

ANALYZING THE EFFECT OF TRANSFORMATIONAL LEADERSHIP PERCEPTION ON TEAM LEARNING IN INDUSTRIAL ORGANIZATIONS: THE MEDIATING ROLE OF AFFECTIVE COMMITMENT

SANAYİ İŞLETMELERİNDE DÖNÜŞÜMCÜ LİDERLİK ALGISININ TAKIM ÖĞRENMESİ ÜZERİNE ETKİSİNİN İNCELENMESİ: DUYGUSAL BAĞLILIĞIN ARACILIK ROLÜ

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ABSTRACT

In organizations where transformational leadership is at a high level, employees establish an emotional bond with their team and thus with the organization, and almost become familiar with other team members. In this context, employees attempt to learn much more and teach other team members what they have learned in order to increase team success. In this case, team learning reaches higher levels and as a result of this, the effectiveness and efficiency of the team and the organization increase. Accordingly, in this study, it is aimed to examine the mediating role of affective commitment in the effect of transformational leadership on team learning. In the study, the questionnaires were conducted with 161 white-collar employees teamed up in the organization located at the motor vehicles industrial organizations operating in Ankara which are included within the scope of the ISO first and second 500 largest industrial organizations. According to the analysis results, the semi-mediating role of affective commitment was found in the effect of transformational leadership on team learning. It was also found that affective commitment had a semi-mediating role in the effect of idealized influence/charisma, inspirational motivation, and individualized consideration on team learning.

Keywords: Transformational Leadership, Team Learning, Affective Commitment, ISO.

ÖZET

Dönüşümcü liderliğin üst düzeyde olduğu örgütlerde çalışanlar içinde buldukları takımla ve dolayısıyla örgütle duygusal bir bağ kurarlar ve adeta diğer takım üyeleri ile kenetlenirler. Bu bağlamda çalışanlar takım başarısını artırmak için daha çok öğrenmeye ve öğrendiklerini diğer takım üyelerine öğretmeye çabalarlar. Bu durumda takım öğrenmesi üst seviyelere çıkar ve bunun sonucunda takımın ve örgütün etkinliği ve verimliliği artar. Bu doğrultuda çalışmada, dönüşümcü liderliğin takım öğrenmesi üzerindeki etkisinde duygusal bağlılığın aracılık rolünün incelenmesi amaçlanmıştır. Araştırmada anketler, ISO birinci ve ikinci 500 büyük sanayi işletmeleri kapsamında yer alan ve Ankara ilinde faaliyet gösteren taşıt araçları sanayi işletmelerinde görev yapan örgüt içinde takımlaşmış olarak çalışan 161 beyaz yakalı çalışan üzerinde uygulanmıştır. Analiz

sonuçlarına göre dönüşümcü liderliğin takım öğrenmesinin üzerindeki etkisinde duygusal bağlılığın yarı aracılık rolü saptanmıştır. Ayrıca idealleştirilmiş etkinin/karizmanın, ilham verici motivasyonun ve bireyselleştirilmiş ilginin takım öğrenmesi üzerindeki etkisinde duygusal bağlılığın yarı aracı bir role sahip olduğu bulunmuştur.

Anahtar Kelimeler: Dönüşümcü liderlik, Takım Öğrenmesi, Duygusal Bağlılık, İSO.

1. INTRODUCTION

A leader who has the nature of transformational leadership is always open to transformation and innovation. He supports and motivates all his employees in this respect. By doing this, a leader pre-eminently influences his employees with his attitudes and behaviours and becomes a role model for employees (Altıntaş, 2020: 13). In this case, the emotional bond of employees, who are continuously supported and motivated, increases. Hence, employees begin to adopt the team they belong to more, and become more open to learning for the team success, sharing the knowledge learned, and playing a role in solving the problems confronted within the team (Paracha, 2012: 55; Sole & Edmondson, 2002: 19). In this case, team learning is continuously provided within the organization and in the teams and therefore the team success increases. Accordingly, in the study, it is attempted to determine the mediating role of affective commitment in the effect of transformational leadership on team learning.

The main purpose of this study is to assess the teamed organization employees working in the ISO first and second 500 motor vehicles industrial organizations operating in Ankara within the framework of transformational leadership, team learning and affective commitment. As a result of the study, it is concluded that important findings can be obtained in order to determine that leaders are affectively committed to the organization and this situation positively affects the learning potential of the employees in the team by supporting the ideas of employees about change and innovation, by motivating employees in all matters, by showing affection and respect, by showing empathy towards employees and by exhibiting similar attitudes and behaviours (Bass, 1997: 133; Kreitner & Kinicki, 2009: 487; Paracha, 2012: 55).

