

# The Mediating Role of Moral Courage in the Relationship Between Authentic Leadership and Teachers' Positive Psychological Capital\*

# Otantik Liderlik ile Öğretmelerin Pozitif Psikolojik Sermayesi Arasındaki İlişkide Ahlaki Cesaretin Aracılık Rolü

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**ABSTRACT:** This study aims to reveal the mediating role of teachers' moral courage (MC) behaviours in the relationship between school principals' authentic leadership (AL) behaviours and teachers' positive psychological capital (PPC) according to the views of teachers working in primary and secondary schools. In this study "AL Questionnaire", "PC Scale" and "PMC (Professional Moral Courage) Scale" were used. 8665 teachers working in primary and secondary schools in Antalya city centre comprise the population of this study. The sample of the study consists of 474 teachers reached by using the convenient sampling method. Confirmatory Factor Analysis (CFA) and (Cronbach Alpha Coefficient) alpha coefficients were benefited from the validity and reliability analysis of the scales, and Spearman's Correlation Coefficient, which was used for data that were not normally distributed, was used to determine the relationships between the variables, and structural equation modelling (SEM) was used for mediating analysis. A low-level positive and significant relationship was found between school principals' authentic leadership behaviours and teachers' psychological capital and moral courage behaviours. Following the results of the Structural equation modelling (SEM) analysis, it has been determined that the moral courage behaviours of the teachers have a mediating role in the relationship between the authentic leadership behaviours of the school principals and the positive psychological capital of the teachers.

Keywords: Authentic leadership, positive psychological capital, moral courage.

ÖZ: Araştırmanın temel amacı okul müdürlerinin otantik liderlik davranışları ile öğretmenlerin pozitif psikolojik sermayeleri arasındaki ilişkide öğretmenlerin ahlaki cesaret davranışlarının aracılık rolünü ortaya koymaktır. Araştırmana "Otantik Liderlik Ölçeği", "Psikolojik Sermaye Ölçeği" ve "Ahlaki Cesaret Ölçeği" kullanılmıştır. Araştırmanın evrenini Antalya il merkezinde ilk ve ortaokullarda çalışmakta olan 8665 öğretmen oluşturmaktadır. Çalışmanın örneklemini uygun örneklem metodu yolu ile ulaşılan 474 öğretmen oluşturmaktadır. Doğrulayıcı Faktör Analizi (DFA) ve (Cronbach Alpha Coefficient) alfa kat sayısı, değişkenler arasındaki ilişkileri belirlemek için ise normal dağılmayan veriler için kullanılan Spearman Korelasyon Katsayısı ve aracılık analizi için yapısal eşitlik modeli (YEM) kullanılmıştır. Okul müdürlerin otantik liderlik davranışları ile öğretmenlerin psikolojik sermayeleri ve ahlaki cesaret davranışları arasında düşük düzeyde olumlu ve anlamlı bir ilişki bulunmuştur. Yapısal eşitlik modellemesi (YEM) analizi sonucuna göre okul müdürlerin otantik liderlik davranışları ile öğretmenlerin pozitif psikolojik sermayeleri psikolojik sermayeleri arasındaki ilişkide öğretmenlerin ahlaki cesaret davranışları ile öğretmenlerin pozitif psikolojik sermayeleri eşitlik modellemesi (YEM) analizi sonucuna göre okul müdürlerin otantik liderlik davranışları ile öğretmenlerin pozitif psikolojik sermayeleri arasındaki ilişkide öğretmenlerin ahlaki cesaret davranışları ile öğretmenlerin pozitif

Anahtar kelimeler: Otantik liderlik, pozitif psikolojik sermaye, ahlaki cesaret.

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According to the classical management approach, the human, cannot go beyond being seen as a part of a machine, although technology seems to be advancing rapidly with the 21st century and technological products are replacing human power, making technology functional depends on the existence of qualified human characteristics. In this context, as the classical management approach has evolved into the contemporary management approach, the value attributed to humans has increased, and it has become even more significant to comprehend human behaviours and mental processes. Along with these experiences, the science of psychology, which examines human behaviour and psychological processes, has continued its development with theory and applications, and recently positive psychology, which emphasises the positive aspects of people by considering also their negative aspects, has become the focus of attention (Akçay, 2011). Positive psychology is a scientific field that interprets people's pursuit of happiness, makes life meaningful, and contributes to related processes (Seligman & Csikszentmihalyi, 2000). It emphasises the positive aspects of people as well as their negative aspects and focuses on their development processes (Kanten & Yesiltas, 2013). In this context, it can be said that positive psychology contributes to the creating suitable environments to improve the positive aspects of people. According to Luthans and Youssef (2004), positive psychology has two main purposes. The first is that it contributes to the search for meaning in people's lives and makes life productive, and the second is that it helps people to reveal their potential. These two main objectives have attracted the attention of management science researchers; it has influenced many scientific fields such as leadership, human resources management, organisational behaviour and ethics.

Positive psychology has an impact on schools, as they function as social organisations similar to other organisations. Looking at studies in the field of educational administration, it has been observed that positive cases are also discussed in addition to negative cases; however, there is a more prominent emphasis on negative facts. It is claimed that the approaches are more problem-oriented since the research focus on solving problems (Cameron & Spreitzer, 2011). While Aydın et al. (2013) argues that studies in the national literature primarily focus on negative phenomena like stress, conflict, and burnout, Demir (2011) stated that concepts such as flow, awareness, optimism, and resilience gain importance for research.

Different perspectives have emerged on the effect of positive psychology on the organisational field. Luthans (2002) provided the emergence of positive organisational behaviour. His studies took their source from positive psychology. Luthans et al. (2007) stated that positive organisational behaviour includes positive psychological processes which can be developed, managed and measured, and are a source for the emergence of positive leadership approaches. The relationship between authentic leadership, positive psychological capital and moral courage, which benefit from positive psychology, are discussed within the scope of this research. Moral courage is one of the three types of the concept of courage shown among the individual study areas of positive psychology (Seligman & Csikszentmihalyi, 2000; Peterson & Seligman, 2004). Based on the aforementioned explanations, it can be argued that the studies in educational administration mostly focus on negative concepts such as stress, conflict, and burnout; and positive psychology-based studies, which aim to emphasise and improve the positive aspects of people and make human life more meaningful, are insufficient. The

concepts of authentic leadership, positive psychological capital and moral courage, which are rooted in positive psychology, can develop schools and teachers and obtain positive school outputs by emphasising positivity in schools. Thus, created positive school environment contributes to the development of both teachers and the school by revealing positive developmental aspects. In this way, teachers can improve their positive psychological capital and spread them to students and society with exemplary behaviours. A positive school environment also makes students happy. Students who are content at school come to school willingly, and by working harder, they can increase both their own and the school's academic success. Hopefully, this study will provide a different perspective on the science of educational administration and positive psychology, and contribute to the relevant literature, while drawing a different framework for school administrators and providing positive school outcomes.

