



A Variable Predicting School Climate: The Personality Traits of School Principals

Okulu İklimini Açıklayan Değişken: Okul Müdürlerinin Kişisel Özellikleri

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Abstract

This correlational article examined the relationship between school climate and personality traits of the school principals according to teachers' perceptions. The sample of the research consisted of 171 teachers and convenience sampling method was used in the research. The School Climate Scale and the Adjective Based Personality Scale were used as data collection tools in the study. In the study, it was found that there was a significant relationship between school climate and school principal's personality traits. In addition, it was also found that neurotic personality trait predicted the supportive school climate negatively, and openness to experience personality trait predicted the directive school climate positively. In the context of the results, it is suggested that the personality traits of school principals should be taken into consideration in order to create a positive school climate.

Keywords: The Big Five, personality traits, school climate, school principals.

Öz

Bu ilişkisel makalede okul iklimi ile okul müdürlerinin kişilik özellikleri arasındaki ilişki, öğretmen algılarına göre incelenmiştir. Araştırmanın örneklemini 171 öğretmen oluşturmaktadır. Çalışmada veri toplama aracı olarak Okul İklim Ölçeği ve Sıfatlara Dayalı Kişilik Ölçeği kullanılmıştır. Araştırmada okul iklimi ile okul müdürünün kişilik özellikleri arasında anlamlı bir ilişki olduğu tespit edilmiş, bununla birlikte, nevrotik kişilik özelliğinin, destekleyici okul iklimini olumsuz yönde yordadığı ve deneyime açık kişilik özelliğinin ise yönlendirici okul iklimini olumlu yönde etkilediği saptanmıştır. Araştırmanın sonuç bölümünde ise olumlu bir okul ikliminin oluşturulabilmesi için okul müdürlerinin kişilik özelliklerinin dikkate alınması gerektiği görüşü öne sürülmektedir.

Anahtar Kelimeler: Büyük Beşli, kişilik özellikleri, okul iklimi, okul müdürleri.

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Introduction

The understanding of socio-psychological environment in organizations, and analyzing the school climate's effect on the attitude and behavior of the employees both have had a significant and relevant place in the literature of organization and management for a long time (Anderson, 1982; Denison, 1996; Halpin, 1966; Hoy, Tarter and Kottkamp, 1991; James and Jones, 1974; Lubienski, Lubienski and Crane, 2008; Özdemir, Sezgin, Şirin, Karip and Erkan, 2010; Payne and Pugh, 1976; Shaw, 2009; Tagiuri and Litwin, 1968). The subject of organizational climate is the field that the researchers focus on working on the organization psychology.

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The major assumption of the research is that there might be some differences among the organizations in terms of organizational climate, and these differences can play a significant role in organizational efficiency (Moran and Volkwein, 1988). To support this statement, there are some findings suggesting that the organizational climate is one of the main aspects of organizational efficiency (Karadağ, Baloğlu, Korkmaz and Çalışkan, 2008; Wei, 2003).

It can be said that school climate studies don't have a long history. Van Houtte (2005) claims that the concept of the climate in schools was firstly studied by Pace and Stern in 1950s. However, without a doubt the most commonly known conceptualization and measurement on the organizational climate in schools are based on the leading study of Halpin and Croft (1962). This study enables a systematical study tradition on learning and improving the progress of students by analyzing the effects of the school climate (Cohen, McCabe, Michelli and Pickeral 2009). Halpin (1966) referred the school climate as the "personality" of the school after the studies he has done on the educational organization. According to Halpin, the most important person who positively or negatively affects the personality of the school is the school principal. According to McGregor (2006) who emphasizes the significance of the organizational climate, if there is not a convenient environment or climate, there is a really low possibility for the policies and regulations prepared on human management/methods of leadership and supervision to be successful.

Organizational climate, a very important concept for the organization, is affected by the leadership approaches of the administrators. Organizational climate does not only affect the performances, efficiencies, effectivity, motivation and interaction with the internal and external environments of the employees, but also affects the leadership and management approaches of the administrators (Arslan, 2004; Gök, 2009; Litwin and Stringer, 1968; Paknadel, 1988; Schulte, Ostroff and Kinicki, 2006). Therefore, leadership implementations have a significant effect on formal and informal organizations (Hoy and Clover, 1986). School administrators need to have certain skills and competencies in order to adopt effective governance in understanding and creating a positive and supportive school climate. The National Policy Board for Educational Administration has conducted a study called "Professional Standards for Educational Leaders (PSEL)" in 2015. In this study, *ten professional standards* are determined by contemporary research papers and real-time experiences of the educational leaders. In these professional standards, it is emphasized that the school leaders should have professional, technical and humanitarian skills. The humanitarian skills are especially important as part of the professional standards, and the personality traits of the school leaders have a crucial role in terms of communicational, culturally sensitive, ethical and professional norms, as well as for meaningful interaction of the families and the society.

