

## **Linking Psychological Empowerment to Innovation Capability: Investigating the Moderating Effect of Supervisory Trust**

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### **Abstract**

*The purpose of this study is to explore the effects of psychological empowerment and trust in supervisor on employees' innovation capability. Blue collar employees from various manufacturing organizations performing in Turkey are selected as the main target of this study. Data was collected via a structured questionnaire. A total of 518 questionnaires were analyzed. The results indicate that all three of the four dimensions of psychological empowerment, namely meaning, competence and impact, and trust in supervisor are strongly and positively related to innovation capability. Furthermore, analysis has also revealed that trust in supervisor moderates the relationships between two psychological empowerment dimensions, which are meaning and impact, and innovation capability. Some practical implications are also discussed.*

**Keywords:** Supervisory trust, psychological empowerment, innovation capability.

### **1. Introduction**

In the last decades, innovation has captured a significant attention of the international business environment, as scholars, policy makers and investors believe in its crucial role for economic prosperity. Innovative companies have become the building-blocks of strong economies in different regions in the world (Ujjual, 2008). Companies that have innovation capability are among the organizations, which are assumed as the key sources of innovative ideas, products, and processes that are essential to obtain and maintain economic and especially technologic competitiveness (Kodama, 1991).

Internet-enabled information and communication technologies have challenged existing business models in almost all sectors and introduced rapid change in every aspect of the business environment. In this turbulent environment, all organizations are inevitably facing with demands for both radical and incremental change. Moreover, globalization and increasing competition have reinforced in organizations the need for differentiation, encouragement for experimentation and constantly learning about new practices and technologies. In order to be able to cope with this continuous change, an organizational system including organizations' strategies, structures, processes and communication practices must be designed so as to encourage innovation and change (Burgelman et al., 2004; Dasgupta & Gupta, 2009). Thus, the innovation capability is considered to represent an important competitive advantage for organizations, given its importance for economic growth, wealth creation, business expansion and technological progress (Beckman & Barry, 2007; Dimov, 2007).

As global competition intensifies and product life cycle shortens, sustainable development cannot be achieved and maintained without innovation. Hence, companies are increasingly looking for ways to enhance their ability to innovate effectively. Successful innovation for companies is expected to be associated with good performance and related to subsequent growth. The salience of innovation capability for companies derives from the fact that in an increasingly hostile business environment characterized by rapid change, it represents a means of survival, and not just growth. Sustainable innovation, which leads to competitive advantage of companies by enhancing their capacity to keep up with, respond to, and initiate change on an ongoing basis, requires a systemic and effective management approach (Romijn & Albaladejo, 2002).

Innovation is considered as a value-added activity dealing mainly with the enhancement of existing works (e.g. product, process, service), particularly for higher business value.

Innovation capability embraces the formation and development of new ideas, new product development, new manufacturing processes and new services (Brown, 1992). Furthermore, Brown (1992) also indicated that the only way to create a competitive strength for an organization is the capability to innovate. In support of these propositions, many researchers have demonstrated that innovation capability significantly contributes to a company's performance in ways; such as innovation performance (Çavuşgil et al., 2003), product and process improvement (Wolff & Pett, 2006), innovation rate (Yam et al., 2004), and company's general / quality performance (Calantone et al., 2002).

Thus, the design and implementation of the programs to enhance competitive innovation capability of companies have received significant attention in the last decade (e.g., Romijn & Albaladejo, 2002; Çakar, 2006; Çakar & Ertürk, 2010). Prior research has attempted to explore what enhances innovation capability. Romijn and Albaladejo (2002) have proposed that internal sources, such as knowledge, professional background and skill of workforce are important internal factors to improve innovation capability. In their recent research on small and medium sized enterprises, Çakar and Ertürk (2010) have demonstrated the important role of empowerment and organizational culture on shaping the innovation capability. Some other research has demonstrated that Research and Development (R&D) expenditures (Wolff & Pett, 2006), the percentage of R&D personnel (Yam et al., 2004) would also contribute to innovation capability.

A large part of a company's knowledge base, which is vital for a company's innovation capability, is embodied in its employees (Hadjimanolis, 2000). Several researches have demonstrated that human resources are strategically important for companies to promote innovation capability and to enjoy sustainable competitive advantage (Hatch & Dyer, 2004; Hitt, 2001). Hence, it is recognized that competitive advantage can be obtained with high quality workforce that enables organizations to compete on the basis of innovation capability.

As people do not live and act in a vacuum, we cannot investigate innovation capability or innovativeness in isolation. Several scholars have called for taking context into account when studying work related variables and human behaviour; as context elements, such as organizational trust and managerial styles, can have substantial and powerful effects on employees' capabilities, attitudes and behaviors (Johns, 2006; Liden & Antonakis, 2009). How people create and use innovative capability in their job and organisation does not only depend on their individual (style) differences, but also on contextual factors, such as organizational trust and managerial styles, and also on the interaction of those contextual factors. In line with the idea of interactionism (i.e., behavior is a function of the interaction between the person and the environment), it is important to integrate the context in the research regarding innovation capability.