Upon reviewing the literature on positive psychological capital, it becomes evident that studies (Carmona–Halty et al., 2018; Datu et al., 2016; Luthans et al., 2012; Luthans et al., 2016; Ortega-Maldonado & Salanova, 2018; Siu et al., 2014; You, 2016) focus on uncovering the link between positive psychological capital and academic performance. Furthermore, the stress experienced by teachers and students has caught the attention of researchers, prompting an investigation into its connection with psychological capital (Rodrigues et al., 2017; Gautam & Pradhan, 2018; Kaur & Amin, 2017; Shen et al., 2014). These studies indicate that positive psychological capital is negatively correlated with stress and moderates the relationship between stress and academic achievement. In a study conducted with teachers, it was found that those with higher levels of positive psychological capital exhibited lower ratings of anxiety, depression, and stress (Rodrigues et al., 2017). Additionally, positive psychological capital may be protective against depressive symptoms (Shen et al., 2014).

It can be said that studies examining the relationship between psychological capital and authentic leadership (Aria et al., 2019; Clapp-Smith et al., 2009; Çetin and Tanoba, 2020; Feng, 2016; Öztekin-Bayır and Aydın, 2019; Yollu and Korkmaz, 2021; Walumbwa et al., 2011) are almost nonexistent. This is particularly evident in the field of education. Therefore, the lack of studies that reveal the effects of authentic leadership on teachers' psychological capital is noticeable. In addition, the concept of moral courage, which is one of the three types of courage, has recently emerged in national and international literature. Studies regarding the mediating role of the concept of moral courage include those by Hannah et al., 2011; Pulungan et al., 2021; Saleem et al., 2021.

In the study by Pulungan et al. (2021), the relationship between moral courage behavior and knowledge sharing behavior with authentic leadership was examined; Saleem et al. (2021) investigated the relationship between emotional intelligence of civil servants and life satisfaction; Hannah et al. (2011) explored the mediating role of moral courage behavior in the relationship between authentic leadership and followers' ethical and pro-social behaviors. However, the mediating role of moral courage in the relationship between authentic leadership and positive psychological capital has not been extensively examined. The relationship between authentic leadership and positive psychological capital is often examined in terms of how authenticity, sincerity, and honesty in leadership enhance employees' positive psychological capital. However, the mediating role of moral courage in this relationship has not been widely discussed. Moral courage involves individuals demonstrating courage to behave in accordance with ethical values. This can include making difficult decisions, speaking out against unethical practices, or standing up against injustices. Therefore, moral courage can play an important mediating role in the relationship between authenticity in leadership and employees' positive psychological capital. Moral courage can serve as an example for employees while leaders demonstrate their authenticity and honesty. This can increase employees' sense of trust and strengthen their positive psychological capital. Additionally, employees who demonstrate moral courage may be more willing to resist unethical behaviors and do what is right, which can further enhance positive psychological capital.

Further research into this area and a more detailed examination of the role of moral courage in the relationship between authentic leadership and positive psychological capital could contribute significantly to the leadership and management literature. To establish the relationship between these concepts derived from positive psychology and to contribute to achieving positive outcomes in the school environment, it is hoped that this will fill a noticeable gap in the literature. Therefore, the accuracy of the mediation model presented based on literature has been tested. This model is presented as follows.

Figure 1 Mediating Model



# Authentic Leadership and Teacher's Positive Psychological Capital

Ethical and social problems, social pressures and changes put the school principals in a difficult situation. While Feng (2016) discussed that the differences, uncertainties and tensions in schools put school administrators under pressure and difficulties, Fox et al. (2015) stated that school principals were exposed to pressures that have reached an all-time high. In these conditions, failing to reach an agreement between school stakeholders may cause moral and ethical problems. In this context, authentic leadership, which strives to provide for all stakeholders who value moral and ethical issues, is considered necessary, especially in effective leadership. School administrators must be authentic leaders to cope with the instability caused by

conflicting internal and external values, structures and expectations (Walker & Shuangye, 2007). Authentic leadership emphasises teachers' participation in the school, encouraging the occupational development of teachers and learning of students (Gumus et al., 2018). Therefore, researchers argue that the presence of authentic leadership can enhance a school's capacity for facilitating positive change (Frick, 2011). Authentic leadership is a leadership model that is conducive to the development of positive psychological processes and an ethical climate, and it expands self-awareness, moral perspective, objective evaluation of information, and transparency (Walumbwa et al., 2008). Having a sense of Self-awareness involves recognizing and understanding one's own perceptions of oneself, as well as acknowledging both personal strengths and weaknesses. It also involves recognizing how these attributes may affect those around us. One's personal values and moral standards guide their behaviour and actions through self-regulation, known as the internalised moral perspective. Relational transparency pertains to how openly one shares information and to what extent one displays their true thoughts and feelings. Balanced evaluation of information refers to the degree to which a leader considers all available information before deciding on a decision-making process. Therefore, authentic leaders show a high level of consistency between their values and actions and display high ethical and moral standards without compromising their internalised values in the face of demands (Avolio et al., 2004). From this perspective, authentic leadership behaviours of school principals can guide their schools to success toward their goals when faced with uncertainties in schools, individual and cultural differences and the pressures and difficulties they cause. Therefore, it can be argued that it has a critical importance in ensuring the development of schools and in creating a school climate based on moral and ethical principles and values.

Crowded classrooms, reduced resources, increased workload and unfair rewards cause burnout, stress and job dissatisfaction in teachers (Chen et al., 2019). In this process, schools become a more complex structure, and this complexity causes teachers to go through negative experiences such as depression, dropping out, and burnout (Jalongo & Heider, 2006). It can be said that these psychological factors negatively affect teachers and school environment. Therefore, coping with these negative situations and finding approaches that reduce stress and related symptoms is critical. In this context, positive psychological capital, considered an effective structure against stress, negative emotions and burnout, have become important (Feng, 2016). Significant findings show that positive psychological capital is positively associated with various helpful outcomes like job satisfaction, positive health and psychological well-being (Avey et al., 2011). Cheung et al. (2011) found that teachers have more job satisfaction and less burnout when their positive psychological capital is high. Shen et al. (2014) revealed that psychological capital is adversely associated with the depressive symptoms of faculty members. Demir (2018) stated that teachers' positive psychological capital levels were negatively correlated with anxiety, burnout, and stress, revealing that it is positively related to job engagement and satisfaction.

