

# A Research on the Relationship between Ethical Climate, Organizational Learning and Innovative Behavior

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## Abstract

It was aimed to investigate the relationship between the concepts of ethical climate, organizational learning and innovative behavior in this study. In line with this objective, a study was conducted on the white-collar employees of Turkey's largest first 500 industrial companies in the year of 2016 that were determined by İstanbul Chamber of Industry (İSO) with reference to the criteria of size of sales from production. The analyzes of the study included data from 526 participants. It was found that there were positive and significant relationships between organizational learning and innovative behavior and between all other sub-dimensions of ethical climate except instrumental. However, significant and positive relationships were found between all sub-dimensions of organizational learning and innovative behavior. The regression analysis results showed that caring (well-being of each other), rules, independence effect organizational learning positively while laws and codes, instrumental effect negatively. Additionally, it was found that all the other ethical climate dimensions, except the instrumental, also influenced innovative behaviors in positive direction. On the other hand, it was detected that organizational learning has been positively related to innovative behavior. Moderate simple mediation analysis was conducted to test the mediator role of organizational learning in relation between ethical climate and innovative behavior. It has been understood that the relationship between ethical climate and innovative behavior is under the influence of organizational learning and it has been determined that organizational learning has a mediating effect as an intermediary variable in this relation.

**Keywords:** Ethical climate, organizational learning, innovation, innovative behavior.

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## 1. INTRODUCTION

Ethical climate, organizational learning, innovation and innovative behavior have vital importance for organizations in recent years because of the impact of developments and changes in business world, working and social life. Due to requirements of the organizations such as more efficient and ethical working environment, using knowledge effectively, high performance, behaving innovative and productive with the effect of socio-economic and technological developments these topics have gained a serious popularity in business life recently. The Ethical Climate Theory, which guided many researchers, was developed in 1988 by Bart Victor and John Cullen. According to the researchers ethical climate includes prohibitions and allowed things, all orders that set moral limitations within the organization and the question of "what should I do" of an organization member. In this approach ethical climate is defined as a set of general characteristics that have spread throughout the organization and affect a wide range of decision making (Victor & Cullen, 1988). It is argued that the basic input and the source of the business are information in this period which is called "beyond-the-industry" or "information age" (Drucker, 1993:8). Because of the increased importance and value of knowledge in social and working life, the importance of organizational learning has increased and has begun to be discussed more. Although economists have acknowledged the importance of being innovative, we can say that these issues have not been valued for a long period of time. Classical economists have not regarded technology as a phenomenon outside the study fields, nor as an integral part of the economy. Neo-classical economists have argued that technological change is a gradual process of change that does not change equilibrium in the long run even though they do not take technology as competent. The field studies of scientists named Thorstein Veblen (1857-1929) and Joseph Alois Schumpeter (1883-1950) in the context of these approaches are the starting point for the studies carried out on this subject. American economist Thorstein Veblen declared and argued that in the "Enterprise Theory" (1904) and in the "Engineers and Price System" (1921) there was a significant interaction between human and man-made things in commercial organizations (Rosegger, 1996). Considering the change factors in societies and in organizations especially in the last thirty years we can say that organizational learning in terms of adopting the developments during this process, ethical climate in terms of suitability of the norms and values of these developments, innovative thinking in terms of adaption to change have an extremely vital proposition for communities and organizations. From here we can

point out that the issues of ethical climate, organizational learning and innovative behavior must be examined together in order to increase productivity, ensure continuity, and acquire necessary changes.

It is determined that there has been a visible increase in the number of studies and investigations carried out within the scope of these concepts in the recent past and still in the scientific world. However, it has been found that the scientific studies that examine the relationship together between ethical climate, organizational learning and innovative behavior limited in the literature. It has been decided to implement this work with the priority of contributing to the completion of this deprivation in the literature. Therefore, the main objective of this study is to provide theoretical information about ethical climate, organizational learning and innovative behavior and also to uncover the practical implications of the effects of ethical climate and organizational learning on innovative behaviors by examining the dual relationships between them.