On the other hand, relationships between different human resource practices and innovation have been revealed in a few studies (e.g., Chandler et al., 2000; Ogbonna & Harris, 2000). However, only a very small body of research has taken into account attitudinal and managerial components together as employee-focused contextual variables that may foster or lessen innovation capability.

Therefore, this study is an attempt to attenuate the gap in the literature considering the different associations between perceptions of empowerment, organizational trust and innovation capability. Main purpose of this research is to determine how innovation capability would be enhanced by empowerment and organizational trust; and by the interactions of those components in high-tech companies. More specifically, this study examines the relationship between psychological empowerment and innovation capability, as well as the moderating effects of trust in organization and trust in supervisor on that relationship.

This study contributes to literature in several aspects. First, unlike most research, which examines innovativeness as an independent variable (e.g., Çavuşgil et al., 2003; Wolff & Pett, 2006; Yam et al., 2004; Calantone et al., 2002), this study specifies this concept as a dependent variable. Such an approach elevates current work as it responds to the need of research examining factors that influence innovation capability (Sethi, Smith & Park, 2001). Second, instead of investigating the effects of empowerment and organizational trust on innovation capability separately, this study focuses on a rather neglected aspect of the innovation capability by examining the interactions and combined influence of attitudinal and managerial components on innovation capability. Third, this study addresses calls for research on the integration of psychological empowerment with other variables, which includes attitudinal contextual variables such as trust, in the prediction of innovation capability (Çakar & Ertürk, 2010).

As a conclusion, despite the widely acknowledged importance of innovation in organizations, present study extends the past research by taking into account the contextual variables to increase current understanding and awareness of innovation capability.

## **2. Theoretical Background and Model Development**

### **2.1. Innovation Capability**

Innovation has been defined in several different ways in the literature. It is not only defined as the conceptualization of a new or significantly improved product or service, but also as the successful introduction of new methods, techniques, practices, or new or altered products and services. Innovation can also be considered as a process in which employees' knowledge and valuable ideas are transformed into new forms of added value for the organization and its stakeholders (Dasgupta & Gupta, 2009).

Thus, a company's innovation capability also involves its ability to mobilize and disseminate the knowledge embodied in its employees (Kogut & Zander, 1992), and furthermore combine it to learning that leads into creating new product and/or process innovation. Innovation capability can be considered as a way of thinking and behaving that facilitates creating and developing values and attitudes within a company, which may in turn encourage new ideas and changes, initiate their acceptance and increase support, even though such changes may mean a conflict with conventional and traditional behavior.

Innovation capability is one of the most important dynamics that enables companies to achieve a high level of competitiveness both in national and international business environment. Considering that innovation capability is one of the crucial features of most industries today, how to promote and sustain the innovation capability should be the key focus area of the managers. So, by stipulating innovation capability as a dependent variable, this study intends to show how to enhance innovation capability by way of organizational culture and empowerment.

### **2.2. Psychological Empowerment**

The concept of empowerment has gained increased popularity in the management field over the last decade (Wall, Wood & Leach, 2004; Spreitzer, 1995; Menon, 2001). Empowerment focused on those management practices designed to "empower" employees, such as the delegation of decision making and the provision of increased access to information and resources for individuals at lower levels of the organization. Through empowerment, organizations allow employees to assume several roles and responsibilities and thus exert a greater influence at work while enjoying increased autonomy (Pare & Tremblay, 2007). Task involvement through empowerment increases a greater sense of support and intrinsic motivation and provides positive work attitudes.

Psychological empowerment, on the other hand, was described as based in four cognitions that affected an employee's intrinsic motivation, namely meaning, competence, self-determination and impact (Thomas & Velthouse, 1990). Spreitzer (1995) built upon Thomas and Velthouse's (1990) model and validated a measure of psychological empowerment. Meaning represents a fit between a work goal or purpose and a person's own ideals, values and beliefs. Competence can be defined as a person's belief in his own capacity to perform activities with skill. Self-determination reflects autonomy over the initiation and continuation of work behavior and processes; making decisions about work methods, pace, and effort are examples. Impact refers to the degree to which a person can influence strategic, administrative, or operating outcomes at work (Spreitzer, 1995).

