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RESEARCH ARTICLE

Investigating the Relationship Between School Principals' Adjective–Based Personality Traits and Their Self-Efficacy

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What is already known on this topic?

- *The concept of self-efficacy originates from Bandura's social-cognitive theory. It's defined as a person's belief in their ability to organize and execute actions to achieve desired outcomes.*
- *The Big Five Personality Traits (BFPT) framework provides a universal model for defining personality. This model consists of five dimensions: emotional stability (neuroticism), agreeableness, extraversion, openness to experience, and conscientiousness.*
- *Research indicates a relationship between personality and various educational factors, such as academic achievement, social relationships, and self-regulation skills. Personality also influences a school principal's leadership style and decision-making processes.*

Abstract

School principals' abilities and resources distinguish them from one another. The research question was whether a significant relationship exists between adjective-based personality traits and self-efficacy. The study aims to examine the level of the relationship between school principals' adjective-based personality traits and their self-efficacy. The research method is quantitative and was developed using a correlational survey design. Within this scope, the research group included 160 principals and vice-principals working in 63 public schools affiliated with the Ministry of National Education in the Avcılar district of Istanbul during the 2021–2022 academic year. The data collection tools used in this study were the school principal self-efficacy scale and the adjective-based personality test. The adjective-based personality test consists of five dimensions, which are respectively: emotional stability, extraversion, openness to experience, agreeableness, and conscientiousness. The tests used in this research included Pearson correlation analysis, simple linear regression, and multiple regression analyses. According to the results of the multivariate regression analysis conducted to determine the level of school principle self-efficacy using the dimensions of the adjective-based personality test, the dimensions accounted for 35% of the variance in self-efficacy levels. When these dimensions were combined with the categorical variable of job position, they accounted for 37% of the variance in school principle self-efficacy levels. Additionally, when these dimensions were combined with the categorical variable of age, they accounted for 37% of the variance in school principle self-efficacy levels.

Keywords: Adjective-based personality traits, Principal's self-efficacy, school principals

Introduction

The theoretical foundations of educational management date back to the 1950s. During the 1950s, educational management adopted positivist, modernist, and rational-empirical perspectives (Çelik, 1997). In the 1960s, the field of educational management began to institutionalize, with an emphasis on decision-making, resource provision, and addressing social issues. The 1970s saw a focus on decision-making, motivation, student achievement, and conflict management. In the 1980s, topics such as organizational culture and school principle beliefs gained importance, while the 1990s aimed to address practical problems through research. From the 2000s to the present, issues like ethical concerns, subjectivity, and effective crisis management have been emphasized (Karaferye, 2022; Sarı and Sarı, 2020). The concept of self-efficacy originates from Bandura's (1986) social-cognitive theory, particularly the principle of reciprocal determinism, which posits that personal factors, the environment, and behavior influence an individual's future actions. According to this principle, behavior can change the environment, and the environment can change behavior. Additionally, the environment can alter personal characteristics, and individual characteristics can modify the environment. Self-efficacy is a key personal factor in the operation of reciprocal determinism (Pajares & Usher, 2008). Self-efficacy levels vary based on context, conditions, task type and difficulty, and the individual's mastery of the subject (Bandura, 1977; Zimmerman, 2000). However, once a strong sense of self-efficacy is developed, occasional failures do not significantly impact one's self-efficacy (Schunk & Pajares, 2005). Individuals develop theories about their self-efficacy based on the information they gather from their environment. These theories become stable over time and influence individuals' perceptions of success or failure (Paris & Newman, 1990). Despite extensive research on self-efficacy, it is often confused with other concepts, leading to issues with the scales developed to measure it. Therefore, it is crucial to distinguish self-efficacy from similar concepts. In educational organizations, the self-efficacy levels of individuals in principle positions play a significant role in determining their effectiveness, with personality being a key variable.

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What this study adds on this topic?

