THE EFFECT OF SAFETY CLIMATE PERCEPTION ON JOB PERFORMANCE AND THE MEDIATING ROLE OF ORGANIZATIONAL COMMITMENT

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Abstract
We investigated the effects of organizational safety climate perception of employees’ and the role of organizational commitment. Therefore, a questionnaire is administered to 228 employees from five different private security companies in the province of Bitlis. The questionnaire analysis and the three performance headings of independent auditors show that employees’ safety climate perception affects their job performances positively. Besides, safety climate perception is observed to impact continual and emotional commitment positively. However, it does not have a significant association with normative commitment. Only emotional commitment among sub-components of organizational commitment affects job performance positively. Finally, hierarchical regression analysis and Sobel test demonstrate that emotional commitment has a partial mediating role in the relationship between safety climate and job performance.

Keywords: Safety Climate, Job Performance, Organizational Commitment, Private Security, Turkey

INTRODUCTION
From past to present in order to prevent or at least minimize occupational accidents, many regulations, mainly on technical and legal basis have been made. Despite these, the number of occupational accidents has kept on rising (Bergman et al., 2014; Clarke, 2006). According to International Labor Organization (ILO), 317 million occupational accidents occur in the world every year and consequently 2.3 million people lose their lives (ILO, 2015). When compared to developed countries such as United States, Canada and Japan, it is observed that the
frequency of occupational accidents occurring in Turkey is four times more (MEGEM, 2014). This only makes us think that taking measures on technical and legal levels is not enough for reducing occupational accident rates and “human” factor needs to be regarded as important just as much as other factors (Dursun, 2013).

That guaranteeing one of the most fundamental rights of mankind, the right to live and maintain their bodily integrity, beyond a moral responsibility has become a constitutional obligation. In this context, the issue of occupational safety should not be considered a responsibility which merely consists of written rules that are fulfilled by employees (1982 Turkish Constitution 17th, 50th, 57th Acts). Therefore, it is significant to create an occupational safety atmosphere which all employees have embraced and internalized. To generate such an atmosphere, it has been considered necessary that safety perceptions and priorities of employees have to be underscored in establishing organizational values, beliefs and symbols.

In the global market where competition among companies is increasing, organizations attempt to maximize their performances and aim to provide benefits for their shareholders. At this point the occupational accidents cause serious financial damage in terms of labor force loss, compensation and health expanses. The ILO data suggests occupational accidents cost nearly 4% of a country’s gross national product (GNP) (ILO, 2015). Additionally, occupational accidents lead to demoralization of employees of an organization and thus reduce employees’ job performance.

Today qualified labor force needs to work with a candid commitment for an organization since this is the only way the organization can compete in any sector. In relation with this, the concept of organizational commitment (OC), which is defined as “embracing the aims and values of an organization, trying to be a part of it and feeling like a family member” (Steers, 1977) is a frequently visited issue in organizational behavior research domain. It is more important for employees to perceive that management pays attention to organizational safety. In this context, the safer employees feel the more commitment they have for their organization. This study which is prepared to draw attention to the significance of creating a safe climate in the organizational management process aims to explore the effect of safety climate on employees’ performance and the mediating role of organizational commitment levels on this process.

THEORETICAL FRAMEWORK

Safety Climate
Culture is widely defined as a concept related to values, meanings and beliefs. Climate, on the other hand, is a concept related to the comprehension of the previously mentioned values,
meanings and beliefs (Owens, 1987). Climate suggests the sharing of perception in an organization whereas culture offers mutual norms, meanings and beliefs (Ashforth, 1985). When the definitions of culture and climate taken into consideration, culture is deeper, lasts longer and its modification is affected by other functional fields which are quite different compared to climate. However, climate changes faster than culture does and is impacted more swiftly by leadership (Şerifoğlu and Sungur, 2007).