Positive psychological capital is the self-confidence which the person will overcome the difficulties they will encounter to attain their objectives, confidence and belief in their abilities; having the point of view that they will always be successful no matter what the circumstances, being satisfied in the way of reaching the goals and trying different ways and being able to survive by resisting the difficulties. Positive psychological capital, referring to the individual's positive psychological development, focuses on who the person can be, taking into account the developmental process of who they were in the past (Luthans, et al., 2007b). Positive psychological capital can increase school's academic success by ensuring that teachers are freed from negative attitudes and behaviours and improve their job performance. From this point of view, managers who expect high performance from their employees by creating a positive climate must understand their employees' strengths and inadequacies, positive and negative behaviours, and develop their psychological capital (Keleş, 2011).

Positive psychological capital is shown among the basic elements of authentic leadership consisting of four dimensions (Luthans & Youssef, 2004). Gardner et al. (2005) argued that authentic leaders enable their followers to improve their positive psychological capital by using their own positive psychological states and role model behaviours. Authentic leadership is a leadership model which encourages positive psychological capital and positive personal development (Walumbwa et al., 2008). In this context, it is possible to discuss the existence of a relationship between authentic leadership and positive psychological capital, and the hypothesis expressing this relationship is formed as follows.

H<sub>1</sub>: A positive relationship exists between school principals' authentic leadership behaviours and teachers' positive psychological capital.

## Authentic Leadership and Teacher's Moral Courage

Moral courage is shown as one of the three types of the concept of courage, which is one of the concepts in the field of positive psychology at the individual level (Seligman & Csikszentmihalyi, 2000). Moral courage is seen as a way out for modern organisations that have become morally complex environments which place significant ethical demands and challenges on their employees (Hannah et al., 2011). In order to fulfil these demands and overcome ethical difficulties, it is proposed that organisational ethical behaviour should be developed, and to achieve this, individuals should have a high level of character, and for a strong character, individuals should have moral courage (Peterson & Seligman, 2004). Morally complex environments can lead to morally distressing situations. These troublesome situations can be a source of conflict of values, which can lead to disagreements among employees. Moral courage is considered significant in dealing with value conflict and moral distress among employees (Sharma, 2018). Moral courage represents a personal attitude to confront ethical issues, challenges and dilemmas and to manage them in a virtuous manner (Sekerka & Yacobian, 2017). The purpose of moral courage is to facilitate and promote the use of moral power in organisational settings. The disappearance of moral values day by day puts organisations in a difficult situation for both employees and managers. Moral courage encourages the use of moral power and enables organizations to overcome ethical issues and difficulties encountered in daily life (Sekerka et al., 2009) Moral courage leads to the existence of a positive organisation by resolving moral issues and forming an ethical environment in organisations.

Individuals with moral courage strive to act in the best interest of others (Sekerka & Bagozzi, 2007); even if they are at risk, they stick to their values and display attitudes and behaviours in line with them (Kidder, 2005). Although there is a

high level of consistency between authentic leaders' values, attitudes, and behaviours, authentic leaders do not compromise their internalised values in the face of demands and have high ethical and moral standards (Avolio et al., 2004). Authentic leaders are committed to their values even if they fail, and they make decisions based on their followers' development and well-being. Authentic leaders adhere to their moral values and encourage their followers to show moral courage by emphasising that they should act in line with their values (Hannah et al., 2005). Based on these explanations, it can be argued that authentic leaders display moral courage are interconnected is formed as follows:

H<sub>2</sub>: A positive relationship exists between school principals' authentic leadership behaviours and teachers' moral courage behaviours.

### **Mediating Effect of Moral Courage**

Moral courage, as Kidder (2005) states, is the courage to be moral. Moral courage can be defined by five essential qualities: honesty, honour, responsibility, decency and compassion. Demonstrating moral courage is seen as a factor in ensuring and improving organisational ethics. A person who acts with moral courage does not compromise on positive attitudes and behaviours such as honesty; thus, it emphasises the creation of an ethical and positive organisational environment by providing the development of values that contribute to the development of organisational ethics. It can be argued that moral courage behaviour is associated with positive psychological capital and promotes positive psychological capital because moral courage behaviour aims to develop moral and ethical characteristics in individuals and organisations by using moral power. In environments where the concept of morality and ethics develops, there are positive relations, and a sense of mutual trust prevails. The point where positive psychological capital grows is in ethical environments where transparency is dominant and mutual trust is created. Therefore, it can be argued that people with moral courage have high levels of positive psychological capital and that moral courage affects and encourages psychological capital. In this context, the hypothesis regarding the potential mediating role of moral courage in the correlation between authentic leadership and positive psychological capital was formed as follows:

H<sub>3</sub>: Teachers' moral courage behaviours have a mediating effect on the relationship between authentic leadership behaviours of school principals and positive psychological capital levels of teachers.

# Method

# **Research Model**

This research is a relational survey model that aims to analyse the mediating role of teachers' moral courage behaviours in the relationship between school administrators' authentic leadership behaviours and teachers' positive psychological capital. In survey research, data is generally collected from a large group using response options determined by the researcher. Researchers are often more interested in how opinions and characteristics are distributed among individuals in the sample rather than the underlying reasons for them (Fraenkel & Wallen, 2006). The study's independent variable is the school administrators' authentic leadership behaviours, whereas the mediator variable is the moral courage behaviour of the teachers, and the dependent variable is the positive psychological capital levels of the teachers. Structural Equation Modeling (SEM) and the mediation model, including latent variables and indicators were used to test the theoretical model of the research.

# **Population and Sample**

The population of the research comprises of 8665 teachers and also the sample comprises 474 teachers working in the central districts of Antalya province (Aksu, Döşemealtı, Kepez, Konyaaltı and Muratpaşa) in the 2020-2021 academic year. The fact that the research was conducted during the pandemic when schools were closed has influenced the sampling method. Therefore, convenience sampling, also known as accidental or convenient sampling, was used in the study. This approach is a method that aims to prevent loss of money, labour and time, as well as allows taking samples from close surroundings (Büyüköztürk et al., 2008).

The sample size that can be selected according to the size of the population is given in different sources at the point of what the appropriate sample size should be. Balc1 (2015) argues that 384 people can represent the population with 95% confidence in large populations. In this context, it can be said that the data collected from 474 teachers in this study is sufficient. Of these participants, 286 (60.3%) were female and 188 (39.7%) were male. 228 (48.7%) of the participants worked in primary school and 246 (51.9%) worked in secondary school.