There are several studies in different disciplines that attempt to explain the nature of the personality in different features (Burger, 2015). In order to explain the nature of the personality and the fundamental dimensions of it, the trait approach was frequently used. Studies conducted on thousands of people attempt to determine the personality structures by factor analysis (McCrae and Costa, 1983; McCrae, Costa and Busch, 1986). The *Five-factor model of personality (often termed "the Big Five")* (Judge, Bono, Ilies and Gerhardt, 2002) is a concept that is often used to describe personality traits. The studies on personality indicated that there were significant relationships between personality and some organizational behaviours, such as workaholism (Burke, Matthiesen and Pallesen, 2006), organizational commitment (Erdheim, Wang and Zickar, 2006), leadership (Judge et al., 2002) and organizational conflict (Yıldızoğlu and Burgaz, 2014).

The studies conducted on the Big Five showed that there were significantly meaningful correlations between personality dimensions and work performance (Barrick and Mount, 1991; Hurtz and Donovan, 2000). Effective leadership behavior is needed in order to realize the organizational purposes and to create a positive organizational climate (Owens and Valesky, 2014). One of the most significant determinant of the leadership behavior is the personality traits of the leader. The relevant literature includes several studies that present the relationship between personality traits and organizational climate (Elankumaran, 2004; Levine and Jackson, 2002). However, the numbers of the studies on the correlation between personality traits and school climate are not much (George and Bishop, 1971). The school principals are one of the most important shareholders of the school. Their personality traits have a great impact on the processes and structures in the schools.

The aims of the study are: firstly, to find out the correlation between the personality traits of the school principals and the school climate, secondly, to determine to what extent the school principals' personality traits explain the school climate. With this purpose, it is aimed to answer the following questions:

1. At what level do the school principals have the Big Five according to the perceptions of the teachers?
2. What is the level of the perceptions of the teachers on the school climate?
3. What kind of correlation is there between the personality traits of the school principals and the school climate?
4. Are the personality traits of the school principals significant predictors of the school climate?

Literature Review

The Big Five

The personality can be defined as consistent behavioral patterns and processes based on the individual. Being consistent means that the personality is always permanent under any condition. The personality also includes all the emotional, motivational and cognitive processes which affect how we behave and feel (Burger, 2015).

The personality is a sort of relationship, which the individual builds with his or her internal and external environment. It is consistent, structured and different from the other individual situations. Personality is a mixture of past, present and future experiences. Therefore, it is formed by many factors such as hereditary and physical structure, family, environment, social structure, social class, geography, and mass media tools (Güney, 2015; Zel, 2006).

The trait of personality studies starting from Allport and continuing with Cattell and Eysenck have come to a new phase with Robert McCrea and Paul Costa with late 1970s and early 1980s wherein the studies attempted to determine the fundamental dimensions of the personality. Cattell supported the need for systematical research methods and an approach which uses trustworthy and sensitive measurements on the processes and development of the personality. Yet, he preferred the factor analysis in analyzing the personality (Yazgan İnanç and Yerlikaya, 2012). Cattell's factor analysis, which was developed based on the different data types obtained from thousands of individuals, is often used by many researchers in determining the fundamental personality traits. Although there is not an agreement on the names and the numbers of the factors, the studies using different methods show that "the Big Five" has become prominent in determining and defining the fundamental dimensions of the personality (Burger, 2015). McCrea and Costa (1983) who led the previous studies, put forward that there are five dimensions of the personality. Nowadays, the majority of the researchers are on the same page that there are five factors in determining the personality traits. There are several findings which support this argument (Costa, McCrae and Dye, 1991; Goldberg, 1990; McCrae and Costa, 1983).

The Big Five is formed by five fundamental dimensions: (i) extraversion, (ii) openness to experience, (iii) agreeableness, (iv) conscientiousness and (v) neuroticism (McCrea and John, 1992). *Extraversion* is a personality dimension related to socialness, having dominant, determined and positive emotions and self-confidence. The extrovert individuals have a tendency of making more friends and adopting the leadership positions (Burke et al., 2006). *Neuroticism* is the cognitive and behavioral reaction tendencies that individuals give to upsetting events. The individuals with high neurotic features have nervous feelings more often, have depressive episodes more, become disappointed more easily and their reactions are contradictory. As for the individuals with low neurotic features, they are calmer and in the mindset of emotional balance (McCrea and John, 1992). *Agreeableness* is a personality trait which is related to being close to cooperation, sympathy and caring about others (Burke et al., 2006). Adaptable individuals are more friendly, they like to work together, they are kind, their tolerance threshold is large, they give trust and they are soft-hearted. Individuals with the features listed above motivate their subordinates well, and they work on covering the subordinates' needs and communicate with them very well (Zel, 2006). *Openness to experience* is a personality trait suggesting scientific and artistic creativity, thinking out of the box, and is mostly related to freedom. These individuals show high imagination, they are curious, farsighted, they hope for change, they go for the values which are non-traditional and their aesthetical sensitivities are high (Erdheim et al., 2006). *Conscientiousness* is a personality trait more related to job performance. The individuals with this personality trait do their job in a rigorous way with patience, and they are well-organized (Burke et al., 2006). It is an important personality trait, especially for the administrators. In a study conducted on personality traits with the participation of 313 CEO candidates., it is stated that the personality traits of conscientiousness such as constancy, focusing on details and bringing high standards are much more important than the other traits. This result shows that the significance of conscientiousness among the other personality traits is high in organizational success and effectiveness (Robbins and Judge, 2012).