2. THEORETICAL FRAMEWORK

2.1. Transformational Leadership

Transformational leadership is related to the leader who acts by considering the interests of the organization while exhibiting attitudes and behaviours towards change and innovation, who prepares the required conditions for the organization and who motivates its employees to work to their utmost capacity in line with the interests of the organization (Bass, 1997: 133). This leadership approach is based on a leadership style that is completely aimed at change and innovation. In other words, transformational leadership is about a leader; to help employees to develop their personal skills in line with the goals of the organization and to motivate their employees to exert effort for the organization beyond their personal interests and above and beyond expectations (Altıntaş, 2020: 13; Bass, 1997: 133; Bass & Avolio 1995: 187). Transformational leaders are those who are vision holder and inspiring for employees, who have certain ideals, strong communication power, empathy, power and charisma to motivate their employees and who are aware of their employees' needs and have specific goals. They become an impressive leader for employees with these features (Paracha, 2012: 55; Altıntaş, 2020: 13; Bass & Avolio, 1995: 187). Sub-dimensions of transformational leadership consist of idealized influence/charisma, inspirational motivation, individualized consideration and intellectual stimulation. Idealized influence/charisma, the first of these dimensions, is related to the fact that the leader has a strong influence on the employees as a result of some behaviours such as attaching importance to the employees, showing respect, and clearly sharing the goals of the organization, and as a result, the employees are

influenced by the attitudes and behaviours of the leader and begin to model the leader more. Inspirational motivation is related to the leader motivating and encouraging employees about the goals of the organization, providing employees with an attractive future vision, and building team spirit within the organization. Individualized consideration is related the leader's ability to analyse the skills, differences and needs of their employees and to attach importance to this situation and to set goals for their employees in this direction. Intellectual stimulation is related to the leader enabling the group employees to question the current situation and encouraging employees to think and act creatively (Bass, 1997: 133-134; Kreitner & Kinicki, 2009: 487).

2.2. Team Learning

Team learning is grounded on the learning of the team members, who formed the team, by establishing a dialogue with each other and is related sharing the knowledge obtained by team members, watching other team members and utilizing their experiences and expertise, and thus gaining the chance to learn (Lucas, 1999: 5). In other words, team learning includes the ability of team members to communicate with each other, to share knowledge and to be integrated with each other (Kaçmaz & Barutçu, 2016; Sole & Edmondson, 2002: 19). Accordingly, team learning includes a more specific part of learning organizations about the team and plays a mediating role between individual learning and organizational learning (Töremen & Pekince, 2011: 391).

To increase the level of team learning in the organization, collaboration and participation are crucial for employees. Accordingly, the main factor to provide cooperation and participation in teams is communication and dialogue (Romme & Dillen, 1997: 76). It is not easy to form and maintain an effective learning team. In this direction, Lick (2006) listed the general processes related to the formation of a learning team as follows: creating group synergy, providing intergroup mentoring, benefiting from learning resources, combining knowledge and creating potential solutions, implementing potential solutions, and sharing and evaluating the findings, producing new solutions through the findings, repeating until getting the desired and finally re-checking group synergy and mutual mentoring (Lick, 2006: 93; Töremen & Pekince, 2011: 400)

2.3. Affective Commitment

Affective commitment is the tendency of employees to remain in the organization due to their emotional relations, and it is the behaviour of employees to accept the aims and values of the organization and to exert more effort than ever for the interests of the organization (Meyer & Allen 1997: 11; Sökmen, et al., 2017: 199). Affective commitment is a type of commitment which is formed by the employee's adoption of organizational goals and rules, commitment to these goals and rules, feeling closeness to their managers, having positive feelings about organizational identification, and adoption of the organizational vision and mission (Meyer & Allen, 1991: 67). In other words, affective commitment is the employee's own willingness to adopt the goals, rules and values of the organization, contribute to all organizational processes and act voluntarily (Tutar, 2007: 106). Employees who feel affective commitment to the organization remain in the organization as they consider themselves as a part of the organization and want to remain in the organization. They do not consider it as an obligation to remain in the organization and to work in the direction of the aims of the organization (Meyer & Allen, 1997: 11).

Several factors influencing affective commitment draw attention. These are: personal characteristics, organizational characteristics and work experiences. (a) Personal characteristics consist of demographic factors such as age, gender, education, status, seniority, personality. (b) Organizational characteristics; are factors such as the employees in the organization feeling comfortable psychologically and physiologically, and thinking that they are supported by the organization. (c) Work experiences are factors such as ensuring the organization's justice in

organizational procedures and distribution of tasks, rewarding the employee, and employee's feeling of management's support at all times (Allen & Meyer, 1990: 5; Bilmmez, 2020: 35).