Researchers, for years, have sought to identify management styles appropriate for creating a supportive organizational environment for innovation. Some authors suggest that supportive, participative, and collaborative management styles are effective in encouraging innovation (Schin & McClomb, 1998; Çakar, 2006; Çakar & Ertürk, 2010), and some others identify transformational management style as the ideal style for promoting innovation (Howell & Higgins, 1990). In their study Jung, Chow and Wu (2003) also revealed that empowerment was positively related to support for innovation, whereas they found negative relationship between empowerment and organizational innovation. They explain this finding with the effects of contextual variables.

Psychological empowerment should make people feel they possess a certain degree of autonomy, feel less constrained by rule-bound aspects and self-effective in enacting their work; and in combination of those features enable people to be innovative (Amabile & Grykiewicz, 1989; Spreitzer, 1995). In a research conducted by Ford and Randolph (1992), it was yielded that successful application of empowerment was very important for new product performance and innovation.

Lawler (1990) also suggested that better participative management that result in psychological empowerment would lead to higher innovation, better performance and productivity. Moreover, Brunetto and Farr-Wharton (2007) also suggested that important outcomes of psychological empowerment, such as mutual trust and increased collaboration are important factors for innovation in organizations. Also, in their recent research, Çakar and Ertürk (2010) have also demonstrated that there is a strong positive association between empowerment and innovation capability for both small and medium sized enterprises.

Employees with high psychological empowerment usually take a more proactive approach toward shaping and influencing their work environment (Spreitzer et al., 1997). As such, empowerment is expected be positively related to organizational innovation. Having a sense of control over what to do and how to do one's work would enhance individuals' capacity for innovative behavior. Supporting this idea, in a research conducted in Australia, Knight-Turvey (2006) found that empowerment and innovation were strongly linked. Furthermore, recent research has found that participation in decision-making processes and sharing information throughout the organization strengthened the innovation capability and innovation culture in an organization (Ogbonna & Harris, 2000). Therefore, we hypothesize;

Hypothesis 1: Psychological empowerment will be positively related to innovation capability.

### **2.3. Moderating Role of Trust in Supervisor**

In the literature, trust has been acknowledged as a critical variable that influences organizational effectiveness, performance and efficiency (e.g., Sako, 1998). Nyhan and Marlowe (1997) defined trust as the expectation of an individual that the behavior of another person or a group would be altruistic and personally beneficial. Trust is also defined as, "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party." (Mayer et al., 1995: 712).

Particularly, trust in supervisor is a measure of an employee's evaluation of his/her supervisor (Moorman, et al., 1998). From that perspective, trust in supervisor is a measure of employee's own perception and refers to the belief that ultimately the supervisor will act for the benefit of employees. Trust in supervisor is also a feeling of confidence and support in an employee that his/her supervisor will be frank and will follow through on commitments (Nyhan & Marlowe, 1997). If employees have trust in their supervisors, employees will have a great sense of belonging, and a feeling that the job is critical to organization's success. Furthermore, employees would have less anxiety and less fear of making mistakes. Thus, they feel more comfortable and become more creative and innovative.

Inventiveness is more likely to occur in high-trust surroundings, because lack of trust reduces creative activity. When there is no mutual trust between the supervisors and the subordinates, supervisors tend to have control systems based more on rules and procedures, which inhibit creativity and inventiveness (Herbig & Dunphy, 1998). Organizations having relationships characterized by low trust generally show such features as highly formalized management and constraining of innovations by rules (Çakar & Ertürk, 2010). In an environment with high mutual trust, supervisors tend to be relatively tolerant of behavior and opinions different from their own, and give more room to employees for creative activities that encourage innovation. In low trust organizational environment, high uncertainty avoidance culture would be the dominant culture, in which risk-averse attitudes imply not taking avoidable risks and only adopts innovations if its effectiveness and value have already been proven (Waarts & van Everdingen, 2005).

Scholars have recently utilized several different dimensions to better understand the dynamics of a variety of relationships including a variety of trust processes and it has been proposed that only creating an atmosphere of interpersonal trust in the organization can enhance organization's efficiency and innovation performance. (Shokley-Zalabak et al., 2000). Sitkin and Pablo (1992) also suggested that a non-threatening environment with high interpersonal trust allows decision makers and employees to pursue more innovative strategies. Based on the aforementioned findings, we hypothesize:

Hypothesis 2: Trust in supervisor will be positively related to innovation capability.

Trust is an essential element in positive human relationships. It creates a collaborative environment and gives people a feeling of security and attachment (Mishra & Morrissey, 1990).

Trust is the key facilitator of integration between the managerial practices, such as empowerment, and the employees' performance, efficiency, capability and attachment to the organization. Thus, high trusting relationships among the employees and the supervisors form a strong foundation as moderator for the achievement of managerial practices, such as empowerment. Trust is considered the fundamental social glue towards establishing long-term effectiveness of managerial practices and, in the absence of trust, no organizational attempt to foster employees' performance and innovation capability will be effective or successful. Supporting the moderating role of trust in organizations, recent research proposes trust as a moderator on different associations among a variety of organizational variables, such as between empowerment and organizational identification (Ertürk, 2010), individual–job congruence and job performance (Goris et al., 2003), motivation and performance (Dirks, 1999), and conflict and decision outcomes (Parayitam & Dooley, 2007).

