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EMOTIONAL AND LEARNING CAPABILITY AND THEIR IMPACT ON TEAM PERFORMANCE AND PRODUCT INNOVATIVENESS IN R&D TEAMS

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ABSTRACT

Purpose - The main purpose of this study is to reveal the certain effects of emotional intelligence together with the learning capability, in product innovativeness which is the result of R&D process and known as IQ-dominant field, since innovation and new product development are extremely critical for economies to increase the amount of value-added goods and services. We propose that emotional capability of an organization influences product innovativeness via team performance, which is affected by learning capability.

Methodology - This study used field survey data from a sample of 813 participants from 187 R&D teams in 160 firms. The collected data from questionnaires were analyzed with SPSS and AMOS software programs.

Findings- Research findings indicated that firm learning capability mediated the relationship between firm emotional capability and team performance. In addition, findings also showed that team performance, which is influenced by emotional capability and learning capability, has an impact on firm product innovativeness.

Conclusion- When considering the business management requirements of the twenty-first century, it is no longer enough to have employees with high level intelligence quotient (IQ) or merely improved technical and reasoning competence for a competent and productive work with customer satisfaction. In the meantime, it is necessary to have employees who are aware of their feelings and also who can control them and understand the other people's feelings, namely employees who have emotionally and socially high capacity.

Keywords: Emotional capability, learning capability, team performance, product innovativeness, R&D.

JEL Codes: O30, M10, D83

1. INTRODUCTION

R&D activities are the main source of business and technological innovation. Today, the firms particularly that embracing new technologies attach great importance to R&D in order to survive in a harsh environment. The importance attached to R&D by countries and firms is a strong indicator of development and competitiveness level. The OECD's Frascati Manual describes R&D as "creative work undertaken on a systematic basis to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications." In line with this definition, it is considered that R&D team members should have a specific set of features such as analytical thinking, problem-solving skills, creativity, high motivation, patience, passion for creating new things, different perspectives, continuous self-development, monitoring relevant literature, competitors and new technologies. On the other hand, R&D team members must be able to assess and aware of lack of aforementioned requirements, constantly and develop themselves, accordingly. When some of these features are carefully investigated, it is realized that some terms are in line with the concept of emotional intelligence in respect of the dimensions of it as well. Emotional intelligence was described as "understanding one's own feelings, empathy for the feelings of others and the regulation of emotion in a way that enhances living"

(Goleman, 1995). The concept has begun to discuss in business world, more frequently with Goleman's article "What makes a leader?" in Harvard Business Review in 2004. The mentioned article proposes that although some degree of analytical and technical skill is a minimum requirement for success, emotional intelligence could be the key feature that distinguishes superior performers from those who are only adequate (Goleman, 2004).

In the organizations with highly emotional intelligent employees, it is observed that the relationships and communication become much more efficient, the performance is improved thanks to team spirit, the workplace turns out to be happier and more peaceful, and as a result the organizations gain profit. The organizations using emotional intelligence skills offer a set of core abilities that provide organizational success: developing leaders, personal productivity, motivation, customer satisfaction, creativity, innovation and time management (Druskat et al., 2006). Since innovation and new product development are extremely critical for both organizations and economies to increase the amount of value-added goods and services, one of the major aim of this study is to reveal the certain effects of emotional intelligence together with the learning capability, in product innovativeness which is the result of R&D process and known as IQ-dominant field. Although many research studies have addressed the impact of emotional capability of an organization on firm performance, product innovativeness and job performance in diverse industries so far, team performance has not been considered as one of the key variable of possible outcomes in various proposed models. To address this deficiency, this study seeks to understand how emotional capability of an organization influences product innovativeness via team performance, which is affected by learning capability.