- *This study provides quantitative evidence of a relationship between school principals' adjective-based personality traits and their self-efficacy using a correlational survey design.*
- *The research found that the five dimensions of the Adjective-Based Personality Test (ABPT) accounted for 35% of the variance in a principal's self-efficacy levels.*
- *The study determined that when combined with the categorical variables of age or job position, the ABPT dimensions accounted for 37% of the variance in administrator self-efficacy levels*

The term "personality" originates from the Latin word "persona," which refers to the masks worn by actors in Roman theater. These masks were used to depict personality traits (Sarıtaş, 1997). Personality is a factor that influences human relationships, life orientations, attire, and speech style in all areas of life. Defining personality is important for understanding individuals, guiding them, and adding value to society (Karaman et al., 2010). Personality traits are crucial for evaluating individuals. There is also a significant relationship between personality and school principals. Effective communication skills, intelligence, versatility, self-confidence, responsibility, managing human relationships, and high self-efficacy are expected traits of successful principals (Arıcı, 2019). Additionally, modern school principals are expected to remain calm in the face of crises and to manage and resolve these crises effectively (Çelikten & Özbaş, 2014). Various studies have shown that personality is related to many factors in education (Komarraju et al., 2009, Martin & Dowson, 2009; Poropat, 2009, Trautwein & Lüdtke, 2009). Personality affects concepts such as joy in life, social relationships, academic achievement, and self-regulation skills. Thus, personality influences school principals, their leadership styles, decision-making processes, ability to motivate teachers, and all processes within the school (Sarıtas, 1997). In this context, evaluating the personality traits of prospective school principals is crucial for determining their self-efficacy levels and for appointing the right individuals to principle positions.

Research Objectives

The perspective on school principals, who are fundamental pillars of the education system, has undergone various changes over time. Nowadays, the behaviors, personality traits, management styles, and decision-making processes of school principals significantly influence teachers, students, and parents within the school (Akbaşlı and Diş, 2019). Ensuring the proper functioning of the school system involves examining the relationship between school principals' personality traits and their self-efficacy, and whether this relationship varies significantly with age and job position.

This research aims to determine whether there is a significant relationship between school principals' adjective-based personality traits and their self-efficacy. This study seeks to uncover findings regarding the direction and magnitude of the relationship between school principals' adjective-based personality traits and their self-efficacy. In this context, the following subproblems related to the main research problem are also presented:

- Is there a significant relationship between the dimensions of the adjective-based personality test (ABPT) and the self-efficacy of school principals?
- Are the dimensions of the ABPT significant predictors of school principals' self-efficacy levels?
- Are the dimensions of the ABPT, along with age and job position, significant predictors of school principals' self-efficacy levels?

Literature Review

Personality is a significant determinant of human behavior (Digman & Takemoto-Chock, 1981). It influences people's relationships, career choices, and overall life direction. Therefore, defining personality is crucial for understanding individuals and providing guidance (Karaman et al., 2010). Intrapersonal processes include the emotional, motivational, and cognitive processes that develop within us and affect the behavior (Çiçek & Aslan, 2020). The scientific study of personality gained momentum in the 20th century (John & Srivastava, 1999) (John & Srivastava, 1999; Daly et al., 2014). Numerous researchers have developed and refined the big five personality traits (BFPT) over time.

The BFPT consists of five dimensions: neuroticism, agreeableness, extraversion, openness to experience, and conscientiousness (John & Srivastava, 1999). The BFPT provides a universal framework for defining personality (McCrae, 1989). It has been validated across cultures and has evolved alongside scientific studies of personality, successfully applied in many research contexts (Komarraju et al., 2009). Detailed descriptions of the five main traits of the BFPT are provided below. Various hypotheses exist regarding why there are five dimensions, with one of the most notable studies conducted by Oliver P. John in 1989. John attempted to measure the personalities of university students using various terms selected from the Adjective Checklist. He found that a factor analysis with 60 commonly used adjectives closely aligned with the five-factor model (Digman, 1990).

Multiple factors contribute to the formation of human personality, making it a complex and challenging phenomenon to analyze. Researchers have conducted numerous studies to understand personality, concluding that influencing factors can be categorized into heredity and environmental influences. These factors include genetic inheritance, the environment and cultural context in which one grows up, and the geographical region's impact on personality. Self-efficacy beliefs influence thought patterns and emotions that enable individuals to exert significant effort toward goals, persist in the face of difficulties, recover from temporary setbacks, and exert some control over events that affect their lives (Bandura, 1977, Maddux et al., 2012) Self-efficacy refers to a person's belief in their ability to organize and execute the actions required to achieve desired outcomes (Bandura, 1977). It is also defined as the belief in one's capacity to handle stressful

situations or external demands that pose challenges (Capri et al., 2012). In this context, self-efficacy is a future-oriented belief about the level of competence a person expects to demonstrate in a specific situation (Ulusoy et al., 2011).

