

## **A Study of the Correlations of the Components of Transformational Leadership with Teachers' Thinking Styles and Organizational Commitment in Public Girl's High Schools in Tehran, Iran**

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**Abstract:** The workforce is one the most valuable assets in any organization and management makes best endeavors to appropriately recognize this asset and to mobilize it towards the promotion of the goals of the organization. So, the present study aimed to investigate the correlations of transformational leadership with teacher's thinking styles and organizational commitment in public girl's high schools in Tehran, Iran. In this cross-sectional study, 356 teachers were selected from the teachers of public girl's high schools based in Tehran, Iran, through the multistage cluster sampling. As for data collection, a demographics checklist, the Allen and Meyer's organizational commitment scale, the Sternberg and Wagner's thinking styles inventory and the Timothy and Tracy's transformational leadership questionnaire were utilized. Further, the data were analyzed through the Kolmogorov-Smirnov test, ANOVA, the Structural Equation Modeling (SEM) and the multivariate regression analysis and to this end, the SPSS Statistics Software and LISREL were utilized. The results of the present study revealed that the three components of transformational leadership, i.e., idealized influence/charismatic behaviors (II), Inspirational Motivation (IM) and Intellectual Stimulation (IS) were correlated with teacher's thinking styles in public girl's high schools based in Tehran, Iran ( $p < 0.05$ ). Similarly, the results demonstrated that there were relationships between each of the four components of transformational leadership, i.e., idealized influence/charismatic behaviors (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individualized Consideration (IC) and teacher's organizational commitment ( $p < 0.05$ ). Given the significant positive correlations of transformational leadership and its components with thinking style and organizational commitment, it can be concluded that improving the transformational leadership among teachers can lead to the enhancement of their thinking styles and organizational commitment.

**Key words:** Transformational leadership, thinking styles, organizational commitment, ANOVA, Iran

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### **INTRODUCTION**

The workforce is one the most valuable assets in any organization and management makes best endeavors to appropriately recognize this asset and to mobilize it towards the promotion of the goals of the organization (Kheyrolahzadeh, 2010). The organizations that have a lack of committed workforce will never achieve their goals. In other words, the committed and loyal workforce plays a key role in the preservation of the organizational competitiveness in the market. In the texts dealing with the organizational sciences, the organizational commitment has been considered one of the most popular job attitudes. Moreover, the prerequisites, factors affecting the organizational commitment, its correlates and its consequences have been investigated in studies about management and organizational psychology over the years. Especially, in today's competitive market, the

employee's attachment and belonging to their organizations are on the decrease, there is substantial labor turnover and they are less loyal to their organizations. Research indicates that the organizational commitment is an important predictor of absenteeism and staff turnover and by taking this variable into consideration, organizations will have fruitful results (Zehir *et al.*, 2012).

The thinking styles can be one of the main sources of variability of occupational and academic performance. To recognize the thinking styles will enable one to realize one's potentialities and to choose an appropriate job. In addition such recognition helps one understand one's causes of success and failures and help with one's profession (Khosroabadi, 2012). Not only does an individual's thinking style influence how he/she thinks, it also affects one's behavior and performance. So it seems that thinking styles can predict one's performance,

success and competency (Sedaghat *et al.*, 2014). Not to mention, ignoring the thinking styles in different situations leads to the omission or ignorance of the best and the most valuable talents and potential assets. One's thinking style should not be ignored because it can be used as a means of recognizing one's interests and attitude in different situations which can be directed in such a way that one's maximum satisfaction can be obtained and in addition to provision of one's mental health, it will both prevent enormous human forces from being wasted and direct them towards the objectives of the organization (Khosroabadi *et al.*, 2012).

More recently, the focus of leadership has shifted away from the traditional and interactive models towards the new types of leadership theories with an emphasis on transformational leadership (Ozaralli, 2003). In recent years, the transformational leadership styles as the new paradigm of management, have received a great deal of attention in theories of management. In this regard, Burns (1978) remarks that the transformational leadership styles act as stimulants and forces that change demands, values and conflicting goals into positive and constructive behaviors. Additionally, this style of leadership functions at a level far beyond the levels of staff's needs and potential values in which more basic and established needs are considered (Madhu and Krishnan, 2005). The transformational leadership increases the affective commitment. Leaders that display transformational behaviors will develop a set of positive results in their organizations and this type of leadership correlates with high levels of effort, performance, satisfaction and commitment. Bass (1990) proposed that leaders can propel their followers into a performance beyond expectations, through the features of transformational leadership (Humphreys and Einstein, 2003).