2. LITERATURE REVIEW

2.1. Emotional and Learning Capability of an Organization

The concept of organizational capabilities has been evolved within the resource-based view of the firm since 1980's (Wernerfelt, 1984; Barney, 1991; Hunt and Morgan, 1996). Organizational capabilities could be defined as an organization's capacity to use its tangible or intangible assets to achieve a specific task or an activity to improve the performance (Ulrich and Lake, 1991). The organizational capability approach has been explained with core competencies of an organization framework since it was introduced to the literature for last decade. Core competencies are considered as one of the main elements of innovativeness of the organization. According to Prahalad and Hamel (1990), the core competencies of company are the integration of various resources and skills that differentiate a firm in competitive environment. Core competencies are likely to broaden the scope of innovation in the organization. Exploiting existing core competencies lead to create new products and new ways of doing things. Today, it is widely accepted that organizational performance is highly related to the intangible assets of organizations (Schiller, 2012).

Emotional intelligence has attracted considerable attention since the influential book, "Emotional Intelligence; Why it can matter more than IQ" written by Daniel Goleman in 1995. However, the term was first coined by US psychologists Peter Salovey and John Mayer in 1990 and defined as the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Møller, 1999). When considering the business management requirements of the twenty-first century, it is no longer enough to have employees with high level intelligence quotient (IQ) or merely improved technical and reasoning competence for a competent and productive work with customer satisfaction. In the meantime, it is necessary to have employees who are aware of their feelings and also who can control them and understand the other people's feelings, namely employees who have emotionally and socially high capacity.

At the organizational level, emotional capability is defined as the ability of an organization to acknowledge, recognize, monitor, discriminate and attend to its members' emotions. It is manifested in the organizations' norms and routines related to feeling and emotions and reflects organizational behaviors that express or evoke certain specific emotional states. These behaviors are called emotional dynamics. These dynamics are helpful for working on the emotional capability of an organization (Huy, 1999). Emotional capability view has been found an attractive concept since it gives alternative and complementary explanation in terms of determining the success factors in organizational level. Emotional dynamics contributing to a company's overall efficiency include the dynamics of encouragement, displaying freedom, playfulness, empathy/experiencing, identification and reconciliation (Huy, 1999). In this study, the questions which were used as the parameters for measuring emotional intelligence were taken from the article of Akgun et. al (2007). In that article, there were survey questions to measure four emotional dynamics since two constructs from emotional capability overlap of the constructs measuring learning capability. So, for this kind of study, dynamics of displaying freedom, dynamics of identification, dynamics of empathy/experiencing and dynamics of reconciliation have been researched.

The dynamics of displaying freedom is the organization's ability to facilitate the variety of different emotions that legitimately can be displayed (and felt) in the organization during a radical change process. The capabilities of a company to manage the individual or collective feelings of their employees lead to the improvement of some features of the company, as follows: (1) producing various information and opinions between different disciplines; (2) taking lessons from the

experiences and using these lessons as time goes by; (3) finding their own solutions for improvement and development; (4) training their employees in order to benefit more from their talents; (5) collecting data on technology, information and market conditions and using this data in accordance with their own dynamics; (6) creating collective awareness about operations with a common vision (Akgun et al., 2009). The dynamics of identification refers to the collective behavior whereby organization members express their deep attachment to salient organization characteristics. These organization characteristics can be core values, beliefs, myths, leaders, or any other element that is meaningful to particular individuals or groups. Members in a community stay together because there are mutual benefits; among the most important of these are the emotional bonds that develop over time in accordance with shared organization characteristics. Identification aggregates personal feelings toward the organization and converts these feelings to the behaviors such as defense of the organization's name and mention about the reputation of the organization even outside work boundaries (Huy, 1999). At the organizational level, empathy and emotional experiencing is defined as the quality of an organization's efforts to identify the variety of emotions aroused during radical change, to accept and internalize them, and to act on a deep level of understanding. Demonstrating care and concern for one another can build a basis for trust and also leads to better work performance. Especially the empathy makes the cooperation and solidarity in the organization increase. It helps to understand opposite ideas and accept them. Thanks to the empathy between the individuals, the organization becomes more prospering. Also, it builds an environment for trust among employees and so helps them work with higher performances (Akgun et al., 2007).