## 2. LITERATURE REVIEW

### 2.1. Ethical Climate

Ethical climate is expressed by Wimbush et al., (1997) as a way of helping to estimate and explain the ethics related positions within the organization. This concept arises from the fact that the various practices and procedures belonging to the organization with ethical content are perceived by the individuals within the organization at a certain time. Consistent with this, Wyld and Jones (1997) stated that which elements are ethically correct behaviors and they also mentioned the existence of shared perceptions of how ethics related issues should be assessed. Bartels et al., (1998), Fritz et al., (1999), Martin and Cullen (2006) identify ethical climate as not only being limited to affecting perceptions of what is appropriate in the organization, but also as an aid to how ethically evaluate and solve the issues faced by individuals within the organization at the same time. For instance, ethical climate allows individuals involved in the organization to decide whether the concept of corruption is right or wrong (Victor & Cullen, 1988). According to other definitions in the literature on ethical climate is expressed as; have a narrower conceptual structure than the organizational culture (Ruppel & Harrington, 2000), an element of organizational climate (Akbaş, 2010) and the overall perception of ethical based forms of work (procedures) and work practices within the organization (Victor & Cullen, 1988; Barnett & Vaicys, 2000; Neubaum et al., 2004; De Coninck, 2010; Parboteeah et al., 2010; Arnaud, 2010). According to Lemmergaard and Lauridsen (2008), ethical climate is a subset of organizational climate and refers to norms that indicate how ethical problems are resolved. Tsai and Huang (2008) have expressed ethical climate in the form of a concept that conveys the organizational practices, procedures and politics that are the moral consequences and as a type of organizational business climate. Ethical climate distinguishes any organization with its various normative qualities and clearly shows what the values of the knitting are (Trevino et al., 1998). Rosenblatt and Peled (2002) were evaluated ethical climate as the attitudes of people who work conceptually ethics to politics and practices. Therewithal, the ethical climate provides clear information to the individuals working within the organization, in such a way as not to cause any complication before ethical expectations (Wood & Rimmer, 2003; O'Dwyer & Madden, 2006).

### 2.2. Organizational Learning

When the literature is examined, it has been seen that organizational learning is expressed as the process of reaching new knowledge and conceptualities by the most general and brief definition (Slater & Narver, 1995; Tippins & Sohi, 2003).

Daft and Weick (1984) have described organizational learning as the production of information in relation to the existence of any group of cause and effect relationships and the relationships established by the organization. Fiol and Lyles (1985) argued that organizational actions lead to better performance in the face of organizational learning. They also considered the increase of information as cognitive transformation and the improvement of actions as behavioral transformation. Garvin (1993) considered organizational learning as an ongoing process from conceptual to behavioral change and increased performance. Dodgson (1993) describes organizational learning more thoroughly on the basis of information utilization and the capabilities of the members of the organization that organizations generate knowledge increase their level of knowledge and as a concept realized by knowledge and realized by assimilation. Daft and Weick (1984) argue that organizational and individual learnings are different from each other. They express that individuals react differently to the same stimulus during individual learning however a group of various stimuli react the same throughout organizational learning. Garvin (1993) stated that organizational learning can be evaluated in three parts in a layered manner. The first of these deals with understanding. Members of the organization are promoted to ideas that are not yet developed and to raise their knowledge levels and to think in various ways in this section. The second part is related to behaviors. Members of the organization begin to assimilate their ideas and change their behaviors in this part. The last part can be expressed as the increase in quality as a result of the change in behavior and the emergence of more efforts to direct measurable favorable increases such as concrete outputs.

Organizational learning is assessed from two perspectives both culturally and structurally (Popper & Lipshitz, 1998). Structurally organizational learning can be stated as the organization of functional arrangements and

practices in accordance with the systematic acquisition, examination, storage and transfer of information on the performance of organizations and members of the organization. In terms of culture, qualities that affect organizational learning consist of meanings and beliefs shared by emotions (Popper & Lipshitz, 2000).

### 2.3. Innovative Behavior

Developing and implementing new working systems, following the latest technological developments and innovations, creating new strategies that will enable to reach the targets, finding new resources to support the implementation of new ideas and efforts to protect these ideas are taken into account in the context of innovative behavior of members and employees of the organization (Yuan & Woodman, 2010). Innovative behavior does not only cover the behavior of innovations within the definition of personal work but also includes the creation and implementation of innovations at the employee's department or at the organization level (Yuan, 2005). Many researchers and writers interested in the subject trying to express innovative behavior by drawing attention to the formation and subsequent implementation of ideas. And also they stated that innovative behavior is a gradual process including creativity and applying the new one (Axtell et al., 2000; Unsworth et al., 2000; Scott & Bruce, 1994).

With the shortest shape innovation is expressed as ideas integrated at one point while creativity is to think differently. The main purpose in creativity is to invent something new. But in innovative behavior it is to try to achieve competitive advantage by practicing the invention which is the cause of creativity. In this context, it would be appropriate to distinguish the origin of creativity as a source of innovation and the innovative behavior as an application stage of creative thinking (West, 2002; Pirola-Merlo & Mann, 2004). In support of this, Von Hippel (1988) argued that innovative behavior will allow the firm to compete and consequently will provide them a competitive advantage otherwise he also mentioned that it is an important and critical activity that can negatively impact competition power.