Safety culture becomes more significant after series of huge accidents happened in the late 1980s such as Chernobyl nuclear accident in 1986 in Russia, in 1988 the explosion of Piper Alpha oil platform in the North Sea and again in 1988 Clapham Junction train accident in London (Fuller and Vassie, 2001). There are various point of views presented on the definitions of concepts of “safety culture” and “safety climate” and how they are different from one another, but these concepts could be used interchangeably (Tüzün and Özaslan, 2011). While safety culture can be defined as long term experiences and applications of an organization, safety climate is explained to be either the current changes or the small details of the long term culture (Fuller and Vassie, 2001).

Safety climate is initially defined by Zohar (1980) as the perception of safety of an organization by its employees. Brown and Holmes (1986) define security climate as perceptions and beliefs of individuals on certain occurrences. According to Payne et al. (2009), it is perception of employees’ on expected, awarded and supported safety behavior. Another definition notes that safety climate is perception of employees on existing principals, procedures and applications in the framework of providing safety in a work area (Keren et al., 2009). All the definitions mutually demonstrate that safety climate is “perception of employees’ on an organization’s safety attempts” (Johnson, 2007).

According to Cooper and Phillips (2004), safety climate comprises of four phases: (i) designing psychometrical measurement devices and investigating the underlying factors, (ii) testing and developing safety climate models to diagnose safety behavior and reasons of job accidents, (iii) taking a closer look at the connection between safety climate perceptions and true safety performance and (iv) finding out the liaison between safety climate and organizational climate. The most important target of safety climate is to prevent problems resulting from low safety and make sure that people follow procedures. Besides, it has a role to play in ensuring employees’ commitment, lowering stress levels and increasing safety performance (Clarke, 2006; Shannon and Norman, 2009). As a result, before a failure in the safety system occurs, all factors which may cause to fail are detected and far safer workplaces are aimed (Türen et al., 2014). As employees are familiarized with safety culture and safety
climate perceptions, their safe behavior and safety performances are affected in a more positive way (Uslu, 2014).

**Safety Climate and Organizational Commitment**

Nowadays management of social capital is fairly significant and making use of qualified human force that owns knowledge and skills with sincerity and commitment in an organization may provide a more competitive atmosphere. Commitment is a concept which means that an individual finds it hard to give up his position, on the contrary, he commits himself more to it. However, the concept of organizational commitment is more complex (Akbaş, 2010). Starting off the 1950s, researchers have been more interested in OC which includes emotional reactions building a bond between employees and their organization and offers a more behavioral quality (Kaplan, 2010). From another perception, OC is regarded as a series of consistent behavior which employees evaluate the cost and financial loss in the case of quitting the organization due to employees’ contribution to the organization so far (time, effort, work and retirement expectation) (Shoemaker et al., 1977). According to normative approach, employees feel obliged due to such kind of pressures and do not want to leave the organization. This situation leads to organizational commitment on employees’ part (Liou and Nyhan, 1994).

In addition, many multi-dimensional approaches covering all these factors are developed. Allen and Meyer's (1990) approach that handles organizational commitment in a multi-dimensional manner is one of the most commonly encountered models in the literature. According to this approach, OC has three components as emotional, continual and normative. Emotional commitment (EC) works when employees embrace the values and goals of an organization and this result in a feeling of belonging to it. Employees do not feel themselves committed to an organization in continual commitment (CC) since their perception of the investment in the organization nor are alternative job opportunities high. In this case, necessities become a fundamental issue. Employees, in normative commitment (NC), think they have liabilities against an organization and this is the main reason why they keep working for it. They see this as a part of their duty. In this context, Employees have three primary reasons to stay in an organization: These are willingness (emotional commitment), necessity (continual commitment) and obligation (normative commitment) (Kaplan, 2010). Özdevcioğlu (2003) states that the most fundamental organizational commitment indicators are embracing the goals and values of an organization, feeling deeply committed, making an effort working voluntarily and enthusiastically and wanting to stay as a member of an organization.