Emotional reconciliation refers to bringing together two opposing views people support strongly. Genuine efforts expended toward achieving a new synthesis and understanding increase receptivity to proposals for change. Reconciling is explained as the conceptualization of change. The proposed change can be framed and accepted by the recipients as an addition or an expansion of existing values. In that case, accepting the change becomes easier. The more continuity exists between the past and the future, the less the change is perceived as radical (Huy, 1999). The dynamics of emotional reconciliation affects the learning capability of an organization. The groups and organizations are comprised of individuals with different feelings. When these individuals reconcile on their different views, then there can be more effective arguments among them. This leads to solving routine and complex problems; also a lot of new ideas appear. Thanks to these efforts, the decisions are made in a more qualified way. This is very vital and important for the performance of the organization (Akgun et al., 2007).

Learning capability of a firm has been one of the most mentioned concepts facilitating innovation and organizational performance in the literature since long time ago (Goh and Richards, 1997; Sinkula et al., 1997; Bapuji and Crossan, 2004; Alegre and Chiva, 2008). Learning capability is the organizational and managerial characteristics allow an organization to learn (Dibella et al.,1996; Goh and Richards, 1997). Information is an important source for the companies. Translating organizational learning into a capability refers to collecting and sharing data and being integrated. A learning organization can be defined as "having the capability to creating, collecting and transferring information and also to shape their behaviors in terms of this new knowledge (Apfelthaler et al., 2002).

Learning capability, which is a multidimensional concept, involves four elements; commitment to learning, shared vision, open-mindedness and intra-organizational knowledge sharing, as identified by (Jerez-Gomez et al.,2005). Commitment to learning expresses that to what extent an organization considers learning as important source. The more an organization values learning, the more likely it has a long term strategic advantage. Shared vision means creating a common ground for learning. This is an organization-wide acceptance that what and why to learn. Open-mindedness is an organization's tendency to criticize routines and accept new ways of doing. It covers an ability to unlearn and adapt rapidly changing conditions. Intra-organizational knowledge sharing is related to spread of learning within an organization. This dimension also includes storing and directing information in order to use it in future actions (Jerez-Gomez et al., 2005).

In the previous studies, it is also stated that the emotions could define the limits of learning (Vince, 2001) and innovation (Green, Amian Smith, 2004). In this regard, the emotional capacity of an organization is related to its ability to learn and this ability to learn is positively related to product creativity. As a result, the product creativity affects the success of the organization (Akgun et al., 2007).

H1: Emotional capability of an organization is positively associated with its learning capability.

2.2. Team Performance and Product Innovativeness

Innovativeness is defined organization's tendency to concentrate on and encourage new ideas, new way of doing things or new processes that may help to bring out new products, services or technological processes (Lumpkin and Dess, 1996). This study deals with specifically product innovativeness which means a newness of a product in terms of market presence at a certain period.

Organizational learning is mostly realized through the observation of the environment and the interaction with it. In terms of innovation, the uncertainty about customers' needs, the technological turbulence and the uncertainty about competition

are important environmental factors. As a result, an organization who wants to learn could improve its innovation capability in three ways. Firstly, they should be very determined about innovation and they should use the main technologies. This will help them to formulate a technological advance and to be capable of forming a market (Roger et al., 2002). In the second place, thanks to this advancement, organization may hardly lose the opportunities of increasing market needs. Because, it already has the capability of understanding customers' needs (Urban and Hauser, 1993). Thirdly, a learning organization has a higher innovation capability compared to its competitors. The characteristic of such an organization is to follow the movements of their rivals in the market very closely. They can understand the weaker and stronger specialties of their competitors and they can learn not only from their success but also their failure (Roger et al., 2002). Sinkula (1997) found a positive correlation between a learning organization and the outputs of an organization.

Team learning, which is explained by Peter Senge, is a crucial to form a learning organization. Team learning is the activities by the organization to use and configure the data for the advantage in competition. It includes gathering and sharing information about customers' needs, changes in the market and behaviors of the competitors; developing new technologies in order to produce alternative products in the fields of competitors. The learning affects the information collected, how they are interpreted, how they are assessed and shared (Roger et al., 2002). Innovation involves asserting new ideas, new processes, new products and services. Therefore, learning is closely linked to the organizational innovation.

