The Predictive Power of Teachers' Proactive Personality Traits on Their Problem Solving Skills[*]
Öğretmenlerin Proaktif Kişilik Özelliklerinin Problem Çözme Becerilerini Yordama Gücü

Gönül Şener[**]

Abstract

In this research, it was aimed to determine the level of teachers' proactive personality traits predicting the problem-solving skills consisting of the sub-dimensions of confidence in problem-solving ability, personal control and approach-avoidance. The relational screening model was used in this research which was prepared in accordance with the quantitative research paradigm. Accordingly, the concept of proactive personality was discussed as an independent variable, and problem solving skills were discussed as dependent variables. It is seen that there is a positive and significant relationship between teachers' proactive personality traits and problem solving skills and confidence in problem-solving ability, approach-avoidance and personal control, which are the sub-dimensions of problem solving. Based on the ANOVA values are examined for all three sub-dimensions, it could be said that the value p is significant, in other words, the regression model is valid. According to the t-test results regarding the significance of the regression coefficients, it is seen that proactive personality traits are a significant predictor on the sub-dimensions of confidence in problem solving ability, approach-avoidance and personal control. Furthermore, according to Durbin-Watson values for all sub-dimensions, the assumption that there is no relationship between error terms is confirmed.

Keywords: proactive personality, problem-solving skills, teacher

Öz

Bu çalışmada, alan yazındaki araştırmalardan yola çıkarak proaktif kişilik özelliklerinin, problem çözme becerilerini ne düzeyde yordadığı araştırılmaya değer görülmüştür. Araştırmada, öğretmenlerin proaktif kişilik özelliklerin problem çözme yeteneğine güven, kişisel kontrol ve yaklaşma-kaçınma alt boyutlarından oluşan problem çözme becerilerini yordama düzeyini belirlemek amaçlanmıştır. Nicel araştırma yöntemi doğrultusunda hazırlanan bu araştırmada ilişkisel tarama modeli kullanılmıştır. Bu doğrultuda proaktif kişilik kavramı bağımsız değişken, problem çözme becerileri ise bağımlı değişken olarak ele alınmıştır. Araştırmada Problem Çözme Envanteri ile Proaktif Kişilik Özellikleri Ölçeğinin Türk dil ve kültür yapısına uyarlanmış hali kullanılmıştır. Araştırmanın sonucunda öğretmenlerin proaktif kişilik özellikleri ile problem çözme becerileri ve problem çözmenin alt boyutları olan problem çözme yeteneğine güven, yaklaşma-kaçınma, kişisel kontrol arasında pozitif ve anlamlı bir ilişki olduğu görülmüştür. Her üç alt boyut için ANOVA değerlerine bakıldığında p değerinin anlamlı olduğu; bir başka deyişle regresyon modelinin geçerli olduğu söylenebilir. Regresyon katsayılarının anlamlılığına ilişkin t-testi sonuçları ise proaktif kişilik özelliklerinin problem çözme yeteneğine güven, yaklaşma-kaçınma ve kişisel kontrol alt boyutu üzerinde anlamlı bir yordayıcı olduğu görülmektedir. Ayrıca bütün alt boyutlar için Durbin-Watson değerleri hata terimleri arasında bir ilişkinin olmadığı varsayımı doğrulanmaktadır.

Anahtar sözcükler: proaktif kişilik, problem çözme becerisi, öğretmen

Önerilen Atıf Bilgisi:

[**] Dr. Öğr. Üyesi, Munzur Üniversitesi Çemişgezek MYO, ORCID: 0000-0003-3212-7703
gonulsener@munzur.edu.tr,

Introduction

In today's changing world, to keep pace with change and development requires changes in the personality traits of individuals. Individuals with proactive personality are expected to take the place of panicky, insecure and passive people who are influenced by external factors and excessively care about what others think. Proactive personality defines the people who act for the purpose of creating an effect that will cause change around them, create opportunities for themselves and make an attempt through these opportunities, show patience until a meaningful difference is formed, have a tendency to create high standards, have all the resources to reach these standards, initiates the change and take an active role such as influencing the environment (Bateman and Crant, 1993). When people with proactive personality encounter with opportunities, they utilize the them and take initiative (Crant,1995; Crant, 2000: 436; Gupta and Bhawe, 2007:3). They have more free (time) will in their business life (Siebert et al. 1999). The primarily perceive what is necessary and why it is necessary in converting new opportunities into capital, gaining profit and progressing (Lee and Peterson, 2000: 406). They eliminate the problems they encounter and take individual responsibilities to be effective in their external world (Crant, 2000). In short, the most appropriate expression that describes the behaviors of individuals with this personality trait is that they have an active approach instead of being passive towards the work (Bateman and Crant, 1993). This leads organizations to succeed. Many studies have reached the conclusion that employees with proactive personality can perform their duties more efficiently (Ashford and Black, 1996; Morrison, 1993a, 1993b; Thompson, 2005).

The fact that employees, especially the teachers who are building stones of the institution, have proactive traits in educational organizations as well as in other organizations is considered as an important element that will lead the organization to success. Proactive teachers are distinguished by their positive attitudes towards coping with disciplinary problems. Proactive teachers prepare the environment to encourage positive behaviors instead of waiting for the development of the problems and then reacting (Henley, 2006). Such teachers act sensitively for the fact that not only the successful students but also all students in their classroom stand by them. Proactive teachers know that each student comes with their strengths and weaknesses. When students cause problems, proactive teachers accept responsibility to find solutions (Brophy, 1983). Another factor required for organizational success is that employees are solution-focused individuals. In other words, they have problem solving skills. When the personality traits of individuals with problem solving skills were examined, it was seen that these people have a sense of self-confidence and the ability to think creatively with an objective point of view. In addition, these people also have the characteristic of being venturous against the events they encounter, without feeling too much anxious (Rosenberg, 1989).

In the problem-solving process, there are three basic approaches that emphasize the importance of the ways individuals perceive and evaluate the problem in solving the problem. These approaches are confidence in problem-solving ability, approach-avoidance style and personal control. Confidence in problem-solving ability represents a person's trust and confidence that he/she will find effective solutions when faced with a large-scale problem situation (Şahin, Şahin and Heppner, 1993). Approach-avoidance style refers to the general tendency to approach and avoid different problem-solving activities. Personal control is defined

as the person's belief in controlling his/her feelings and behaviors during the problem solving activity (Heppner and Baker, 1997).

