Check for updates

OPEN ACCESS

EDITED BY Pāvels Jurs, Riga Technical University, Latvia

REVIEWED BY Yi-Man Teng, Yango University, China Fahri Özsungur, Mersin University, Türkiye

*CORRESPONDENCE Ayhan Kandemir ⊠ ayh_81@hotmail.com

RECEIVED 02 August 2024 ACCEPTED 12 September 2024 PUBLISHED 04 October 2024

CITATION

Kandemir A (2024) The mediating role of school effectiveness in the relationship between transformational leadership and workplace exclusion. *Front. Psychol.* 15:1475156. doi: 10.3389/fpsyg.2024.1475156

COPYRIGHT

© 2024 Kandemir. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

The mediating role of school effectiveness in the relationship between transformational leadership and workplace exclusion

Ayhan Kandemir*

Ministry of Education, Bolu, Türkiye

The purpose of this study is to reveal the mediating role of school effectiveness in the relationship between transformational leadership and workplace exclusion. The sample of the study consisted of 410 teachers working in primary, secondary and high schools in Bolu/Türkiye province center in the 2023-2024 academic year. Correlational design was used in the study and path analysis was used to reveal the predictive relationships between variables. As a result of the study, it was seen that the hypotheses put forward in line with the model put forward were confirmed. In this context, it was concluded that transformational leadership has a significant positive effect on school effectiveness (Hypothesis 1), school effectiveness has a significant negative effect on workplace exclusion (Hypothesis 2), transformational leadership has a significant negative effect on workplace exclusion (Hypothesis 3) and finally school effectiveness has a mediating role in the effect of transformational leadership on workplace exclusion (Hypothesis 4). In the context of the results, suggestions were made such as providing in-service courses for school administrators on transformational leadership and school effectiveness, preventing exclusion at work by giving teachers the opportunity to develop themselves and participate in the decisions taken.

KEYWORDS

school, school effectiveness, teacher, transformational leadership, Türkiye, workplace exclusion

Introduction

It is known that leadership styles are important for organizations to achieve the goals they set and that effective leadership plays a major role in achieving the goals of organizations. Leadership, which is one of the important concepts, can be defined as the process of mobilizing those who are behind them in line with a specific goal with these characteristics of individuals with high analytical and intuitive power, empathy, and expertise (Buil et al., 2018).

Today, with the rapid pace of change, a racing environment has emerged in the world and it has become important to realize change and change on time. Leadership (Demirtaş and Şama, 2016) and especially transformational leadership can be considered important for organizations to realize this change (Yu and Jang, 2024). Because while transformational leaders support innovation in products and technologies, they also lead changes in the strategy, mission, culture and structure of organizations (Samson et al., 2021). Transformational leadership triggers the needs that are important to those around them by making them realize

the importance of their task (Yao et al., 2024). The missions of transformational leadership include inspiring and encouraging those around them and focusing on developing shared commitment and vision by bringing about positive change in community culture (Pineda, 2023). They coach their followers and empower them by supporting them in learning and personal development (Andoka et al., 2024; Harms and Crede, 2010; Kartika, 2024; Lai et al., 2020), and they positively influence their followers in terms of performance as they strategically anticipate the future and create an exciting team spirit (Joo and Lim, 2013). In addition, transformational leaders create an effective interaction between themselves and their followers by appealing to the feelings of individuals and establishing an emotional bond with them (Barutçugil, 2014). They have a vision for the future, can see changes in the organizational environment, and have the ability to motivate and inspire their members (Andoka et al., 2024). Truly transformational leaders are a directive, sensitive and forwardlooking concept (Nguyen et al., 2023) that is necessary to bring about change in areas such as human resources, tools, infrastructure, finance, etc. to achieve targeted business results. Similar to these explanations, Hay (2006) explains the characteristics of transformational leaders as visionary, risk-taking, having effective communication skills, enthusiastic, open to learning, inspiring others, giving importance to cooperation, caring about the individual needs of employees, etc. When the relevant literature is examined, it is seen that transformational leadership has positive effects in organizations. For example; Alzoraiki et al. (2024) found that transformational leadership positively affects school culture and teaching performance; Jiatong et al. (2022) found that transformational leadership has a positive effect on affective organizational commitment and job performance; Yu and Jang (2024) found that transformational leadership has a positive effect on teachers' work. When the research results are examined, it is seen that transformational leadership has a positive effect on many aspects such as organizational culture, organizational commitment and job performance. From this perspective, it can be interpreted that transformational leaders have a positive impact on the organization, creating a positive climate in the organization and reducing negativities such as organizational exclusion.