# **Data Collection Instruments**

# AL Questionnaire

ALQ used in this study which consisted of 4 dimensions and 16 items was developed by Walumbwa et al., (2008). Tabak et al. (2012) adapted the authentic leadership questionnaire into Turkish language. In the reliability analysis Tabak et al. (2012); found the Cronbach Alpha internal consistency coefficients of the dimensions as follows: "relational transparency" 0.81; "self-awareness" 0.89; "balanced processing" 0.78, and "internalised moral perspective" 0.78. In this study, the Cronbach Alpha internal consistency 0.85; self-awareness 0.88; balanced processing 0.77, and internalised moral perspective 0.81. According to the results of confirmatory factor analysis (CFA), when the fit indices were examined in general, it was possible to say that the research

data fitted the model well, so the model-data fit was relatively high ( $X^2$  /sd= 2.86, RMSEA= 0.063, CFI= 0.95, TLI= 0.94, SRMR= 0.04).

## PC Scale

The PC scale, which consisted of 24 items and 4 dimensions (optimism, hope, self-efficacy, resilience) and was developed by Luthans et al. (2007), was utiliezed in this study. The PC scale was adapted to Turkish by Çetin and Basım (2012) by conducting validity and reliability analyses with the data obtained from 235 public sector employee managers at different levels. As a result of a series of analyses, Çetin and Basım (2012) revealed that the reliability coefficients of the dimensions of the scale ranged from 0.67 to 0.85. The Cronbach Alpha internal consistency coefficients of the dimensions were found as follows in this research: optimism 0.71, hope 0.84, self-efficacy 0.91, and resilience 0.83. In general, fit indices showed that the research data fitted the model well. Therefore, it was possible to say that the model-data fit was good ( $X^2$ /sd= 2.79, RMSEA= 0.062, CFI= 0.91, TLI= 0.90, SRMR= 0.05).

## PMC Scale

The PMC scale was developed by Sekerka et al. (2009). The scale consists of 5 dimensions (moral agency, multiple values, endurance of threat, going beyond compliance, moral goal) and 15 items. The scale was designed to improve ethics education in the US Navy. The scale was adapted to Turkish by the authors of this study. In the process of adapting the scale to Turkish, the 5-stage method proposed by Brislin et al. (1973) was used. After the final version of the scale was revealed, its validity and reliability were tested by applying it to two different samples (n=105, n=474). In the pre-application fit indices generally show that the research data fit the model well. Therefore, it was possible to say that the model-data fit was high  $(X^2 / sd =$ 1.19, RMSEA= 0.043, CFI= 0.98, TLI= 0.98, SRMR= 0.04). In this study the Cronbach Alpha internal consistency coefficients of the dimensions were found to be between 0.79 to 0.92. Also, main application fit indices generally showed that the research data fitted the model well ( $X^2$  /sd= 1.93, RMSEA= 0.045, CFI= 0.97, TLI= 0.96, SRMR= 0.03). The Cronbach Alpha internal consistency coefficients of the dimensions were found as follows: moral agency 0.83; multiple values 0.88; endurance of threat 0.92; going beyond compliance 0.86, and moral goal 0.87.

## **Data Analysis**

The data set was first examined before analysing the data collected within the scope of the research. As a result of the examination, it was determined that the information of some participants was missing from the data. After examining whether the missing data formed a pattern or not, it was determined that it did not form a pattern, so data assignment based on the mean was made. To ascertain whether the data conforms to a normal distribution or not, the Kolmogorov-Smirnov test, which is suitable for 29 or more observations, was used and the p $\geq$ .05 criterion required for normal distribution was sought (Kalaycı, 2014). It was concluded that the Kolmogorov-Smirnov test was significant (p  $\leq$  .05) and therefore the data were not normally distributed. As the estimation method, the MLM method, in which the standard errors were estimated more strongly against the data that did not show normal distribution was

used. For other analyses, SPSS 25 package program was used. Table 1 provides the kurtosis and skewness values.

## Table 1

	AL	PPC	РМС
Min.	16	23	15
Max.	80	126	105
Mean	62.12	113.37	94.88
Standart deviation	12.07	13.02	10.97
Skewness	-1.05	-2.44	-2.83
Kurtosis	1.62	11.18	14.27

CFA was applied to reveal the scales' construct validity. The following criteria were taken into account while examining the model fit for CFA. RMSEA value < .05 was considered a good fit, and .05 < RMSEA value < .08 was an adequate fit (Browne & Cudeck, 1993). The confidence interval obtained for RMSEA shows in which intervals the true value of this fit index can take place in the population (MacCallum et al., 1996). An SRMR value of less than .05 is an indicator of a good fit, while a value of less than .10 is an indicator of an acceptable fit (Hu & Bentler, 1995; Schermelleh-Engel & Moosbrugger, 2003). CFI and TLI values close to 1 indicate a good fit, over 0.95 suggest a perfect fit, and an acceptable model-data fit between 0.90-0.94 (Sümer, 2000). In addition, CFI values around 0.95 indicate a suitable model fit (Thompson, 2004).  $\chi^2$ /sd value less than 2 points is deemed a good fit, while a value between 2-3 points is deemed an acceptable fit (Browne & Cudeck, 1993). In addition, the fact that this ratio is less than 5 indicates an acceptable fit (Sümer, 2000).

The maximum likelihood (ML) method among data estimation methods in structural equation modelling is the most widely used method (Sen, 2020). The most critical assumption in using this method is that the data are continuous and show a normal distribution. An alternative method may be needed if the data is not continuous or does not show a significant normal distribution even though it is continuous (Kline, 2019). SEM-based analyses can be used in data consisting of nonlinear relationships, non-normally distributed data, and variables with categorical and ordinal measurement levels, with appropriate method preference (Bollen & Pearl, 2013). In the continuous data set that does not show normal distribution, ML (if the deviation from normality is very low), MLM, MLR, and Bootstrap methods are used as the estimation method (Gana & Broc, 2019, as cited in Sen, 2020). Although these research data are continuous, they do not show a normal distribution. Therefore, the MLM method, which is suitable for data sets that was not normally distributed, was used as the estimation method.

## **Ethical Procedures**

This study is a product of the doctoral dissertation conducted by the authors. Ethics committee approval was obtained based on the letter from Gazi University Measurement and Evaluation Ethics Committee dated 21.10.2020 and numbered E.113162.