The success in solving a problem varies from person to person depending on the way the problem is addressed. Here, as well as the individual's ability to cope with the problem, other personality traits and living conditions that accompany the problem play an important role. The fact that the individual fail to solve the problem leads to consequences such as increasing problems around him/her, anxiety and depression (D'zurille and Goldfried, 1971). Proactive personality brings about the problem solving skills, as well (Crant, 2000). Problem-solving skill is a high-level skill in which individuals' question, interpret and structure their knowledge using their mental processes. Problem solving means that individuals find a solution through which they can deal with the obstacles that prevent them from achieving their objective using their problem solving skills for the questions or problems in the lesson or life (Erdem and Yazıcıoğlu, 2015). It is seen that individuals who can solve their problems have more confidence in case of decision-making, are more enterprising in social relations and have positive self-perception (Şahin, Şahin and Heppner, 1993). In coping with the problem, the ability of a person to solve problematic situations depends on cognitive self-assessment and largely self-focalization (Heppner and Baumgardner, 1985). According to some researchers, problem solving is a cognitive behavioral process involving the awareness of the problems that individuals face in their daily life and finding effective solutions to the problems (Koç, Terzi ve Gül, 2015; McClure, Nezu, Nezu, O'Hea and McMahon, 2010).

The presence of teachers with proactive personality traits and problem solving skills is important for the success and seamless functioning of schools. This situation brings together teachers' proactive personality traits and problem solving skills on a common basis. In this study, it was considered worthwhile to investigate to what extent the proactive personality traits predict the problem solving skills, based on the studies in the literature. In the research, answers to the following questions were searched.

1. Is there a significant relationship between teachers' proactive personality traits and problem solving skills?
2. Are teachers' proactive personality traits a significant predictor of their problem solving skills?

Method

In this research, it was aimed to determine the level of teachers' proactive personality traits predicting the problem-solving skills consisting of the sub-dimensions of confidence in problem-solving ability, personal control and approach-avoidance. The relational screening model was used in this research which was prepared in accordance with the quantitative research paradigm. Accordingly, the concept of proactive personality was discussed as an independent variable, and problem solving skills were discussed as dependent variables. The relational screening model is a research model which is used in determining the presence and/or degree of covariance between two or more variables (Karasar, 2007).

Participants

Since the study group of the study agreed to voluntarily participate in the study teachers working in the city center of Elazığ province in the 2015-2016 academic year constituted the

population of the research. The random and disproportionate cluster sampling method was used in this research. Cluster sampling is used in case of the presence of different groups that naturally occur in the considered universe or is artificially created for different purposes and show similarity in terms of certain characteristics within themselves (Yıldırım, Şimşek, 2006). Accordingly, the schools in the city center of Elazığ province were randomly selected from the list, and 500 scales were distributed to teachers working in these selected schools to their receive opinions. However, 328 of the distributed questionnaires were returned. The rate of return was determined as 65.6%. It was concluded that 12 scales were incorrect by calculating the mahalanobis distances for the returning questionnaires, and these questionnaires were excluded from the analysis. The distributions of teachers according to their demographic characteristics are presented in Table 1.

Table 1. Frequency and Percentage Distributions of Demographic Characteristics of The Study Group

Variables		1	2	3	4	5	Total
Gender		Female	Male				-
	N	161	155				316
	%	50.9	49.1				100
Branch		Class	Branch				-
	N	129	187				316
	%	40.8	59.2				100
Seniority		1-5	6-10	11-15	16-20	21+…	-
	N	106	63	51	50	46	316
	%	33.5	19.9	16.1	15.8	14.6	100
School Type		Primary School	Secondary School	High School			-
	N	141	87	88			316
	%	44.6	27.5	27.8			100
Age		21-30	31-40	41+…			-
	N	110	114	82			316
	%	34.8	36.1	29.1			100
Education Status		Graduate	Postgraduate				-
	N	289	27				316
	%	91.5	8.5				100

Materials

The *Problem Solving Inventory*, and *The Proactive Personality Traits Scale* which was adapted to Turkish language and culture structure, were used in the research.

Problem Solving Inventory: Problem Solving Inventory (PSI) aims to measure how individuals react to the problems they encounter in their daily lives. The scale, which was developed by Heppner and Peterson (1982) and adapted to Turkish by Şahin, Şahin and Heppner (1993), is a likert type scale which is scored between 1 and 6, is a self-assessment scale consisting of 35 items. The scale consists of the sub-dimensions of *Confidence in Problem Solving Ability* (5, 10, 11, 12, 19, 23, 24, 27, 33, 34, 35), *Approach-Avoidance* (1, 2, 4, 6, 7, 8, 13, 15, 16, 17, 18, 20, 21, 28, 30, 31) and *Personal Control* (3, 14, 25, 26, 32) . The scale included the items that were

excluded (9, 22, 29) and were reversely scored because they had negative meanings (1, 2, 3, 4, 11, 13, 14, 15, 17, 21, 25, 26, 30, 34).

In the confirmatory factor analysis which was performed to confirm the three-factor structure of the scale, the Chi-square value (x^2=1371.90, sd=461, p=0.00) was found to be significant. The fit index values were found to be RMSEA=.079, CFI=.93, IFI=.93, GFI=.79, AGFI=.75 and SRMR=.069, NFI=.90, NNFI=.93. The internal consistency coefficient for the whole scale is .87. Total item correlations of the scale vary between .36 and .73. The highest and lowest scores that can be taken from the Problem Solving Inventory are 192 and 32, respectively. The high score obtained from the scale indicates that the perception of problem-solving skill is low (Savaşır and Şahin, 1997).

Proactive Personality Scale: The one-dimensional proactive personality scale consisting of 17 items and developed by Bateman and Crant (1993) was adapted to Turkish by Akın, Abacı, Kaya, and Arıcı (2011). According to the confirmatory factor analysis which was performed to confirm the single-factor structure of the scale, the Chi-square value (x^2=469.30, sd=119, p=0.00) was found to be significant. The fit index values were found to be RMSEA=.097, CFI=.92, IFI=.92, GFI=.85, AGFI=.81 and SRMR=.069, NFI=.89, NNFI=.91. The internal consistency coefficient for the whole scale is .84. Total item correlations of the scale vary between .47 and .71.