As a frequently used concept, ostracism is the exclusion, ignoring, disregarding and isolation of a person from other individuals or groups, often without giving a reason (Williams, 1997). According to another definition, ostracism is a distressing emotion for the individual, a situation that reduces the individual's self-perception and can take away the sense of control in interaction with others (Sulea et al., 2012). Ostracism can be considered as a hidden pain that reduces the motivation of employees and affects their attitudes (Li and Zhang, 2019). On the other hand, ostracism in the workplace is a situation in which an individual or group is rejected or ignored by another individual or group to the extent that it constitutes an obstacle in terms of job success, positive relationship or reputation (Hitlan et al., 2006). In other words, exclusion in the workplace causes employees to be ignored in the organization they work for and, consequently, to become depressed and unable to meet their basic needs (Xing and Li, 2022). It is understood that individuals who are exposed to exclusion in the workplace; group loyalty, job satisfaction and organizational citizenship perceptions decrease (Mohsin et al., 2022; Qian et al., 2019; Zhang et al., 2023), cause problems such as depression, anxiety, and emotional exhaustion (Wang G.H. et al., 2023; Yang and Wei, 2018) and are one of the main causes of stress in organizations (Liu et al., 2013; Noor and Abbas, 2024). This situation is also reflected in the studies conducted. For example, Wang L. M. et al. (2023) concluded in their study that increased information sharing in the workplace decreases exclusion and burnout. Noor and Abbas (2024) found that ostracization in the workplace depletes resources such as self-esteem and self-control. At this stage, it can be interpreted that exclusion can cause negative consequences for organizations and prevent positive situations such as school effectiveness.

Effectiveness is defined as "the degree to which the organization achieves its goals" (Barnard, 1938, cited in Ciftçi, 2023) or the state of achieving success in the results obtained by using effective methods in terms of revealing the determined goals, reaching the necessary resources and adapting to the environment (Ada and Baysal, 2012). From this point, it is seen that effectiveness is an important situation for organizations. Because it is known that organizations maintain their existence when they are effective and sufficient (Aydın, 2010). It is understood that this situation is also valid for schools, which are important organizations. Effective schools are characterized by clear educational goals, systematic evaluation, safe school climate, quality, and holistic development of students (Edmonds, 1979, as cited in Dis, 2023). In other words, effective schools are schools where students are supported with all areas of development at the highest rate (Abdurrezzak, 2015). In effective schools, factors such as teacher motivation (Khun-Inkeeree et al., 2022), strong leadership, positive school culture, meeting students' needs, promoting social justice, and parent involvement are prominent (Javornik and Klemenčič Mirazchiyski, 2023). It is seen that there are different stakeholders in the formation of these environments in effective schools. Zigarelli (1996) stated that factors such as teacher quality, leadership and communication skills of the administrator, teacher participation, strong school culture, and participation of families are important in effective schools. Weindling (1989; as cited in Al-Mekhlafi and Osman, 2022) similarly listed the characteristics of effective schools as emphasizing learning, shared vision and expectations, parent-school collaboration, professional leadership, staff development, positive reinforcement, etc. As can be seen, many factors play a role in effective schools. This situation has also manifested itself in research. For example, Kale (2023) concluded in his study that there is a positive significant relationship between school effectiveness and trust in instructors; Özgenel (2020) concluded in his study that school climate predicts school effectiveness. Again, Özgenel and Koç (2020) found that there is a significant relationship between teachers' professional commitment and school effectiveness.