#### Results

#### **Testing Hypotheses**

The correlation between variables was determined using Spearman's Correlation Coefficient, which was used for data that was not normally distributed. The relationship between school administrators' authentic leadership behaviours, teachers' moral courage behaviours and positive psychological capital is given in Table 2.

#### Table 2

Teachers' Moral Courage Behaviours and Positive Psychological Capital					
Variables		1	2	3	
1. AL	R	1			
	р				
2. PPC	R	.214**	1		
	р	.000			
3. MC	R	.313**	.594**	1	
	р	.000	.000		

The Relationship Between School Administrators' Authentic Leadership Behaviours, Teachers' Moral Courage Behaviours and Positive Psychological Capital

\*\*p<0.01

As seen in Table 2, a low level of positive correlation exists between the authentic leadership behaviours of school principals and the positive psychological capital of teachers (r=.214, p=.00). It is possible to say that this finding supports the first hypothesis of the study. Also, a moderate relationship exists between school principals' authentic leadership behaviours and teachers' moral courage behaviours (r=.313, p=.00). This finding supports the study's second hypothesis. According to these findings, authentic leadership behaviours of school principals are positively related to both positive psychological capital and moral courage behaviours of teachers.

In order to examine the moral courage behaviour of teachers in the relationship between the school principals' authentic leadership behaviours and the teachers' positive psychological capital, a structural equation model was established, and the mediating effect of moral courage behaviour was tested. The model established to examine the effect of teachers' moral courage behaviours on the effect of authentic leadership behaviour on psychological capital. In this model, authentic leadership, moral courage and psychological capital structures were included as latent variables, and their sub-dimensions were considered indicators of each latent variable. Model-fit indices for the established model are given in Table 3.

Fit Indices —		CFAs of Scales			Reference
	AL	PPC	РМС	Model	Value(s)
X <sup>2</sup>	280.84	506.714	155.173	123.528	
p value	<.05	<.05	<.05	<.05	
df	98	181	80	62	
$X^2/df$	2.87	2.80	1.94	1.99	< 3
CFI	.95	.91	.97	.99	≥.90
TLI	.94	.90	.96	.99	≥.90
SRMR	.04	.05	.03	.02	<.10
RMSEA	.063	.062	.045	.046	$\leq .08$

## CFAs of Scales, Mediation Model

Table 3

When the presented the model fit indices in Table 3 are analysed; it is observed that the RMSEA value is 0.046 and the confidence interval for this value is between 0.34 and 0.57. Chi-square goodness-of-fit index value was obtained as 123.528/62=1.99. Since this value was less than 3, it was accepted as an indicator of a good fit. It is seen that both CFI and TLI fit index values are estimated as 0.99. It is seen that the SRMR cut-off value, which is another fit index, is 0.02. In general, the fit indices fit the research data very well with the model, so the model-data fit is relatively high.

## Table 4

#### Testing Hypotheses

	β	SE	% 95 CI Lower	%95 CI Upper	Z	р
OL -> PPC	.008	.034	.058	.075	.232	.81
OL -> PMC	.276	.056	.168	.391	4.923	.00
PMC -> PPC	.801	.046	.697	.873	17.241	.00
OL -> PMC -> PPC	.221	.050	.105	.332	4.391	.00

In Table 4 it is seen that authentic leadership behaviour does not have a direct effect on psychological capital (B=0.008, p>0.05). However, the impact of authentic leadership behaviour on teachers' moral courage behaviour was found to be statistically significant (B=.28, p<0.05). In addition, the effect of teachers' moral courage behaviour on psychological capital was found to be statistically significant (B=.80, p<0.05). Accordingly, it is possible to say that authentic leadership directly affect psychological capital, but impacts moral courage behaviour (B=0.22, p<0.05) and thus acts as a mediator. Therefore, our third hypothesis is also supported.

As regards to the traditional approach of Baron and Kenny, the independent variable should directly affect the dependent variable in mediation tests, and mediation tests in which there is no direct effect should be terminated. However, the contemporary approach denies that the independent variable should directly affect the dependent variable and accepts the mediation model as validated if the indirect effect is significant (Fritz & MacKinnon, 2007; MacKinon et al., 2002). In other words, the contemporary approach has suggested that the indirect effect may be significant when the total effect is not statistically significant. As a matter of fact, many articles (Cole et al., 2008; Fillo et al., 2016; Hammond et al., 2012; Maguen et al., 2011; Petrocelli et al., 2016) reporting the mediation effect, although the total effect is not significant, have been published in respected journals of their field.

## Figure 2

SEM Result on the Mediating Model



In addition, the variance explained by school administrators' authentic leadership behaviours on teachers' moral courage behaviours is approximately 8%. The variance explained by authentic leadership and moral courage on psychological capital was found to be approximately 65%. Accordingly, it can be concluded that authentic leadership predicts moral courage behaviour at a low level. On the other hand, authentic leadership predicts moral courage behaviour and psychological capital at a high level.

#### Discussion

Positive psychology is a science that focuses on improving people's positive characteristics, having positive life experiences, and improving their personal wellbeing through education (Seligman & Csikszentmihalyi, 2000). Positive psychology provides the necessary conditions and processes for the optimal development of individuals, groups, and organisations (Gable & Haidth, 2005). These positive psychology features have attracted different scientists' attention over time. In this process, positive psychology has revealed different perspectives in research that have influenced organisational behaviour, leadership and management science. Recently, studies that benefit from this trend have emerged. Likewise, in this study, concepts that benefit from positive psychology (authentic leadership, psychological capital, moral courage) were discussed, and an attempt was made to provide a new outlook on positive psychology and educational administration.

The first hypothesis suggests a positive correlation between school principals' the authentic leadership behaviours and teachers' positive psychological capital. The results obtained support this hypothesis. Based on the findings of the study, it has been determined that there is a low positive relationship between school principals' authentic leadership behaviours and teachers' positive psychological capital. When the literature is examined, studies reveal that there is a positive relationship between the authentic leadership behaviours of managers and the psychological capital of employees (Aria et al., 2019; Çetin & Tanoba, 2020; Feng, 2016; Öztekin-Bayır & Aydın, 2019; Yollu & Korkmaz, 2021; Walumbwa, et al., 2011). In their research Çetin and Tanoba (2020) conducted in primary, secondary and high schools; Yollu and Korkmaz (2021) in primary and secondary schools found that there is a moderately positive relationship between school administrators' authentic leadership behaviours and teachers' psychological capital. In both national and international literature, there are studies that back up this particular study.