Research demonstrates that OC is mainly affected by factors such as organizational culture, climate, work experience personal features, job structure and leadership (Çekmecioğlu
According to Kaplan (2010); however, priorities of OC are personal factors (job expectations, psychological contract and demographical qualities), factors related to work or role (job structure, role conflict and ambiguity, work experience, over workload and work associations), organizational factors (organizational support, communication, organizational justice and trust, empowerment) and environmental (socio-economic status, unemployment rate, sector crisis).

Research done on 57 work groups employed in separate organizations in Malaysia showed that safety climate perception affects employees’ commitment and performance in a positive way. Therefore, it is reported that safety climate is one of the predecessors of positive organizational behavior (Idris et al., 2015). Another research conducted on employees working for a middle size company points out that if they feel themselves psychologically secure, this affects their organizational citizenship behavior in a positive way. Furthermore, employees’ feeling safe is emphasized as an indicator for positive organizational behavior and job performance (Singh et al., 2013). In a survey carried out on 291 participants in Malaysia, it is highlighted that a negative safety climate perception leads to role conflict, cynicism and consequently burnout resulting in performance reduction. A positive safety climate perception, on the other hand, leads to an increase in organizational commitment by providing supervision support and participation in decision-making process and thus raising job performance (Idris et al., 2011). In the light of the abovementioned empirical research and information gathered from theoretical frame we hypothesized:

Hypothesis-1: Employees’ positive safety climate perception affects their organizational commitment in a positive way.

Safety Climate and Job Performance
In order for organizations to exist in a global competition atmosphere, they started to emphasize the concept of performance. It is basically related to conducting or achieving a target, duty or function (Turunç, 2010). Job performance (JP) is employees’ action or behavior while fulfilling organization goals (Miraglia et al., 2015). If the results of these actions and behavior are positive, it means personnel has successfully achieved the duty due to high performance but should they be negative, the employee is accepted to be unsuccessful because of low performance. According to the results, such important decisions as whether the employee will be paid a high salary, be promoted and still be hired are made (Kahya, 2013; Shamsuddin and Rahman, 2014). It is considered important that the employees at an organization need to feel safe so as to work much more comfortably. Such employees conduct their tasks and duties more carefully and in an organized manner and thus their efficiency, effectiveness and
performance will go up accordingly. Results of a research done on pilots, technicians and ground services personnel that are employed in Chinese aviation sector, note a positive relationship between safety climate perception and job performance (Baba et al., 2009). Consequently, we hypothesized:

**Hypothesis-2:** Employees’ positive safety climate perception affects their job performance (physical capacity, professional knowledge, shooting performance) in a positive way.

In the light of the abovementioned empirical research and information gathered from theoretical frame, the following research hypotheses are suggested regarding that positive safety perception of an organization’s employees may increase their organizational commitment and as a result their job performance in a positive way. Consequently, we hypothesized:

**Hypothesis-3:** The level of employees’ organizational commitment has a mediating role between their safety climate perception and job performance.

**METHOD**

**Sample**

The main objective in this research is to demonstrate causality relationships between variables. In this context, a questionnaire is administered (random sampling) to 228 employees employed at five different private security companies in the province of Bitlis (a province in eastern Turkey) in order to measure their SC perceptions and OC levels. Job performances of the same employees are evaluated by independent auditors as well. To determine their performances in the evaluation process, physical capacity, professional knowledge and shooting performances are tested. Their physical capacity is evaluated through physical fitness tests, professional knowledge through written tests and finally shooting performance through a simulation.

Qualities of individuals that make up the sample are shortly: 93% male, 7% female, 73% are between the ages of 20 and 29, 22% between 30 and 39, 5% at 40 or over. 60% of the employees is high-school-graduate whereas 2% of them is graduated from colleges that offer a 2-year-education, additionally, 38% of them have a bachelor degree. It is reported that only 12% the total number of employees are female in the sector (Güven-İş Union, 2015). This percentage explains the lowness of female participation (7%) in this sample.

