				-2.07*
Coordination*TMS				-2.04
Functional Diversity: Squared*TMS				-2.13
R ²	.03	.55***	.59***	.67***
Adjusted R ²	.02	.52	.56	.63
R ² Change	.03	.52	.04	.08
F value	1.93	19.5	19.9	18.2
Sig. F.Change	.15	.000	.000	.000

Note: * $p < .05$; ** $p < .01$, *** $p < .001$

Based on Table 1 and Table 2, the R² value, which is an indicator of how well the model fits (coefficient of determination) is higher for psychosocial outcomes (R² = .67) as opposed to task-outcomes (R² = .28).

In other words, a multiple regression model fits the data adequately and significantly explains 67% of the variation in the outcome variable, psychosocial-outcomes and is left with 33% residual variability. The multiple regressions model for task-outcomes significantly explains 28% of the variation and leaving 72% residual variability. This indicates that both the models are satisfactorily robust. Based on Table 2, it shows that the regression coefficients for top management support is significant as well as the interactive term (i.e., affective trust \times top management support) are significant. Thus, top management support is a quasi-moderator variable for the relationship between affective trust and psychosocial outcomes. Table 1 shows the regression coefficient for top management support is not significant but the interactive term (i.e., coordination \times top management support and diversity \times top management support) have significant beta coefficient. Therefore, top management support is identified as a pure moderator for the association between coordination and perceived task-outcomes and diversity and perceived task-outcomes.

The results (see Table 1 and 2) revealed that collectively, the control variables were not significantly related to perceived task-outcomes and psychosocial outcomes. This indicated that group size and tenure in team project did not contribute significantly to new product development performance. Hypothesis 1 predicted a curvilinear relationship between functional diversity and new product development performance. The squared term revealed that functional diversity had no significant curvilinear relationship with perceived task-outcomes and psychosocial-outcomes. Therefore hypothesis 1 is not supported. The result was not all that surprising because empirical research on the effects of diversity has produced inconsistent results. For example, Cohen and Bailey (1997); Jackson(1992); Milliken and Martins (1996), asserted that functional diversity can have mixed effects on performance depending on the extent to which it causes conflict. Conflict can have a beneficial effect in tasks involving creativity but can be a hindrance for routine production tasks.

Hypotheses 2 predicted that team coordination is positively related to new product development performance. Results from table 1 and 2 revealed that coordination had a significant relationship with new product development performance ($\beta=.42$, $p<.001$ & $\beta=.67$, $p<.001$). Thus, hypothesis 2 is supported. The finding is consistent with Hoegl and Gemuenden (2001), who found the relationship between teamwork quality (a comprehensive concept of the collaboration in teams consisting of six facets of the team work quality construct, i.e., communication, coordination, balance of member contributions, mutual support, effort, and cohesion) and project success using data from 575 team members, team leaders, and managers of 145 German software team found a significant association between teamwork quality with team performance as rated by team members, team leaders, and team-external managers.

Hypothesis 3 predicted that there is a positive relation between trust (cognitive and affective) and new product development. The results in Table 2 from step 2 revealed that affective trust is positively related to psychosocial outcomes ($\beta=.16$, $p<.01$) but not on task-outcomes. Thus, hypothesis 3 is partially supported. The results support previously discussed literature (e.g. Barney & Hansen, 1994; Chowdhury, 2005; Costa, Roe & Taillieu, 2001; Dirks & Ferrin, 2001; Erdem & Ozen, 2003)

The moderating effects of top management support on the predictor-criterion relationship were tested by adding a moderator in step 3. Subsequently, the interaction terms between the predictors and the moderator were entered in step 4. As shown in Table 2 (in step 3), the addition of moderator added statistical significance to the total variance explained of psychosocial outcomes ($\beta=.28$, $p<.001$) but not in perceived task-outcomes. Thus, top management support is also predictor toward psychosocial

outcomes. Table 1 (in step 4) shows that top management support interacted with functional diversity and coordination to predict perceived task outcomes. The significant beta coefficient for interactive term ($\beta=3.82, p<.01$; $\beta=-4.57, p<.05$) indicated that the impact of functional diversity and coordination on perceived task outcomes differ by the degree of emphasis on top management support and this variation is best shown in figure 2 and figure 3.

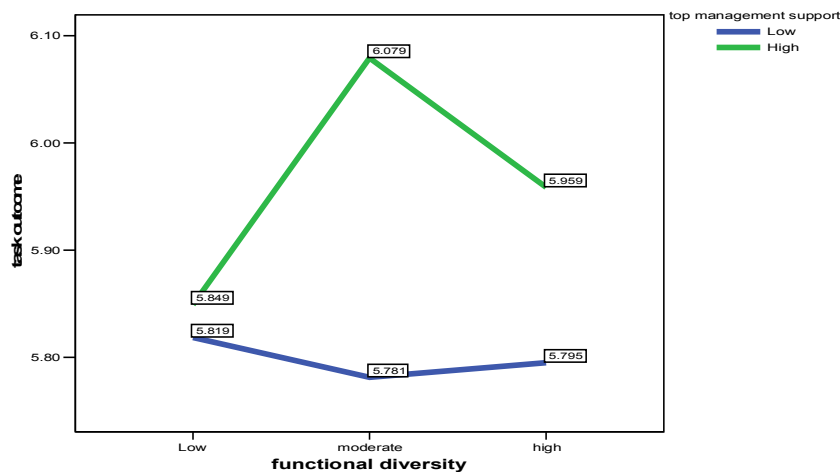


Figure 2: Interaction between Functional Diversity and Task-Outcomes

From Figure 2, it is observed that functional diversity has no impact on task-outcomes when top management support is low. In the environment of high top management support the impact of functional diversity on task outcomes is strongly positive from low to moderate level of functional diversity. The impact becomes negative as it moves from moderate to high level of diversity. The inverted U-shape relationship is clearly evident from the graph. This indicates that too few or too diverse functional representatives on a team may decrease performance. Only a moderate level of functional diversity is needed to support performance. Therefore, top management support moderates the relationships between functional diversity and task-outcomes. Thus, hypothesis 4a is supported.