2.4. The Relationship between Transformational Leadership, Team Learning and Affective Commitment

A transformational leader in an organization motivates its employees to act in the direction of the interests of the organization rather than their own interests, while exhibiting attitudes and behaviours aimed at change and innovation (Deluga, 1990: 193; Bass, 1997: 133). In this case, a positive and motivating environment emerges in the organization. Employees in such an environment are more committed to the organization, they adopt organizational goals and rules, feel close to their senior managers, their positive feelings about the organization increase and they almost integrate with the organization (Meyer & Allen, 1991: 67). In short, they are affectively committed to the organization. In this case, employees maintain a continuous dialogue with the leader and other team members with whom they work together in the same team in that organizational environment led by a leader who is positive, motivating, open to change and innovation, constantly share knowledge, benefit from the experiences and expertise of other team members, thus realizing a better learning within the team (Altıntaş, 2020: 13; Lucas, 1999: 5).

From a different viewpoint, if employees feel that their leaders support different and new ideas, constantly make sacrifice for themselves, behave nicely and respectfully towards them in all circumstances, constantly appreciate, encourage and motivate them (Kreitner & Kinicki, 2009: 487-488), then employees also begin to feel closeness to their leader and the organization. Thus, the employees are affectively committed to the organization and they accept and adopt the organization in all extents. In this case, they make effort based on learning and teaching what they know and make all kinds of sacrifices for the success of their team.

Regarding similar studies; Thamrin (2012), Atmojo (2015), Ribeiro et al. (2018) and Avolio et al. (2004) were determined that transformational leadership had a positive effect on organizational commitment and more specifically on affective commitment. Chiu et al. (2009), Bucic et al. (2010), Raes et al. (2013) and Park (2015) were determined that transformational leadership had a positive effect on team learning. Suh and Jung (2018) were determined that affective commitment has a positive effect on team learning.

Accordingly, hypotheses based on previous studies and main variables are as follows:

H1: Transformational leadership has a significant and positive effect on affective commitment.

H2: Transformational leadership has a significant and positive effect on team learning.

H3: Affective commitment has a significant and positive effect on team learning.

H4: Affective commitment has a mediating role in the effect of transformational leadership on team learning.

H5: Affective commitment has a mediating role in the effect of sub-dimensions of transformational leadership on team learning.

3. RESEARCH METHOD

3.1. Purpose and Importance of the Study

In this study, evaluation of the employees teamed up in the motor vehicles industrial organizations operating in Ankara, within the scope of the ISO first and second 500 largest industrial organizations, through the variables of transformational leadership, team learning and affective commitment, was determined as the main purpose. In addition, because of the limited number of studies related to these variables in the literature, it is aimed to empirically examine these relationships and the mediating role of variables on employees, and to provide contribution to the literature. Another important aspect of the study is to conduct it on the employees of the ISO first and second 500 industrial organizations, one of the largest industrial organizations in Turkey.

In addition, as a result of the study, it was considered that the analysis data on how leaders would develop transformational leadership characteristics and how they would ensure the affective commitment of employees and how this situation would increase team learning, could be used, and as a result, important findings were provided for organizations.

3.2. Population and Sample Selection

Population of the study, obtained from the 2019 data of the Istanbul Chamber of Industry, consists of approximately 260 white-collar employees working as a team, who are not the senior and mid-level managers and who work in the motor vehicles industrial organizations operating in Ankara included within the scope of the ISO first and second 500 largest industrial organizations. Sample of the study consists of 161 employees randomly selected from the said organizations. In the formation of sample, it is determined that the sample meets this situation over the 5% margin of error within the limits of 95% (Sekaran, 1992: 253).

3.3. Data Collection Tools and Scales Used

Questionnaire technique was used in the study and this technique was applied to employees through distribution and collection method. 4 questionnaires out of 165 distributed questionnaires were not analysed, because they did not return or included missing data. Study was performed with 161 questionnaires. The first part of the questionnaire is the demographic characteristics of the employees consisting of 8 questions. In the second part, the statements about 20-item transformational leadership scale of Bass and Avolio (1995) were taken. The third part is the statements about 13-item team learning scale found by Marsick and Watkins (2003) and standardized by Doruk (2010). The fourth part is the statements about 6-item affective commitment scale of Allen and Meyer (1990) which is included in the organizational. 5-point Likert scale was used in the parts including scale. SPSS 18.0 and AMOS 18.0 package programs were used in the study.