The gathered data is analyzed using SPSS 20.0 and Amos 20.0 packet programs. Cronbach Alpha coefficient is checked for internal consistency of scales. Also, first exploratory and then confirmatory factor analyses are implemented for structural validity. Correlation analyses are used to determine links while regression analyses are applied for the effects of variables one on another. Last but not least, mediating effect is explored by the way of hierarchical regression analysis and Sobel test.
Measures

Safety Climate Scale
In this study the SC scale that is developed by Choudry et al. (2009). This scale is adapted to Turkish by Türen et al. (2014). The scale covers 14 points and two components; management point of view and rules (MP) and co-workers and safety training (CWST) respectively. The answers are organized according to a 5-likert-scale (1=definitely disagree, 5=definitely agree). For studying the structural validity of both scales benefitted in this study, Exploratory Factor Analysis (EFA) has been applied.

Samples are checked with KMO and Barlett tests for both scales prior to further analysis and decided that they are fit for EFA (KMO >0.69; PC 0.001) (Büyüköztürk, 2006). It is observed that for SC scale that items are gathered under two factors (management point of view and rules/ co-workers and safety training) and factor loads alter between 0.70 and 0.88. The two factors explain 73.738% of the total variance.

Organizational Commitment Scale
The scale which is developed by Meyer and Allen (1997) to measure the employees’ OC levels is used. This scale has three components namely emotional, continual and normative commitment. The Turkish version of the scale is used by Kaplan (2010) and Akbaş (2010) and decided that it is valid and reliable. The scale consists of 20 questions and answers are set in a 5-likert-scale (1=definitely disagree, 5=definitely agree).

After applying EFA it is detected that items are gathered under three factors (emotional, continual and normative), factor loadings change between 0.67 and 0.87 and the three factors explain 81.121% of the total variance.

Additionally, component matrix is rotated using Varimax method for both scales in order to obtain interpretable and significant factors. When EFA results for two scales used in this study are investigated, all factor loads are bigger than 0.50 and the difference between factor loadings included in the two factors are more than 0.1 (Tavşancıl, 2002).

Confirmatory Factor Analysis (CFA) is implemented to confirm if the factor structure is in line with the previous studies and maximum likelihood method is used for this analysis. The CFA results are presented on Table-1. Results demonstrate that models are 95% reliable and it could be claimed that values in fit index lines show scales applied on samples have an original and acceptable structure.
Table 1: Confirmatory Factor Analysis (CFA)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Abbreviation</th>
<th>Perfect Fit</th>
<th>Acceptable Fit</th>
<th>Safety Climate Scale</th>
<th>Organizational Commitment Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodness of Fit Index</td>
<td>GFI</td>
<td>≥0.95a</td>
<td>0.90≤ GFI ≤ 0.95a</td>
<td>0.915</td>
<td>0.903</td>
</tr>
<tr>
<td>Adjusted Goodness of Fit Index</td>
<td>AGFI</td>
<td>≥0.90b</td>
<td>0.85≤ AGFI ≤ 0.90a</td>
<td>0.873</td>
<td>0.868</td>
</tr>
<tr>
<td>Comparative Goodness of Fit Index</td>
<td>CFI</td>
<td>≥0.97a</td>
<td>0.95≤ CFI ≤ 0.97a</td>
<td>0.973</td>
<td>0.978</td>
</tr>
<tr>
<td>Normal Fit Index</td>
<td>NFI</td>
<td>≥0.95a</td>
<td>0.90≤ NFI ≤ 0.95a</td>
<td>0.950</td>
<td>0.952</td>
</tr>
<tr>
<td>Root-Square-Mean Error of Approximation</td>
<td>RMSEA</td>
<td>≤0.05c</td>
<td>0.05≤ RMSEA ≤ 0.1</td>
<td>0.069</td>
<td>0.059</td>
</tr>
<tr>
<td>Minimum Discrepancy</td>
<td>CMIN/SD</td>
<td>≤2d</td>
<td>2≤ CMIN/SD ≤ 3a</td>
<td>2.075</td>
<td>1.800</td>
</tr>
</tbody>
</table>