Trust in the supervisor, if it exists, would improve the willingness of an employee to accept greater responsibilities inherent in an empowerment effort as well as improve the level of capability to innovate and be creative. Covey (1998) proclaims that the only way management benefits from empowerment is through a high-trust culture. Psychological empowerment is linked to organizational effectiveness when employees operate in a trust-based environment, resulting in increased ownership. Furthermore, examining many firms, Andrews (1994) claims that the lack of trust within an organization is a key element of failure, forming a hidden and invisible barrier preventing personnel empowerment efforts from resulting in success. Andrews also states that trust between employees and managers creates a distinctive atmosphere for empowerment practices to reach the intended goals. Thomas and Velthouse (1990) also suggest that results and effectiveness of empowerment not only depend on individuals' assessments of their work tasks, but also depend on contextual factors such as employees' interactions with and trust in their superiors, peers, and subordinates.

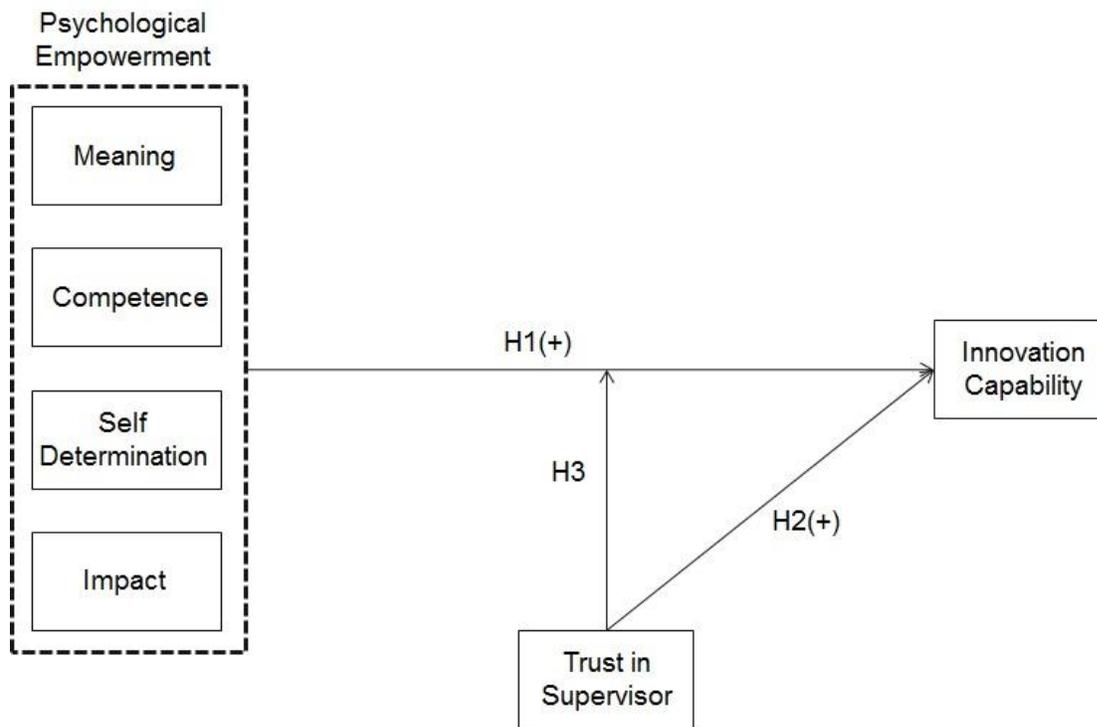
An employee's perception that the supervisor cannot be trusted will reduce the employee's willingness to contribute to the organization. Successful results of psychological empowerment require an enhanced level of trust between employee and the supervisor as well as employee and top management. Trust is a basis for empowerment, because trust is necessary for employees to build greater capability and potential. Employees want to trust that they can take risks, have initiative, make mistakes, and determine how best to do their jobs without fear. In order to enhance the positive results of psychological empowerment, employees must trust that the organization really wants to empower them, and the employee must be willing to acknowledge and exploit the empowerment opportunities they are given.

Given this scheme, we suggest that the relationship between the psychological empowerment and innovation capability will be stronger for employees who have stronger trust in their supervisors. Thus, we predict that higher level of employee trust in the supervisor is likely to strengthen the effects of psychological empowerment on innovation capability.

Hypothesis 3: Trust in supervisor will moderate the relationship between psychological empowerment and innovation capability in such a way that high levels of trust in supervisor will strengthen the relationship between psychological empowerment and innovation capability.