Although many definitions have been made for innovative behavior, the most common result of the literature review is the definition of West and Farr (1989). The researchers have characterized innovative behavior as the practice of an idea by an organization member or company employee to embrace the ideas of products, services, procedures and processes within their own will and desire and to apply these ideas to their business, unit or organization (West & Farr, 1989). Scott and Bruce (1994) stated that innovative behavior is a process that starting with describing the problem and introduction of new or previously accepted thoughts, remedies; sustained by the support of innovative ideas and eventually ends with a concrete style or a first and new example of new thinking. According to Janssen (2000), another researcher with significant research on the subject, innovative behavior is creating and applying the thoughts of individuals in a way that will be in their favor and in favor of their organizations.

## 3. RESEARCH METHODOLOGY

### 3.1. Measures

**Ethical Climate Questionnaire:** The original and short form scale consisting of 26 expressions developed by Victor and Cullen (1988) was chosen to test the organizational ethical climate perceptions of white-collar workers in this study. The sub-dimensions measured by Ethical Climate Questionnaire (ECQ) are caring (well-being of each other), laws and codes, rules, instrumental, independence.

**Organizational Learning Questionnaire:** Dimensions of the Learning Organization Questionnaire (DLOQ) developed by Watkins and Marsick (1997) was used to measure the effects of organizational learning trends on innovative behaviors in this study. The scale was designed as a scale consisting of seven basic dimensions and two auxiliary dimensions pointing to key results. The section containing the expressions of the seven dimensions of the scale in terms of serving the purpose of the work was used in the research questionnaire of this study. The basic dimensions of the scale are continuous learning, inquiry and dialogue, team learning, embedded systems, empowerment, system connection, strategic leadership.

**Innovative Behavior Questionnaire:** De Jong and Den Hartog (2008) developed a 17-item scale based on the scales that had previously formed by Scott and Bruce (1994), Janssen (2000) and Kleysen and Street (2001) in their studies. They found that innovative behaviors are measured by only 10 of these scales as a result of their pilot study. In our study, innovative behavior was dealt with in one dimension by using 10 expressions that De Jong and Den Hartog (2008) found.

Cronbach's alpha ( $\alpha$ ) values for variables and sub-dimensions are shown in Table 1.

In this study,  $\alpha > 0.70$  is taken as the criterion to accept scale reliability. The general Cronbach Alpha ( $\alpha$ ) value of the scales was found to be 0.921. The reliability coefficient of the ethical climate scale was calculated as 0.822. It has been found that 6<sup>th</sup> and 7<sup>th</sup> statements of the caring and 14<sup>th</sup> statement of the rule sub-dimensions of ethical climate reduced the overall reliability of scale. Therefore, these items have not been included in the further analyzes. The reliability coefficient of the organizational learning scale was found to be 0.983. Because it

reduced reliability of the scale, 57<sup>th</sup> statement of the system connection sub-dimension of organizational learning has not been included the analyzes. The reliability coefficient of the innovative behavior scale, which was considered as one-dimensional in this study, was found to be 0.956.

**Table 1 - Reliability Statistics**

Variables	Dimensions	N of Items	Cronbach Alpha ( $\alpha$ )
<b>Ethical Climate</b>	Caring	5	0.896
	Laws and Codes	4	0.922
	Rules	3	0.819
	Instrumental	7	0.715
	Independence	4	0.781
	<b>Ethical Climate Scale</b>	<b>23</b>	<b>0.822</b>
<b>Organizational Learning</b>	Continuous Learning	7	0.939
	Inquiry and Dialogue	6	0.906
	Team Learning	6	0.928
	Embedded Systems	6	0.891
	Empowerment	6	0.928
	System Connection	6	0.935
	Strategic Leadership	6	0.943
	<b>Organizational Learning Scale</b>	<b>43</b>	<b>0.983</b>
<b>Innovative Behavior</b>	<b>Innovative Behavior Scale</b>	<b>10</b>	<b>0.956</b>

### 3.2. Sample

The largest 500 industrial enterprises of Turkey in the year of 2016, which is active in the production sector and is determined by İstanbul Chamber of Industry (İSO) with reference to the sales size criterion of production, constitute the universe of this research. The sample of the study consists of the white-collar employees to be reached in the number of persons who will represent the universe with reference to İSO data. 1,200 questionnaire forms were sent to the companies. Finally, 582 questionnaires from 35 companies were returned. Because the validity was not accepted for various reasons 56 of the questionnaire forms were not included in the analyzes. Only 526 questionnaires were included in the analyzes of the research.