\[ \chi^2 \] test

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>N</th>
<th>Degrees of Freedom</th>
<th>SD</th>
<th>$\chi^2$</th>
<th>$\chi^2$ ≤ 0.05</th>
<th>145.263</th>
<th>225.053</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degrees of Freedom</td>
<td>SD</td>
<td>$\chi^2$ ≤ 0.05</td>
<td>145.263</td>
<td>225.053</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>p</td>
<td>p1 = 0.00</td>
<td>0</td>
<td>p2 = 0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(\(^a\)): Schermelleh et al. (2003); (\(^b\)): Hu and Bentler (1999); (\(^c\)): Steiger (1990); (\(^d\)): Marsh and Hocevar (1985); Ullman, (2001).

**Measurement of Job Performance by Independent Auditors**

There are some standards concerning the job performance of private security employees. To begin with, they are expected to be physically powerful and resistant where there is some occurrence that needs to be interfered with. They are also desired to know about law issues when face to face communication with public is necessary. Communicational skills and professional knowledge are among other essential expectations. Furthermore, they are supposed to use their guns well in case of criminal occurrences. In this research for measuring employees’ job performance, independent inspectors and their inspection reports are taken into consideration. The inspection evaluates the performances in three categories. First, whether security employees can meet the physical fitness standards which are determined regarding their age. The tests are 3000 meters running, push-ups and pull-ups. Arithmetical average grade of participants are evaluated as “physical capacity” (PHYCAP). Secondly, participants sit a written test which includes subjects that a security employee has to know about (legal framework, communication with people, professional security issues). Arithmetical average grade of participants for this test is evaluated as professional knowledge (PRFKNW). Thirdly, security employees attend a shooting test in a simulation. By considering criteria of timing and accuracy, they are given a “shooting performance” grade (SHTPER). These three evaluation results are accepted as individual performances of security employees and included in the analyses along with scores obtained using questionnaire.
ANALYSIS AND RESULTS
In this part of the study the relations among variables are evaluated and research hypotheses are tested. In order to determine the relations among variables, correlation analysis is conducted initially. Its summary is presented on Table-2.

Table 2: Means, Standard Deviations, Correlations and Reliabilities

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SC</td>
<td>3.29</td>
<td>1.06</td>
<td>(0.95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. MP</td>
<td>3.19</td>
<td>1.12</td>
<td>0.87** (0.95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. WCS</td>
<td>3.52</td>
<td>1.11</td>
<td>0.49** 0.74** (0.89)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. OC</td>
<td>3.21</td>
<td>1.06</td>
<td>0.45** 0.36** 0.27** (0.96)</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5. NC</td>
<td>3.09</td>
<td>1.22</td>
<td>0.34** 0.29** 0.18** 0.68** (0.95)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. EC</td>
<td>3.57</td>
<td>1.27</td>
<td>0.12 0.11 0.04 0.67** 0.76** (0.95)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>7. PHYC</td>
<td>72.32</td>
<td>14.65</td>
<td>0.28** 0.18** 0.24** 0.03 -0.05 -0.00 0.26** (0.98)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. PRFKNW</td>
<td>81.50</td>
<td>16.32</td>
<td>0.29** 0.20** 0.23** 0.03 -0.04 -0.01 0.25** 0.98** (0.97)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9. SHTPER</td>
<td>69.27</td>
<td>14.06</td>
<td>0.25** 0.16* 0.21** 0.02 -0.03 -0.02 0.22** 0.96** 0.96** (0.98)</td>
<td></td>
<td></td>
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</tbody>
</table>

n=228; ** p<0.01, * p<0.05; Cronbach’s alphas presented in parenthesis

When Table 2 is taken into consideration, there is a positive relationship between SC perception, its sub-components and OC, its sub-components (except normative commitment). SC and NC do not have a significant relationship, though. In addition, SC has a positive relationship with PHYCAP, PRFKNW and SHTPER. Regarding OC and JP association, there is merely a positive link between EC and PHYCAP, PRFKNW and SHTPER. However, CC and NC do not bear a significant relationship with “job performance values.” Regression analyses are conducted to explore causality between variables in line with these correlations.