Since transformational leaders strategically envision the future and create excitement in the team spirit, it is seen that they positively increase the performance of their followers (Joo and Lim, 2013) and adopt management based on learning and development (Loyless, 2023). It can be said that this situation also manifests itself in schools. Transformational leaders enable teachers to develop up-to-date teaching and learning approaches, allowing them to develop individually and, accordingly, to educate students according to the requirements of the age (Celep, 2004). Transformational leadership aids school and community development through a culture that fosters innovative capacity and moral commitment to student achievement, sustained performance and school community development (Alzoraiki et al., 2024). At this point, it can be interpreted that the transformational leadership characteristics of administrators

have a positive effect on schools to be effective schools. Because it is seen that schools that try to increase their academic levels make efforts to increase their leadership capacities, and school principals who serve as administrators make efforts to transform the school culture (Marks and Printy, 2003). In addition, transformational leaders make individual contributions to their colleagues by sharing risks and responsibilities with them (Moolenaar et al., 2010). In addition, transformational leaders contribute to the development of employees by supporting them, and they produce appropriate solutions to problems by expressing their wishes (Bass, 1996). Thus, it is interpreted that negative attitudes such as emotional exhaustion, high stress, and exclusion in the workplace (Lane, 2017), which lead to problems such as achieving goals, etc., will decrease in organizations where transformational leadership characteristics are seen. When the related literature is examined, it is seen that there is no study investigating the effect of transformational leadership on workplace exclusion and the mediating role of school effectiveness. This situation makes the research important. In addition, when the effect of transformational leadership on workplace exclusion is revealed, it will be easier to encourage school administrators to become transformational leaders. In addition, investigating the mediating role of school effectiveness in the effect of transformational leadership on workplace exclusion makes the research important in terms of revealing the characteristics of effective schools. Finally, it is thought that the research is important in terms of shedding light on both decision makers and future studies.

Method

Study group

The study group of the current study consisted of 410 volunteer teachers working in primary, secondary and high schools in the center of Bolu/Türkiye in the second semester of the 2023–2024 academic year. The type of sampling in which the researcher saves time, money and effort by easily accessing the group of the size needed by the researcher is accepted as convenient sampling (Büyüköztürk, 2010). Furthermore, the selection of schools was based on their different levels, types (vocational, science and Anatolian high schools, middle schools, imam-hatip middle schools, etc.) and social environments. Thus, it was aimed to reach different opinions by reaching teachers working at different levels of education. Of the teachers who participated in the study; 262 (63.7%) were female, 149 (36.3%) were male; 310 (75.6%) had undergraduate education, 100 (24.4%) had

postgraduate education; 68 (16.6%) had 0–10 years, 192 (46.8%) 11–20 years; 119 (29.0%) had 21–30 years of seniority and 31 (7.6%) had 31 or more years of seniority; 116 (28.3%) worked in primary schools, 133 (32.4%) in secondary schools and 161 (39.3%) in high schools; 387 (94.4%) were married and 23 (5.6%) were single.

Research model and hypotheses

In the study, correlational design (Dancey and Reidy, 2017) was used to determine the relationship between transformational leadership, school effectiveness and workplace exclusion according to teacher perceptions, and path analysis was used to reveal the predictive relationships between variables.

The model created for transformational leadership, workplace exclusion and school effectiveness in the context of the current study is given in Figure 1.

When Figure 1 is examined, the research model was determined as transformational leadership (independent variable), school effectiveness (mediating variable), and workplace exclusion (dependent variable). In line with the determined model, the following hypotheses were included;

Hypothesis 1: Transformational leadership has a significant positive effect on school effectiveness.