**Table 2 - Sampling Descriptive Statistics**

		%	Qty.
<b>Gender</b>	Female	27,8	146
	Male	72,2	380
<b>Age</b>	20-29	6,1	32
	30-39	54,8	288
	40-49	36,9	194
	50-59	2,3	12
<b>Marital Status</b>	Married	71,3	375
	Single	28,7	151
<b>Education Status</b>	High School	1	5
	College	12,9	68
	University	62,2	327
	Master's/Doctorate Degree	23,9	126
<b>Salary</b>	2.301-3.300 TL	9,9	52
	3.301-4.300 TL	31,2	164
	4.301-5.300 TL	40,7	214
	5.301 TL and over	18,2	96
<b>Department</b>	Finance	6,7	35
	Human Resources	10,6	56
	Production	24	126
	Marketing	17,1	90
	Public Relations	2,3	12
	Account	7,8	41
	Administration	4,4	13
	Quality Control	16,2	85
R&D	11	58	

27,8% of the participants who responded to the survey forms that were appropriate for the analysis within the scope of the research sample were female (n=146) and 72,2% of them were male (n=380) as shown in Table 2. Additionally, it was observed that participants were mostly in the age range of 30-39 (n=288). 71,3% of the sample were married (n=375) and 28,7% were single (n=151). 327 university graduate participants supported this research applied on white-collar workers. 129 participants also have a master's degree or doctoral degree. Consequently it can be said that this is a positive indicator of the research results. In terms of suitability for the main purpose of the survey, questionnaires were applied in specific areas requiring more expertise. Accordingly, 24% of the questionnaires (n=126) were obtained from the production department. Also, 17,1% of participants who support the study by responding to the survey questionnaire were working in marketing department (n=90), 16,2% were in quality control (n=85), 11% were in R & D (n=58) and %10,6 were in human resources (n=56) departments. The descriptive statistics of the research sample are shown in Table 2.

#### 4. DATA ANALYSIS AND RESEARCH FINDINGS

##### 4.1. Correlation Analysis

The results of the correlation analysis of the variables and the sub-dimensions in the study model are shown in Table 3. According to the results ethical climate is positively correlated with organizational learning and innovative behavior at the significance levels of 0.01 and 0.05. And also organizational learning is positively correlated with innovative behavior. These results show us that the level of organizational learning and innovative behaviors will also increase or decrease in the same direction in the case of employees' ethical climate perceptions increasing or decreasing. Likewise, we can say that innovative behaviors of employees based on the orientation of organizational learning levels also act in the same direction.

Instrumental climate was found to be associated with innovative behavior in a significant and negative direction (-0.296,  $p < 0.01$ ). Likewise, the instrumental climate was negatively correlated with all dimensions of organizational learning at a level of 0.01 significance (-0.222; -0.257; -0.333; -0.422; 0.343; -0.398; -0.386,  $p < 0.01$ ). Consequently we can say that organizational learning levels of employee will be reduced and they will be less innovative by perceiving that egoist approach dominates throughout the organization. So, they would believe that decisions do not serve their own interests and would prefer to consider options appropriate to their personal interests even if they would harm others.

Caring (0.621,  $p < 0.01$ ), laws and codes (0.612,  $p < 0.01$ ), rules (0.587,  $p < 0.01$ ), independence (0.310,  $p < 0.01$ ), the sub-dimensions of ethical climate, were positively correlated in a significant and positive direction. These relations have indicated us that beneficial decisions made by management for the employees, organization, for the others and society, benevolent behaviors, acting in accordance with laws and external codes have positive effects on employees' innovative behavior. It can be mentioned that organizational rules (policy and principle) have a little influence on the innovative behaviors of employees. Also acting independently by making free decisions with their own have positive effect on employees' innovative behaviors, but this effect is not very intense and dominant. There is a strong positive correlation at the level of 0.01 significance between the caring climate (0.817,  $p < 0.01$ ) and the continuous learning dimension of organizational learning. This finding can be explained by learning tendency of individuals will be increase in a benevolent working environment in which decisions are made for the benefit of employees and the society.

Table values showed that the innovative behaviors of employees were strongly correlated (0.706,  $p < 0.01$ ) with the continuous learning sub-dimension of organizational learning. Innovative behavior have also a stronger relationship with strategic leadership (0,733,  $p < 0.01$ ) dimension in the same way. It can be said that being prone to learning of employees and supporting by their managers or leaders in the decisions they make have positive effects on their innovative behaviors.

It was found that the innovative behaviors of the employees had a relatively strong positive relations (0,582; 0.577,  $p < 0.01$ ) in the level of 0.01 significance between the inquiry&dialogue and the team learning sub-dimensions of organizational learning. However, positive stronger correlations were found at the level of 0.01 significance between the embedded systems, empowerment and system connection sub-dimensions (0,633; 0.650, 0.608,  $p < 0.01$ ).