The results of studies conducted by Javdani (2011) and Hassanpour *et al.* (2011) about the correlations of the transformational leadership with the organizational commitment of teachers and staff's empowerment revealed that the transformational leadership was significantly correlated with each of the sense of competence (Nomani *et al.*, 2016). The feeling of having a choice, feeling effective, a sense of significance and a sense of trust for others. Similarly, Alkahtani found out that there was a significant relationship between the dimensions of the transformational leadership (Idealized Influence/charismatic behaviors (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individualized Consideration (IC) and the dimensions of the organizational commitment (Alkahtani, 2016).

Given the said material as well as the fact that the educational system in any country is in need of committed teachers who provide the public with quality educational services, the present study aimed to investigate the correlations of transformational leadership with teachers' thinking styles and organizational commitment in public girl's high schools based in Tehran, Iran.

## **MATERIALS AND METHODS**

In this study, the statistical population comprised all teachers of public girl's high schools in Tehran, Iran ( $N = 4894$ ). To determine the sample size, the Krejcie and Morgan's sample size determination tables were employed ( $n = 356$ ) and the multistage cluster sampling was used for sample selection. To this end, first off, Tehran was divided into five regions: northern, southern, western, eastern and central. Then several schools were randomly chosen from those based in each region.

As for data collection, a demographics checklist, the Timothy and Tracy's transformational leadership questionnaire, the Sternberg and Wagner's thinking styles inventory and the Allen and Meyer's organizational commitmentscale were utilized.

The demographics checklist comprised questions on age, education, work experience in the Department of Education and Training and field of study.

The 35-item transformational leadership questionnaire was developed by Hinkin and Tracy (1999) and comprised four components: Idealized Influence charismatic behaviors (II) (questions 1-9), Inspirational Motivation (IM) (questions 10-19), Intellectual Stimulation (IS) (questions 20-26) and Individualized Consideration (IC) (questions 27-35). In a pilot study, the reliability (Cronbach's alpha) of each of these dimensions proved acceptable and the results were as follows: Idealized Influence/charismatic behaviors (II) (0.85), Inspirational Motivation (IM) (0.81), Intellectual Stimulation (IS) (0.70) and Individualized Consideration (IC) (0.77).

Moreover, the 15-item thinking styles inventory, developed by Sternberg and Wagner (1991), had three dimensions: executive thinking (questions 1-4), judgmental thinking (questions 5-9) and legislative thinking (questions 10-15). Additionally, the reliability (Cronbach's alpha) of each of these dimensions proved acceptable in a pilot study and the results were as follows: executive thinking (70), judgmental thinking (76) and legislative thinking (85).

Finally, the 24-item organizational commitmentscale by Allen and Meyer (1990) comprised three components: affective commitment, normative commitment and

continuance commitment. Meyer and Kieras (1997) examined the reliability (Cronbach's alpha) of each of these dimensions and the results were as follows: affective commitment (0.79), normative commitment (0.81) and continuance commitment (0.84). In an Iranian study performed, the reliability (Cronbach's alpha) of each of these dimensions measured as follows: affective commitment (0.77), normative commitment (0.61) and continuance commitment (0.79). Also, the results showed that the reliability coefficients were desirable and acceptable with an emphasis on psychometric characteristics (Nadi and Toghraie, 2012). In our preliminary study, the reliability of affective commitment, continuance commitment and normative commitment were 0.86, 0.81 and 0.84, respectively.

Furthermore, the SPSS Statistics Software and LISREL were utilized to analyze the data. Additionally, to examine the reliability of the questionnaires, the Cronbach's alpha was used and the Kolmogorov-Smirnov test was applied to test for a normal distribution. In addition, to test the hypotheses of the research, the correlation test was applied and the Structural Equation Modeling (SEM) and the multivariate regression analysis were employed for testing the model. Finally, the Analysis of Variance (ANOVA) was applied to examine the roles of the demographic variables in the main variables by considering the normal distribution of the data.