Proposed research model is presented in Figure 1.

**Figure 1. Proposed Research Model.**



**3. Method**

**3.1. Sample and Procedure**

In order to test the proposed hypotheses empirically, the data was collected from blue-collar employees, employed in eight manufacturing companies performing in Istanbul and Kocaeli. Data was acquired via a structured questionnaire. All measurements included in the questionnaire were originally developed in English and translated into Turkish via the back-translation technique (see Brislin, 1980). Prior to administering the questionnaire, we conducted a pilot study, which revealed that scales were easily understood by blue-collar employees. Questionnaires were sent to each company. A cover letter was used to explain the purpose of the survey and note that participation was voluntary as all participants were assured of confidentiality. Moreover, respondents were asked to return the completed questionnaires directly to the research assistant to ensure their anonymity.

Of the 1200 questionnaires sent, 536 completed questionnaires were returned with a response rate of 45%. After deleting records with missing cases, 518 questionnaires remained and constituted the sample for this study. Some demographic data was collected, such as age, gender and tenure in the company. No personal data was collected except demographics. The average respondent was 36 years old (standard deviation of 8.9 years) and ages ranged from 23 to 59 years old. The sample was 79.4% male and 68.6% of the respondents was married. Survey respondents had worked for their companies for an average of 10.5 years (standard deviation of 7.15 years) and a range from 1 year to 29 years.

**3.2. Measures**

All items were measured on a five point Likert-type scale where 1 indicates “strongly disagree” and 5 indicates “strongly agree”. In this study, we measured empowerment with a 12-item scale developed and tested by Spreitzer (1995). In this scale, each of four empowerment dimensions, namely meaning, competence, self-determination and impact, was tapped by 3 items. Sample items for psychological empowerment scale included; “I am confident about my ability to do my job” (competence), “The work I do is very important to me” (meaning), “I can decide on my own how to go about doing my work” (self-determination), and “My impact on what happens in my department is large” (impact). Items were measured on a five point Likert-type scale where 1 indicates “strongly disagree” and 5 indicates “strongly agree”.

An 8-item scale, adapted from the scale developed and tested by Nyhan and Marlowe (1997), was used to measure trust in supervisor. Sample items for trust in supervisor scale included “I trust in my immediate supervisor that he/she follows through what he/she says” and “I have confidence that my immediate supervisor knows what to do”. Items were measured on a five point scale where 1 indicates “strongly disagree” and 5 indicates “strongly agree”.

To measure firms’ innovation capability, two items (R&D expenditures and firms’ new product development capacity) adapted from Denison (2000) are used to assess the average level of firm innovation capability within the preceding three years, using five-point scales anchored at much worse than competition (=1) and much better than competition (=5).

### 3.3 Factor Analysis and Correlations

Exploratory factor analysis for psychological empowerment revealed a four-factor structure allowing the retention of all twelve of its original items. Consistent with our expectations, all items loaded with high-standardized coefficients onto their respective factors and with substantially lower-standardized coefficients in other factors. Cronbach’s alpha for the dimensions of empowerment, which are meaning, competence, self-determination and impact, were 0.83, 0.86, 0.84 and 0.87 respectively.

Eight items comprising trust in supervisor scale produced a clean one-factor solution with the alpha coefficient of 0.89. After the exploratory factor analysis, two-item innovation capability scale also revealed a clean one-factor solution as expected. Factor loadings of the scale items vary from 0.592 to 0.921. The scales met the generally accepted reliability of 0.70 (Nunnally, 1978). Means, standard deviations and correlations among the variables are displayed in Table 1.

**Table 1. Descriptive Statistics, Reliabilities and Correlations.**

	Means	St. Dev.	ME	CO	SD	IM	TIS	IC
ME	4.02	0.18	0.83a					
CO	3.93	0.16	0.71**	0.86a				
SD	3.58	0.15	0.42**	0.49**	0.84a			
IM	2.83	0.05	0.11*	0.14*	0.29**	0.87a		
TIS	3.32	0.07	0.35**	0.28**	0.23**	0.18**	0.89a	
IC	3.53	0.12	0.36**	0.34**	0.25**	0.12**	0.34**	-

\*\* Correlation is significant at the 0.01 level.  
\* Correlation is significant at the 0.05 level.  
a Cronbach’s Alpha Reliabilities  
ME: Meaning, CO: Competence  
SD: Self Determination IM: Impact  
TIS: Trust in Supervisor IC: Innovation Capability

### 3.4. Hypotheses Testing and Findings

The hypotheses were tested using hierarchical moderated regression analysis (Cohen & Cohen, 1983). Since multiple regression analysis engaged interactions, the main effect terms and the product terms could be highly correlated, thus raising the issue of multicollinearity. This situation could make the regression coefficients unstable and hard to interpret (Cohen & Cohen, 1983). So, as suggested by Aiken and West (1991), we first centred our data and used centred variables in analysis, because interactional analysis using centring procedure reveals coefficients that are relatively unaffected by multicollinearity. We also plotted the significant interactions as graphs to facilitate the interpretation of moderator effects.