The concept of a learning organization provides a new paradigm. The traditional views about an organization consider it as an automatic learning mechanism and as a place in which individuals gain new information and/or experiences. This shows that the successful organizations can learn. Consequently, if an employee quits the organization, the information belongs to him/her stays in the organization. As time goes by, the team members formulate new capabilities to change what can they do and how they can understand. Accordingly, the individuals in a team learn altogether (for example, the quality circles). The mechanisms integrated to the quality management provide an effective learning. The organization turns out to be a laboratory environment in which people of different levels try and test new practical applications and techniques consistently (Holt et al., 2000). The organizations who are adapted to quality management can realize their learning disciplines in a better way. These disciplines include personal management, intellectual models, mutual vision, team learning and systemic thinking. However, neither of them can be applied without cooperation between team members. Accordingly, the successful organizations give importance to the motivation and improvement of all their workers in all positions and make them feel as a part of the processes (Holt et al., 2000).

The concept of performance is defined as the amount of the product or services produced in a determined time in terms of the organizations (Lebas, 1995). Regarding the employee, performance is the individual "productivity" and "activity" for reaching a goal, namely the degree of realization of the goals and aims (Pugh, 1990). The concept of performance may be defined differently by various approaches. Performance is the degree of reaching out a goal in an organization by the individuals or institutions (Pugh, 1990). With its lexical meaning, "performance" refers to the degree of using the capacity. Performance is the output level of an activity. This level shows us the degree of realizing the objective or the duty (Schermerhorn et al., 1985). Campell defines the performance as the behaviors suitable for the objectives of the organization and according to Campell performance can be measured with the contributions of the employee to the organizational objectives (Suliman, 2001).

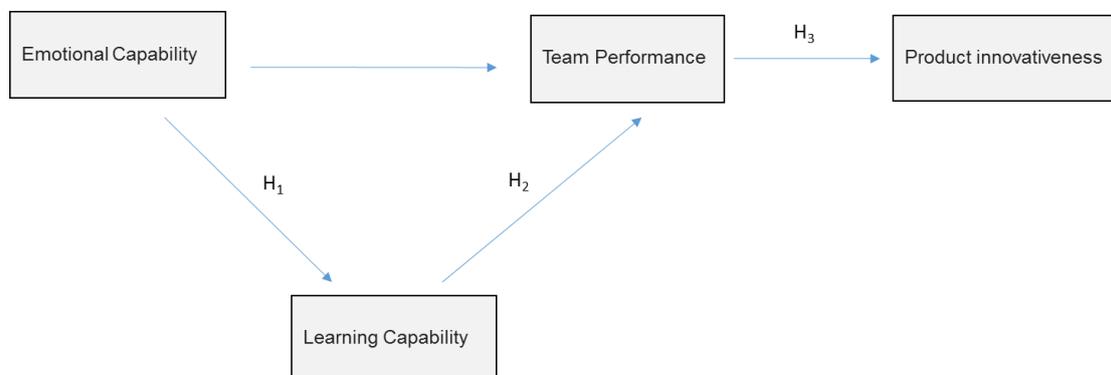
With this definition, it is possible to see that the degree of the performance is related to the personal features of the employee, their intellectual abilities, their wish to integrate with organizational objectives and their beliefs and values (Tutar and Altınöz, 2010). The common ground of different definitions for the employee performance is that the performance emerges in accordance with the relationship of individual expectations and organizational objective. Employee performance is the quantitative and qualitative measurement of the activities of an employee, a group or an organization. There should be some psychological conditions in the organizational environment so that the employees can reach their quantitative and qualitative objectives. To achieve this, the wage and career development of the employees should be provided. Moreover, it is important to provide a suitable organizational environment for the employee to improve himself/herself and be a part of the decisions (Gupta, 1982).

In the background of the emotional capability theory, Huy (1999) emphasizes that emotional dynamics allow organization to realize change and react to a paradigm shift in a timely manner. Emotional capability like other capabilities can be established and matured within an organization over time. Since emotional capability has been associated with the radical change at the organizational level, emotional capability of an organization is closely related to exploit radical change which is the desired condition for product innovativeness of an organization. Radical change is defined as discontinuous change in the basic philosophy of the shared identity of members of the organization and can be effected by human beings in organization.