## RESULTS

In the present research, 356 teachers of public girls' high schools in Tehran, Iran, were studied. In terms of age, the highest number of teachers was in the 40-49 age range (181 teachers or 50.8%) and 137 teachers (38.5%) were in the 30-39 age group. Also, 7.9% were 50 years old and above and the lowest percentage (1.1%) belonged to those aged under 30. In terms of education, 8.7% had a high school education and associate degrees, 75.3% had bachelor's degrees and 14.9% had master's degrees. Additionally, in terms of work experience in the Department of Education and Training, a very large

fraction had >10 year's work experience (84.8%) and the lowest percentage belonged to the respondents with a three-five year's work experience at 1.3%. Additionally, 11.5% of the respondents had five-ten year's work experience. Also, the majors of Persian Literature (22.2%), Mathematics (18%), Chemistry (8.1%) and English (7.9%) had the highest percentages.

Furthermore, the results of the Kolmogorov-Smirnov test indicated that the data distribution was normal ( $p = 0.163$ ). Also, the results of ANOVA revealed that there was no significant difference between the age groups in terms of the mean scores of the variables of thinking styles, organizational commitment and transformational leadership ( $p > 0.05$ ). Not to mention, no significant difference was observed between education and work experience in the Department of Education and Training in terms of the main variables of the study ( $p > 0.05$ ).

In terms of field of study, given that the significance level of only transformational leadership was less than 0.05, it was concluded that only the variable of the field of study played a role in the transformational leadership. So, those majoring in Geography and Philosophy had the highest levels of transformational leadership and those studying Physics and Mathematics had the lowest levels of transformational leadership (Table 1).

The results of the Pearson correlation test showed that there were significant direct relationships between each of transformational leadership and its components and thinking style at medium levels ( $p < 0.001$ ). The strongest correlation coefficient was between the transformational leadership and thinking style ( $r = 0.573$ ) and the weakest correlation coefficient was observed between the individualized consideration and thinking style ( $r = 0.448$ ) (Table 2).

Furthermore, other results of the Pearson correlation test revealed that there were significant direct relationships between each of transformational leadership and its components and organizational commitment ( $p < 0.001$ ). Not to mention, the transformational leadership and Individualized Consideration (IC) had the highest and lowest correlations with the organizational commitment, respectively (Table 2).

Table 1: The means and standard deviations of the main variables of the study

Main variables	Subscales	Mean
Organizational commitment	Affective commitment	3.48
	Continuance commitment	3.54
	Normative commitment	3.67
Thinking style	Executive thinking	3.76
	Judgmental thinking	3.80
	Legislative thinking	3.61
Transformational leadership	Idealized Influence/charismatic behaviors (II)	3.80
	Inspirational Motivation (IM)	3.48
	Intellectual Stimulation (IS)	3.58
	Individualized Consideration (IC)	3.94

The Structural Equation Modeling (SEM) of the main variables of the study is shown in Fig. 1. The results indicated that the factor loading of the main variables of the study had the sufficient significance values (over 1.96). Therefore, was concluded that all of the components of the three main variables under study were important enough to assess their own main variables.

Also, the results of studying the model showed that it had a good fit (NFI = 0.87; NNFI = 0.84; CFI = 0.88; IFI 0.89 and GFI = 0.97). In Fig. 2, the regression model for the subsidiary variables is shown using the LISREL Software. In addition, the results revealed that all relationships were significant except the one between the Individualized Consideration (IC) and thinking style (Fig. 2).

Table 2: The results of the pearson correlation test between the main variables

Variables	Organizational commitment		Thinking style	
	r	Sig.	r	Sig.
Transformational leadership	0.563	<0.001	0.573	<0.001
Idealized influence/charismatic behaviors (II)	0.497	<0.001	0.571	<0.001
Inspirational Motivation (IM)	0.496	<0.001	0.513	<0.001
Intellectual Stimulation (IS)	0.492	<0.001	0.450	<0.001
Individualized Consideration (IC)	0.481	<0.001	0.448	<0.001