School Climate

The concept of organizational climate was first used by Kurt Lewin, Ronald Lippitt and Ralph White in 1939. The organizational climate, which expresses the situation of the relationship between leader and follower in the research, is examined in terms of differences in student behaviors in environments where democratic, autocratic and liberal leadership styles are exhibited (Lewin, Lippitt and White, 1939). However, in the years 1930 and 1940, administrative scientists such as K. Levin, C. Barnard, and P. Selznick pointed out the psychological, cultural and symbolic aspects of organizations (Şişman, 2007). The foundations of climate research originate from social psychology and industrial psychology, and are based on the "Field Theory" of Kurt Lewin (1951) (Owens and Valesky, 2014). Climate concept was first used in the field of business in the late 1950s and later became important as a contemporary interest area in many academic disciplines. In 1958, Argyris analyzed interpersonal relations, and examined the complex and mutual structure of the elements that make up the organizations. In his study, he identified three interrelated variables, which

make up the organizational climate, as (i) policies, procedures, and hierarchical positions; (ii) employees' needs, values and talents; (iii) employees strive for the purpose within the organization. Within the 1960s, studies were done frequently in educational organizations. (Hoy, 1990). The organizational climate of schools was examined in terms of its organizational context and the hierarchical positions of individuals within the organization (Payne and Mansfield, 1973).

According to Tagiuri (1968), the organizational climate can be defined as the permanent and strong quality of the internal environment of the organization, which is different from other organizations for some certain features (*iii*), which affects the behaviors of the employees (*ii*) and is experienced by the employees (*i*).

The human behaviors are important factors to create the organization environment, especially in the human-based organization such as an educational organizations (Taymaz, 2009). The school climate which points out the perceptions of the teachers in the work environment is a wide terminology. Also, organizations are affected by some variables such as the personality traits of the employees and the leadership style of the school principal (Hoy, 1990). Halpin (1966) states that each school environment is different from each other and there is a bunch of features that make them all unique. When you go to a certain school from another one, you will notice a certain personality for the particular school. In this point, the concept of organizational climate is described as the personality of the schools.

The National School Climate Council (NSCC, 2007) provides a comprehensive and functional definition for school climate. According to this definition, the school climate is based on the experiences of the individuals in school life and covers a general structure including norms, objectives, interpersonal relations, the process of teaching and learning and the organizational structures (Thapa et al., 2013). Bursalioğlu (2008) defines the organizational climate, which is a product of interpersonal and inter-group relations, as one of the four dimensions (objective, structure, process and climate) of the organization.

According to Owens and Valesky (2014), the studies on the organizational climate are more interested in the effects of the employees and their inner situations on their behaviors. The organizational climate refers to the perception of individuals towards the several sides of the organization environment. For instance, Halpin and Croft (1962) in their leading study on the organizational climate, analyzed the "leadership and the features of the group behaviors" in primary schools. The main output in this study was to find out the perception of the employees by conducting detailed surveys and defining the organizational climate of the primary schools in a systematical way (Owens and Valesky, 2014).

The climate created by personal perceptions and the interaction of the organizational structure of the organization has an identity that has effects on the individual's behaviors (Ertekin, 1978). Human dimension of organizations, objectives, structure and working strategies of the organization interact with each other. These interactions create a unique climate for organizations. This climate gives the organization an identity, as well as having an impact on the behaviors of the employees. The organizational climate is a significant variable affecting the latecomer employees' behavior patterns, beliefs, and attitudes. Similarly, the employees may affect the organizational climate as well. Therefore, there is a dual correlation between the employees of the organization and the organizational climate (Tagiuri and Litwin, 1968).

Methodology

Research Model

This research was designed as a correlational study. A correlational study describes the degree to which two or more quantitative variables are related by using a correlation coefficient (Frankel and Wallen, 2009). In this correlational study, it was aimed to explain and predict possible relationships between school climate and personality traits of the school principals. The predictor variables of the study were the dimensions of personality traits which were described as follows: (*i*) extraversion, (*ii*) openness to experience, (*iii*) agreeableness, (*iv*) conscientiousness, and (*v*) neuroticism. The predicted variables of the study were the dimensions of school climate which were described as follows: (*i*) supportiveness, (*ii*) intimacy, (*iii*) restrictiveness and (*iv*) directiveness.

Sample

The population of the study includes the teachers working in the central towns of Ankara, in Turkey. Convenient sampling was used for choosing the study group. For sampling, it is also considered that the teachers would need a time period in order to evaluate their school principal. Therefore, teachers who have been working at least for one year in their schools, as well as those who have been working with their principal for at least one year, are included in this study. Within the scope of the research, 198 teachers working in the central towns of Ankara in the academic year of 2015-2016 participated in the study and the data collected from 171 teachers were evaluated. 27 teachers' data were not analyzed since they filled in the scales either randomly or left more than 10 % of the scale items unfilled.

Approximately three-fifths of the participants were female ($n = 107$), and two-fifths of them were male ($n = 64$). The age average of the teachers (ranged between 23-61) was approximately 36. When the teachers were analysed according

to their branches: 28% ($n = 47$) of them were class teachers, 72% ($n = 124$) of them were branch teachers. The average period of the teachers at their profession was five years in the particular school, while the average period of the teachers in their job was 13 years. The least period of service of the teachers was one year, the most was 17 years.

Data Collection Tools

The data collection tool of the study consists of three parts. There is demographic information of the participants in the first part, School Climate Scale in the second part, Adjective-Based Personality Scale in the third part.