Research on self-efficacy began in the United States in the 1970s with Bandura's therapy sessions involving individuals with various phobias. Bandura observed that despite high motivation, individuals did not equally overcome their phobias, leading him to conclude that varying perceptions of personal efficacy influenced therapy outcomes (Bandura, 1977). The performance of school principals affects the success of the schools they manage in multiple aspects. One of the most critical factors influencing principal performance is principal self-efficacy (Tschannen-Moran and Gareis, 2007). The scientific literature on principal self-efficacy includes studies examining the combined impact of leadership qualities, instructional leadership, and school principals' technological skills (Bellibas and Liu, 2017; Çobanoğlu & Yurek, 2018; Görgülü et al., 2013; Hallinger et al., 2018; McAuley et al., 2000).

Studies in the literature also explore the relationship between principals' self-efficacy levels and qualities such as job satisfaction, personality traits, school effectiveness, and bullying management (Giehll, 2020; Skaalvik, 2020). Instructional leadership practices not only support school principals' self-efficacy beliefs but also enhance teachers' and students' self-efficacy, positively contributing to student achievement (Bellibas & Liu, 2017). Research on the relationship between instructional leadership practices and principals' self-efficacy levels examines the connection between principals' instructional leadership and their leadership self-efficacy (Hallinger, 2005 Küçüksüleymanoğlu, 2019). A study examining school principals' personality traits, strengths and weaknesses, management styles, and views on in-service training needs found that these factors are interrelated. The study highlighted the value of having traditional and contemporary requests for in-service training, reflecting both past and present needs (Özkul et al., 2023). Some research related to the topic investigates the relationship between personality traits and sports requirements (Allen et al., 2013; Aslan & Karanfil, 2022).

Methods

Research Model

The research conducted within the scope of the study primarily consists of two main headings. The first of these is examining the relationship between school principals' self-efficacy and personality traits based on adjectives. Thus, quantitative data were obtained regarding the self-efficacy levels of the individuals in the sample under study using scales, and analyses were conducted based on this data. Since scores from the ABPT are considered continuous variables, the relationship between them was examined using linear regression analysis. In this context, quantitative data were obtained using scales related to ABPT scores, and analyses were conducted based on these data.

Table 1.
Frequency and Percentage Distribution Data for Demographic Variables

Variable	Category	*n*	%
Age	20–30	23	14.47
	31–40	55	34.59
	41–50	53	33.33
	51 and above	28	17.61
Job level	Pre-school	10	6.29
	Primary	52	32.71
	Elementary	44	27.67
	High school	53	33.33

In addition to the aforementioned research, the contribution of demographic characteristics to the prediction of self-efficacy levels by personality traits was also examined through linear regression analysis.

Research Group

The research group consists of principals and vice principals serving in public kindergartens, primary schools, middle schools, and high schools in the Avcılar district of Istanbul during the 2021–2022 academic year. The relevant research group includes a total of 59 schools, with 59 principals and 101 vice principals serving in these schools. Among these schools, 6 are preschools, 37 are primary schools, and 16 are secondary schools. Within the scope of the research, demographic questions were directed to the 160 school principals reached with the scale. These questions collected categorical data. Questions were directed to obtain data related to the age and position level of school principals. The number and percentage data for the age and position level variables are presented in Table 1.

According to Table 1, the majority of school principals participating in the research group are in the age ranges of 31–40 and 21–30, respectively. In terms of position level, the highest percentage is for high school, followed by primary school and middle school, respectively.

Data Acquisition Tools

In data collection for the research, two scales and a personal information form were utilized. The data were obtained via an internet connection. Initially, participants were asked to complete the personal information form, through which their age and position level information were collected.