The Kaiser-Meyer-Olkin (KMO) sampling adequacy test and the Bartlett's Sphericity Test were applied to the scales used in the study to test the suitability of the data for factor analysis (Table 2).

Table 2. KMO and Bartlett Test Results

Scale	Kaiser-Meyer-Olkin (KMO)	Bartlett's Sphericity Test (sig.)	Variance Explanation Ratio (%)
Problem Solving	.904	3575.040	40.004
Proactive Personality	.882	1662.668	33.448

According to Table 2, KMO value was found as .904 for the problem solving inventory and as .882 for the proactive personality scale, and it was concluded that the data structure was sufficient to perform factor analysis when it was considered that the KMO value between 0.5 and 1.0 was at acceptable level (Altunışık et al. 2010:266). When the Bartlett test results were examined, it was found that the obtained chi-square value was significant at the level of 0.01 for both scales (sig.=.000), and it was determined that this result derived from the multivariate normal distribution of data and therefore was at the acceptable level as another prerequisite showing the suitability for factor analysis (Çokluk et al., 2010).

Analysis of Data

Frequency, percentage, arithmetic mean, and standard deviation values of the data collected from the teachers through the scales were analyzed in the SPSS program, and the confirmatory factor analysis of the proactive personality scale and problem solving skills scale was performed in Lisrel 8.80 program. The relationship between teachers' proactive personality traits and problem solving skills was calculated by Pearson product-moment correlation coefficient. Multiple regression technique was used to determine to what extent the proactive personality

traits of teachers predicted their problem solving skills. In the analyses, $p \leq .05$ and $p \leq .01$ levels were taken as basis.

Results

In order to determine whether there was a significant relationship between teachers' proactive personal traits and problem solving skills, the values between the variables were primarily examined, and the multiple regression analysis was performed. The correlation matrix showing the relationship between the variables is presented in Table 3.

Table 3. The Correlation Matrix Showing The Relationship Between Proactive Personality and Problem Solving Skills and Sub-Dimensions

	Değişkenler	A	B	C	D	E
A	Proactive Personality	1	.570**	.589**	.487**	.230**
B	Problem Solving Skills		1	.898**	.932**	.541**
C	Confidence in Problem Solving Ability			1	.706**	.363**
D	Approach-Avoidance				1	.420**
E	Personal Control					1
	N= 316; r<.01					

When Table 3 was examined, it was seen that there was a positive and significant relationship between teachers' proactive personality traits and problem solving skills and confidence in problem-solving ability, approach-avoidance and personal control, which are the sub-dimensions of problem solving. The correlation values obtained were r=.570; r=.589; r=.487; r=.230, respectively. Accordingly, it can be said that teachers with proactive personality traits are also good at problem solving. In addition, it is seen that the highest correlation coefficient values are between the sub-dimension of confidence in problem solving ability, problem solving skills, approach-avoidance sub-dimension and the personal control sub-dimension, respectively. This result shows that the relationship between the proactive personality traits of teachers and the sub-dimension of confidence in problem solving ability is stronger than the other variables.

When determination coefficients (r^2=.32; r^2=.34; r^2=.23; r^2=.5; p<.01) are taken into account, it can be said that 32% of total variance (variability) in problem solving, 34% of the sub-dimension of confidence in problem solving ability, 23% of the approach-avoidance sub-dimension and 5% of the personal control sub-dimension resulted from the proactive personality traits of teachers. The results of the multiple regression analysis performed for this sub-purpose are presented in Table 4.

Table 4. Results of the Multiple Regression Analysis Regarding The Prediction of Problem Solving Skills

Problem Solving Skills	B	Standard Error $_B$	β	t	p	Durbin-Watson
Constant	2.522	.168		15.056	.000	1.578
Proactive Personality	.536	.044	.570	12.296	.000	
R= .570	R^2=.324					
$F_{(1, 314)}$= 151.201	p=.000					

When Table 4 is examined, the ratio of proactive personality traits of teachers explaining the problem solving skills is about 32% (R=.570; R^2=.324). When the ANOVA values are examined, it can be said that the value p is significant, in other words, the regression model is valid ($F_{(1, 314)}$=151.201; p<.01). When the t-test results regarding the significance of the regression coefficients are examined, it is seen that proactive personality traits are a significant predictor on problem solving skills. Furthermore, when Durbin-Watson (1.578) value was examined, the assumption that there was no relationship between error terms was confirmed.

In the multiple regression analysis, histogram and normal distribution curves were examined to determine whether the relationship between proactive personality traits and problem solving skills was linear and whether the scores were normally distributed. The graphs are presented in Figure 1.
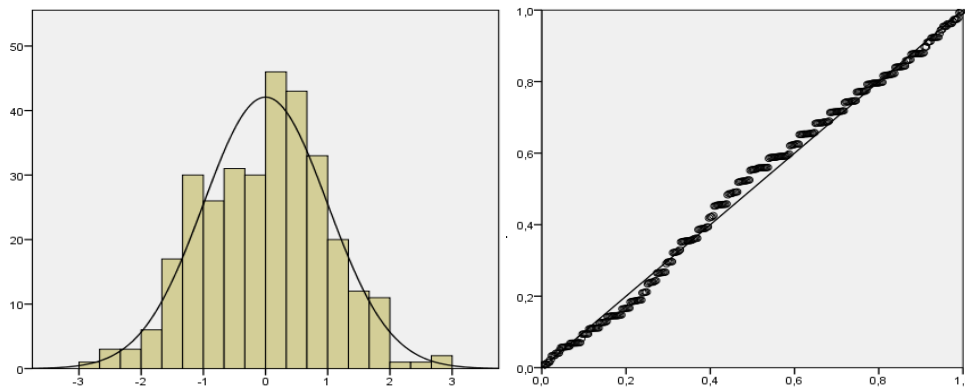
Figure 1: *The graphs in multiple regression analysis regarding the prediction of problem solving skills*
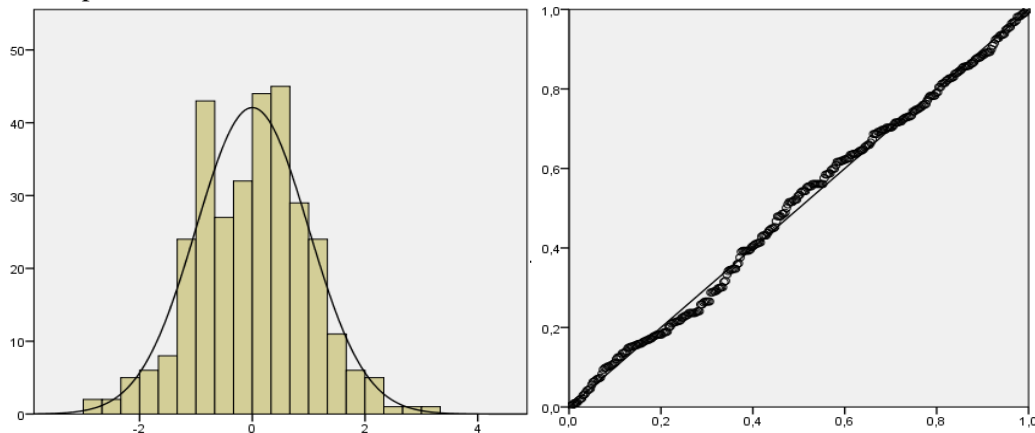
According to Figure 1, it can be said that the histogram and normal distribution curves created for standardized predicted values (problem solving skills) showed a normal distribution. On the other hand, the fact that the number of subjects included in the analysis was high indicates that the normality assumption could be more easily met (Büyüköztürk, 2002:108).