Correlation analysis findings of the study showed that the four sub-dimensions of ethical climate, all aspects of organizational learning and innovative behaviors have positive and significant relations with each other. Nevertheless, instrumental sub-dimension of ethical climate has significant, linear but negative relations with all sub-dimension of organizational learning and innovative behavior.

**Table 3 Means, Standard Deviations and Correlation Analysis Findings**

	<i>Means</i>	<i>St. Dev.</i>	<i>EC Caring</i>	<i>EC La&amp;Co</i>	<i>EC Rules</i>	<i>EC Inst.</i>	<i>EC Indep.</i>	<i>IB</i>	<i>OL ConLea</i>	<i>OL Inq&amp;Di</i>	<i>OL Te.Lea</i>	<i>OL Em.Sys</i>	<i>OL Emp</i>	<i>OL SysCo</i>	<i>OL StLea</i>
<b>Caring</b>	3,6297	,68710	1	,692**	,635**	-,165**	,506**	,621**	,817**	,651**	,724**	,663**	,760**	,707**	,720**
<b>La&amp;Co</b>	4,1274	,59256		1	,911**	-,372**	,301**	,612**	,634**	,530**	,547**	,729**	,629**	,566**	,694**
<b>Rules</b>	4,0627	,55212			1	-,368**	,302**	,587**	,652**	,568**	,575**	,730**	,612**	,583**	,684**
<b>Inst.</b>	2,5864	,55118				1	,205**	-,296**	-,222**	-,257**	-,333**	-,422**	-,343**	-,398**	-,386**
<b>Indep.</b>	2,8070	,55384					1	,310**	,484**	,440**	,406**	,328**	,413**	,372**	,348**
<b>IB</b>	3,9918	,64724						1	,706**	,582**	,577**	,633**	,650**	,608**	,733**
<b>Con.Lear.</b>	3,5847	,68940							1	,832**	,834**	,758**	,788**	,788**	,810**
<b>Inq.&amp;Dia.</b>	3,7842	,60751								1	,824**	,777**	,712**	,802**	,726**
<b>Team Lea.</b>	3,7208	,68016									1	,719**	,707**	,840**	,700**
<b>Em. Sys.</b>	3,8805	,63291										1	,791**	,776**	,852**
<b>Empow.</b>	3,7497	,69987											1	,824**	,764**
<b>Sys.Conn.</b>	3,8831	,70741												1	,726**
<b>Str.Lead.</b>	3,8349	,68757													1

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Table 4 - Ethical Climate and Organizational Learning Regression Analysis**

<i>Model</i>	<b>Coefficients<sup>a</sup></b>					
	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		<i>t</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>			
<b>(Constant)</b>	1,294	,145			8,910	,000
<b>Caring</b>	,520	,030		,589	17,577	,000
<b>Laws &amp;Codes</b>	-,173	,059		-,169	-2,945	,003
<b>Rules</b>	,381	,059		,348	6,500	,000
<b>Instrumental</b>	-,262	,028		-,239	-9,426	,000
<b>Independence</b>	,155	,030		,141	5,224	,000

**Dependent Variable:** Organizational Learning  
 $R^2 = 0,753$  ;  $F = 316,507$  ;  $Sig. = 0.000$

#### 4.2. Regression Analyzes

The results of regression analysis revealing the relationship between ethical climate and organizational learning are shown in Table 4.

The value of F (316,507) is valid at the level of sig. 0.000 indicates the validity and significant of the research model. Adjusted R<sup>2</sup> value of the research model was determined to be 0,750 as indicated in Table 4. This shows us that ethical climate reveals 75% of changes in organizational learning. According to the standardized coefficients (Beta) it has been found that the sub-dimensions of ethical climate caring (0,589, p<0.000), rules (0,348, p<0.000) and independence (0,141, p<0.000) have positive and significant effects on organizational learning. However, it has been found that laws and codes (-0,169) and the instrumental (-0,239) have significant and but negative effects on organizational learning. In this case we can say that there will be a decline in organizational learning level of workers in the climate in which egoistic approaches, laws and codes are dominated. Regression analysis results obtained by testing the relationship between ethical climate and organizational learning have shown that employees' ethical climate perceptions affect statistically significant and more positive their organizational learning levels and tendencies.

We tried to determine the relationship between ethical climate and innovative behavior within our research model. The findings of the regression analysis we have done for this purpose have shown that employees' ethical climate perceptions affect their innovative behaviors at a statistically significant level.