H2: Emotional capability is positively associated with team performance via learning capability.

H3: Team performance, which is influenced by emotional and learning capability, is positively associated with product innovativeness.

Figure 1: Conceptual Model



3. DATA AND METHODOLOGY

The research plan is formed as: establishing research model, researching for the measurement in the literature, constructing the best fitting measurement compound from the alternatives, reaching the participants and informing them for the survey, gathering the data and analyzing to test the hypotheses with SPSS and AMOS package programs.

3.1. Measurement Instrument and Sample

In order to measure research variables a questionnaire was prepared depending on the scales used in previous studies in the literature. In this study, we used 17 items (3 items for display freedom, 4 items for identification, 5 items for experiencing and 5 items for reconciliation) emotional capability scale used by Akgun et al (2007). Learning capability scale adapted from Chen (2005). This scale includes 9 items. Product innovativeness 8 items scale adapted from Chiang et al. (2014) and Baker and Sinkula (2005). Team performance scale includes 6 items adapted from Kirkman and Rosen (1999). For each construct, items ranging (Likert-style) from 1 (strongly disagree) to 5 (strongly agree) with 3 as a middle point.

A survey was adopted to gather data via a self-administered questionnaire from manufacturing firms having R&D teams in Turkey/Marmara region. To avoid industry bias, data was collected from several industries. Discarding 32 partially completed questionnaires, the final sample consisted of 813 questionnaires filled by 187 R&D teams in 160 firms. Information on the sample is provided in Table 1. The participating companies are mostly IT and Electronic firms and they have commonly above 1000 employees. Additionally, the age of sample firms is between 5 and 10 years by a majority.

Table 1. Research Sample

Firm Size	Below 50	46	31,1%	Industry	Automotive	14	8,8%
	50-500	40	27,0%		Chemistry and Healty	15	9,4%
	Above 1000	62	41,9%		Electronic	22	13,8%
Firm Age	Below 10	38	23,8%	Food	7	3,8%	Total
	10-50	83	51,9%	IT	65	40,9%	
	Above 50	39	24,4%	Others	37	23,3%	

4. FINDINGS

4.1. Validity and Reliability of the Measurements

In order to understand the underlying dimensions of the measured constructs used in the research, exploratory factor analysis was performed by using principal component analyses extraction method and promax rotation. The reason of choosing promax rotation is that it is recommended to use this method in social sciences (Hair et al. 2010). Kaiser-Meyer-Olkin (KMO) sample adequacy test and Bartlett sphericity tests were applied to test whether the data set is suitable for factor analysis. If KMO value is greater than 0.5 and "p" value is less than 0.05 in Barlett test we can say that data set is adequate for factor analysis (Field, 2009). According to analyses results KMO value is 0,948 and Barlett test result is

significant at 0.001 levels. That means our data set is adequate for factor analysis. At the principal component analyses, sub limit of factor loadings of each items was taken as 0.45 by taking into consideration to the size of the sample (Hair et al 2010). According to the PCA, each variable loaded to the foreseen factor component and factor loadings were between 0.486 and 0.868. Besides, it was observed that factor loadings are generally over the 0.500 value. Cronbach's Alphas are higher than the standard 0.7 cut-off point (Field, 2009), supporting the reliability and internal consistency of the six constructs. A confirmatory factor analysis was carried out to examine the unidimensionality, convergent and discriminant validity of the constructs. The measurement model fit indices fell within the recommended parameters ($\chi^2/df = 2,451$, $GFI=0,916$, $TLI=0,945$, $CFI=0,951$, $PNFI=0,827$, $RMSEA=0,042$) as suggested by Hu and Bentler (1999) and Schumacker and Lomax (2012). All items loaded on their respective constructs, and all loadings were significant at the .001 level. These results indicate unidimensionality among the research constructs (Anderson and Gerbing, 1988).