School Climate Scale (SCS): The SCS which was developed by Halpin and Croft (1963) and then re-developed for the primary schools by Hoy and Clover (1986), was translated and adapted into Turkish by Kavgacı (2010) and was used in this study. The scale is comprised of a 4-point Likert scale having 25 articles and 4 dimensions as [never (1), sometimes (2), often (3), always (4)]. The SCS covers the school climate in 4 dimensions: supportiveness, restrictiveness, directiveness and intimacy. During the adaptation process of the scale, .85 total Cronbach Alfa reliability coefficient was applied as .90 for the dimension of supportiveness, .80 for the dimension of restrictiveness, .76 for the dimension of directiveness and .83 for the dimension of intimacy. The total variance of 55.65% was explained together with the four dimensions of scale to the adaptation study. The Cronbach Alfa reliability coefficient for each one of the dimensions in this study was measured as .91, .86, .88 and .89. The study's four dimensions explain the total variance of 63%.

Adjective-Based Personality Scale (ABPS): The study used the ABPS based on the Big Five. The ABPS which was developed by Bacanlı, İlhan and Aslan (2009) was based on Five Factor Theory and in this scale, appropriate adjective pairs were used to express personality traits. These adjectives have been measured with a Likert-type scale graded between 1-7. The scale has five dimensions: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. The original scale used the Cronbach Alfa reliability coefficient as .73 for neuroticism, .89 for extraversion, .80 for openness to experience .87 for agreeableness and .88 for conscientiousness dimension. The Cronbach Alfa reliability coefficient for this study was measured as .70, .87, .89, .91 and .90 respectively. The original test which consisted of 40 adjective couples defining the incompatible personality traits explained the 52.6% of the total variance. In this study, five dimensions of the ABPS explained the 63% of the total variance.

Data Analysis

The data was analyzed in three phases in this study. Firstly, the data of the research were transferred to a software program called SPSS. Secondly, the incompatible values in the data were excluded, and the incorrect or missing values were corrected. In this study, the missing values were assigned via the EM algorithm. In this method, missing value estimation was performed based on regression approach. The advantage of this method was that it is more objective than the prediction made by the researcher and contains more information than simply a general average assignment. Lastly, the data were analysed with a focus on the sub-problems of the study. The multicollinearity level of the variables was analyzed in order to cover a multi-regression assumption. According to Field (2005), the highest VIF value should be smaller than 10, and toleration value should be bigger than .20 in the multi-regression analysis. Therefore, VIF [in between 1.16 and 4.85] and toleration [in between .13 and .25] were analysed, and these values were acceptable.

Arithmetic mean and standard deviation were measured in order to determine the personality traits of the school principals and the perception of the teachers on the school climate. Pearson correlation coefficient (r) was used in order to detect the correlation between the variables of the study. The level of the independent variables (neuroticism, extraversion, openness to experience, agreeableness and conscientiousness) predicting the dependent variables (supportiveness, intimacy, restrictiveness, and directiveness) was explained by Multiple Linear Regression Analysis. In interpreting the regression analysis, standardized Beta (β) coefficients and t-test were used. A significance level of .05 was used in the data analysis.

Results

Table 1 presents the levels and dimension of the perception of the teachers on the personality traits of their school principals, and the perception of the teacher on the school climate in the school they work for.

Table 1

The Correlation between the Personality Traits of the School Principals and the School Climate

Variables	\bar{X}	S	1	2	3	4	5	6	7	8	9
1. Neuroticism	3.63	.98	-	-.01	-.12	-.28**	-.10	-.36**	.01	-.01	-.08
2. Extraversion	5.40	1.09		-	.84**	.67**	.80**	.38**	-.16*	.26**	-.01
3. Openness to Experience	5.50	1.14			-	.86**	.86**	.50**	-.10	.29**	.01
4. Agreeableness	5.47	1.21				-	.81**	.52**	-.14	.20**	.04
5. Conscientiousness	5.62	1.14					-	.49**	-.16*	.25**	.02
6. Supportiveness	3.57	.82						-	-.25**	.48**	.22**
7. Restrictiveness	2.99	1.02							-	.02	.06
8. Directiveness	3.35	.91								-	.23**
9. Intimacy	3.32	.85									-

* $p \leq .05$, ** $p \leq .05$

The data in Table 1 shows that according to the perception of the teachers, among the school principals' personality traits, the conscientiousness dimension (\bar{X} = 5.62) is the highest one. Respectively, the openness to experience, agreeableness and extraversion follow the first one. According to the perception of the teachers, the lowest personality trait of all is neuroticism dimension (\bar{X} = 3.63). When the perceptions of the participated teachers on the school climate were analyzed, it was seen that the highest average on the school climate is the dimension of supportiveness (\bar{X} = 3.57), which is followed by the dimension of directiveness and intimacy. As for the lowest average on the school climate, the dimension of restrictiveness (\bar{X} = 2.99) is observed.