The results of the analysis showed that the value of F (91,373) is valid at the level of sig. 0.000, indicating that the model is valid and significant. The adjusted R<sup>2</sup> value of the model was determined to be 0.468. Accordingly, it can be mentioned that ethical climate which is the independent variable explains 46.8% of the changes in innovative behavior which is dependent variable in our research model. It has been found that all sub-dimensions of ethical climate have significant effects on innovative behavior. Caring (0,366), laws and codes (0,172), rules (0,128) and independence (0,063) have positive effects on innovative behaviors of employees. We can say that there will be an increase in the level of innovative behaviors of employees in case of an increase in each unit of these dimensions. Nevertheless, it has been found that the instrumental sub-dimension of ethical climate (-0,239) has a significant but negative effect on innovative behavior. We can interpret this situation as the level of innovative behavior of employees will decrease in the organizations that experience the egoistic environment where the instrumental climate dominates.

The results of regression analysis revealing the relationship between ethical climate and innovative behavior are shown in Table 5.

**Table 5 - Ethical Climate and Innovative Behavior Regression Analysis**

Model	Coefficients <sup>a</sup>				t	Sig.
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
<b>(Constant)</b>	1,566	,228			6,880	,000
<b>Caring</b>	,345	,046	,366		7,444	,000
<b>Laws &amp; Codes</b>	,187	,092	,172		2,038	,042
<b>Rules</b>	,150	,092	,128		1,636	,102
<b>Instrumental</b>	-,161	,044	-,137		-3,692	,000
<b>Independence</b>	,073	,046	,063		1,579	,115

**Dependent Variable:** Innovative Behavior  
R<sup>2</sup> = 0,468 ; F= 91,373 ; Sig. = 0.000

Another regression analysis in this study was attempted to measure the effects of organizational learning on innovative behaviors. The findings of the regression analysis of the relationship between organizational learning and innovative behavior are shown in Table 6.

**Table 6 - Organizational Learning and Innovative Behavior Regression Analysis**

Model	Coefficients <sup>a</sup>				t	Sig.
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
<b>(Constant)</b>	1,110	,125			8,902	,000
<b>Org. Learning</b>	,764	,033	,715		23,420	,000

**Dependent Variable:** Innovative Behavior  
R<sup>2</sup> = 0,511 ; F= 548,507 ; Sig. = 0.000

Given the data in Table 6. F value found at 548.507 is valid at the level of sig. 0.000 and indicating that our research model is valid and significant. Along with that, 51.1% (adjusted R<sup>2</sup>) of innovative behaviors can be

explained by organizational learning is another important finding of analysis. Standardized beta coefficient shows that organizational learning (0,715,  $p < 0.000$ ) has a high positive and significant effect on innovative behaviors. It is understood that the 1-unit increase in organizational learning level will cause a positive increase of 71,5% in innovative behaviors of employees. The data obtained by regression analysis revealed that organizational learning levels of employees are affected innovative behaviors at a statistically significant level.

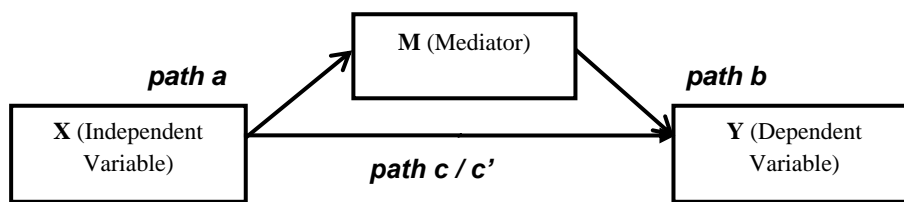
#### 4.3. Mediation Effect Of Organizational Learning On The Relation Between Ethical Climate And Innovative Behavior

PROCESS (moderate mediation) method was used in our study in order to test the existence and the role of the intermediate variable which indicates the indirect effect of the independent variable on the dependent variable. The method was developed by Andrew F. Hayes (2013) and its use is described in the book of "Introduction to Mediation, Moderation, and Conditional Process Analysis". It is an easy to use analysis method added to SPSS and SAS (Statistical Analysis System) statistical programs. PROCESS method uses the ordinary least squares or logistic regression based (path) analytic framework to estimate direct and indirect effects in single and multiple mediation models (parallel and serial).

According to PROCESS simple mediation model of our study; **X** represents ethical climate (independent variable), **Y** represents innovative behavior (dependent variable), **M** represents organizational learning (intermediate variable & mediator). **path a** refers to the effect of ethical climate on organizational learning, **path b** refers to the effect of organizational learning on innovative behavior. **path c** expresses the total effect of ethical climate on innovative behavior and **c'** expresses the direct effect of ethical climate on innovative behavior.