Table 2: Exploratory and Confirmatory Factor Analyses

Construct	Items	Faktor Loading		Valididy and Reliability Values
		EFA	CFA	
Freedom and Identification (EC)	dynof.freedom_1	0,797	0,716	Cronbach α ; 0,851 SCR; 0,840 AVE; 0,512
	dynof.freedom_3	0,769	0,732	
	dynof.ide_1	0,792	0,736	
	dynof.ide_2	0,513	0,697	
	dynof.ide_3	0,866	0,696	
Experiencing (EC)	dynof.ide_4	0,566	dropped	Cronbach α ; 0,849 SCR; 0,850 AVE; 0,587
	dynof.exp_1	0,765	0,763	
	dynof.exp_2	0,806	0,785	
	dynof.exp_3	0,793	0,768	
	dynof.exp_4	0,723	0,748	
Reconciliation (EC)	dynof.rec_1	0,486	0,692	Cronbach α ; 0,848 SCR; 0,845 AVE; 0,522
	dynof.rec_2	0,728	0,756	
	dynof.rec_3	0,775	0,774	
	dynof.rec_4	0,678	0,680	
	dynof.rec_5	0,817	0,706	
Learning Capability	learn.cap_1	0,742	0,728	Cronbach α ; 0,907 SCR; 0,904 AVE; 0,512
	learn.cap_2	0,808	0,738	
	learn.cap_3	0,785	0,722	
	learn.cap_4	0,747	0,725	
	learn.cap_5	0,735	0,731	
	learn.cap_6	0,797	0,716	
	learn.cap_7	0,652	0,669	
	learn.cap_8	0,635	0,702	
	learn.cap_9	0,686	0,705	
Team Performance	team.perf_2	0,590	dropped	Cronbach α ; 0,874 SCR; 0,859 AVE; 0,605
	team.perf_3	0,868	0,790	
	team.perf_4	0,879	0,811	
	team.perf_5	0,772	0,812	
	team.perf_6	0,793	0,693	
Product Innovativeness	prod.inno_1	0,688	0,676	Cronbach α ; 0,895 SCR; 0,892 AVE; 0,509
	prod.inno_2	0,774	0,632	
	prod.inno_3	0,805	0,709	
	prod.inno_4	0,733	0,769	
	prod.inno_5	0,758	0,723	
	prod.inno_6	0,759	0,723	
	prod.inno_7	0,760	0,723	
	prod.inno_8	0,761	0,722	

(i) Principal Component Analysis with Promax Rotation

(ii) KMO =0,948, Bartlett Test; $p < 0.001$

(iii) Total Variance Explained (%); 61,929

(iv) All CFA trait is statistically significant with the lowest t value being 17,387 at $p < 0.001$ $\chi^2/df = 2,451$, $GFI=0,916$, $TLI=0,945$, $CFI=0,951$, $PNFI=0,827$, $RMSEA=0,042$

The composite factor reliability (CR) values, which assess the internal consistency of a measure, exceeded the .60 threshold. In addition, the average variance extracted (AVE) estimates exceeded the .50 threshold, in support of convergent validity (Bagozzi and Yi, 1988). Finally, Discriminant validity was established using CFA and chi-square difference test. In this method, each covariance trait between factor constructs fixes 1.0. A significant difference in chi-square values level for fixed and free solutions at the 0,05 indicates the difference of the two constructs (Bagozzi et al., 1991). According to the chi-square difference tests, it has been observed discriminant validity among research constructs (Table 3).

Table 3: Correlations and Chi-Square Differences for Discriminant Validity

Constructs	Experiencing	Learning Capability	Product Innovativeness	Freedom and Identification	Team Performance	Reconciliation
Experiencing	1	308,916	401,039	214,247	256,927	217,312
Learning Capability	0,597	1	361,056	281,933	273,788	295,761
Product Innovativeness	0,455	0,765	1	295,761	305,573	368,851
Freedom and Identification	0,624	0,706	0,672	1	214,247	78,449
Team Performance	0,470	0,616	0,618	0,623	1	236,124
Reconciliation	0,750	0,718	0,609	0,737	0,605	1

Correlation values are shown at the bottom of the diagonal and $\Delta\chi^2(1)$ values are shown at the top.