Table 5. Results of the Multiple Regression Analysis Regarding The Prediction of The Sub-Dimension of Confidence in Problem Solving Ability

Confidence in Problem Solving Ability	B	Standard Error B	β	t	p	Durbin-Watson
Constant	1.647	.220		7.471	.000	1.674
Proactive Personality	.742	.057	.589	12.921	.000	
R= .589	R^2=.346					
$F_{(1,314)}$= 166.958	p=.000					

According to Table 5, the ratio of proactive personality traits of teachers explaining the sub-dimension of confidence in problem solving ability is about 34% (R=.589; R^2=.346). When the ANOVA values are examined, it can be said that the value p is significant, in other words, the regression model is valid ($F_{(1, 314)}$=166.958; p<.01). When the t-test results regarding the significance of the regression coefficients are examined, it is seen that proactive personality traits are a significant predictor on the sub-dimension of confidence in problem solving ability.

When Durbin-Watson (1.674) value was examined, the assumption that there was no relationship between error terms was confirmed.

Figure 2: *The graphs in multiple regression analysis regarding the prediction of the sub-dimension of confidence in problem solving ability*
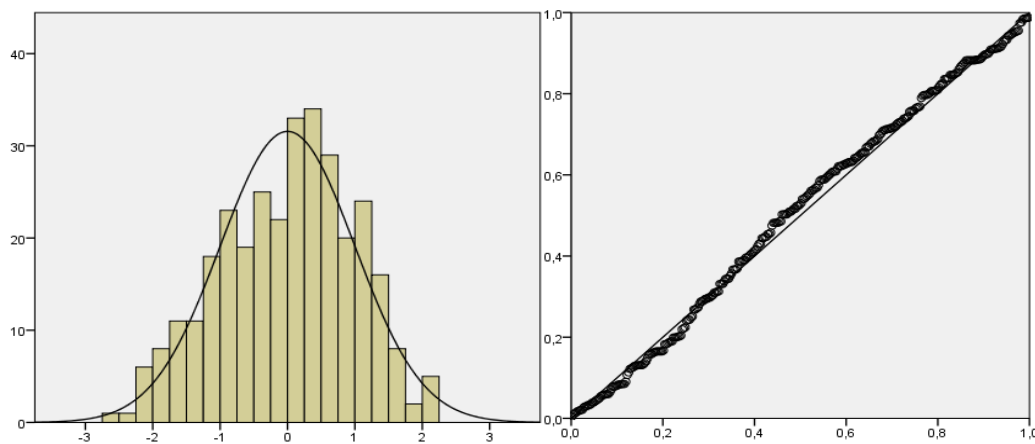
The histogram and normal distribution curves were examined to determine whether the relationship between proactive personality traits and the sub-dimension of confidence in problem solving ability was linear and whether the scores were normally distributed. It is possible to say that the histogram and normal distribution curves created for standardized predicted values (confidence in problem solving ability) showed a normal distribution.

Table 6. Results of the Multiple Regression Analysis Regarding The Prediction of The Sub-Dimension of Approach-Avoidance

Approach-Avoidance	B	Standard Error $_B$	β	t	p	Durbin-Watson
Constant	2.721	.195		13.984	.000	1.692
Proactive Personality	.500	.051	.487	9.872	.000	
R= .487	R^2=.237					
$F_{(1, 314)}$= 97.466	p=.000					

According to Table 6, the ratio of proactive personality traits of teachers explaining the sub-dimension of approach-avoidance is about 23% (R=.487; R^2=.237). When the ANOVA values are examined, it can be said that the value p is significant, in other words, the regression model is valid ($F_{(1, 314)}$=97.466; p<.01). When the t-test results regarding the significance of the regression coefficients are examined, it is seen that proactive personality traits are a significant predictor on the sub-dimension of approach-avoidance. When Durbin-Watson (1.692) value was examined, the assumption that there was no relationship between error terms was confirmed.
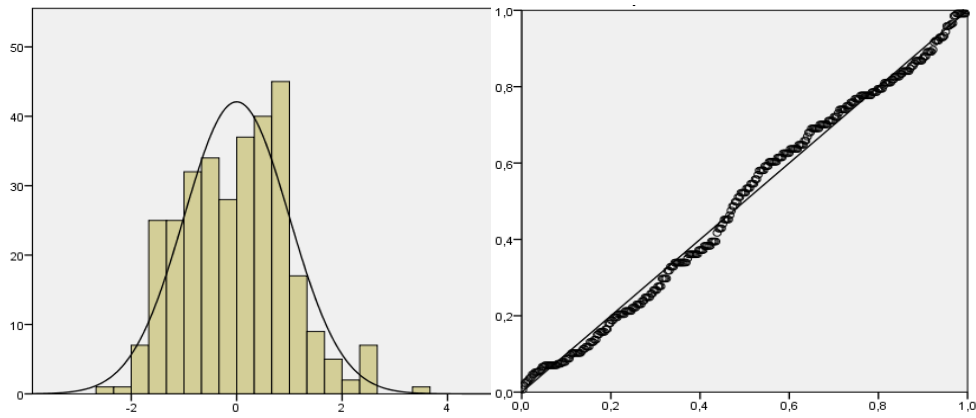
Figure 3: *The graphs in multiple regression analysis regarding the prediction of the sub-dimension of approach-avoidance*