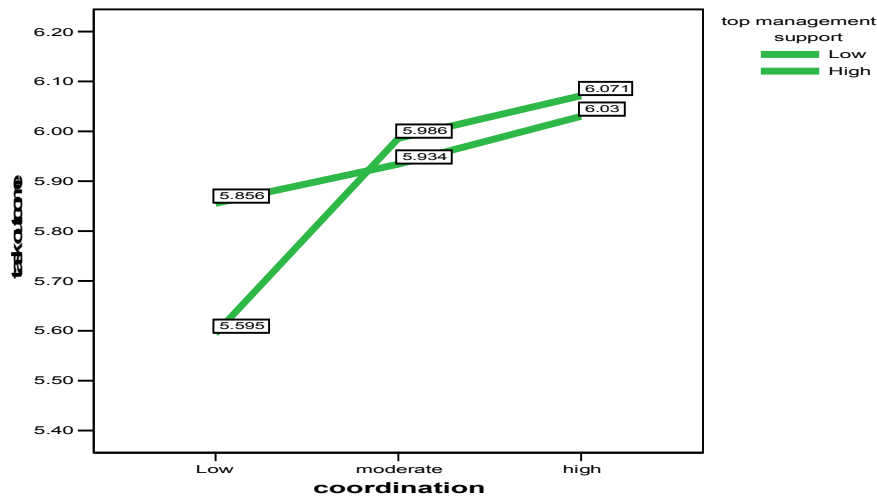


Figure 3: Interaction between Coordination and Task-Outcomes

Figure 3 shows the moderating effect of top management support on coordination with respect to task-outcomes. It is observed that the impact of coordination on task-outcomes is strongly positive from low to moderate levels of coordination in the environment of low top management support. As it moves from moderate to high levels of coordination, the impact of coordination is slightly positive. In the environment of high top management support, the impact of coordination on task-outcomes is positive but slightly lower than when top management support is low. Thus hypothesis 4b is supported.

Table 2 (in step 4) shows that top management support interacted with affective trust to predict perceived psychosocial outcomes. The significant beta coefficient for interactive term ($\beta = -2.07$, $p < .05$) indicated that the impact of affective trust on psychosocial-outcomes differ by the degree of emphasis on top management support and this variation is best shown in figure 4.

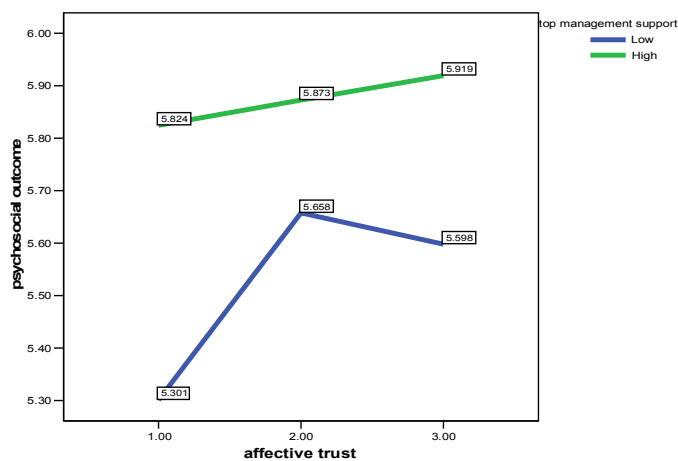


Figure 4: Interaction between Affective Trust and Psychosocial Outcomes

Figure 4 shows the moderating effect of top management support on affective trust with respect to psychosocial-outcomes. It is observed that in the environment of low top management support, the impact of affective trust on psychosocial-outcomes is strongly positive from low to moderate. Beyond moderate level of affective trust, the effect is slightly negative. In the environment of high top management support, affective trust has a positive impact on psychosocial-outcomes. Hypothesis 8.2d postulated a positive impact of affective trust on psychosocial-outcomes in the environment of high top management support. Thus, hypothesis 4c is supported.

CONCLUSION

Cross-functional team has emerged as one of the favorite choice among many organizations that emphasize on product innovation. The benefits of cross-functional integration are well known in the literature, that include significant improvements in NPD cycle time, product life cycle costs and many other aspects of new product performance. Therefore, of importance to organizations is to understand how a cross-functional team can realize its full potential. This research suggests that successful cross functional teams engaged in effective team processes such coordination, trust, and functional diversity. The results showed that product innovation performance is directly and positively influenced by coordination, affective trust and functional diversity. The benefits of functional diversity such as creative solutions to problems and better quality products more quickly and at lower cost may not evident without strong support and recognition from top management. At the same time, this research identifies that top management support acts as an independent variable to psychosocial-outcomes i.e. quasi moderator not to task-outcomes.

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