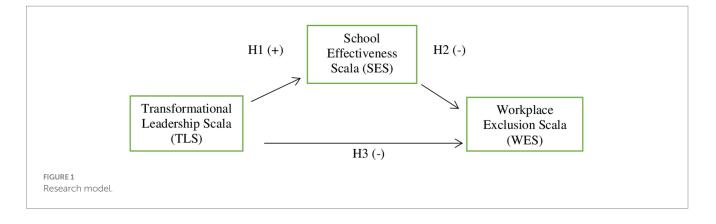
Hypothesis 2: School effectiveness has a significant negative effect on workplace exclusion.

Hypothesis 3: Transformational leadership has a significant negative effect on workplace exclusion.

Hypothesis 4: School effectiveness has a mediating role in the effect of transformational leadership on workplace exclusion.

Data collection

The research data were collected face-to-face from volunteer teachers with the permission of Bolu Abant İzzet Baysal University Human Research Ethics Committee in Social Sciences with protocol number 2024/69. During the data collection phase, school administrations were first informed. Then, participating teachers were briefly informed about the study by the researcher and data were



collected from volunteer teachers. The data obtained were transferred to digital media and made ready for analysis.

Data analysis

It is important that the sample size is sufficient to determine any effect between variables in research. In order to reveal indirect effects between variables, 115-285 participants are recommended for mediation analysis (Fritz and MacKinnon, 2007). In the current study, a sample size of 410 participants, which is larger than this range, was included. JAMOVI analysis program was used in the analysis of the data. Before the analysis, Skewness and Kurtosis distributions were checked for normality distribution. In the distributions, the data belonging to 4 participants with extreme values (those with a scale mean score of 4 and above) in the WES in the exclusion at work scale were excluded from the data set, and no extreme data were found in other scales. Since the scales met the normality condition, no rotation was performed on the data. The analysis continued with the data of 410 participants. When the results were examined, it was found that the scales of TLS (Skewness=-,913, sd=,121; Kurtosis=,573, sd=,240), WES (Skewness=-1,416, sd=,121; Kurtosis=1,964; sd = ,240), SES (Skewness = -1,107, sd = ,121; Kurtosis = 1,440; sd = ,240), the skewness and kurtosis values of the scales were between -2 and +2 and therefore it was accepted that the distributions met the normality condition (George and Mallery, 2003; Şencan, 2005). The results were evaluated at 95% confidence interval and p < 0.05 was considered significant. In addition, the reliability of the scales was evaluated according to Chronbach's alpha coefficient ($\alpha \ge 0.70$; Eymen, 2007; Şencan, 2005).

Data collection tools

Three different scales were used in the study. Information about the scales is as follows:

The short transformational leadership scale was developed by Berger et al. (2012), and adapted into Turkish by Okan and Okan (2021). The scale consisted of 8 items and one dimension, and the scale was prepared in a five-point Likert-type scale including "Strongly disagree" (1), "Disagree" (2), "Undecided" (3), "Agree" (4) and "Strongly disagree" (5). There are no reverse items in the scale. First, the linguistic equivalence of the scale was ensured. Then, the researchers conducted validity (χ^2 =2.51; *p*<0.001; RMSEA=0.06; RMR=0.009; NFI=0.98; CFI=0.992; GFI=0.969) and reliability (Cronbach's Alpha: ,97) studies and concluded that the scale was again found to be .97.

The perceived school effectiveness scale was developed by Hoy (2014) and adapted into Turkish by Yıldırım and Ada (2018). The scale consisted of 8 items and a single dimension, and the scale was prepared in a six-point Likert scale including "Strongly Disagree" (1), "Disagree" (2), "Undecided" (3), "Somewhat Agree" (4), "Agree" (5) and "Strongly Disagree" (6). There are no reverse items in the scale. The researchers conducted validity (χ^2 =3.06; *p*<0.001; RMSEA=0.063; RMR=0.045; NFI=0.98; CFI=0.99; GFI=0.97), language equivalence coefficient (0.708) and reliability (Cronbach's Alpha;,86) studies and concluded that the scale was valid and reliable. In the current study, the Cronbach's Alpha value of the scale was found to be.92.