Secondly, participants from the research group were asked to complete the principals self-efficacy scale (Işık & Derinbay, 2015). This scale consists of 18 items, and participants were instructed to choose a value between 1 (not at all) and 9 (extremely) for each question. The internal consistency coefficient value for the self-efficacy scale, known as Cronbach α, was calculated as 0.94 (Işık & Derinbay, 2015). The self-efficacy score for a given sample in the research group is the sum of numerical responses provided by the respective school principal for the questions in the self-efficacy scale. Since the lowest possible score for each of the 18 questions is 1, and the highest is 9, a self-efficacy score for a sample can range from 18 to 162.

Finally, the personal characteristics of the research group were obtained through the 5-Factor ABPT (Bacanl et al., 2009). The ABPT comprises a total of 40 questions, with each response ranging numerically from 1 to 7. These 40 questions are divided into five separate subgroups (factors) based on the measured attribute. These subgroups are respectively represented by emotional instability (neuroticism), extraversion, openness to experience, agreeableness, and conscientiousness, with question counts of 7, 9, 8, 9, and 7. It was revealed that the internal consistency coefficients for the dimensions of the ABPT range from 0.73 to 0.89 (Bacanlı et al., 2009).

Approvals for the personal information form and scales were obtained from the İstanbul Provincial Directorate of National Education on May 22, 2022. Additionally, approval from the Fatih Sultan Mehmet Vakıf University Scientific Researh and Publishing Ethics Committee (Approval no: 13/08; Date: March 10, 2022). The corresponding scale was utilized with the consent of its author, Prof. Dr. Hasan Bacanlı, granted on February 16, 2022.

Outlier Detection

To ensure the consistency of the collected data, outliers were identified before starting the analysis. Accordingly, each participant's self-efficacy and ABPT characteristics were standardized using the z-score.

Samples with z-scores for either personality traits or self-efficacy that were less than −3 or greater than 3 were considered outliers and

removed from the dataset. Using this method, 10 outliers were identified, and analyses were conducted with the remaining 150 records.

Based on the obtained data, a correlation analysis will be performed for ABPT characteristics and self-efficacy. In this context, the presence of a significant relationship between ABPT characteristics and self-efficacy level will be examined using both linear and multivariate regression. Additionally, it will be investigated whether the self-efficacy level of school principals can be predicted by demographic characteristics.

Descriptive Statistical Values and Normality Test for Self-Efficacy and Adjective–Based Personality Test Variables

The Kolmogorov–Smirnov normality test was applied to the data, yielding a statistic of 0.06 and a critical value of 0.11. These results indicate that the ABPT data obtained from the research group follows a normal distribution. To determine whether the self-efficacy data also conforms to a normal distribution, the Kolmogorov–Smirnov normality test was applied to this data as well. The test yielded a Kolmogorov–Smirnov statistic of 0.11 and a critical value of 0.11. Based on these findings, the self-efficacy data, like the ABPT data, is considered to follow a normal distribution (Massey Jr, 1951).

Results

In this section, the relationship between ABPT dimensions and self-efficacy is examined in light of the research questions. Findings related to the subproblems of the study are presented within this scope.

Examination of the Relationship Between School Principals' Adjective–Based Personality Test Dimensions and Their Self-Efficacy in Leadership

Before examining whether the level of principals' self-efficacy predicts each of the ABPT dimensions significantly, a correlation analysis was conducted for each relevant dimension variable. The correlation coefficient obtained for these two variables was calculated as 0.75. The second strongest linear relationship, with a correlation coefficient of 0.69, was observed between extraversion and conscientiousness. Another aspect is the pairwise linear relationships between ABPT dimensions and the level of self-efficacy. According to the findings, the ABPT dimension with the strongest linear relationship with the level of self-efficacy is Conscientiousness, with a Pearson correlation coefficient value of 0.56. In light of the acquired data, a negative significant relationship is observed between school principals' self-efficacy and ABPT dimension neuroticism, while positive significant relationships are observed with the remaining four dimensions.