The simple moderate mediation model of Hayes (2013) is shown in Figure 1.

Figure 1: PROCESS simple mediation model



The summary of the findings on the mediating role of organizational learning in mediating between ethical climate and innovative behavior is as follows:

- 1) The variable X affects the variable M – **path a**
  - a.  $F(1,524) = 736.974$ ,  $p = < .01$ ,  $R^2 = 0.523$ . Ethical climate has a significant effect on organizational learning. **path a** is significant.
  - b.  $b = 1.141$ ,  $t(524) = 27.147$ ,  $p = < .01$
- 2) The variables X and M together affect the variable Y – **path b / path c'**
  - a.  $F(2,523) = 220.283$ ,  $p = < .01$ ,  $R^2 = 0.521$ . Ethical climate and organizational learning have significant impacts on innovative behavior. In this context, we can say that the model is significant.
  - b. The variable M affect the variable Y – **path b**
    - i.  $b = 0.654$ ,  $t(523) = 12.931$ ,  $p = < .01$ . Organizational learning has a significant effect on innovative behavior at the rate of 0.654 in relation to ethical climate and innovative behavior. **path b** is significant.
  - c. X no longer affect Y or the effect level is decreasing – **path c'**
    - i.  $b = 0.240$ ,  $t(523) = 3.607$ ,  $p = < .01$ . When the organizational learning is involved in the relationship between ethical climate and innovative behavior, ethical climate is weakening to influence innovative behaviors and the impact on innovative behaviors is diminishing. **path c'** is significant.
- 3) The variable X affect the variable Y (Total Effect) – **path c**
  - a.  $F(1,524) = 239.950$ ,  $p = < .01$ ,  $R^2 = 0.342$ . The ethical climate has a significant influence on innovative behavior. The findings show that the model is valid and significant. **path c** is significant.
  - b.  $b = 0.986$ ,  $t(524) = 15.490$ ,  $p = < .01$ . It has been found that ethical climate has an impact on innovative behavior at the rate of 0.986 in triple relation between ethical climate, organizational learning and innovative behavior.
- 4) Sobel Test (normal theory test) = Z
  - a.  $Z = 11.668$  ( $c-c' > 0$ ;  $c-c' \neq 0$ ),  $p = .01$ ,  $K^2$  (Kappa squared/mediation effect size=0.332) Depending on



statistical parameters organizational learning has a significant and positive mediating effect on the relationship between ethical climate and innovative behavior ( $Z > 0$ ). In the triple relation between these concepts, ethical climate has an effect size of 33% on innovative behavior.

All these results show us that organizational learning has a moderate mediation role in relation to ethical climate and innovative behavior. The results obtained with PROCESS mediation analysis 2.16 version using by SPSS analysis program are shown in Table 7.

**Table 7 - Process Moderate Mediation Analysis**

<i>Model=4</i>	<i>X: Ethical Climate</i>		<i>M: Organizational Learning</i>				
	<i>Y: Innovative Behavior</i>		<i>Sample Size: 526</i>				
<b>Outcome: OL ( path a )</b>							
<i>Model summary</i>	R	R-sq.	MSE	F	df1	df2	p
	,723	,523	,176	736,974	1,000	524,000	,000
<i>Model</i>	Coeff	Se	t	P	LLCI	ULCI	
<i>Constant</i>	-,156	,150	-1,044	,297	-,450	,138	
<i>EC (X)</i>	<b>1,141</b>	,042	27,147	,000	1,059	1,224	
<b>Outcome: Innovative Behavior ( path b &amp; path c' )</b>							
<i>Model Summary</i>	R	R-sq.	MSE	F	df1	df2	p
	,722	,521	,201	220,283	2,000	523,000	,000
<i>Model</i>	Coeff	Se	t	P	LLCI	ULCI	
<i>Constant</i>	,698	,182	3,844	,000	,342	1,055	
<i>OL (M)</i>	<b>,654</b>	,051	12,931	,000	,555	,754	
<i>EC (X)</i>	<b>,240</b>	,066	3,607	,000	,109	,370	
<b>Outcome: Innovative Behavior TOTAL EFFECT (path c)</b>							
<i>Model Summary</i>	R	R-sq.	MSE	F	df1	df2	p
	,585	,342	,276	239,950	1,000	524,000	,000
<i>Model</i>	Coeff	Se	t	P	LLCI	ULCI	
<i>Constant</i>	,596	,228	2,620	,000	,149	1,644	
<i>EC</i>	,986	,064	15,490	,000	,861	1,111	
<b>TOTAL, DIRECT AND INDIRECT EFFECTS</b>							
<i>Total effect of X on Y</i>							
	effect	SE	t	p	LLCI	ULCI	
	<b>,986</b>	,064	15,490	,000	,861	1,111	
<i>Direct effect of X on Y</i>							
	effect	SE	t	p	LLCI	ULCI	
	<b>,240</b>	,066	3,607	,000	,109	,370	
<i>Indirect effect of X on Y</i>							
	effect	Boot SE	Boot LLCI	Boot ULCI			
<i>OL</i>	<b>,747</b>	,064	,627	,874			
<i>R-squared mediation effect size (R<sup>2</sup>- med) (Preacher and Kelly (2011); Kappa squared)</i>							
	effect	Boot SE	Boot LLCI	Boot ULCI			
<i>OL</i>	<b>,332</b>	,027	,279	,384			
<i>Sobel Test (normal theory test)</i>							
	effect	se	Z	p			
<i>ÖÖ</i>	<b>,747</b>	,064	<b>11,668</b>	,0000			