Regression analysis is a statistical method which is applied to explain the change in one part with the change in the other in a connection between two variables. Moreover, as more than one independent variable provides more valid and explanatory models; regression analysis is encountered as one of the fundamental statistical analysis types (Güriş and Çağlayan, 2005). The results of regression analysis conducted to determine effects of employees’ SC perceptions on OC levels suggest that SC perception generally affects OC positively and significantly (β=0.452; p<0.05). The effects of SC perception on sub-components of OC have a positive and significant impact on CC (β=0.346; p<0.05) and EC (β=0.456; p<0.05), but have no significant impact on NC (β=0.125; p>0.05).

In this context, SC perception affects OC positively and significantly and Hypothesis 1 is supported for OC (Total). When its sub-factors are investigated, it is observed that the hypothesis is supported for EC and CC, but not supported for NC. The result of the analysis
aiming to determine the effect of SC perception on JP illustrates that SC perception affects PHYCAP ($\beta=0.280; p<0.05$), PRFKNW ($\beta=0.293; p<0.05$) and SHTPER ($\beta=0.252; p<0.05$) positively and significantly. In this case, Hypothesis 2 is supported. When its sub-factors are investigated, it is observed that the hypothesis is supported for all three factors. Details of regression analysis is presented on Table-3

<table>
<thead>
<tr>
<th>Safety Climate (SC)</th>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>$\beta$</th>
<th>Std. Err.</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>OC (Total)</td>
<td>0.452</td>
<td>0.049</td>
<td>0.204</td>
<td>0.201</td>
<td>7.612**</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>CC</td>
<td>0.346</td>
<td>0.085</td>
<td>0.120</td>
<td>0.116</td>
<td>5.54**</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>NC</td>
<td>0.125</td>
<td>0.090</td>
<td>0.016</td>
<td>0.011</td>
<td>1.89</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>EC</td>
<td>0.456</td>
<td>0.081</td>
<td>0.207</td>
<td>0.204</td>
<td>7.69**</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>PHYCAP</td>
<td>0.280</td>
<td>0.013</td>
<td>0.078</td>
<td>0.074</td>
<td>4.382**</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>PRFKNW</td>
<td>0.293</td>
<td>0.014</td>
<td>0.086</td>
<td>0.082</td>
<td>4.601**</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>SHTPER</td>
<td>0.252</td>
<td>0.012</td>
<td>0.064</td>
<td>0.059</td>
<td>3.916**</td>
<td></td>
</tr>
</tbody>
</table>

** $p<0.01$; $n=228$.

So as to determine the mediating role of EC between SC and PHYCAP, PRFKNW and SHTPER, three-step regression analysis which is suggested by Baron and Kenny (1996) is implemented. According to this method, to mention a mediating effect, three conditions have to be fulfilled (1. The independent variable is a significant predictor of the dependent variable, 2. The independent variable is a significant predictor of the mediator, 3. The mediator is a significant predictor of the dependent variable, while controlling for the independent variable, the previously significant path between the independent and dependent variable (Step #1) is now greatly reduced, if not non-significant. If it is insignificant, it displays a “full mediation” effect. If it is significant but reduced greatly, it shows “partial mediation”). The first two conditions of mediation effect are supported for each three dependent variable and presented in Table-3 and Table-4.