According to the histogram and normal distribution curves which were examined to determine whether the relationship between proactive personality traits and the sub-dimension of approach-avoidance was linear and whether the scores were normally distributed, it was seen that the histogram and normal distribution curves created for standardized predicted values (approach-avoidance) showed a normal distribution.

Table 7. Results of the Multiple Regression Analysis Regarding The Prediction of The Sub-Dimension of Personal Control

Personal Control	B	Standard Error $_B$	β	t	p	Durbin-Watson
Constant	3.812	.184		20.761	.000	1.399
Proactive Personality	.200	.048	.230	4.191	.000	
R= .230	R^2=.52					
$F_{(1, 314)}$= 17.561	p=.000					

According to Table 7, the ratio of proactive personality traits of teachers explaining the sub-dimension of personal control is about 5% (R=.230; R^2=.52). When the ANOVA values are examined, it can be said that the value p is significant, in other words, the regression model is valid ($F_{(1, 314)}$=17.561;   p<.01). When the t-test results regarding the significance of the regression coefficients are examined, it is seen that proactive personality traits are a significant predictor on the sub-dimension of personal control. When Durbin-Watson (1.399) value confirmed that the assumption that there was no relationship between error terms.

Figure 4: *The graphs in multiple regression analysis regarding the prediction of the sub-dimension of personal control*

According to the histogram and normal distribution curves which were examined to determine whether the relationship between proactive personality traits and the sub-dimension of personal control was linear and whether the scores were normally distributed, it was seen that the histogram and normal distribution curves created for standardized predicted values (personal control) showed a normal distribution.

Discussion and Results

The results show that there is a positive and significant relationship between teachers' proactive personality traits and problem solving skills and confidence in problem-solving ability, approach-avoidance and personal control, which are the sub-dimensions of problem solving. According to the obtained correlation values, it can be said that teachers with proactive personality traits are also good at problem solving. In addition, it is seen that the highest correlation coefficient values are between the sub-dimension of confidence in problem solving ability, problem solving skills, approach-avoidance sub-dimension and the personal control sub-dimension, respectively. This result shows that the relationship between the proactive personality traits of teachers and the sub-dimension of confidence in problem solving ability is stronger than the other variables. When literature is examined in the literature, it has been found that problem-solving skills are related to emotional intelligence level, anger experience and critical thinking skills. Studies in people's emotional intelligence level increases problem-solving skills in the observed increase in (Deniz, 2013; Hess and Bacigalupo, 2014; İşmen, 2001; Shahbazi vd. 2014; Tetik ve Açıkgöz, 2013; Yılmaz Karabulutlu vd., 2011), constant anger problem solving skills with the confidence and positive self-control subscale, which is in inverse relationship with the approach-avoidance subscale (Aydın vd., 2005), found a positive and moderately significant relationship between problem-solving skills and critical thinking skills (Erdem ve Yazıcıoğlu, 2015).

When determination coefficients are taken into account, it can be said that 32% of total variance (variability) in problem solving, 34% of the sub-dimension of confidence in problem solving ability, 23% of the approach-avoidance sub-dimension and 5% of the personal control sub-dimension resulted from the proactive personality traits of teachers. The ratio of proactive personality traits of teachers explaining the problem solving skills is about 32%. When the ANOVA values are examined, it can be said that the p value is significant, in other words, the regression model is valid. When the t-test results regarding the significance of the regression

coefficients are examined, it is seen that proactive personality traits are a significant predictor on problem solving skills. Furthermore, when Durbin-Watson value is examined, the assumption that there is no relationship between error terms is confirmed.

In the multiple regression analysis, according to the histogram and normal distribution curves which were examined to determine whether the relationship between proactive personality traits and problem solving skills was linear and whether the scores were normally distributed, it can be said that the histogram and normal distribution curves created for standardized predicted values (problem solving skills) showed a normal distribution. The ratios of proactive personality traits of teachers explaining the sub-dimensions of confidence in problem solving ability, approach-avoidance and personal control are 34%, 23% and 5%, respectively. Proactive personality traits explain the problem solving skills by 62%.

When the ANOVA values are examined for all three sub-dimensions, it can be said that the p value is significant, in other words, the regression model is valid. According to the t-test results regarding the significance of the regression coefficients, it is seen that proactive personality traits are a significant predictor on the sub-dimensions of confidence in problem solving ability, approach-avoidance and personal control. Furthermore, according to Durbin-Watson values for all sub-dimensions, the assumption that there is no relationship between error terms is confirmed.

The histogram and normal distribution curves were examined to determine whether the relationship between proactive personality traits and the sub-dimensions of confidence in problem solving ability, approach-avoidance and personal control was linear, and whether scores were normally distributed. It is possible to say that the histogram and normal distribution curves created for the standardized predicted values showed a normal distribution.

In similar studies, attention was attracted to the relationship between career success and proactive personality (Seibert et al., 1999). It was concluded that proactive personality has a positive and significant effect on job performance and job satisfaction (Prabhu, 2007), that business establishment attitude is explained by proactive personality trait and the sub-dimension of perceived organizational appearance regulation (Duygulu, 2008), that proactive personality traits have a direct and moderate relationship with the entrepreneurial tendencies of university students (Konaklıoğlu and Kızanlıklı, 2011), that there are dynamic interrelationships between the proactive personalities of workers and business controls (Li et al., 2014), that the accounting profession groups with proactive personality structure are satisfied with their careers (Boyar and Güngörmüş, 2016), that there is a low level of relationship between proactive personality and emotional contagion level (Oral Kaya et al., 2016), that proactive personality is an inclined priority of the employment process, and employment is directly related to job satisfaction of proactive personality and partially mediate its relationship with career satisfaction and life satisfaction (Jawahar and Liu, 2016), that proactive personality has a positive relationship with the proactive working behavior, and psychological strengthening has a regulatory impact in this relationship (Uncuoğlu Yolcu and Çakmak, 2017).