The data in Table 1 shows that there is a significantly meaningful correlation between the perceptions of the teachers on the school climate, and on the personality traits of the school principals. It is observed that there is a moderately negative correlation between *neurotic personality traits* as one of the dimensions of the ABPS, and *supportive school climate* (r = -.36, p < .05). In other words, the increase in the neurotic personality traits of the school principals decreases the supportive school climate. Within the scope of this data, it can be stated that in the schools where the school principals have neurotic personality traits, the supportive school climate will not occur. There are moderately positive correlations between sub-dimensions of the ABPS as *openness to experience*, *extraversion*, *agreeableness* and *conscientiousness* and *supportiveness* (respectively, r = .50, p < .05; r = .38, p < .05; r = .52, p < .05; r = .49, p < .05) and *directiveness* (respectively, r = .29, p < .05; r = .26, p < .05; r = .20, p < .05; r = .25, p < .05) school climate dimensions. In other words, if there is an increase in the personality traits of the school principals in terms of openness to experience, extraversion, agreeableness, and conscientiousness, there will be also an increase in the dimensions of supportiveness and directiveness leading in the school climate. The data obtained shows that the school climate will be supportive and directive wherein the personality traits of the school principals are in the dimensions of openness to experience, extraversion, agreeableness, and conscientiousness. It is observed that there are highly positive correlations between supportiveness and directiveness dimensions and openness to experience, extraversion, agreeableness, and conscientiousness. Similarly, there is a moderately positive correlation among the supportive and directive school climates (see Table 1). There is low negative correlation between extraversion and agreeableness and restricting school climate (respectively, r = -.16, p < .05; r = -.16, p < .05). In other words, increasing personality traits of the school principals such as extraversion and agreeableness decreases the restrictive school climate. Table 2 presents the level of each sub-dimension of the school climate, predicting the personality traits of the school principals.

Table 2

The Results of the Regression Analysis on the level of the Personality Traits of the School Principals explaining the School Climate

Predictor Variables	Predicted Variables											
	Supportiveness ^a			Restrictiveness ^b			Directiveness ^c			Intimacy ^d		
	β	t	p	B	t	p	β	t	p	β	t	p
Fixed		6.80	.00		7.30	.00		4.45	.00		7.45	.00
1. Neuroticism	-.28	-4.13	.00	-.03	-.32	.75	-.01	-.07	.94	-.06	-.70	.48
2. Extraversion	-.07	-.546	.59	-.24	-1.60	.11	.02	.13	.90	-.05	-.30	.77
3. Openness to Experience	.23	1.33	.19	.44	2.09	.04	.41	1.99	.04	-.06	-.26	.79
4. Agreeableness	.10	.74	.46	-.22	-1.33	.19	-.21	-1.28	.20	.07	.39	.70
5. Conscientiousness	.22	1.66	.10	-.17	-1.03	.30	.05	.33	.74	.05	.26	.80

^a R = .59, R^2 = .35; F = 17.86, p < .05^b R = .23, R^2 = .05; F = 1.85, p > .05^c R = .31, R^2 = .10; F = 3.53, p < .05^d R = .09, R^2 = .01; F = 0.27, p > .05

The results of the regression analysis are given in Table 2. According to these results, there is a moderately significant correlation between the sub-dimensions of the ABPS (predictor variables) and supportive and directive school climates (predicted variables) (respectively, $R=.59$, $R^2=.35$, $p<.05$; $R=.31$, $R^2=.10$, $p<.05$). The predictor variables in combination account for the 35% of the total variance in the supportive school climate, and 10% of the total variance of the directive school climate. The regression model on the intimacy and restrictiveness dimensions as the other predicted variables is not significant.

According to the standardized regression coefficient (β), the relative order of importance that the predicted variables have on the supportive school climate is as follows: neuroticism, openness to experience, conscientiousness, agreeableness, and extraversion. The T-test indicates the significant relationship between the regression coefficients. It is observed that only neuroticism has an effect on the supportive school climate ($p<.01$) and the other personality traits do not have significant effects on the supportive school climate.

According to the standardized regression coefficient (β), the relative order of importance that the predicted variables have on the directive school climate is as follows: openness to experience, agreeableness, conscientiousness, extraversion, and neuroticism. The T-test indicates the significant relationship between the regression coefficients. Only the personality trait of openness to experience has a significant impact on the directive school climate ($p<.05$).

Discussion

The purpose of this study is to analyze the relationship between the personality traits of the school principals and the school climate according to teachers' perceptions. Also, it aims to determine to what extent the personality traits of the school principals explain the school climate. Within the scope of the study, the personality traits of the school principals are determined as neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. The perceptions of the school climate are determined as supportiveness, intimacy, restrictiveness, and directiveness. The correlations between the personality traits of the school principals and school climate are presented as the personality traits that explain/predict the school climate.