The correlation table in Table 2 illustrates the relationships between self-efficacy levels and the five personality dimensions identified in the big five model: neuroticism, extraversion, openness, agreeableness, and conscientiousness. The data reveal that self-efficacy is positively associated with extraversion ($r=0.49$), openness ($r=0.41$), agreeableness ($r=0.42$), and conscientiousness ($r=0.56$), while it is negatively correlated with neuroticism ($r=-0.27$), These findings are consistent with existing theoretical and empirical literature, which suggests that personality traits significantly influence motivational constructs such as self-efficacy. Among the observed traits, Conscientiousness exhibits the strongest positive correlation with self-efficacy. This relationship is theoretically coherent, as individuals high in conscientiousness tend to demonstrate greater self-regulation, persistence, and goal-directed behavior—attributes closely aligned with high self-efficacy beliefs. Extraversion also shows a notable positive association, indicating that individuals who are sociable and assertive may possess a stronger belief in their ability to manage and succeed in various tasks. The positive relationship between openness and self-efficacy may be attributed to the adaptive and exploratory tendencies of open individuals, which facilitate cognitive engagement and learning processes. Likewise, the correlation with agreeableness, though moderate, suggests that interpersonal trust and cooperativeness may foster a supportive environment conducive to efficacy development. Conversely, the negative correlation with neuroticism aligns with prior research indicating that emotional instability and susceptibility to anxiety can undermine confidence in one's capabilities. Individuals high in neuroticism may be more prone to self-doubt and stress, which can adversely affect their perceived self-efficacy. Overall, these findings underscore the integral role of personality in shaping self-efficacy beliefs and highlight the value of incorporating personality-informed approaches into educational interventions aimed at enhancing learner motivation and achievement.

For all correlation analyses conducted among the mentioned variables, p values were calculated as $<.05$. Thus, it can be seen that the correlation analyses conducted in this section are statistically significant.

Predicting the Level of School Principal Self-Efficacy Through the Variables of Adjective–Based Personality Test Dimensions

After performing individual regression analyses between the self-efficacy variable and the ABPT dimensions, the relationship between these variables will be examined using a multivariate regression analysis method. In this regression analysis, the self-efficacy level will be considered the dependent variable, while the ABPT dimensions emotional instability, extraversion, openness to experience, agreeableness, and conscientiousness will be treated as independent variables. The resulting mathematical model will be:

$$\text{Self-efficacy} = \beta_0 + \beta_1 \times \text{Emotional Instability} + \beta_2 \times \text{Extraversion} + \beta_3 \times \text{Openness to Experience} + \beta_4 \times \text{Agreeableness} + \beta_5 \times \text{Conscientiousness}$$

The statistical results obtained from this model are provided in Table 2. As indicated by the β_i values in Table 2, the most significant independent variable in predicting the self-efficacy variable is conscientiousness ($\beta_5=1.17$). This is followed by the extraversion trait with a β_2 value of 0.49. In this context, the weakest predictor of the self-efficacy variable is openness to experience ($\beta_3=-0.12$). The established multiple linear regression model was found to be statistically significant ($p < .05$). According to the multivariate regression analysis findings in Table 3, the variables emotional instability and openness to experience negatively predict the self-efficacy variable. In contrast, extraversion, agreeableness, and conscientiousness positively influence self-efficacy levels.

The t-statistic is the ratio of the estimated coefficient to its standard error. If the estimate is large relative to the standard error, it reflects

Table 2.
Correlation Table for Self-Efficacy Level and ABPT Dimensions

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness	Self-Efficacy
Neuroticism	1	−0.16	−0.26	−0.37	−0.29	−0.27
Extraversion	−0.16	1	0.75	0.59	0.69	0.49
Openness	−0.26	0.75	1	0.68	0.66	0.41
Agreeableness	−0.37	0.59	0.68	1	0.69	0.42
Conscientiousness	−0.29	0.69	0.66	0.69	1	0.56
Self-efficacy	−0.27	0.49	0.41	0.42	0.56	1

Table 3.
Linear Regression Findings for Self-Efficacy Levels and ABPT Dimensions

	β	Standard Error	*t*–Statistic
Intercept	69.93	13.11	5.34
Emotional instability	−0.23	0.15	−1.57
Extraversion	0.49	0.27	1.79
Openness to experience	−0.13	0.32	−0.39
Agreeableness	0.16	0.27	0.58
Conscientiousness	1.17	0.32	3.69

higher precision in the estimation. Based on this definition, the larger the *t*-statistic for a variable in a multiple linear regression model, the more accurate the estimate of that variable's coefficient. When examining the *t*-statistics in Table 3, it is concluded that the estimates for the constant ($t=5.34$) and Conscientiousness ($t=3.69$) are more accurate compared to the other variables.