In order to investigate the hypotheses, we performed a hierarchical regression analysis. We used moderated regression (Cohen & Cohen, 1983), in which innovation capability was the dependent variable. The centred independent variables were introduced into the equation in three successive steps (Aiken & West, 1991; Cohen & Cohen, 1983). In Step 1, meaning, competence, self determination and impact were introduced to the equation, and in Step 2 trust in supervisor (the moderator variable) was introduced. Next, the two-way interactions (meaning x moderator, competence x moderator, self determination x moderator and impact x moderator) with trust in supervisor were entered into the equation one at a time as Step 3.

The moderation hypothesis would be supported if the unstandardized coefficient of a two-way interaction is different from zero and statistically significant. This would indicate that there is a significant interaction effect between relevant independent variables on the dependent variable. Results of the regression analysis are presented in Table 2.

**Table 2. The Effects of Empowerment and Trust in Supervisor on Innovation Capability**

Independent Variables	Dependent Variable (Innovation Capability)		F	R <sup>2</sup>	Adj.R <sup>2</sup>
	$\beta$	T			
<i>Step 1</i>			16.87**	0.11	0.10
ME	0.17	2.88**			
CO	0.10	1.83*			
SD	0.05	0.95			
IM	0.25	5.96**			
<i>Step 2</i>			24.62**	0.18	0.17
TIS	0.28	7.05**			
<i>Step 3</i>			25.31**	0.20	0.18
TIS X ME	0.23	3.02**			
TIS X CO	0.08	1.36			
TIS X SD	0.01	0.15			
TIS X IM	0.18	2.31**			

\*\* p < 0.01  
\* p < 0.05  
ME: Meaning, CO: Competence  
SD: Self Determination IM: Impact  
TIS: Trust in Supervisor IC: Innovation Capability

Regression analysis revealed that three of the four dimensions of psychological empowerment, namely meaning ( $\beta=0.17$ ,  $p<0.01$ ), competence ( $\beta=0.10$ ,  $p<0.05$ ) and impact ( $\beta=0.25$ ,  $p<0.01$ ) were significantly and positively related to innovation capability. Nevertheless, hypothesized relationship between self determination and innovation capability was not found to be statistically significant ( $\beta=0.05$ ,  $p>0.05$ ). Thus, our first hypothesis that suggested psychological empowerment dimensions would be positively related to innovation capability was partially supported.

Furthermore, in Step 2, trust in supervisor was also found to be significantly and positively associated with innovation capability ( $\beta=0.28$ ,  $p<0.01$ ). Proposed model was also found to be statistically significant ( $F=24.62$ ,  $p<0.01$ ). Therefore, second hypothesis that suggested trust in supervisor would be positively related to innovation capability, was supported.

In Step 3, in accordance with the moderation analysis, interactions between trust in supervisor and psychological empowerment were found to be different from zero and statistically significant for only two of empowerment dimensions, which were meaning ( $\beta=0.23$ ,  $p<0.01$ ) and impact ( $\beta=0.18$ ,  $p<0.01$ ). This finding partially supported the third hypothesis that suggested trust in supervisor would moderate the relationship between empowerment and innovation capability. Interaction between trust in supervisor and meaning is displayed in Figure 2 and other interaction between trust in supervisor and impact is presented in Figure 3. Finding of the moderation analysis has shown that that meaning and impact dimensions affect innovation capability more strongly and positively among those perceive high trust in their supervisor.

Figure 2. Interaction of Trust in Supervisor and Meaning.