As the first sub-problem of the study, the aim was to determine the personality traits of the school principals. As for the results of the study, the perceptions of the teachers indicated that the school principals show the personality trait of conscientiousness the most. Therefore, it can be said that the school principals must be seen as rigorous, patient and ordered in their jobs (Burke et al., 2006). It is also possible to say that school principals are expected to show high job performance, and this expectation makes them more conscientious. The meta-analysis studies in the literature showed that among all the personality traits, "conscientiousness" is the one which mostly explains the job performance (Barrick and Mount, 1991; Hurtz and Donovan, 2000; Judge, Heller and Mount, 2002). Judge et al. (2002) suggested that conscientiousness is comprised of two related facets: achievement and dependability. Respectively, the personality traits of openness to experience, agreeableness, and extraversion follow the personality trait of conscientiousness. In this study, neuroticism is the personality trait that the school principals happen to have the least. According to McCrea and John (1992), neurotic individuals have nervous feelings more often than the others, but rather they show depressive features, they get disappointed more and their reflexes are more contradictory. Judge et al. (2002) also used these negative statements related to neuroticism: "Neuroticism represents the tendency to exhibit poor emotional adjustment and experience negative effects, such as anxiety, insecurity, and hostility". Therefore, the possible neurotic behaviors observed in the school principals may lead to negative situations in and out of the schools. Thus, it can be expected from the school principals to have a lower personality trait of neuroticism. The concept of personality is considered as important in developing the group norms to improve the group climate and to express the group leadership (Erdoğan, 1994). It can be stated that the personality traits of the school administrators are influential in the progress and the environment of education in schools. Korkmaz (2006) stated that the struggles between school administrators (principal, vice-principal, sub-principal) might be based on their differences in personalities. This would not only affect the school climate bad, but also the performances of the teachers in a particular school as well. Yıldızoğlu and Burgaz (2014) explained that the personality traits of the school principals have a meaningful impact on the conflict management style.

As the second sub-problem of the study, the aim was to determine the perception of the teachers on the school climate. As for the results of the study, the teachers thought that their school has the supportive school climate mostly. Therefore, it can be said that this situation is more related to the school principals who appreciate the teachers' success, are open to the teachers' opinions and suggestions and simply respect the teachers' professional perfection. Thapa et al. (2013) explained that a positive and supportive school climate has a great impact on empowering the learning motivation, living a happy life and improving a lifelong learning talent. Respectively, the dimensions of directiveness, intimacy, and restrictiveness follow the dimension of supportiveness. It can be interpreted that the reason why the restrictiveness dimension is the least is that the school principals do not interfere with the teachers' practices. Hoy and Clover (1986) stated that the most important individual affecting the school climate is the school principal. Therefore,

they suggested that the implementations of the school principals have a determinant effect on the formal and informal organization.

The third sub-problem of the study aimed to point out the correlation between the personality traits of the school principals and the school climate according to the teachers' perception. The results showed that the increasing personality traits of the school principals as openness to experience, extraversion, agreeableness, and conscientiousness will increase the school climates to be more supportive and directive. This result revealed the importance of principals' positive personality traits for positive school climate. Castro Silva, Amante and Morgado (2017), based on their research's findings, claimed that a supportive learning environment created by a school principal would encourage teachers to work collaboratively. On the other hand, as long as extraversion and agreeableness of school principals increase, the restrictive school climate decreases. These findings showed whether the school principals have the personality traits of openness to experience, extraversion, agreeableness, and conscientiousness is important. Similar to this correlation between the personality and the climate, Halpin (1996) defined the school climate as a "personality" of the school. However, he points out that the school principals act as a primary individual to affect the school personality in a negative or positive way. On the other hand, it was discovered that there is a backward correlation between the neurotic personality traits and the supportive school climate, which also supported the findings of the literature.

As for the fourth sub-problem of the study, the aim was to examine whether the personality traits of the school principals are significant in predicting/explaining the school climate. When the findings of the study were analyzed, it was found out that neurotic personality traits are significant predictors for the supportive school climate. In the schools where the school principals have the neurotic personality traits, the supportive school climate does not appear. It was stated that the individuals with the low neurotic personality traits are calmer, and they are engaged in a sort of emotional balance (McCrea and John, 1992). According to the research results of Judge et al. (2002), as the neurotic personality traits increase, the leadership behaviors decrease, which means that an organizational climate with low leadership is not going to be supportive. The directive school climate showed significant correlations with the personality trait of openness to experience. If the school principal has a personality trait of openness to experience, this increases the perception of the directive school climate. In other words, in a school where the school principals are high in imagination, curiosity, intelligence, vision, changeability, progressive values and aesthetical sensitivity, a directive school climate is likely to occur (Erdheim et al., 2006). In the directive school climate, all the jobs done by teachers are closely observed and supervised by the school principal.

The school climate is an aspect affecting all the individuals in a particular school, as well as an aspect getting affected by those individuals. It can also prevent learning and teaching processes. The school climate within the scope of school principals is discussed in this study. As for further studies, the school climate can be analyzed together with the personality traits of the teachers and the school principals. The results of this study point out the decision-making in the human resources as the most important factor for both the school climate and the personality traits. Consequently, choosing the individuals for the school administration positions is important, and should not only be merit-based but also based upon their personality traits for the sake of the school climate.

Limitations

For this study, two limitations should be noted: Firstly, it can be said that organizational studies have traditionally differed by "micro" and "macro" analysis level. In the literature, there are some researchers who emphasized the importance of analysing climate at the organizational level (e.g. sampling unit: school) (Hoy, 1990; Sirotnik, 1980). In this study, the analysis unit was defined at micro level (e.g. sampling unit: teacher), which can be considered as a limitation. Secondly, as this research was a correlational study, it did not express experimental causality. It only explained the relationship and predictability of the relevant variables. For this reason, further research can be conducted on climate at macro level and the relationship among relevant variables can be examined in terms of causality.