Using the coefficients in Table 3, the multivariate regression equation for predicting the self-efficacy variable is expressed as:

Self-efficacy = 69.93 − 0.23 × Emotional Instability + 0.49 × Extraversion 0.12 × Openness to Experience + 0.16 × Agreeableness + 1.17 × Conscientiousness

According to the regression coefficients obtained, a 1-unit increase in extraversion, agreeableness, and conscientiousness results in an increase in self-efficacy by 0.49, 0.16, and 1.17 units, respectively. On the other hand, a 1-unit increase in emotional instability and openness to experience results in a decrease in self-efficacy by 0.23 and 0.13 units, respectively.

To evaluate the overall predictive ability of the model, the R_2 value of the model was calculated. For the established multivariate regression model, $R^2=0.35$. This finding indicates that the ABPT variables account for only 35% of the variance in the dependent variable, which is self-efficacy.

Predicting the Level of School Principal Self-Efficacy Through the Adjective–Based Personality Test Dimensions, and the Variables of School Principals' Age and Job Position

In this section, analyses will be conducted to determine the extent to which demographic variables create significant differences in predicting the school principal self-efficacy variable. The mathematical expression of this model is given as follows:

$$\text{Self-efficacy} = \beta_0 + \beta_1 \times \text{Emotional Instability} + \beta_2 \times \text{Extraversion} + \beta_3 \times \text{Openness to Experience} + \beta_4 \times \text{Agreeableness} + \beta_5 \times \text{Conscientiousness}$$

Using the above model, two separate linear regression analyses were performed for two different demographic variables: age and job position. Both of these variables are categorical. The regression findings for the model obtained by adding the age categorical variable to the multivariate regression model described in subsection 3.2 are presented in Table 4.

Table 4.
Linear Regression Findings for Self-Efficacy Levels, ABPT Dimensions, and the Age Categorical Variable

	β	Standard Error	*t*–Statistic
Intercept	78.67	14.38	5.47
31–40 (age)	−5.48	3.61	−1.52
41–50 (age)	−0.62	3.66	−0.17
51 and above (age)	1.74	4.11	0.42
Emotional instability	−0.22	0.15	1.44
Extraversion	0.51	0.27	1.86
Openness to experience	−0.13	0.32	−0.40
Agreeableness	0.13	0.27	0.47
Conscientiousness	1.01	0.32	3.12

The multivariate regression model detailed in Table 4 is statistically significant ($p < .05$). According to the regression analysis, the combination of the ABPT dimensions and the categorical variable age accounts for 37% of the variance in the level of school principal self-efficacy ($R^2=0.37$).

The findings for the second demographic variable, job position, which were used in another multivariate regression analysis, are shown in Table 5. The mathematical model for this regression is expressed as follows:

$$\text{Self-efficacy} = \beta_0 + \beta_1 \times \text{Emotional Instability} + \beta_2 \times \text{Extraversion} + \beta_3 \times \text{Openness to Experience} + \beta_4 \times \text{Agreeableness} + \beta_5 \times \text{Conscientiousness}$$

Table 5.
Linear Regression Findings for Self-Efficacy Levels, ABPT Dimensions, and the Job Level Categorical Variable

	β	Standard Error	*t*–Statistic
Intercept	67.36	13.08	5.15
Pre-school (job level)	2.27	5.22	0.43
Primary (job level)	2.25	2.87	0.79
Elementary (job level)	−4.69	5.22	−1.52
Emotional instability	−0.13	0.16	–0.81
Extraversion	0.40	0.26	1.44
Openness to experience	−0.03	0.32	−0.09
Agreeableness	0.15	0.27	0.55
Conscientiousness	1.20	0.32	3.73

The multivariate regression model detailed in Table 5 is statistically significant ($p < .05$). According to the regression analysis, the combination of the ABPT dimensions and the categorical variable job position accounts for 37% of the variance in the level of school principals' self-efficacy ($R^2=0.37$).

Discussion

Following the research questions, discussions of the analysis results and findings will be presented sequentially based on the three sub-objectives of the study.

Objective 1: Is there a significant relationship between school principals' ABPT dimensions and school principals' self-efficacy?