4. FINDINGS AND DISCUSSION

4.1. Demographic Findings

In this part, in demographic findings the frequency and percentage distribution of the sample were investigated. Accordingly, while 19.3 % (31) of the participants were female, 80.7% (130) of them were male. While 66.5% (107) of the participants were married, 33.5% (54) of them were unmarried. 9.3% (15) of the respondents were employees between 30 years old and below, 38.5% (62) of them were between 31 and 35 years old, 30.5% (49) of them were between 36 and 40 years old, 19.2% (31) of them were between 41 and 45 years old and 2.5% (4) of them were 46 years old and above. 6.8% (11) of the respondents were high school graduates, 26.8% (43) of them were college graduates, 63.3% (102) of them were bachelor, 3.1% (5) of them were Master's/Ph.D. graduates. 26.7 % (43) of the respondents consist of technicians, 55.3% (89) of them were engineers, 14.3 % (23) of them were responsible personnel, 3.7 % (6) of them were assistant specialists. 21% (34) of the respondents have been working in the organization less than 1 year, 34.8% (56) of them between 1-5 years, 31% (50) of them between 6-10 years, 9.4% (15) of them between 11-15 years, 3.7% (6) of them for 16 years and more. 23.6 (38) % of the respondents have total employment period of less than one year, 33.5 (54) of them between 1-5 years, 28.6% (46) of them between 6-10 years, 11.8% (19) of them between 11-15 years and 2.5% (4) of them for 16 years or above. In addition, 38.6% (62) of the respondents work in R&D department, 37.2% (60) of them in production department, 11.8% (19) of them in procurement department and 12.4% (20) of them in marketing and sales departments.

4.2. Validity and Reliability Analysis

Analyses were performed using principal components method and varimax rotation method. In addition to this, factor analysis was also used to retest and verify the factor structures (Yaşlıoğlu, 2017: 75). An expression about transformational leadership and team learning with a factor load of less than 0.30 was excluded from the scale. Accordingly, This is shown in Table 1 and Table 2.

Table 1. Validity and Reliability Analysis related to Transformational Leadership, Team Learning and Affective Commitment

TRANSFORMATIONAL LEADERSHIP				
Factors	Eigenvalue	Cronbach's Alpha	Factor Exp. (%)	Factor Loading (Min.-Max.)
Idealized Influence/Charisma	2.873	.758	17.381	.531- .826
Inspirational Motivation	2.694	.729	16.872	.547- .853
Individualized Consideration	2.215	.714	11.694	.510- .844
Intellectual Stimulation	1.478	.703	8.891	.495- .731
Transformational Leadership (<i>Ex. Tot. Var.</i> = %54.838; <i>p</i> = .000; α = .764; <i>KMO</i> = .717 ; <i>Bartlett's Sph.</i> χ^2 = 986.552)				
TEAM LEARNING				
Factors	Eigenvalue	Cronbach's Alpha	Factor Exp. (%)	Factor Loading (Min.-Max.)
Team Learning	3.162	.831	58.340	.551-.875
Team Learning (<i>Ex. Tot. Var.</i> = %58.340; <i>p</i> = .000; α = .831; <i>KMO</i> = .768 ; <i>Bartlett's Sph.</i> χ^2 = 604.083)				
AFFECTIVE COMMITMENT				
Factors	Eigenvalue	Cronbach's Alpha	Factor Exp. (%)	Factor Loading (Min.-Max.)
Affective Commitment	3.647	.846	63.327	.542-.886
Affective Commitment (<i>Ex. Tot. Var.</i> = %63.327; <i>p</i> = .000; α = .846; <i>KMO</i> = .819 ; <i>Bartlett's Sph.</i> χ^2 = 571.635)				

As is seen in Table 1, all data groups have a multivariate normal distribution. Accordingly, the KMO value related to transformational leadership is .717 and Bartlett test is at ($p = .000 < .05$) significance level, KMO value related to team learning is .768 and Bartlett test at ($p = .000 < .05$) significance level, and finally KMO value related to affective commitment is .819 and Bartlett test is at ($p = .000 < .05$) the significance level. In this case, KMO is at an acceptable level (Yaşlıoğlu, 2017: 75). According to the results of the reliability analysis, the reliability coefficients of all factors exceeded the limit of 0.70, which is considered as a reasonable value (Kalaycı, 2010: 405). In addition, the explanations of the factors and the total variance explained have reasonable values (Yaşlıoğlu, 2017: 76). In addition, confirmatory factor analysis is shown in Table 2.