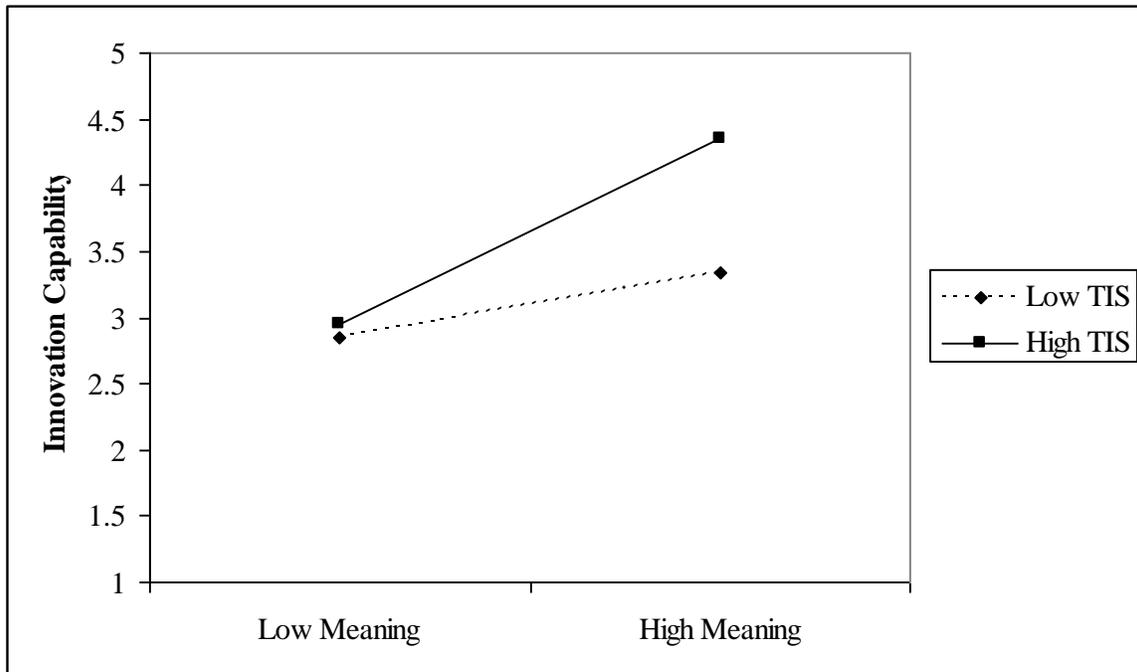
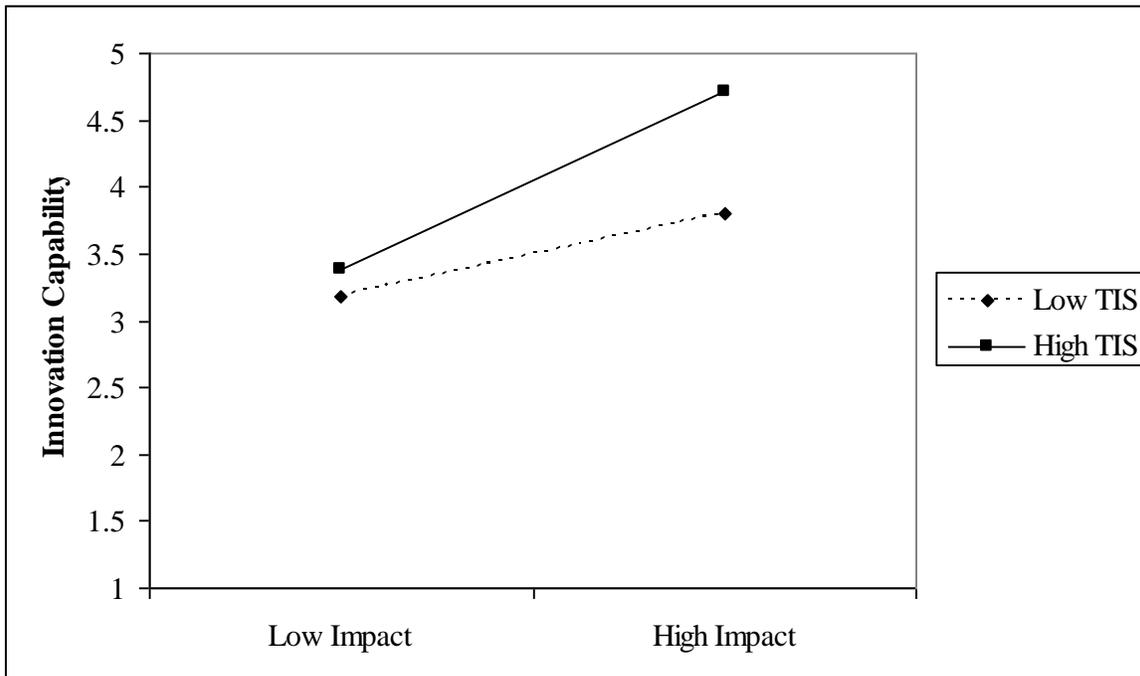


Figure 3. Interaction of Trust in Supervisor and Impact.



4. Discussion and Conclusion

In this research, we focused on the role of psychological empowerment and supervisory trust in fostering innovation capability. Consistent with our expectations and previous research (e.g., Knight-Turvey, 2006; Spreitzer et al., 1997), three of the four psychological empowerment components are found to be significantly and positively related to innovation capability. Furthermore, it is also yielded that trust in supervisor is strongly and positively associated with innovation capability, which has confirmed previous research that considered supervisory trust as an important component in strengthening innovation capability and creative behavior (e.g., Shockley-Zalabak et al., 2000; Sitkin & Pablo, 1992).