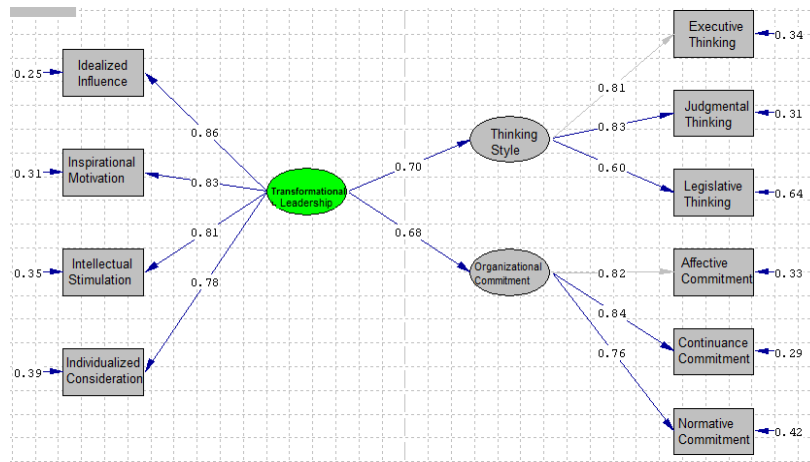


Fig. 1: The structural equation model for the main variables (standardized coefficients)

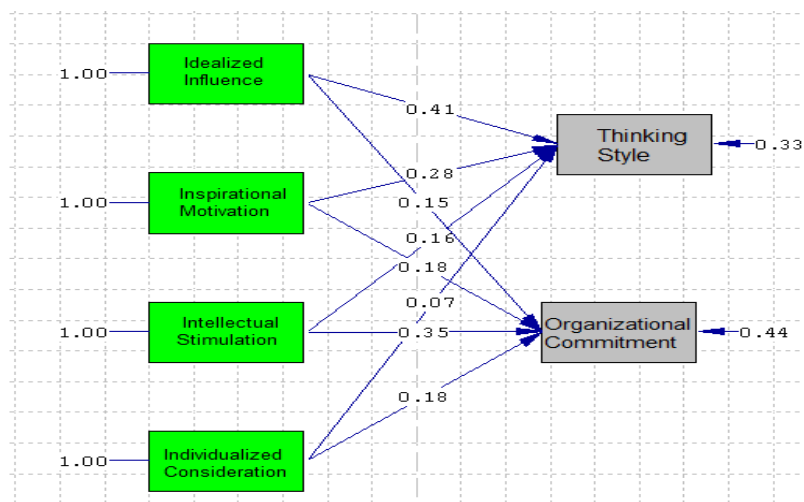


Fig. 2: The multiple regression model for the main variables (standardized coefficients)

Moreover, in the regression model, the coefficients of determination ( $R^2$ ) for the effects of the components of the transformational leadership on thinking styles and organizational commitment were 0.67 and 0.56, respectively. In other words, the components of the transformational leadership could explain or predict 0.67% and 0.56% of the changes of the variables of thinking styles and organizational commitment, respectively.

### DISCUSSION

The present study aimed to investigate the correlations of transformational leadership with teachers' thinking styles and organizational commitment in public girls' high schools based in Tehran, Iran. The results of the Pearson correlation test showed that the transformational leadership was significantly and positively correlated with thinking style and organizational commitment, an indication of the fact that having the qualities of transformational leadership is accompanied by improved thinking styles and organizational commitment. Additionally, the results of the Structural Equation Modeling (SEM) were indicative of significant relationships between these variables. The results of a study conducted by Javdani (2011) indicated that the transformational leadership was significantly correlated with the organizational commitment of teachers at elementary schools based in Shiraz, Iran. Similarly, Sanjaghi *et al.* (2011) showed that the transformational leadership could influence improvements to the organizational commitment of employees at the Defense Organization. Furthermore, the results of the present study revealed that there was a significant positive relationship between all of the dimensions of the transformational leadership (Idealized Influence/charismatic behaviors (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individualized Consideration (IC) and the organizational commitment which was concurrent with the results of a study performed by Alkahtani (2016). Additionally, the results of the present study demonstrated that all of the dimensions of the transformational leadership were significantly and positively correlated with the thinking style.

### CONCLUSION

Not to mention, given the limited number of the statistical population of the present study and restricting it to the teachers of public girls' high schools based in Tehran, Iran, extreme caution should be exercised when generalizing the results to other populations.

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