Table 2. Confirmatory Factor Analysis

Scales	$\Delta X^2/df$	GFI	AGFI	CFI	IFI	RMSEA
Transformational Leadership	2.361	.914	.880	.951	.928	.073
Team Learning	2.810	.908	.855	.973	.916	.060
Affective Commitment	2.842	.917	.891	.962	.941	.077

ΔX^2 = Chi-square statistics; df= Degrees of freedom, GFI= Goodness of fit index, AGFI= Adjusted Goodness of fit index, CFI= Comparative fit index, IFI= Incremental fit index, RMSEA= Root mean square error of approximation * $p < .001$.

According to Schermelleh-Engel and his friends (2003) acceptable good fit values for factor analysis are; $2 \leq \Delta X^2/df \leq 5$; $.90 \leq GFI \leq 1.00$; $.85 \leq AGFI \leq 1.00$; $.90 \leq CFI \leq 1.00$; $.90 \leq IFI \leq 1.00$; $.05 \leq RMSEA \leq .08$ (Schermelleh-Engel, et al., 2003: 52). In the table, it was found that models of transformational leadership scale ($\Delta X^2/df = 2.361$; $p < .001$; GFI=.914; AGFI=.880; CFI=.951; IFI=.928; RMSEA=.073), team learning scale ($\Delta X^2/df = 2.810$; $p < .001$; GFI=.908; AGFI=.855; CFI=.973; IFI=.916; RMSEA=.060) and affective commitment scale ($\Delta X^2/df = 2.842$; $p < .001$; GFI=.917; AGFI=.902; CFI=.962; IFI=.941; RMSEA=.077) provided goodness-of-fit values. In this case, it can be said that the goodness of fit values are at a reasonable level (Schermelleh-Engel, et al., 2003: 52).

4.3. Descriptive Statistics and Correlation Analysis

Descriptive statistics and correlation analysis was used in the study to determine the relationship between transformational leadership, team learning and affective commitment variables. Correlation analysis for variables is shown in Table 3.

Table 3. Descriptive Statistics and Correlation Analysis Table

Scales	\bar{X}	S.D.	1	2	3	4	5	6	7
1. Transformational Leadership (G)	3.78	.441	1.000						
2. Idealized Influence/Charisma	3.65	.473	.370**	1.000					
3. Inspirational Motivation	3.94	.382	.615**	.421**	1.000				
4. Individualized Consideration	3.11	.526	.712**	.493**	.426**	1.000			
5. Intellectual Stimulation	2.52	.610	.94	.119**	.88	.237**	1.000		
6. Team Learning	3.91	.417	.546**	.454**	.407**	.616**	.263**	1.000	
7. Affective Commitment	4.03	.372	.618**	.437**	.533**	.537**	.279**	.667**	1.000

* $p < .05$ and ** $p < .01$

Transformational Leadership and its Sub Dimensions (Min. Max.): Skewness= -.313 ; Kuttosis= .611

Team Learning (Min.-Max.): Skewness= -.741 ; Kuttosis= .592

Affective Commitment (Min.-Max.): Skewness= -.663 ; Kuttosis= .555

In this part, means, standard deviations and skewness and kurtosis of the variables are examined. According to the results, all dimension's averages aren't diverge from the general average so much. The mean of affective commitment (4.03) is the highest, while the mean and of intellectual stimulation (2.52) is the lowest.

Also, the values are skewed to the left and range from -.741 to -.313. Their kurtosis values range from +.555 to +.611. According to Tabachnick and Fidell (2007), it is considered normal for the coefficients of skewness and kurtosis to take values between ± 2 or ± 3 . In this case, it is indicated that the positive value of kurtosis shows that the curve is more perpendicular than the normal and the negative value of kurtosis shows that is curve more kurtic than the normal. Accordingly, the skewness and kurtosis values are at reasonable levels (Pallant, 2001: 52).

According to the results of correlation analysis, there is a positively significant and high level relationship between inspirational motivation and transformational leadership ($r = .615$; $p = .000$), between individualized consideration and transformational leadership ($r = .712$; $p = .000$), between individualized consideration and team learning ($r = .616$; $p = .000$), between affective commitment and transformational leadership ($r = .618$; $p = .000$) and between affective commitment and team learning ($r = .667$; $p = .000$).

4.4. Regression Analysis

In this part, it was used hierarchical regression analysis in order to measure the effects of transformational leadership and its sub-dimensions, team learning and affective commitment on each other, and mediation analysis found by Baron and Kenny (1986) to measure the mediating effect of affective commitment. According to the results of the study, Durbin Watson values should be between 1.5 and 2.5, Tolerance should be greater than 0.2, VIF should be less than 10, Sobel Test Z value should be greater than 1.96 and p value should be significant (Uslu & Aktaş, 2010: 82; Puspita, et al., 2020: 291). Regression analysis are examined in Table 4 and Table 5.