The workplace exclusion scale was developed by Ferris et al. (2008) and adapted into Turkish by Kurum and Erdemli (2022). The scale consisted of 10 items and a single dimension, and the scale was prepared in a seven-point Likert-type scale including "Strongly Disagree" (1), "Disagree" (2), "Somewhat Disagree" (3), "Neither Agree nor Disagree" (4), "Somewhat Agree" (5), "Agree" (6) and "Strongly Agree" (7). There are no reverse items in the scale. First, the linguistic equivalence of the scale was ensured. Then, the researchers conducted validity ($\chi^2 = 2.03$; p < 0.001; RMSEA = 0.06; NNFI = 0.98; NFI = 0.98; AGFI = 0.92; GFI = 0.95) and reliability (Cronbach's Alpha: ,88) studies and concluded that the scale was valid and reliable. In the current study, the Cronbach's Alpha value of the scale was found to be 0.93.

When the Cronbach's Alpha values of the scales were analyzed, it was concluded that the reliability levels of the three scales were sufficient (Eymen, 2007; Şencan, 2005).

Findings

The relationship between transformational leadership scale (TLS), school effectiveness scale (SES) and workplace exclusion scale (WES) was analyzed by Pearson Correlation analysis and given in Table 1.

Table 1 shows that teachers' perceptions of transformational leadership (\bar{x} = 3.78; SD = 0.93) and school effectiveness (\bar{x} = 4.55; SD = 0.92) are higher than their perceptions of exclusion at workplace (\bar{x} = 1.40; SD = 0.52). Correlation coefficient values are also given in Table 1. Correlation coefficient values; 0.10–0.29 is interpreted as small, 0.30–49 as medium, and 0.50–1.00 as large effect (Cohen, 1988; Cohen, 1992). Accordingly, when Table 1 is analyzed, it is concluded that there is a negative and low level relationship between transformational leadership and workplace exclusion (r=-0.153; *p*<0.01), a positive and medium level relationship between transformational leadership and school effectiveness (r=474; *p*<0.01), and a negative and low level relationship between school effectiveness and workplace exclusion (r=-0.289; *p*<0.01).

TABLE 1 The relationship between the scales.

	Descriptive statistics				Correlations			
Variable	N	Min.	Max.	x	SD	1	2	3
1. TLS	410	1.00	5.00	3.78	0.93	1		
2. WES	410	1.00	3.80	1.40	0.52	-0.153*	1	
3. SES	410	1.00	6.00	4.55	0.92	0.474**	-0.289**	1

*Correlation significant at 0.05 level. *Correlation significant at 0.01 level. n, sample number, X, mean, SD, standard deviation.

Reliability analysis

The reliability of the scales in the model was evaluated with Cronbach's Alpha coefficient, McDonald's Omega (w) and Composite Reliability (CR) internal consistency coefficients. The internal consistency reliability of the scales in the model was evaluated with Cronbach's Alpha Coefficient and Cronbach's alpha values greater than 0.70 at 95% confidence interval for each of the constructs were taken as a reference (Eymen, 2007; Şencan, 2005). It is stated that the internal consistency value should be 0.70 and above to ensure the reliability of a scale. As a result of the analysis, the internal consistency coefficient of the Transformational Leadership Scale was 0.97, McDonald's Omega $(\omega) = 0.97$, CR (Composite Reliability) = 0.70, the internal consistency coefficient of the Workplace Exclusion Scale was 0.93, McDonald's Omega (ω) = 0.94; CR (Composite Reliability)=0.94; and the internal consistency coefficient of the School Effectiveness Scale was 0.92, McDonald's Omega (ω) = 0.94, CR (Composite Reliability) = 0.94 (Table 2). When the Cronbach's Alpha values of the scales were analyzed, it was concluded that the reliability levels of the three scales were sufficient (Büyüköztürk, 2010; DeVellis, 2017; Eymen, 2007; Kline, 2015; Sencan, 2005).