All correlations are statistically significant at $p < 0,001$

Correlation analysis indicates that there is a positive and significant relationship between factor constructs. This shows that research variables correlate each other sufficiently and they can be reviewed adequately. Also, multicollinearity does not exist in the research variables because correlation levels are less than 0.7 (Hair et al. 2010).

4.2. Hypotheses Testing

Structural equation modelling was used to test the hypotheses in this study. The use of structural equation modeling is due to the fact that SEM is a advantageous method that allows to examine causal relations (Hox and Bechger 1998). As shown in Table 4, the results demonstrate that emotional capability has a positive association with learning capability ($B=0,805$ $p < 0,001$), supporting H1.

We examined the mediating effect of learning capability by following the analysis strategy of Baron and Kenny (1986) and Preacher and Hayes (2008). The results show that emotional capability has a positive association with learning capability, and learning capability has a positive association with team performance ($B=0,270$ $p < 0,001$). As a result of the indirect effect of emotional capability on team performance in 5000 bootstrap sample with 95% confidence interval (Preacher and Hayes 2008), it has been concluded that learning capability has a mediator effect between emotional capability and team performance association. Related mediator effect could be defined as partially due to the fact that the existing relation between emotional capability and team performance association has been decreasing but not disappearing. Eventually, H2 was supported. Lastly, team performance has a positive association with product innovativeness ($B=0,684$ $p < 0,001$) and also supporting hypothesis H3.

Table 4: Structural Equation Modelling

Relation Type	IVs	DVs		
		Learning Capability	Team Performance	Product Innovativeness
Direct Relations	Emotional Capability	0,805*** (14,901)	0,507*** (7,042)	
	Learning Capability		0,270*** (4,136)	
	Team Performance			0,684*** (14,791)
	Firm Size		0,027 (0,661)	0,012 (0,289)
	Firm Age		-0,017 (0,409)	-0,039 (-0,897)
Indirect Relations	Emotional Capability		0,218***	

Model Fit; $\chi^2/df = 2,772$, $GFI=0,900$, $TLI=0,928$, $CFI=0,934$, $PNFI=0,821$, $RMSEA=0,047$

Standardized coefficient are reported with t-values in parentheses, *** $p < 0,001$

Indirect Effect; CI Lower: 0,101 CI Upper: 0,334 in 5000 Bootstrap Samples, %95 Confidence Interval

5. CONCLUSION

There are numerous studies showing the benefits of having emotionally intelligent workers in the literature. The headworkers in a company got emotional intelligence training on the subjects like listening more efficiently and helping the workers in solving problems. After this training, the accidents in the company decreased by 50%, excuses became five times less frequent and also productivity increased worth for 250.000 USD. In another factory, after the same training, the production rates increased by 17%; yet there was no increase in the productivity of the teams under supervisors who were

not trained about emotional intelligence (Cherniss, 2001). In a research among 44 organizations of the Fortune 500 list, it has been stated that the sales representatives with higher emotional intelligence were able to double the total average income; and according to another study, the technical program developers who have higher emotional intelligence by 10% were able to develop software three times faster than low-level emotional intelligent ones (Poskey, 2006).

Innovation allows the organizations to improve in accordance with the environmental improvements. It is a strategic key to respond to the hardships of an environment with uncertainties. Innovation refers to the adaptation or production of new ideas or behaviors for an organization. It is widely known in the literature that innovation is a competitive instrument for a long-term success and survival continuity for the organizations. According to Nonaka and Yamanouchi (1989), organizations adapt themselves into the changing conditions of technology and diversity of the market; they may even update or renew themselves via innovation. Technological learning provides an information background which can be innovated. Most of the studies on the innovation capabilities of the organizations are about innovation diffusion. According to these studies, an organization must be innovative so that it can survive in a changing environment. Innovation, as considered by some people, is the degree of someone to adapt a relatively new concept earlier than the others in the social environment. However, this term is focused on the individual, not on the organization. In addition to this, there are some opinions with a collective perspective which define the innovation of a company as an organizational reflection of openness to new ideas (Roger et al., 2002).

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