4.4.1. Mediating Role of Affective Commitment in the Effect of Transformational Leadership on Team Learning

In this context, H1, H2, H3 and H4 hypotheses will be analysed in Table 4.

Table 4. Regression Analysis related to the Mediating Role of Affective Commitment in the Effect of Transformational Leadership on Team Learning

Model	Dependent Variable	Independent Variable	β	T	P
1	Affective Commitment	<i>Conts.</i>	3.155	9.438	.000
		Transformational Leadership	.729	5.730	.001
F= 101.824; Model (P)= .000 ; R=.698; R ² =.494; Adj.R ² = .472					
Model	Dependent Variable	Independent Variable	β	T	P
2	Team Learning	<i>Conts.</i>	3.537	8.948	.000
		Transformational Leadership	.726	6.461	.000
		<i>Conts.</i>	2.528	9.802	.000
		Affective Commitment	.760	7.539	.000
Transformational Leadership: F= 73.759 ; Model (P)= .000 ; R=.680; R ² = .482; Adj.R ² = .426 Affective Commitment: F= 62,528 ; Model (P)= .000 ; R=.594; R ² = .467; Adj.R ² = .453					
Model	Dependent Variable	Independent Variable	β	T	P
3	Team Learning	<i>Conts.</i>	2.179	7.285	.000
		Transformational Leadership	.511	7.120	.000
		Affective Commitment	.385	6.149	.000
F= 79.627 ; Model (P)= .000 ; R=.737; R ² = .583; Adj R ² = .545 * p<.05; ** p<.01; *** p<.001					
Durbin Watson = 1.918 Tolerans = .720 VIF = 4.193 Sobel Test: Z = 9.62 P < .000					

According to the mediating variable analysis: **Step 1:** Transformational leadership explains 47.2% of affective commitment. F=101.824 and sig=.000 indicate that the relationship between the variables is significant. In addition, it was found that transformational leadership ($\beta = .729$, $p = .001$) had a positive effect on affective commitment. In this case, it was found that transformational leadership had a significant and positive effect on affective commitment, and thus H1 hypothesis was accepted. **Step 2:** Transformational leadership explains 42.6% of team learning. F=73.759 and sig =.000 indicate that the relationship between the variables is significant. In addition, it was found that transformational leadership ($\beta = .726$, $p = .000$) had a positive effect on team learning. In this case, it was found that transformational leadership had a significant and positive effect on team learning, and thus H2 hypothesis was accepted **Step 3:** Affective commitment explains 45.3% of team learning. F=62.528 and sig =.000 indicate that the relationship between the variables is

significant. In addition, it was found that affective commitment ($\beta = .760, p = .000$) had a positive effect on team learning. In this case, it was found that affective commitment had a significant and positive effect on team learning, and thus H3 hypothesis was accepted. **Step 4:** In Model 3, affective commitment, which is the mediating variable, was included in the analysis. It was observed that the value of R^2 ($0.482 \rightarrow 0.583$) increased according to Model 2. Thus, the mediating effect of affective commitment is supported. Besides that, with the affective commitment analysed, since the β coefficient of the transformational leadership ($\beta = .726 \rightarrow \beta = .511$ and $p = .000$) decreases and p values remain below 0.05, affective commitment was found to be a semi-mediating variable. It was also confirmed that there was no multiple connection between the variables of Durbin Watson, Tolerance, VIF and Sobel Test Z values for transformational leadership. In this case affective commitment plays a semi-mediating role in the effect of transformational leadership on team learning. Thus H4 hypothesis was accepted.

4.4.2. Mediating Role of Affective Commitment in the Effect of Sub-Dimensions of Transformational Leadership on Team Learning

In this context, the analyses created in the direction of the H5 hypothesis in Table 5 were examined.

Table 5. Regression Analysis Related to the Mediating Role of Affective Commitment in the Effect of Sub-Dimensions of Transformational Leadership on Team Learning

Model	Dependent Variable	Independent Variable	β	T	P
1	Affective Commitment	<i>Conts.</i>	3.618	4.385	.000
		Idealized Influence/Charisma	.347	3.476	.001
		Inspirational Motivation	.356	3.379	.000
		Individualized Consideration	.266	2.758	.000
		Intellectual Stimulation	.156	.859	.361
F= 114.625; Model (P)= .000 ; R=.593; $R^2=.417$; Adj. $R^2=.384$					
Model	Dependent Variable	Independent Variable	β	T	P
2	Team Learning	<i>Conts.</i>	4.630	3.116	.000
		Idealized Influence/Charisma	.377	1.750	.001
		Inspirational Motivation	.320	3.109	.001
		Individualized Consideration	.365	2.368	.002
		Intellectual Stimulation	.221	1.892	.003
		<i>Conts.</i>	5.483	8.479	.000
		Affective Commitment	.354	5.748	.000