The relationship between the school principals' self-efficacy levels and personality traits of school principals was examined through correlation analysis. According to the analysis, a moderate positive relationship was identified between self-efficacy levels and personality traits. This finding suggests a harmony between the personality traits and self-efficacy levels of school principals, indicating that their positive personal traits contribute to the effectiveness of school management activities (Federici & Skaalvik, 2012). This relationship can be associated with the concept of successful leadership, where school principals with high self-efficacy and positive personality traits are considered effective and successful leaders (Brown et al., 2005). Therefore, it is plausible to assert that the school principals in the research group are successful leaders for their respective schools (Bellibas and Liu, 2017). Similar studies have also shown significant relationships between personality traits and self-efficacy beliefs among school principals, supporting the findings of this study. Additionally, studies examining the relationship between psychological contract perceptions and self-efficacy among school principals have yielded results consistent with the current study (Açıkgöz, 2022). Furthermore, a study investigating the

relationship between technological leadership self-efficacy and personality traits of school principals found a positive correlation between personality traits and technological leadership self-efficacy skills (Çalık et al., 2019). Moreover, studies examining the relationship between school principals' self-efficacy and organizational commitment perceptions and entrepreneurial characteristics among school principals have revealed a slightly higher level of relationship compared to the present study (Köybaşı, 2016).

The dimension of Neuroticism showed a negative correlation with both other ABPT dimensions and self-efficacy levels. This suggests that the emotional inconsistency and vulnerability of school principals lead to lower school principals' self-efficacy. A similar situation applies to the other four dimensions of ABPT.

Objective 2: Are ABPT dimensions significant predictors of school principals' self-efficacy levels?

It is plausible to suggest that ABPT characteristics moderately predict school principals' self-efficacy. A similar study examining the predictive power of teacher self-efficacy on job satisfaction found that teacher self-efficacy is a significant predictor of job satisfaction (Buluç & Demir, 2015). Another study examining the predictive power of educational technology use self-efficacy on transformational leadership behavior and management skills of school principals revealed that educational technology use self-efficacy is a significant predictor of transformational leadership behaviors and management skills (Kiraz, 2021). Similarly, a study found that personality traits such as compliance, extraversion, and openness to experience positively predict communication ethics dimensions (Küçüksüleymanoğlu, 2019).

Objective 3: Are ABPT dimensions and demographic variables such as age and tenure significant predictors of school principals' self-efficacy levels?

The obtained results indicated that when ABPT dimensions and demographic variables such as age and Tenure were combined, they increased the predictability of school principals' self-efficacy from 35% to 37%. This suggests that ABPT dimensions and demographic variables moderately predict school principals' self-efficacy levels. Another study examining the prediction of family involvement self-efficacy levels by various demographic variables among primary and middle school teachers found that seniority, type of school, participation in seminars/workshops, and reading habits significantly predicted family involvement self-efficacy (Tümkaya & Çetin, 2021). The findings of this research are expected to contribute to the evaluation of the success of current school principals and assist in the selection and appointment processes of future school principals.

Conclusion and Recommendations

According to the research findings, the dimension of Responsibility predicts school principals' self-efficacy at the highest level among the ABPT dimensions. Therefore, increasing the level of responsibility of school principals is crucial for enhancing their self-efficacy. Developing empathy skills can be added to the training programs of school principal candidates. Regarding teacher-administrator relationships from previous roles.

The findings of the study also revealed a strong positive correlation between the dimensions of openness to experience and extraversion. Thus, supporting school principals' participation in various national and international projects, symposiums, and seminars to increase extraversion could potentially enhance their openness to experience. In this context, an increase in extraversion may contribute to an increase in openness to experience.

This research is limited to school principals, provincial directors of national education, and their assistants in the central district of Istanbul and the Avcılar district of the city center. School principals in other districts are excluded from this research.

Data Availability Statement: The data that support the findings of this study are available on request from the corresponding author.

Ethics Committee Approval: Ethics committee approval was received for this study from the Ethics Committee of Fatih Sultan Mehmet Vakıf University (Approval no: 13/08; Date: March 10, 2022).

Informed Consent: Written informed consent was obtained from the school principals affiliated with the Ministry of National Education in the Avcılar district of İstanbul who participated in this study.

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