In the second hypothesis of the study, it is asserted that a positive relationship between school principals' authentic leadership behaviours and teachers' moral courage behaviours. Based on the findings, a positive and middle-level relationship exists between school principals' authentic leadership behaviours and teachers' moral courage behaviours. Thus, it can be argued that the hypothesis is supported. Abney (2016), in their doctoral thesis titled "Authentic Leadership: A Model for Professional Moral Courage", concluded that there is a positive relationship between the participants' perceptions of authentic leadership and their perceptions of moral courage behaviour. In another study (Hannah et al., 2011), a significant positive relationship was found between authentic leadership and the moral courage behaviours of followers. Authentic leadership requires having an internalised moral perspective. This moral perspective provides the power to not compromise their moral values even under pressure. Vrapca (2015) argued that authentic leaders exhibit leadership behaviours in line with their values and beliefs. This perspective predicts the relationship between these two concepts. As a result, it can be said that both the literature and empirical studies support this study.

In the third hypothesis, it is examined that teachers' moral courage behaviours have a mediating effect on the relationship between school principals' authentic leadership behaviours and teachers' positive psychological capital levels. Pulungan et al. (2021) determined the full mediating role of moral courage behaviour in the relationship between authentic leadership and whistleblowing behaviour. Saleem et al. (2021) determined the full mediating role of moral courage behaviour in the relationship between emotional intelligence and life satisfaction of civil servants. In the study of Hannah et al. (2011) at the US military base, moral courage behaviour was found to have a fully mediating role in the relationship between ethical and pro-social behaviours of authentic leadership. It is possible to say that the results of the research support this research result.

#### **Conclusion and Suggestions**

This study showed that school principals' AL behaviours have a positive effect on teachers' PPC and MC. In addition, teachers' MC behaviours have a mediating effect on the relationship between school principals' OL behaviours and teachers' PPC. Moreover, model fit indices point to a high level of fit in the model. In this research and previous research results, it is seen that MC behaviour has a fully mediating role in processes that contribute to the formation of a positive organisational environment and individual and organisational performance such as authentic leadership, PPC, pro-social behaviour, emotional intelligence, life satisfaction and ethical behaviours. According to another result of these studies, it is possible to talk about the existence of a positive correlation between MC behaviour has a crucial place in achieving positive outcomes for organisations. On the other hand, it is possible to say that these results support the literature suggesting that MC behaviour derives from positive psychology.

It would be appropriate to make some suggestions to practitioners and researchers in the range of the research results. Research based on positive psychology that emphasises positive situations that do not ignore the negative aspects that support a positive school environment should be increased. The research can be repeated with a larger sample group at different levels and public/private education institutions and by using different methods and techniques. In terms of future research, scale development studies can be conducted to measure teachers' moral courage behaviours. School principals should increase the positive psychological capital of teachers and enable them to use their existing potential at the highest level. If school principals demonstrate authentic leadership behaviors, they can enhance teachers' psychological capital through role modeling. Authentic leaders are those who possess psychological capital themselves by exhibiting optimistic, hopeful, and transparent behaviors, thus fostering psychological resilience. Teachers who follow an authentic school principal will reflect the behaviors they model, thereby enhancing their own psychological capital. In this context, it is crucial to first develop authentic leadership qualities in school principals. To achieve this, leadership training programs for school principals become crucial. These programs aim to enhance principals' authentic leadership qualities, which in turn empower teachers and contribute to the improvement of the school environment.

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#### **Statement of Responsibility**

Both authors contributed to the whole process of the study and the study is responsibility of both authors. All responsibility for the study belongs to the authors.

#### **Conflicts of Interest**

No financial support was provided for this research. During the research, the authors did not declare any conflict of interest.

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# References

- Abney, A. C. (2016). *Authentic leadership: A model for professional moral courage* [Unpublished doctoral dissertation]. Regent University, London.
- Akçay, V. H. (2011). Pozitif psikolojik sermayenin kişisel değerler bakımından iş tatminine etkisi ve bir araştırma [The effect of positive psychological capital on job satisfaction in terms of personal values and a research] [Unpublished doctoral dissertation]. İstanbul Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Aria, A., Jafari, P., & Behifar, M. (2019). Authentic leadership and teachers' intention to stay: The mediating role of perceived organizational support and psychological capital. *World Journal of Education*, 9(3), 67-81. https://doi.org/10.5430/wje.v9n3p67
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviours, and performance. *Human Resource Development Quarterly*, 22, 127-152. doi: 10.1002/hrdq.20070
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D.R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15, 801–823. https://doi.org/10.1016/j.leaqua.2004.09.003
- Aydın, A., Yılmaz, K., & Altınkurt, Y. (2013). Positive psychology in educational administration. *Journal of Human Sciences*, 10(1), 1470-1490.
- Balcı, A. (2015). Sosyal bilimlerde araştırma yöntem, teknik ve ilkeler. Ankara: Pegem Akademi.

- Bollen, K. A., & Pearl, J. (2013). Eight myths about causality and structural equation models. In S. L. Morgan (Ed.), *Handbook of causal analysis for social research* (pp. 301-328). New York: Springer.
- Brislin, R. W., Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods* (Vol. 11). New York: J. Wiley.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In A. Bollen& J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2008). *Bilimsel araştırma yöntemleri*. Ankara: Pegem Akademi.
- Cameron, K. S., & Spreitzer, G. M. (2011). Positive organizational scholarship handbook: Introduction. In K. S. Cameron & G. M. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 1-14). New York: Oxford University.
- Carmona–Halty, M., Salanova, M., Llorens, S., & Schaufeli, W. B. (2018). How psychological capital mediates between study–related positive emotions and academic performance. *Journal of Happiness Studies*, 1–13. https://doi.org/10.1007/s10902-018-9963-5
- Chen, X., Zeng, G., Chang, E. C., & Cheung, H. Y. (2019). What are the potential predictors of psychological capital for Chinese primary school teachers? *In Frontiers in Education, 4*, 1-8. https://doi.org/10.3389/feduc.2019.00050
- Cheung, F., Tang, C. S. K., & Tang, S. (2011). Psychological capital as a moderator between emotional labor, burnout, and job satisfaction among school teachers in China. *International Journal of Stress Management*, 18(4), 348. https://psycnet.apa.org/doi/10.1037/a0025787
- Clapp-Smith, R., Vogelgesang, G. R., & Avey, J. B. (2009). Authentic leadership and positive psychological capital: the mediating role of trust at the group level of analysis. *Journal of Leadership & Organizational Studies*, 15(3), 227-240. https://doi.org/10.1177/1548051808326596
- Cole, M. S., Walter, F., & Bruch, H. (2008). Affective mechanisms linking dysfunctional behavior to performance in work teams: A moderated mediation study. *Journal of Applied Psychology*, 93(5), 945–958. https://doi.org/10.1037/0021-9010.93.5.945
- Çetin, F., & Basım, H. N. (2012). Örgütsel psikolojik sermaye: Bir ölçek uyarlama çalışması [Organizational psychological capital: A scale adaptation study]. Amme İdaresi Dergisi, 45(1), 121-137.
- Çetin, M., & Tanoba, T. (2020). Okullarda otantik liderlik ve psikolojik sermaye ilişkisi [The relationship between authentic leadership and psychological capital in schools]. Eğitim Yönetimi ve Politikaları Dergisi, 1(2), 8-19.
- Datu, J. A. D., Valdez, J. P. M., & King, R. B. (2016). The successful life of gritty students: Grit leads to optimal educational and well-being outcomes in a collectivist context. In King, R., Bernardo, A. (Eds.), *The psychology of Asian learners: A festschrift in honor of David Watkins* (pp. 503-516). Springer.