In this research, proactive personality structure was determined as the predictor of problem solving skills. Teachers who are proactive in spreading missionary information, guiding children and young people's learning experiences, take initiative and responsibility when they fulfill their duties demonstrate the importance of teachers with proactive personality. It is important that teachers with this personality structure are good at solving the problem, as well as in terms of the effectiveness of the schools they work in. From the results of the study,

teachers with proactive personality can be actively involved in guidance counseling and management units where problem-solving skills are front-line. In addition to it is necessary to pay attention that there are activities that are aimed at developing problem-solving skills and bring this proactive personality into the forefront during in-service trainings provided to teachers. It is thought that these activities will contribute to both personal and professional achievements of teachers. In addition, the study carried out is for teachers. A similar study can be carried out by selecting school administrators as a sample.

References

Altunışık, R., Recai, C., Bayraktaroğlu, S. ve Yıldırım, E. (2010). *Sosyal bilimlerde araştırma yöntemleri SPSS uygulamaları*. Adapazarı: Sakarya Kitabevi.

Ashford, S. J. & Black, J. S. (1996). Proactivity during organizational entry: antecedents, tactics, and outcomes. *Journal of Applied Psychology*, *81,* 199–214.

Aydın, B., İmamoğlu, S. ve Yukay, M. (2005). Üniversite öğrencilerinin öfke yaşantıları ile problem çözme becerileri arasındaki ilişkinin incelenmesi. *M. Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi, 21*, 1-18.

Bateman, T. S. & Grant, J. M. (1993). The proactive component of organizational behavior. *Journal of Organizational Behavior*, *14,* 103-118.

Boyar, E. ve Güngörmüş, A. H. (2016). Muhasebe meslek mensuplarının proaktif kişilik özelliklerinin, kariyer memnuniyeti ile UFRS' ye bakış açıları ve bilgi düzeyleri üzerine etkisi. *Muhasebe ve Finansman Dergisi*, 55-66.

Brophy J. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology, 75,* 631-661.

Crant J. M. 2000. Proactive behavior in organizations. *Journal of Management*, *26,* 435-462.

Crant, J. M. (1995). The proactive personality scale and objective job performance among real estate agents. *Journal of Applied Psychology, 80,* 532–537.

Çokluk, Ö., Şekercioğlu, G. ve Büyüköztürk, Ş. (2010). Çok değişkenli istatistik SPSS ve LISREL uygulamaları. Ankara: Pegem Akademi Yayınları.

D'zurilla, T. J. & Goldfried, M. R. (1971), Problem solving and behavior modification. *Journal of Abnormal Psychology*, *18,* 407–426.

Deniz, S. (2013). The relationship between emotional intelligence and problem solving skills in prospective teachers. *Educational Research and Reviews, 8 (24)*, 2339-2345.

Duygulu, E. (2008). Algılanan kurumsal görünüm, proaktif kişilik özelliği ve iş kurma (girişimcilik) tutumu: Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü öğrencileri üzerine bir inceleme, *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi. 10(2),* 95-120.

Erdem, A. R. ve Yazıcıoğlu, A. (2015). Öğretmen adaylarının problem çözme becerileri ile eleştirel düşünme becerileri arasındaki ilişki. *Türkiye Sosyal Politika ve Çalışma Hayatı Araştırmaları Dergisi, 5(9),* 27-41.

Erdem, A. R. ve Yazıcıoğlu, A. (2015). Öğretmen adaylarının problem çözme becerileri ile eleştirel düşünme becerileri arasındaki ilişki. *Türkiye Sosyal Politika ve Çalışma Hayatı Araştırmaları Dergisi OPUS*, 5 (9), 27-41.

Gupta, V. K. & Bhawe, N. M. (2007). The influence of proactive personality and stereotype threat on women's entrepreneurial intentions, *Journal of Leadership and Organizational Studies. 13,* 73–85.

Henley, M. (2006). *Classroom management: A proactive approach*. Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Heppner, P. P., Baumgardner, A. H. & Jakson, J. (1985). Depression and attributional style: are they related?. *Cognitive Therapy and Research*, *9,* 105–113.

Heppner, P.P. & Baker, C.E. (1997). Application of problem solving inventory. *Measurement and Evaluation in Counseling and Development, 29*,(4),129-143.

Heppner, P.P. & Petersen, C.H. (1982). The development and implications of a personal problem -solving inventory. *Journal of Counseling Psychology*, *29,* 66-75.

Hess, J. D. & Bacigalupo, A. C. (2014). Enhancing management problem-solving processes through the application of emotional ıntelligence skills. *Journal of Management Policies and Practices, 2(3),* 1-17.

İşmen, A. E. (2001). Duygusal zeka ve problem çözme. *M.Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi, 13,* 111-124.

Jawahar, I. M. & Liu, Y. (2016). Why are proactive people more satisfied with their job, career, and life? an examination of the role of work engagement. *Journal of Career Development, 44(4),* 344-358.

Karasar, N. (2007). Bilimsel araştırma yöntemleri. (17. baskı). Ankara: Nobel Yayıncılık.

Koç, B., Terzi, Y. ve Gül, A. (2015). Üniversite öğrencilerinin iletişim becerileri ile kişilerarası problem çözme becerileri arasındaki ilişki. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi, 4(1),* 369-390.

Konaklıoğlu, E. ve Kızanlıklı, M. M. (2011). Üniversite öğrencilerinin proaktif kişilik özellikleri ile girişimcilik eğilimleri arasındaki ilişki. *Ticaret ve Turizm Eğitim Fakültesi*, *1,* 72-92.

Lee, S.M. & Peterson, S. (2000). Culture, entrepreneurial orientation and global competitiveness. *Journal of World Business, 35,* 401–416.

Li, W. D., Frese, M. Fay, D., Harms, P., & Gao, X. (2014). Reciprocal relationship between proactive personality and work characteristics: a latent change score approach, *Journal of Applied Psychology, 99(5),* 948-965.