## 5. DISCUSSION AND CONCLUSION

The main objective of this study is to examine the relations between ethical climate, organizational learning and innovative behavior to reveal the effects and directions of these relations. Finally, it is aimed to determine whether organizational learning has a mediating role on the relation between ethical climate and innovative behavior.

Correlation analysis of the research revealed that there were significant and positive relations between ethical climate and organizational learning, ethical climate and innovative behavior, organizational learning and

innovative behavior at significance levels of 0.01 and 0.05. According to regression analysis results ethical climate has a significant and positive effect ( $R^2=0,753$ ,  $p<0.000$ ) on organizational learning. The results also show that ethical climate has significant and positive effects ( $R^2=0,486$ ,  $p<0.000$ ) on the innovative behaviors of employees. These results are supported by the findings obtained as a result of previous empirical studies such as West and Wallace (1991), West and Anderson (1996), Akkoç (2012), Kavousi and Mansouri (2015), Topçu et al., (2015). Hartmann (2006) noted that ethical climate, organizational culture, innovation related organizational values and norms are associated with innovative behavior in integrating innovative employees. Neubaum et al., (2004) found a strong and positive relationship between sub-dimensions of ethical climate and business innovation in their study. Er-Ming and Han (2008), Rhee et al., (2010), Eshlaghy and Maatofi (2011) also found that organizational learning has a strong significant and positive influence on innovativeness. In accordance with these researchs, it has also been found in this study that organizational learning have a positive and significant effect ( $R^2=0,511$ ,  $p<0.000$ ) on innovative behavior. Additionally, this result of our study has similarity and supported by the study findings of Hurley and Hult (1998), Özdevecioğlu and Biçkes (2012), Awang et al., (2014), Demirel and Kubba (2014). Weerawardena et al., (2006) reported in their studies that as the level of learning of employees increases, the innovation levels of enterprises also increase.

The results of PROCESS simple mediation analysis indicate that organizational learning has a moderate mediating role as an intermediate variable in the relationship between ethical climate and innovative behavior. It is identified that ethical climate affects organizational learning at the rate of 1,141 (path a). Ethical climate has also a total effect at the rate of 0,986 (path c) on innovative behavior with organizational learning. In the case of triple relation of these variables, organizational learning has a direct effect at the rate of 0,654 (path b) on innovative behavior and consequently ethical climate affects innovative behavior at the rate of 0,240 (path c') directly. Depending on these results we can conclude that organizational learning reduces the impact of ethical climate on innovative behavior in triple relationship between them. Besides these the findings indicate that ethical climate has an indirect effect at the rate of 0,747 (path a x path b=  $1,141 \times 0,654=0,747$ ) on innovative behavior through the organizational learning which is the mediator variable of the research model. And also according to the Sobel Test results it has been understood that organizational learning has a mediating effect on the relationship between ethical climate and innovative behavior as a mediating variable ( $Z=11,668$ ,  $p =.01$ ,  $Z > 0$ ) and this effect has a magnitude of 33% ( $K^2 = 0,332$ ).

This study demonstrates that organizations should consider ethical climate and organizational learning for more innovative employees. For this reason, organizations should develop specific innovative processes taking into account the processes of change and innovation. Organizations should create a work environment in which rights are distributed equally, learning demands are welcomed and learning is encouraged. Hereby, employees can be provided to be more innovative with high motivation. Ethical management policies and practices of organizations can positively affect employees' perceptions of justice. We can say that it is necessary to increase the learning trends and abilities of employees to make positive changes in their intention to innovate for organization. At this point, we can indicate that ethical management policies that can positively affect employees' perceptions of justice should be applied across the organization. Employees' innovative behaviors will help businesses to create competitive advantage. Accordingly, organizations will be able to reach the targets more easily and quickly that they set within the strategic plans.

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