Another significant contribution of this study is to provide empirical evidence that positive relationship between psychological empowerment and innovation capability is partially moderated by trust in supervisor. Trust in supervisor moderates the relationship between two dimensions of psychological empowerment, namely meaning and impact, and innovation capability. On the other hand, trust in supervisor does not moderate the effects of competence and self-determination. That is, impact and meaning influence employees' innovation capability, but particularly so when their trust in supervisor is high.

Meaning represents a fit between an employee's own values / beliefs and the organization's values, goals and purposes. Impact stands for the extent to which an employee can influence strategic, administrative, or operating outcomes of the organization. According to the findings of this study, when employees' trust in supervisor is high, employees believe that the supervisor, and accordingly the organization, will act for the benefit of employees, and that their supervisors and the organization will do the right and sound things for employees. So, that gives employees a feeling of confidence that his/her supervisor will be honest and will follow through on commitments. Thus in that case, employees' belief on the congruence of their own values and the organization's values, would become stronger. Similarly, employees might think that they could influence organization's important processes, strategies and results.

Previous research has revealed that the innovation capability is a crucial competitive advantage for organizations, being very important for economic growth, wealth creation, business expansion and technological progress (Beckman & Barry, 2007; Dimov, 2007). Organizations have been increasingly searching new ways to enhance their ability to innovate effectively. Successful innovation for organizations is usually associated with good performance and related to subsequent growth. In an increasingly hostile and continuously changing business environment, innovation capability represents a means of survival, and not just growth. Thus, for the long-term sustainable success of the organization's strategies, managers should try to increase employees' innovation capability.

In order to achieve this, managers should focus on employee empowerment and put more effort on enhancing and maintaining a high level of supervisory trust. Therefore, managers should be careful about empowerment processes. By creating an empowered work environment throughout the organization, managers can enhance their ability to increase employees creative behaviors and capability to innovate, which is very essential for organization's sustainable achievement. Nevertheless in this research, it is also suggested that supervisory trust would moderate the relationship between psychological empowerment and organizational identification. Along with this finding, psychological components of empowerment process could be more strongly perceived by employees who feel high trust in their supervisor. Thus, alternative policies should be implemented for those, who were low in supervisory trust, so that the psychological empowerment could be more effectual and operational on innovation capability. Furthermore, given the moderating effect of trust in supervisor, when management achieves to increase employees' trust, psychological empowerment would be more effective for those employees.

The findings of this study suggest several implications from theoretical and practical perspectives. The differential influences of the variables examined point out a need for to conceptualize all four dimensions of psychological empowerment and to employ supervisory trust foci. The findings also reinforce the notion that it is crucial for organizations to discover how to manage trust effectively. If organizations desire to have more innovative employees, and thus high performing organizations, they should formulate the human resources practices that promote employee empowerment and create and trusting environment.

#### **4.1. Limitations and Future Directions**

The findings and the contribution of the current study must be evaluated taking into account the potential limitations of the research design. First, despite the encouraging support for the construct validity of the organizational culture measures, the relatively high correlation between some scales may lead us to speculate that the items might have included a positivity or desirability bias. However, the results of the multi-collinearity tests, such as variance inflation factor (VIF) and the condition index (CI) (Kleinbaum et al., 1998), suggested that the organizational culture scales had distinct relations with other measures in the study as predicted by the theory, and thus, should be considered sufficiently independent.

Second, the data were cross-sectional, making it impossible to imply causality. All of the variables were measured at the same time and from the same source, so concern over the effects of common method variance was warranted. To minimize this potential problem, the scales in the actual survey were ordered so that the dependent variable did not precede all the independent ones (Podsakoff et al., 2003). In addition, Harman's one factor test, confirmatory factor analysis and further post hoc statistical tests were conducted to test the presence of common method effect (Podsakoff et al., 2003). The results of the Harman's one-factor test and the single factor confirmatory factor analysis suggest that common method variance is not of great concern and thus is unlikely to confound the interpretation of results. Nevertheless, longitudinal designs, in which both predictor and criterion variables are measured over time, might be particularly useful extensions of the current study.

The findings, implications and conclusions of this study are bounded by the context of the research, but future research could involve the replication of this study in a number of different contexts. I believe that future research assessing similar data from different context, will provide informative validation for the results of this study. Additionally investigating other firm-specific effects and managerial implications, such as justice perceptions, rewards, leadership on innovation capability may guide academicians and practitioners to better understand the determinants of innovativeness.

### **Author Biography**

Dr. Alper Ertürk is currently a Research Fellow at Vlerick Leuven Gent Management School, Belgium. He obtained his Ph.D. in Organizational Behavior from Gebze Institute of Technology, Turkey. His current research interests include leadership, organizational trust, cognitive styles and perceptions of workplace fairness.

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