In this context hierarchical regression analysis which is the third condition is conducted and its summary is presented on Table 4.
Table 4: Mediating Effect Analysis With Hierarchical Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables</th>
<th>B</th>
<th>Std. Err.</th>
<th>R²</th>
<th>ΔR²</th>
<th>t</th>
<th>Collinearity Statistics***</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>SC</td>
<td>PHYCAP</td>
<td>0.200</td>
<td>0.014</td>
<td>0.102</td>
<td>0.094</td>
<td>2.823**</td>
<td>0.793</td>
</tr>
<tr>
<td>EC</td>
<td></td>
<td>0.175</td>
<td>0.010</td>
<td>0.102</td>
<td>0.094</td>
<td>2.460*</td>
<td>0.793</td>
</tr>
<tr>
<td>SC</td>
<td>PRFKNW</td>
<td>0.224</td>
<td>0.016</td>
<td>0.104</td>
<td>0.096</td>
<td>3.154**</td>
<td>0.793</td>
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<tr>
<td>EC</td>
<td></td>
<td>0.152</td>
<td>0.012</td>
<td>0.104</td>
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<td>2.138*</td>
<td>0.793</td>
</tr>
<tr>
<td>SC</td>
<td>SHTPER</td>
<td>0.190</td>
<td>0.014</td>
<td>0.078</td>
<td>0.070</td>
<td>2.646**</td>
<td>0.793</td>
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<tr>
<td>EC</td>
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<td>0.136</td>
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<td>0.078</td>
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<td>1.887</td>
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</tr>
</tbody>
</table>

SC (Security Climate), EC (Emotional Commitment), PHYCAP (Physical Capacity), PRFKNW (Professional Knowledge), SHTPER (Shooting Performance).

* p<0.05, ** p<0.01, ***As VIF <10 or tolerance > 0.2 there is no multi-collinearity problem; n=228.

As it is shown in Table 4, when the mediating variable, EC, is included in the model, SC regression coefficient on PHYCAP decreases significantly from β=0.280 to β=0.200 and EC affects PHYCAP significantly (β=0.175). Therefore, in the association between SC and PHYCAP, EC has a mediating role. Secondly, when the mediating variable, EC, is included in the model, SC regression coefficient on PHYCAP goes down significantly from β=0.293 to β=0.224 and EC impacts PRFKNW significantly in this process (β=0.152). In this context, it could be suggested that in the relationship between SC and PRFKNW, EC has a mediating role. Thirdly, when the mediating variable, EC, is included in the model, SC regression coefficient on PHYCAP diminishes from β=0.252 to β=0.190 significantly; however, EC does not affect SHTPER significantly in this process (β=0.293; p>0.05). Hence, it is figured that in the association between SC and SHTPER, EC does not play a mediating role.

In the analysis of the mediating effect, after mediating variable enters the analysis, in case independent variable affects dependent variable in a statistically insignificant way, the effect is “full mediating.” However, in case independent variable significantly affects dependent one and if there is a significant decrease in regression coefficient, it is a “partial mediating” effect (Frazier et al., 2004). Therefore, it can be said that EC has a partial mediating effect in the associations between SC and PHYCAP-PRFKNW. Figure-1 offers the statistically supported partial mediating effects in this study.
To analyze the mediating effect, Sobel test is used widely as an alternative. Thus, significance of “z” value which is calculated using Sobel test is checked (Kenny et al., 1998). According to Sobel test results, it could be observed that in the relationship between SC and PHYCAP, PRFKNW, EC has a partial mediating role. Although Sobel test results support that EC might have a mediating role in the association between SC and SHTPER, it is ignored as it is not validated by hierarchical regression analyses. The details of Sobel test results are presented on Table-5.
According to results of the analyses above in the relationship between security climate and job performance it is detected that emotional commitment, which is a component of organizational commitment, has a partial mediating role and Hypothesis-3 is only supported for EC, but not supported for NC and CC.