McClure, K. S., Nezu, A. M., Nezu, C. M., O'hea, E. L. & McMahon, C. (2010). Social problem solving and depression in couples coping with cancer. *PsychoOncology*, *21,* 11–19.

Morrison, E. W. (1993a). Newcomer information seeking: exploring types, modes, sources, and outcomes. *Academy of Management Journal*, *36,* 557–589.

Morrison, E. W. (1993b). Longitudinal study of the effects of information seeking on newcomer socialization. *Journal of Applied Psychology*, *78,* 173–183.

Oral Kaya, N., Vergili, A. ve Erdem, R. (2016). Sağlık çalışanlarının proaktif kişilik yapıları ile duygusal bulaşma durumları arasındaki ilişkinin incelenmesi üzerine bir araştırma. *Balkan Sosyal Bilimler Dergisi,* 91-103.

Prabhu, V. P. (2007). *Understanding the effect of proactive personality on job related outcomes ın an organizational change setting*. Unpublished doctoral thesis. Auburn University, Auburn, Alabama.

Rosenberg, M. (1989). *Society and the adolescent self-image*. (Rev. ed.). Middeltown, CT: Wesleyan University Press.

Shahbazi, S., Heidari, M. & Shirvani, M. (2014). Hemşirelik öğrencilerinin problem çözme becerisi ile duygusal zeka arasındaki ilişki ilişkisi. *Jokull Journal, 64(7),* 307-314.

Siebert, S. E., Crant, M. J. & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, *84(3),* 416-423.

Şahin, N., Şahin, N. H., & Heppner, P. P. (1993). Psychometric proporties of the problem solving inventory in a group of Turkish university students. *Cognitive Therapy and Research, 4 (17),* 379–396.

Tetik, S. ve Açıkgöz, A. (2013). Duygusal zeka düzeyinin problem çözme becerisi üzerindeki etkisi: meslek yüksekokulu öğrencileri üzerine bir uygulama. *Electronic Journal of Vocational Colleges-UMYOS Özel Sayı,* 87-97.

Thompson, J. A. (2005). Proactive personality and job performance: a social capital perspective. *Journal of Applied Psychology, 90,* 1011–1017

Uncuoğlu Yolcu, İ. ve Çamak, A. F. (2017). Proaktif kişilik ile proaktif çalışma davranışı ilişkisi üzerinde psikolojik güçlendirmenin etkisi. *Uluslararası Yönetim İktisat ve İşletme Dergisi, 13(2),* 425-438.

Yıldırım, A. ve Şimşek, H. (2006). *Sosyal bilimlerde nitel araştırma yöntemleri*. (6. baskı). Ankara: Seçkin Yayıncılık.

Yılmaz Karabulutlu, E., Yılmaz, S. ve Yurttaş, A. (2011). Öğrencilerin duygusal zeka düzeyleri ile problem çözme becerileri arasındaki ilişki. *Journal of Psychiatric Nursing, 2(2),* 75-79.

Extended Abstract

Giriş

Günümüz değişen dünyasında değişime ve gelişime ayak uydurma bireylerin kişilik özelliklerinde de değişimin olmasını zorunlu kılmaktadır. Dış faktörlerin etkisinde kalan, panik, güvensiz, edilgen, başkalarının ne düşündüğüne haddinden fazla önem veren kişilerin yerini proaktif kişiliğe sahip bireylerin alması beklenmektedir. Proaktif kişilik problem çözme becerilerini beraberinde getirmektedir. Proaktif kişilik özelliklerine ve problem çözme becerilerine sahip öğretmenlerin varlığı okulların başarısı ve sorunsuz işleyişi bakımından önemlidir. Bu durum öğretmenlerin proaktif kişilik özellikleri ile problem çözme becerilerini ortak bir temelde buluşturmaktadır. Bu çalışmada, alan yazındaki araştırmalardan yola çıkarak proaktif kişilik özelliklerinin, problem çözme becerilerini ne düzeyde yordadığı araştırılmaya değer görülmüştür. Bu doğrultuda öğretmenlerin proaktif kişilik özelliklerin problem çözme yeteneğine güven, kişisel kontrol, yaklaşma-kaçınma alt boyutlarından oluşan problem çözme becerilerini yordama düzeyini belirlemek amaçlanmıştır. Araştırmada aşağıdaki sorulara yanıt aranmıştır.

1. Öğretmenlerin proaktif kişilik özellikleri ile problem çözme becerileri arasında anlamlı bir ilişki var mıdır?

2. Öğretmenlerin proaktif kişilik özellikleri problem çözme becerilerinin anlamlı bir yordayıcısı mıdır?

Yöntem

Nicel araştırma yöntemi doğrultusunda hazırlanan bu araştırmada ilişkisel tarama modeli kullanılmıştır. Bu doğrultuda proaktif kişilik kavramı bağımsız değişken, problem çözme becerileri ise bağımlı değişken olarak ele alınmıştır. Araştırma için Elazığ il merkezinde yer alan okullar rasgele yöntemle listeden seçilmiş ve seçilen bu okullarda görev yapan 500 ölçek görüşleri alınmak üzere öğretmenlere dağıtılmıştır. Ancak dağıtılan anketlerden 328'i geri dönmüştür. Geri dönüş oranı %65.6 olarak belirlenmiştir. Geri dönen anketler için mahalanobis uzaklıkları hesaplanarak 12 anketin hatalı olduğu sonucuna ulaşılmış ve bu anketler analiz dışı bırakılmıştır. Araştırmada *Problem Çözme Envanteri* ile *Proaktif Kişilik Özellikleri Ölçeği*nin Türk dil ve kültür yapısına uyarlanmış hali kullanılmıştır.