- Demir, K. (2011). Pozitif örgüt araştırmaları [Positive organization research]. *Eğitim Bilimleri Araştırmaları Dergisi, 1*(2), 1-8.
- Demir, S. (2018). The relationship between psychological capital and stress, anxiety, burnout, job satisfaction, and job involvement. *Eurasian Journal of Educational Research*, 75, 137-153.
- Feng, F. I. (2016). School principals' authentic leadership and teachers' psychological capital: Teachers' perspectives. *International Education Studies*, 9(10), 245-255. http://dx.doi.org/10.5539/ies.v9n10p245
- Fillo, J., Alfano, C. A., Paulus, D. J., Smits, J. A., Davis, M. L., Rosenfield, D., & Zvolensky, M. J. (2016). Emotion dysregulation explains relations between sleep disturbance and smoking quit-related cognition and behavior. *Addictive Behaviors*, 57, 6-12. https://doi.org/10.1016/j.addbeh.2016.01.013
- Fox, J., Gong, T., & Attoh, P. (2015). The impact of principal as authentic leader on teacher trust in the K-12 educational context. *Journal of Leadership Studies*, 8(4), 6-18. https://doi.org/10.1002/jls.21341
- Fraenkel, J.R., & Wallen, N.E. (2006). *How to design and evaluate research in education*. New York: McGaw-Hill International Edition.
- Frick, W.C. (2011) Practicing a professional ethic: Leading for students best interest. *American Journal of Education*, 117(4), 527-562. https://doi.org/10.1086/660757
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, 18(3), 233-239. https://doi.org/10.1111/j.1467-9280.2007.01882.x
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103-110. https://doi.org/10.1037/1089-2680.9.2.103
- Gana, K., & Broc, G. (2019). *Structural equation modeling with lavaan*. Hoboken, Nj, USA:Wley-ISTE.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). Can you see the real me?: A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16(3), 343-372. https://doi.org/10.1016/j.leaqua.2005.03.003.
- Gautam, P., & Pradhan, M. (2018). Psychological capital as moderator of stress and achievement. *Indian Journal of Positive Psychology*, 9(1), 22–28. https://doi.org/http://dx.doi.org/10.15614/ijpp.v9i01.n73.
- Gumus, S., Bellibas, M. S., Esen, M., & Gumus, E. (2018). A systematic review of studies on leadership models in educational research from 1980 to 2014. *Educational Management Administration & Leadership*, 46(1), 25–48. https://doi.org/10.1177/1741143216659296.
- Hammond, S. I., Müller, U., Carpendale, J. I. M., Bibok, M. B., & Liebermann-Finestone, D. P. (2012). The effects of parental scaffolding on preschoolers' executive function. *Developmental Psychology*, 48(1), 271–281. https://doi.org/10.1037/a0025519.
- Hannah, S., Avolio, B., & Walumbwa, F. (2011). Relationships between authentic leadership, moral courage, and ethical and pro-social behaviors. *Business Ethics Quarterly*, 21(4), 555–578. https://doi.org/10.5840/beq201121436.

<sup>© 2024</sup> AKU, Kuramsal Eğitimbilim Dergisi - Journal of Theoretical Educational Science, 17(3), 698-718

- Hannah, S. T., Lester, P. B., & Vogelgesang, G. (2005). Moral leadership: Explicating the moral component of authentic leadership. W. L. Gardner, B. J. Avolio and F. O. Walumbwa (Ed.) *Authentic leadership and practice: Origins, effects, and development*. Amsterdam: Elsevier.
- Hu, L., & Bentler, P. (1995). Evaluating model fit. R. H. Hoyle (Ed.), *Structural equation modeling. Concepts, issues, and applications* (pp. 76–99). London: Sage.
- Jalongo, M. R., & Heider, K. (2006). Editorial teacher attrition: An issue of national concern. *Early Childhood Education Journal*, *33*(6), 379-380.
- Kalaycı, Ş. (2014). SPSS uygulamalı çok değişkenli istatistik teknikleri (6. Baskı). Ankara: Asil.
- Kanten, P., & Yeşiltaş, M. (2013). Pozitif örgütsel davranışlar üzerine kavramsal bir inceleme [A conceptual study on positive organizational behaviors]. Süleyman Demirel Üniversitesi Vizyoner Dergisi, 4(8), 83-106.
- Kaur, J., & Amin, S. (2017). Psychological capital and stress among school students. *Indian Journal of Positive Psychology*, 8(4), 495–499.
- Keleş, H. N. (2011). Pozitif psikolojik sermaye: Tanımı, bileşenleri ve örgüt yönetimine etkileri. *Organizasyon ve Yönetim Bilimleri Dergisi, 3*(2), 343-350.
- Kidder, R. M. (2005). Moral courage. New York: William Morrow.
- Kline, R. B. (2019). *Yapısal eşitlik modellemesinin ilkeleri ve uygulaması* (Çev. Ed.: Sedat Sen). Ankara: Nobel Akademik Yayıncılık.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. Journal of Organizational Behavior: The International Journal of Industrial, *Occupational and Organizational Psychology and Behavior*, 23(6), 695-706. https://doi.org/10.1002/job.165
- Luthans, F., & Yousseff, C. M. (2004). Human, social and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33(2), 143-160. http://dx.doi.org/10.1016/j.orgdyn.2004.01.003
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital: Investing and developing positive organizational behavior. *Positive Organizational Behavior*, *1*(2), 9-24.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007b). *Psychological capital: Developing the human competitive edge*. New York: Oxford University.
- Luthans, B. C., Luthans, K. W., & Jensen, S. M. (2012). The impact of business school students' psychological capital on academic performance. *Journal of Education for Business*, 87(5), 253–259. https://doi.org/10.1080/08832323.2011.609844
- Luthans, K.W., Luthans, B.C. and Palmer, N.F. (2016). A positive approach to management education: The relationship between academic PsyCap and student engagement. *Journal of Management Development*, 35, 9, 1098-1118. https://doi.org/10.1108/JMD-06-2015-0091
- MacCallum, R. C., Browne, M. W., and Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods1*, 130–149. https://psycnet.apa.org/doi/10.1037/1082-989X.1.2.130

- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83–104. https://doi.org/10.1037/1082-989X.7.1.83
- Maguen S., Luxton D.D., Skopp N.A., Gahm G.A., Reger M.A., Metzler T.J., Marmar C.R. (2011). Killing in combat, mental health symptoms, and suicidal ideation in Iraq war veterans. *Journal of Anxiety Disorders*, 25(4), 563-567.
- Ortega-Maldonado, A., & Salanova, M. (2018). Psychological capital and performance among undergraduate students: the role of meaning-focused coping and satisfaction. *Teaching in Higher Education*, 23(3), 390-402. https://doi.org/10.1080/13562517.2017.1391199
- Öztekin-Bayır, Ö. & Aydın, A. (2019). Otantik liderliğin psikolojik sermaye, işe kapılma ve okul başarısıyla ilişkisi [The relationship of authentic leadership with psychological capital, employment and school success]. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 19*(4), 1232-1254. https://doi.org/10.17240/aibuefd.2019..-631377.
- Peterson, C., & Seligman, M. E. P. (2004). Character strengths and virtues: A handbook and classification. New York: Oxford University.
- Petrocelli, J. V., Rubin, A. L., & Stevens, R. L. (2016). The sin of prediction: When mentally simulated alternatives compete with reality. *Personality and Social Psychology Bulletin*, 42(12), 1635-1652. https://doi.org/10.1177/0146167216669122
- Pulungan, A. H., Sari, K. J. A. T., Maharsi, S., & Hasudungan, A. (2021). Authentic leadership and whistleblowing: The mediating roles of trust and moral courage. *Jurnal Kajian Akuntansi*, 5(2), 265-289. https://dx.doi.org/10.33603/jka.v5i2.5424.
- Rodrigues, R. I., Carochinho, B. J.-A., & Rendeiro, O. M. M. (2017). The impact of positive psychological capital on the psychological distress of primary and secondary education teachers. Psique. *Journal of Research Centre for Psychology* of the Universidade Autonoma de Lisboa, 12, 40–56.
- Saleem, S., Khalid, A., & Ashraf, R. (2021). Emotional intelligence and lifesatisfaction: mediating role of moral courage in government employees of Pakistan. *Journal of Research & Reviews in Social Sciences Pakistan*, 4(1), 1157-1168.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74.
- Sekerka, L., & Bagozzi, R. (2007). Moral courage in the workplace: moving to and from the desire and decision to act. *Business Ethics: A European Review*, 16(2), 132-149. https://doi.org/10.1111/j.1467-8608.2007.00484.x.
- Sekerka, L., Bagozzi, R., & Charnigo, R. (2009). Facing ethical challenges in the workplace. *Journal of Business Ethics*, 89, 565-579. https://doi.org/10.1007/s10551-008-0017-5.
- Sekerka, L., & Yacobian, M. (2017). Understanding and addressing Islamophobia in organizational settings. Leading with moral courage. *International Journal of Public Leadership*, 13(3), 134-150. https://doi.org/10.1108/IJPL-10-2016-0040

- Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14. https://doi.org/10.1037/0003-066X.55.1.5.
- Sen, S. (2020). Mplus ile yapısal eşitlik modellemesi uygulamaları. Ankara: Nobel.
- Sharma, E. (2018). Professional moral courage to combat ethical challenges in the workplace. Int J Dev Conflict.
- Shen, X., Yang, Y. L., Wang, Y., Liu, L., Wang, S., & Wang, L. (2014). The association between occupational stress and depressive symptoms and the mediating role of psychological capital among Chinese university teachers: a crosssectional study. *BMC psychiatry*, 14(1), 1-8.
- Siu, O. L., Bakker, A. B., & Jiang, X. (2014). Psychological capital among university students: Relationships with study engagement and intrinsic motivation. *Journal of Happiness Studies*, 15, 979-994. https://doi.org/10.1007/s10902-013-9459-2.
- Sümer, N. (2000). Yapisal eşitlik modelleri: Temel kavramlar ve örnek uygulamalar [Structural equation modeling: Basic concepts and applications]. *Türk Psikoloji Yazilari*, 3(6), 49–74.
- Tabak, A., Polat, M., Coşar, S., & Türköz, T. (2012). Otantik liderlik ölçeği: güvenirlik ve geçerlik çalışması. *Endüstri İlişkileri ve İnsan Kaynakları Dergisi*, 14(4), 89-106. http://dx.doi.org/10.4026/1303-2860.2012.0212.x.
- Thompson, B. (2004). Exploratory and confirmatory factor analysis: Understanding concepts and applications. *American Psychological Association*.
- Walker, A., & Shuangye, C. (2007). Leader authenticity in intercultural school contexts. *Educational Management Administration and Leadership*, 35(2), 185-204. https://doi.org/10.1177/1741143207075388.
- Walumbwa, F., Avolio, B., Gardner, W., Wernsing, T., & Peterson, S. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34, 89–126. https://doi.org/10.1177/0149206307308913.
- Walumbwa, F.O., Luthans, F., Avey, J.B., & Oke, A. (2011). Retracted: Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of Organizational Behavior*, 32, 4-24. https://doi.org/10.1002/job.653.
- Yollu, S., & Korkmaz, M. (2021). Öğretmen görüşlerine göre okul müdürlerinin otantik liderlik davranışları ile öğretmenlerin pozitif psikolojik sermayeleri arasındaki ilişki [The relationship between school principals' authentic leadership behaviors and teachers' positive psychological capital according to teachers' opinions]. *Cappadocia Journal of History and Social Sciences, 17*, 186-208. http://dx.doi.org/10.29228/cahij.52211.
- You, J. W. (2016). The relationship among college students' psychological capital, learning empowerment, and engagement. *Learning and Individual Differences*, 49, 17–24. https://doi.org/10.1016/j.lindif.2016.05.001.



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