Validity analysis

It is important to provide the required sample size for structural equation modeling. Sample size affects the correct estimation of the model and the detection of specification error (Teo et al., 2013). The KMO test is the test that measures the correlations between variables and the suitability of factor analysis, and the value of the KMO test should be between 0 and 1 (Yaşlıoğlu, 2017). For this purpose, KMO sampling criterion was used for the validity analysis of the model and the KMO test result of.94 showed that the sample size was very suitable for the analysis. In addition, Bartlett's Test of Sphericity was found as 11,602,302, p < 0.05.

Then, factor loadings and average variance explained (AVE) values of the variables were evaluated for convergent validity. Since there were no items with factor loadings below 0.40, no item was removed from the analysis. It was determined that the item factor loadings of the TLS scale ranged between 0.89 and 0.93, the item factor loadings of the SES scale ranged between 0.75 and 0.88, and the WES scale ranged between 0.69 and 0.089 (Table 2). AVE values are expected to be above 0.50. However, if the factor loadings of the items were less than 0.70, the AVE value was required to be 0.50 (Hair et al., 2017). Although the item factor loading was lower than 0.70 (0.65) in item 1 of the Workplace Exclusion Scale, the

Scale	Item	Factor Loading	Cronbach's Alpha	ω	AVE	CR
Transformational leadership	TLS 1	0.89				
	TLS 2	0.91				
	TLS 3	0.90				
	TLS 4	0.89				
scala (TLS)	TLS 5	0.90	0,97	0.97	0,88	0.70
	TLS 6	0.93				
	TLS 7	0.92				
	TLS 8	0.91				
	SES 1	0.75				
	SES 2	0.78				
	SES 3	0.84				
School effectiveness scala	SES 4	0.88	0,92	0.94	0,72	0.94
(SES)	SES 5	0.85				
	SES 6	0.85				
	SES 7	0.84				
	SES 8	0.82				
	WES 1	0.64				
	WES 2	0.71				
	WES 3	0.70				
	WES 4	0.80				
Workplace exclusion scala (WES)	WES 5	0.88	0,93	0.94	0.64	0.94
	WES 6	0.81				
	WES 7	0.89				
	WES 8	0.87				
	WES 9	0.89				
	WES 10	0.76				

TABLE 2 Validity and reliability of the scales.

TABLE 3 Model goodness-of-fit results.

Goodness of fit indices	Good fit value	Acceptable fit value	Structural model
<i>p</i> value	$0.05 \le p \le 1.00$	$0.01 \le p \le 0.05$	<i>p</i> < 0,01
χ^2/df (sd)	$0 \leq \chi^2/df \leq 2$	$2 \le \chi^2/df \le 3$	1,86
NFI	$0.95 \leq \mathrm{NFI} \leq 1.00$	$0.90 \leq \mathrm{NFI} \leq 0.95$	0.99
TLI	$0.95{\le}\mathrm{TLI}{\le}1.00$	$0.90{\leq}\mathrm{TLI}{\leq}0.95$	0.99
CFI	$0.95{\leq}\mathrm{CFI}{\leq}1.00$	$0.90{\leq}\mathrm{CFI}{\leq}0.95$	0.99
SRMR	0 <srmr td="" ≤0.05<=""><td>0.05 < SRMR≤0.10</td><td>0.04</td></srmr>	0.05 < SRMR≤0.10	0.04
RMSEA	$0 \leq \text{RMSEA} \leq 0.05$	$0.05 \leq \text{RMSEA} \leq 0.08$	0.04

*RMSEA, root mean square error of approximation, SRMR, standardized root mean squared residual; CFI, comparative fit index; TLI, Tucker-lewis index. Cited in Erkorkmaz et al., 2013; İlhan and Çetin, 2014.

AVE value was found to be 0.80 (Table 2). In this case, it was seen that all scales met the convergent validity.