Team Learning: F= 69.489 ; Model (P)= .000 ; R=.642; R²= .430; Adj.R²= .381
 Affective Commitment: F= 118.172 ; Model (P)= .000 ; R=.559; R²= .427; Adj.R²= .373

Model	Dependent Variable	Independent Variable	β	T	P
3	Team Learning	<i>Conts.</i>	3.837	4.540	.000
		Idealized Influence/Charisma	.262	2.637	.000
		Inspirational Motivation	.236	1.231	.001
		Individualized Consideration	.318	1.580	.002
		Intellectual Stimulation	.334	.345	.000
		Affective Commitment	.269	2.591	.000
F= 62.581 ; Model (P)= .000 ; R=.629; R ² = .539; Adj R ² = .392 * p<.05; ** p<.01; *** p<.001					
Idealized Influence/Charisma: Durbin Watson = 1.855 Sobel Test: Z =10.84			Tolerans = .575 P <.000	VIF = 2.634	
Inspirational Motivation: Durbin Watson = 1.737 Sobel Test: Z =9.11			Tolerans = .456 P <.000	VIF = 2.020	
Individualized Consideration: Durbin Watson = 1.684 Sobel Test: Z =8.46			Tolerans = .487 P <.000	VIF = 1.831	

According to the mediating variable analysis: **Step 1:** Sub-dimensions of transformational leadership explains 38.4% of affective commitment. F =114.625 and sig =.000 indicate that the relationship between the variables is significant. In addition, it was found that idealized influence/charisma ($\beta = .347$, $p = .001$), inspirational motivation ($\beta=.356$, $p=.000$), and individualized consideration ($\beta=.266$, $p=.000$) had a positive effect on affective commitment. **Step 2:** Sub-dimensions of transformational leadership explains 38.1% of team learning. F =69.489 and sig =.000 indicate that the relationship between the variables is significant. In addition, it was found that idealized influence/charisma ($\beta =.377$, $p =.001$), inspirational motivation ($\beta=.320$, $p=.001$), and individualized consideration ($\beta=.365$, $p=.002$) and intellectual stimulation ($\beta=.221$, $p=.003$) had a positive effect on team learning. **Step 3:** Affective commitment explains 37.3% of team learning. F=118.172 and sig =.000 indicate that the relationship between the variables is significant. In addition, it was found that affective commitment ($\beta=.354$, $p=.000$) had a positive effect on team learning. **Step 4:** In Model 3, affective commitment, which is the mediating variable, was included in the analysis. It was observed that the value of R² (0.430→0.539) increased according to Model 2. Thus, the mediating effect of affective commitment is supported. Besides that, with the affective commitment analysed, since the β coefficient of the idealized influence/charisma ($\beta=.377$ → $\beta=.262$ and $p=.000$), inspirational motivation ($\beta=.320$ → $\beta=.236$ and $p=.001$) and individualized consideration ($\beta=.365$ → $\beta=.318$ and $p=.002$) decreases and the p values remain below 0.05, affective commitment was found to be a semi-mediating variable. It was also confirmed that there was no multiple connection between the variables of Durbin Watson, Tolerance, VIF and Sobel Test Z values for idealized influence/charisma, inspirational motivation and individualized

consideration. In this case affective commitment plays a semi-mediating role in the effect of idealized influence/charisma, inspirational motivation and individualized consideration on team learning. Thus, H5 hypothesis was accepted partially.

5. CONCLUSION AND RECOMMENDATIONS

Employees, in organizations where transformational leadership is effective, internalize leaders' support of their different and innovative ideas, motivation, empathy, and attitudes and behaviours within the framework of respect and love in every respect (Paracha, 2012: 55; Kreitner & Kinicki, 2009: 487). In this case, they can establish an emotional bond with their leaders, with their working team and therefore with their organizations. Accordingly, they will be more open to learning and teaching what they learned for their own and for their team's success by adopting each member of their team more. As a result, team learning within the organization can make them reach higher levels.

According to the results from the study, it was determined that affective commitment plays a semi-mediating role in the effect of transformational leadership on team learning. In this direction, employees in organizations controlled by transformational leadership almost integrate with their team and affectively commit the team and therefore to the organization. In this case, they pre-eminently try to serve the team and the organization, consider the team success as their own success and try to increase the learning efforts within the team in order to reach highest level.