CONCLUSIONS

Today companies are trying hard to survive in the sector. Therefore, without a doubt the maximization of performance has a vital role for companies. Increasing performance depends on using all capital components a company owns (materialistic physical, social, intellectual and human) effectively, economically and efficiently. In the process of utilizing these components, companies give both physical and mental losses because of occupational accidents. In this study security climate that is a result of activities aiming to prevent occupational accidents and taking necessary precautions is investigated. Creating a safe climate in the work place is thought to be achieved in a brief time with managers’ taking the issue seriously. In the long run the issue could be an essential part of organizational culture.

In this study determining employees’ observations, the effect of their safety perception on their job performance at their workplace and the role of organizational commitment in this process are aimed. The study focuses on employees who basically serve in the private security industry. In this context, employees’ safety perceptions towards organization and their organizational commitment levels are measured through a questionnaire. Employees’ job performance is measured by independent external auditors. Necessary performance criteria vary according to the type of job. Therefore, regarding the importance of physical capacity, professional knowledge and shooting performances of employees’ in the security sector, the three performance criteria are a applied practices. Analysis of the data from the survey and the performance evaluation of independent auditors initially prove that SC positively and significantly affects job performance. This study proves when employees at a work place feel secure, they focus better and their performance climbs up accordingly.

Secondly, as a result of the analyses SC has a positive and significant effect on OC. In sub-components of OC, there is a positive and significant effect of SC on EC and CC, but not on NC. Hence, employees that believe they are employed at a safe place emotionally embrace the goals and values more. Another result that can be reached in this study is the investment that an employee makes in an organization (time, effort, career, retirement etc.) and expectations about future, that is continual commitment, are directly related to how an organization approaches security policies. Employees that consider occupational safety a priority would like to continue working in the organization and invest in the future. However, it is observed that SC
does not have a significant effect on NC. In this context, the obligation to continue working in an organization is not thought to be related to security climate. The results at hand seem to support the studies of Idris et al. (2015), Singh et al., Idris et al. (2011) and Baba et al. (2009).

Finally, the results of the analyses are examined to see whether EC has a mediating role in the relationship between SC and JP (PHYCAP, PRFKNW, SHTPER). It is found out that EC has a partial mediating role in the association between SC and PHYCAP, PRFKNW; however, it does not play a mediating role between SC and SHTPER. Employees’ physical capacity and professional knowledge are ones that could enhance as a result of some practice. Even though shooting performance is also among such capabilities, it depends on instantaneous factors. Therefore, it could be stated that their shooting performance could be affected by several parameters (weather conditions, concentration deficiency).

In this study, the effect of safety climate on job performance and the role of organizational commitment in this process are investigated. Theoretical frame of concept of security climate is determined and its priorities are covered. Considering the research in the literature, how organizational commitment and job performance of employees are affected in this process is researched. Handling security climate perception and variables of organizational commitment and job performance together is significant in terms of offering an integrated approach.

In contemporary organizational behavior research, relationships among variables are generally investigated. In these researches, it is evaluated that measuring true job performance of employees cannot be precisely correct. In this context, it is significant that job performance of employees in security sector is evaluated by independent auditors. Therefore, results gathered can be advocated to be authentic.

Today in order to increase organizational performance, alternative solutions are struggled to be developed. This study aims to offer a different point of view. The fact that independent auditors measure employees’ performance contributes to the authenticity of the results. Besides, it could be added to the results of this study that “human” factor is as important as other factors in preventing occupational accidents. The investment made in employees enables them to commit more to the organization and increase their job performance.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

Although this study is considered significant in determining the aspects of modern organizational behavior and seeing human factor as a source of competition, it has limitations. It should be kept in mind that there may be regional and sectorial variations while deducing from the results of this study. Besides, most participants are male because of the nature of the
population of this research. Females should be included in future works. Data are cross sectional, and causality and temporal sequences should be cautiously generalized. For future work we can suggest that the association among these concepts to be studied on some other samples from different industries, cultures and nations. Longitudinal work is advised in order to reveal the sensitivity of employees’ job performances towards change in safety climate perception and organizational commitment.

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