Structural model evaluation

The concept of model goodness shows whether the constructed structural model reflects the data situation positively. Poor model fit reduces the reliability of the results (Kang and Ahn, 2021). In the model fit evaluation of structural equation modeling; χ^2 /df, NFI, TLI, CFI, SRMR and RMSEA fit indices were included. Since the chi-square statistic is easily affected by sample size, the χ^2 /df ratio, which is less affected by sample size, can be used (Yazıcıoğlu and Erdoğan, 2014). Therefore, first the χ^2 /df value of the structural equation model was found to be 1.86. Since this result is less than 2, it can be said that the model provides a good fit (Tabachnick and Fidell, 2007). Then, other fit values of the model were calculated. Table 3 shows the NFI, TLI, CFI, SRMR, and RMSEA values of the model and the model was accepted because the results obtained were between good and acceptable fit values.

When Table 3 is examined, it is seen that the model fit is good because the SRMR value is below.80 (0.04) in the model goodness of fit indices (Teo et al., 2013). In addition, an NFI value above.80 indicates the acceptability of the model and an NFI value of.99 indicates the validity of the model (Table 3).

As a result of the analysis, it was seen that the models established in the planning stage of the research were valid p < 0.01. It can be said that school effectiveness is a mediating variable in the effect of transformational leadership on workplace exclusion. Because while the relationship between transformational leadership and workplace exclusion was $\beta = -0.08$ at the beginning, this relationship became $\beta = -0.18$ when school effectiveness was added (Table 4). This situation is also shown in Figure 2.

Conclusion, discussion, and recommendations

This section of the present study presents the results, discussion and recommendations in the context of the results.

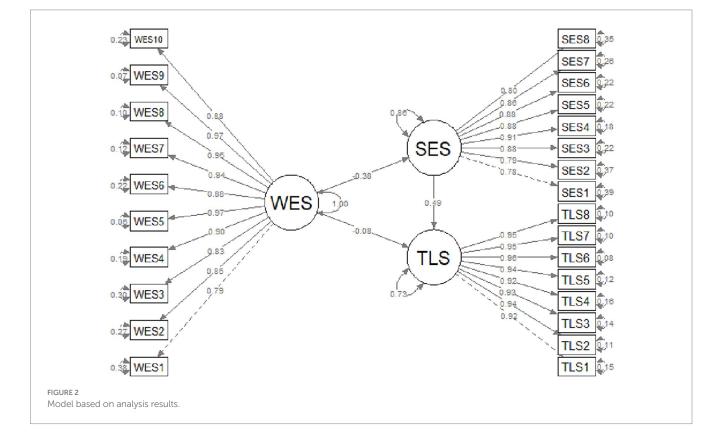
In Hypothesis 1, it was assumed that transformational leadership has a positive and significant effect on school effectiveness and when the results were analyzed, Hypothesis 1 was confirmed ($\beta = 0.47$; $R^2 = 0.22$; *p* < 0.001). Ermeydan and Can (2020) found that transformational leadership is a significant predictor of school effectiveness, and Sesli (2023) found that transformational leadership characteristics applied in schools positively affect school effectiveness in his study. When the related literature is examined, it is seen that there are different studies that are similar to the research results (Abdurrezzak, 2015; Akçay Güngör, 2018; Dufour et al., 2004; Tuncel, 2013). In order for schools to be effective schools and to bring about the intended changes, school leaders should have sufficient knowledge of transformational leadership principles (Dufour et al., 2004; Marks and Nance, 2007). Because school leadership is seen as one of the characteristics of effective schools (Javornik and Klemenčič Mirazchiyski, 2023; Sammons, 2010; Weindling, 1989; cited in, Al-Mekhlafi and Osman, 2022). It is seen that it will be easy for schools to reach their mission and vision if school administrators have transformational leadership characteristics. In this way, it can be thought that the administrator will have the opportunity to transform the school in line with the goals by meeting the needs of teachers, parents and students, thus increasing school effectiveness. Therefore, it can be concluded that the positive and significant effect of transformational leadership on school effectiveness is a natural result.