Regarding the sub-dimensions, it was found that affective commitment had a semi-mediating role in the effect of idealized influence/charisma, inspirational motivation and individualized consideration on team learning. In this case the leader can make employees more affectively committed to their work together with exemplariness of leader for the employees, their respect to employees, positive thoughts of employees about their leader, confidence and inspiration of leader towards employees, persuading the employees about the importance of their role in the organization, consideration of the individual talents, differences and needs of the employees (Bass & Avolio 1995: 187) and supporting them to develop these aspects, and as a result, the leader may cause employees to put more effort into the team success and thus organizational success.

Regarding similar studies, no one-to-one study has been found on the mediating role of affective commitment in the effect of transformational leadership on team learning. As a result, in this study, the studies considered important and including the relationships of other variables as stated in the hypotheses were examined. In this context, in the study, titled "The influence of transformational leadership and organizational commitment on job satisfaction and employee performance", conducted by Thamrin (2012) with 105 freight company employees operating in Indonesia, it was found that transformational leadership had a positive effect on organizational commitment and more specifically on affective commitment. In this case, the results of our study are similar to the results of this study. However, unlike our study, the effects of the sub-dimensions of transformational leadership were also examined. In the study performed by Atmojo (2015) with 146 middle managers titled "The influence of transformational leadership on job satisfaction, organizational commitment, and employee performance", it was found that transformational leadership had a positive effect on organizational commitment and more specifically on affective commitment. In this case, the results of our study are similar to the results of this study. However, unlike our study, the effects of the sub-dimensions of transformational leadership were also examined. Ribeiro et al. (2018) with 476 healthcare professionals titled "How transformational leadership predicts employees' affective commitment and performance", it was found that transformational leadership had a positive effect on organizational commitment. In this case, the results of our study are similar to the results of this study. Avolio et al. (2004) with 520 nurses titled "Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance", it was found that transformational leadership had a positive effect on

affective commitment. Accordingly, the results of our study are similar to the results of this study. In the study performed by Chiu et al. (2009) with 443 employees from 99 working group titled “Transformational leadership and team behavioural integration: The mediating role of team learning”, it was found that transformational leadership had a positive effect on team learning. In this case, the results of our study are similar to the results of this study. However, unlike our study, the effects of the sub-dimensions of transformational leadership were also examined. In the study performed by Bucic et al. (2010) with organizational team members titled “Effects of leadership style on team learning”, it was found that transformational leadership had a positive effect on team learning. In this case, the results of our study are similar to the results of this study. In the study titled performed by Raes et al. (2013) with 498 healthcare employees from 28 nursery teams titled “Facilitating team learning through transformational leadership”, it was found that transformational leadership had a positive effect on team learning. In this case, the results of our study are similar to the results of this study. However, unlike our study, the effects of the sub-dimensions of transformational leadership were also examined. In the study performed by Park (2015) titled “The relationship of team personality to team learning behaviour: Transformational leadership as a moderator” with 227 employees working in 58 teams in 8 organizations, it was found that transformational leadership had a positive effect on team learning behaviour. In this case, the results of our study are similar to the results of this study. However, unlike our study, the effects of sub-dimensions of transformational leadership were also examined. In the study performed by Suh and Jung (2018) with 106 organizational employees titled “The effect of workplace silent behaviour on team learning: Mediating effect of affective commitment”, it was found that affective commitment has a positive effect on team learning. In this case, the results of our study are similar to the results of this study.

This study contributes to the literature as it examines the relationships of transformational leadership, team working and affective commitment. Another contributing aspect of the study is to be performed in ISO first and second 500 industrial organizations which has various departments. In the future studies, in which the variables in different sectors within the ISO first and second 500 industrial organizations are examined, can be performed comparatively. In addition, researchers who will perform new studies on this subject, might be suggested to analyse these variables by using different methods.

The study was limited to the ISO first and second 500 motor vehicles industrial organizations located in Ankara. In addition, there were employees who could not be interviewed for the questionnaire due to the several limitations of the organizations and the density of the organizational employees. In this case, a new study can be performed by increasing the number of employees interviewed in future studies.

According to the results of the study, it was attempted to determine the transformational leadership perceptions of the employees about the organization where they work and the results of these perceptions in the organization. In this direction, the study includes some important guiding findings for leaders. It can contribute to the organization by improving the transformational leadership characteristics of the leaders, improving the positive perceptions of the employees towards the team and the organization, increasing their affective commitment to the team and the organization, and as a result of this situation, employees can contribute to the organization by doing their best for the success of the team and the organization, to increase their efficiency and productivity. This study can also help leaders to review the personal characteristics and make corrections if they have any negative attitude or behaviour towards the employees.

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