Reference

- Anderson, C. S. (1982). The search for school climate: A review of research. *Review of Educational Research*, 52(3), 368-420.
- Argyris, C. (1958). Some problems in conceptualizing organizational climate: A case study of a bank. *Administrative Science Quarterly*, 501-520.
- Arslan, N. T. (2004). "Örgütsel performansı belirleyici bir etmen olarak" örgüt kültürü ve iklimi hakkında bir değerlendirme [An essay on organizational culture and climate as determinants of the organizational performance]. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi [Suleyman Demirel University The Journal of Faculty of Economics and Administrative Sciences]*, 9(1), 203-228.
- Bacanlı, H., İlhan, T., & Aslan, S. (2009). Beş faktör kuramına dayalı bir kişilik ölçeğinin geliştirilmesi: Sıfatlara dayalı kişilik testi (SDKT) [Development of a personality scale based on five factor theory: Adjective based

- personality test (ABPT)]. *Türk Eğitim Bilimleri Dergisi [The Journal of Turkish Educational Sciences]*, 7(2), 261-279.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). The FFM personality dimensions and job performance: Meta analysis of meta analysis. *International Journal of Selection and Assessment*, 9-30.
- Bayrak, C., Altınkurt, Y., & Yılmaz, K. (2014). The relationship between school principals' power sources and school climate. *Anthropologist*, 17(1), 81-91.
- Berry, L. (1998). *Psychology at work: An introduction to organizational psychology*. New Jersey: McGraw Hill.
- Burger, J. M. (2015). *Personality*. Stanford: Cengage Learning.
- Burke, R. J., Matthiesen, S. B., & Pallesen, S. (2006). Personality correlates of workaholism. *Personality and Individual Differences*, 40, 1223-1233.
- Bursalıoğlu, Z. (2008). *Okul yönetiminde yeni yapı ve davranış [New structure and behavior in school management]*. Ankara: PegemAkademi.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2008). *Bilimsel araştırma yöntemleri [Scientific research methods]*. Ankara: Pegem Akademi.
- Castro Silva, J., Amante, L., & Morgado, J. (2017). School climate, principal support and collaboration among Portuguese teachers. *European Journal of Teacher Education*, 40(4), 505-520.
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *The Teachers College Record*, 111(1), 180-213.
- Costa, P. T., McCrae, R. R., & Dye, D. A. (1991). Facet scales for agreeableness and conscientiousness: A revision of the NEO personality inventory. *Personality and Individual Differences*, 12, 887-898.
- Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of Management Review*, 21(3), 619-654.
- Dubrin, A. (1994). *Applying psychology, individual effectiveness*. New Jersey: Prentice Hall.
- Elankumaran, S. (2004). Personality, organizational climate and job involvement: An empirical study. *Journal of Human Values*, 10(2), 117-130.
- Erdheim, J., Wang, M., & Zickar, M. J. (2006). Linking the Big Five personality constructs to organizational commitment. *Personality and Individual Differences*, 41(5), 959-970.
- Ertekin, Y. (1978). *Örgüt iklimi [Organizational climate]*. Ankara: TODAİ.
- Field, A. (2005). *Discovering statistics using IBM SPSS statistics*. Sage.
- Fraenkel J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education* (7th Edition). New York: McGraw-Hill.
- George, J. R., & Bishop, L. K. (1971). Relationship of organizational structure and teacher personality characteristics to organizational climate. *Administrative Science Quarterly*, 16(4), 467-475.
- Gök, S. (2009). Örgüt ikliminin çalışanların motivasyonuna etkisi üzerine bir araştırma [A study on the influence of organizational climate on motivation of employees]. *Uluslararası İnsan Bilimleri Dergisi [International Journal of Human Sciences]*, 6(2), 587-605.
- Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216-1229.
- Güney, S. (2015). *Örgütsel davranış [Organizational behavior]* (3. Basım). Ankara: Nobel.
- Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*, 9(2), 157-191.
- Halpin, A. W. (1966). *Theory and research in administration*. London: The Macmillan Company.
- Halpin, A. W., & Croft, D. B. (1962). *The organizational climate of schools*. Chicago: Midwest Administration Center of the University of Chicago.
- Hoy, W. K. (1990). Organizational climate and culture: A conceptual analysis of the school workplace. *Journal of Educational and Psychological Consultation*, 1(2), 149-68.
- Hoy, W. K., & Clover, S. I. (1986). Elementary school climate: A revision of the OCDQ. *Educational Administration Quarterly*, 22(1), 93-110.
- Hoy, W. K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools, healthy schools: Measuring organizational climate*. Thousand Oaks, CA: Corwin Press.
- Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology*, 85(6), 869-879.
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin*, 81(12), 1096-1112.

- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of applied psychology*, 87(4), 765-780.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology*, 87(3), 530-541.
- Karadağ, E., Baloğlu, N., Korkmaz, T., & Çalışkan, N. (2008). Eğitim kurumlarında örgüt iklimi ve örgüt etkinlik algısı arasındaki ilişkinin değerlendirilmesi [Evaluation of the relation between the organizational climate and the organization efficiency in the educational institutions]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD)*, 9(3), 63-71.
- Kavgacı, H. (2010). *Organizational climate and school-family relations in primary schools* (Unpublished doctoral thesis). Gazi University, Ankara.
- Levine, S. Z., & Jackson, C. J. (2002). Aggregated personality, climate and demographic factors as predictors of departmental shrinkage. *Journal of Business and Psychology*, 17(2), 287-297.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates". *The Journal of Social Psychology*, 10(2), 269-299.
- Litwin, G. H., & Stringer, R. A. (1968). *Motivation and organizational climate*. Boston, MA: Harvard University.
- Lubienski, S. T., Lubienski, C., & Crane, C. C. (2008). Achievement differences and school type: The role of school climate, teacher certification, and instruction. *American Journal of Education*, 115(1), 97-138.
- McCrae, R. R., & Costa, P. T. (1983). Social desirability scales: More substance than style. *Journal of Consulting and Clinical Psychology*, 51(6), 882-888.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its application. *Journal of Personality*, 60(2), 175-215.
- McCrae, R. R., Costa, P. T., & Busch, C. M. (1986). Evaluating comprehensiveness in personality systems: The California Q-Set and five-factor model. *Journal of Personality*, 54(2), 430-446.
- McGregor, D. (2006). *The Human side of enterprise* (Annotated Edition). New Jersey: McGraw-Hill.
- Moran, E. T., & Volkwein, J. F. (1988). Examining organizational climate in institutions of higher education. *Research in Higher Education*, 28(4), 367-383.
- National Policy Board for Educational Administration (2015). *Professional Standards for Educational Leaders 2015*. Reston, VA: Author.
- Owens, R. G., & Valesky, T. C. (2014). *Organizational behavior in education leadership and school reform* (Tenth Edition). Edinburgh Gate Harlow: Pearson.
- Özdemir, S., Sezgin, F., Şirin, H., Karip, E., & Erkan, S. (2010). İlköğretim okulu öğrencilerinin okul iklimine ilişkin algılarını yordayan değişkenlerin incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 38(38), 213-224.
- Paknadel, A. C. (1988). *Organizational climate and job satisfaction* (Unpublished doctoral thesis) Hacettepe University, Ankara.
- Payne, R. L., & Mansfield, R. (1973). Relationships of perceptions of organizational climate to organizational structure, context, and hierarchical position. *Administrative Science Quarterly*, 515-526.
- Payne, R. L., & Pugh, D. S. (1976). Organizational structure and climate. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology* (pp. 1125-1173). Chicago, IL: Rand McNally.
- Pepper, K., & Thomas, L. H. (2002). Making a change: The effects of the leadership role on school climate. *Learning Environments Research*, 5(2), 155-166.
- Robbins, S. P., & Judge, T. A. (2010). *Organizational behaviour* (14 th edition). New Jersey: Pearson.
- Schulte, M., Ostroff, C., & Kinicki, A. J. (2006). Organizational climate systems and psychological climate perceptions: A cross-level study of climate-satisfaction relationships. *Journal of Occupational and Organizational Psychology*, 79(4), 645-671.
- Shaw, B. C. (2009). *Impact of leadership styles on school climate* (Unpublished Doctoral Dissertation). Capella University, Minneapolis.
- Sirotnik, K. A. (1980). Psychometric implications of the unit-of-analysis problem (with examples from the measurement of organizational climate). *Journal of Educational Measurement*, 17(4), 245-282.
- Şişman, M. (2007). *Örgütler ve kültürler [Organizations and cultures]* (2. Baskı). Ankara: Pegem Akademi.
- Tagiuri, R. (1968). The concept of organizational climate. In R. Tagiuri and G. H. Litwin (Eds). *Organizational climate. Explorations of a concept* (pp. 9-32). Boston: Harvard University.
- Tagiuri, R., & Litwin, G. H. (Eds.) (1968). *Organizational climate: Explorations of a concept*. Boston, MA: Harvard University.
- Taymaz, H. (2009). *İlköğretim ve ortaöğretim okul müdürleri için okul yönetimi* (9. Baskı). Ankara: Pegem Akademi.
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3), 357-385.

- Van Houtte, M. (2005). Climate or culture? A plea for conceptual clarity in school effectiveness research. *School Effectiveness and School Improvement*, 16(1), 71-89.
- Wei, L. T. (2003). *Organizational climate and effectiveness in junior-middle schools in P.R. China* (Unpublished Master Dissertation). Retrieved from ProQuest Dissertations and Thesis database.
- Williamson, J. S. (2007). *Defining the relationship between principal's leadership style and school climate as perceived by Title I elementary teachers* (Unpublished Doctoral dissertation). The University of Toledo, Ohio.
- Yazganİnanç, B., & Yerlikaya, E. E. (2012). *Kişilik kuramları[Personality theories]*. (6. Baskı). Ankara: Pegem Akademi.
- Yıldızoğlu, H., & Burgaz, B. (2014). Okul yöneticilerinin beş faktör kişilik özellikleriyle çatışma yönetimi stili tercihleri arasındaki ilişki [The relationship between school administrators' five factor personality traits and their conflict management style preferences]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi [Hacettepe University Journal of Education]*, 29(2), 295-310.
- Zel, U. (2006). *Kişilik ve liderlik: Evrensel boyutlarıyla yönetsel açıdan araştırmalar, teoriler ve yorumlar[Personality and leadership: Managerial investigations, theories and interpretations from universal dimensions]*. (2. Baskı). Ankara: Nobel.