Bulgular ve Tartışma

Öğretmenlerin proaktif kişilik özellikleri ile problem çözme becerileri ve problem çözmenin alt boyutları olan problem çözme yeteneğine güven, yaklaşma-kaçınma, kişisel kontrol arasında pozitif ve anlamlı bir ilişki olduğu görülmektedir. Elde edilen korelasyon değerlerine göre proaktif kişilik özelliklerine sahip öğretmenlerin problem çözmede de iyi oldukları söylenebilir. Ayrıca en yüksek korelasyon katsayı değerlerinin sırasıyla problem çözme yeteneğine güven alt boyutu, problem çözme becerileri, yaklaşma – kaçınma alt boyutu ve kişisel kontrol alt boyutu arasında olduğu görülmektedir. Bu bulgu öğretmenlerin proaktif kişilik özellikleri ile problem çözme yeteneğine güven alt boyutu arasındaki ilişkinin diğer değişkenlere göre daha güçlü olduğunu göstermektedir. Alan yazın incelendiğinde problem çözme becerinin duygusal zeka düzeyi, öfke yaşantısı ve eleştirel düşünme becerileri ile arasında ilişkinin olduğuna dair çalışmalara rastlanmıştır. Yapılan çalışmalarda kişilerin duygusal zeka düzeyi arttıkça problem çözme becerilerinde artış gözlendiği (Tetik ve Açıkgöz, 2013; İşmen, 2001; Deniz, 2013; Shahbazi vd. 2014; Hess and Bacigalupo, 2014; Yılmaz Karabulutlu vd., 2011), sürekli öfkenin

problem çözme yeteneğine güven ve kişisel kontrol alt boyutu ile olumlu, yanaşma-kaçınma alt boyutu ile ters ilişki içinde olduğu (Aydın vd., 2005), problem çözme becerileri ile eleştirel düşünme becerileri arasında pozitif yönde ve orta düzeyde anlamlı bir ilişki olduğu bulunmuştur (Erdem ve Yazıcıoğlu, 2015).

Öğretmenlerin proaktif kişilik özelliklerinin problem çözme becerilerini açıklama oranı yaklaşık %32'dir. ANOVA değerlerine bakıldığında p değerinin anlamlı olduğu; bir başka deyişle regresyon modelinin geçerli olduğu söylenebilir. Regresyon katsayılarının anlamlılığına ilişkin t-testi sonuçları incendiğinde; proaktif kişilik özelliklerinin problem çözme becerileri üzerinde anlamlı bir yordayıcı olduğu görülmektedir. Öğretmenlerin proaktif kişilik özelliklerinin *problem çözme yeteneğine güven* alt boyutunu açıklama oranı yaklaşık %34, *yaklaşma-kaçınma* alt boyutunu açıklama oranı yaklaşık %23 ve *kişisel kontrol* alt boyutunu açıklama oranı yaklaşık %5'tir. Proaktif kişilik özellikleri problem çözme becerilerini %62 oranında açıklamaktadır. Kalan %38'lik oran ise dışsal faktörlerle (alınan eğitimler, okunan kitaplar, yaşanan tecrübeler) açıklanabilir. Her üç alt boyut için ANOVA değerlerine bakıldığında p değerinin anlamlı olduğu; bir başka deyişle regresyon modelinin geçerli olduğu söylenebilir. Regresyon katsayılarının anlamlılığına ilişkin t-testi sonuçları ise proaktif kişilik özelliklerinin *problem çözme yeteneğine güven*, *yaklaşma-kaçınma* ve *kişisel kontrol* alt boyutu üzerinde anlamlı bir yordayıcı olduğu görülmektedir.

Benzer çalışmalarda; kariyer başarısı ile proaktif kişilik arasında ilişkiye dikkat çekilmiştir (Seibert vd. 1999). Proaktif kişiliğin iş performansı ve iş tatmini üzerinde pozitif ve anlamlı düzeyde ilişkinin olduğu (Prabhu, 2007), iş kurma tutumunun proaktif kişilik özelliği ve algılanan kurumsal görünümüm düzenleyicilik boyutu tarafından açıklandığı (Duygulu, 2008), proaktif kişilik özelliklerinin üniversite öğrencilerinin girişimcilik eğilimleri ile doğru yönlü ve orta düzeyde bir ilişki olduğu (Konaklıoğlu ve Kızanlıklı, 2011), işgörenlerin proaktif kişilikleri ile iş kontrolleri arasında dinamik karşılıklı ilişkilerin varlığı (Li vd., 2014), proaktif kişilik yapısına sahip olan muhasebe meslek gruplarının, kariyerlerinden memnun oldukları (Boyar ve Güngörmüş, 2016), proaktif kişilik ile duygusal bulaşma düzeyi arasında düşük düzeyde ilişki olduğu (Oral Kaya vd., 2016), proaktif kişiliğin işe alım sürecinin eğilimli bir önceliği olduğu ve işe girişin proaktif kişiliğin iş tatmini ile doğrudan ilişkili olduğu ve kısmen kariyer doyumu ve yaşam doyumuyla olan ilişkisine aracılık ettiği (Jawahar and Liu, 2016), proaktif kişiliğin proaktif çalışma davranışı ile de olumlu ilişki içerisinde olduğu; psikolojik güçlendirmenin bu ilişkide düzenleyici etkiye sahip olduğu (Uncuoğlu Yolcu ve Çakmak, 2017) sonuçlarına ulaşılmıştır.

Bu araştırmada proaktif kişilik yapısı problem çözme becerilerinin yordayıcısı olarak tespit edilmiştir. Görevi bilgi yaymak, çocukların ve gençlerin öğrenme yaşantılarına rehberlik etmek olan öğretmenlerin bu görevlerini yerine getirirken insiyatif ve sorumluluk almaları proaktif kişiliğe sahip öğretmenlerin önemini ortaya koymaktadır. Bu kişilik yapısına sahip öğretmenlerin problem çözmede de iyi olmaları görev yaptıkları okulların etkililiği açısından önem taşımaktadır. Çalışma sonuçlarından yola çıkarak proaktif kişiliğe sahip öğretmenlerin problem çözme becerilerinin ön planda olduğu rehberlik komisyonu ve yönetim birimlerinde aktif görev almaları sağlanabilir. Ayrıca öğretmenlere verilen hizmetiçi eğitimlerde problem çözme becerilerini geliştirilmesine dönük ve proaktif kişiliği ön plâna çıkaran etkinliklerin olmasına dikkat edilmelidir. Bu etkinliklerin öğretmenlerin hem kişisel hem de mesleki başarılarına katkı sağlayacağı düşünülmektedir. Ayrıca yapılan çalışma öğretmenlere dönüktür. Benzer çalışma okul yöneticilerinin örneklem olarak seçilmesi ile de yapılabilir.