In Hypothesis 2, it was hypothesized that school effectiveness has a significant negative effect on workplace exclusion and the hypothesis was confirmed as a result of the study ($\beta = -0.28$; R² = 0.08; p < 0.001). An effective school is a school that increases the learning outcomes and quality of students, responds to the educational needs of the society (Yumuşak and Korkmaz, 2024), and adds value to the results of students when compared to similar schools (Mortimore, 1991; as cited in Lafci-Tor and Yavuz, 2020). The concept of school effectiveness is affected differently by many variables such as school, administrators, teachers and students (Yumuşak and Korkmaz, 2024). Mortimore (1988; as cited in Al-Mekhlafi and Osman, 2022) also states that the main determinants of school effectiveness are the leadership of school administrators and the participation of teachers in the decisionmaking process. Therefore, it can be said that teachers, who are seen to have an impact on school effectiveness, should have positive motivation towards the school they work for. Because teachers' motivation has an important role on teacher performance and thus on students (Gemeda and Tynjälä, 2015). It is seen that teachers' having positive motivation towards school will increase their success and thus school effectiveness. Thus, in effective schools, it can be thought that exclusion, which causes negative situations such as depression, thoughts of uselessness, anxiety, violence (Yang, 2012), inability to express their views (Luo et al., 2023), will decrease. Because it can be said that having employees who have high job satisfaction and organizational citizenship and who can express their opinions openly will make it easier for the school to be an effective school. Therefore, in the current study, it can be thought that school effectiveness has a negative effect on exclusion at work.

In Hypothesis 3, it was hypothesized that transformational leadership has a significant negative effect on workplace exclusion and the hypothesis was confirmed in the context of the results ($\beta = -0.15$; $R^2 = 0.02$; p < 0.001). Robbins and Judge (2012) state that transformational leaders have a significant impact on their followers

Relationship	β	R ²	<i>p</i> -value	Hypothesis	Result
$TLS \rightarrow SES$	0,47	0,22	<0.001	H1	Verified
$SES \rightarrow WES$	-0,28	0,08	<0.001	H2	Verified
$TLS \rightarrow WES$	-0,15	0,02	<0.001	H3	Verified
$WES \rightarrow SES \rightarrow TLS$	-0,18	0,08	<0.001	H4	Verified

TABLE 4 Research model structural equation analysis results.



by integrating the goals of the followers and the goals of the organization, and that they care about and support the individual development of their subordinates (Robbins and Judge, 2012). Yukl (2018) states that transformational leaders are leaders who develop the skills and confidence of their followers. Subordinates who have such leaders in organizations increase their organizational commitment and satisfaction levels (McShane and Von Glinow, 2016) and their organizational citizenship is positively affected (Li et al., 2023). Because transformational leaders have a vision for the future and can see the changes in the environment. They motivate and inspire their members and help them achieve higher goals (Andoka et al., 2024). It can be said that this situation will reduce the perception of exclusion at work, which is defined as a form of exploitation (Lance Ferris et al., 2019; Wu et al., 2019) that causes negative situations such as a decrease in job satisfaction, an increase in thoughts of leaving the job, and deterioration in sleep quality. Therefore, it can be said that the significant negative effect of transformational leadership on workplace exclusion in the current study is a normal situation.

The mediating role of school effectiveness in the effect of transformational leadership on workplace exclusion constituted the 4th hypothesis of the study, and the hypothesis was confirmed in the context of the results obtained ($\beta = -0.18$; $R^2 = 0.08$; p < 0.001). Transformational leaders enable the psychological, managerial, and work-oriented development of their environment, thus enabling their personal development. In addition, in this process, they provide a sustainable feedback mechanism that is important in the development of their environment (Jung et al., 2009; as cited in Yılmaz and Kasımoğlu, 2024). They encourage and inspire people to achieve goals (Florek-Paszkowska and Hoyos-Vallejo, 2023). It is seen that this situation plays an important role in the emergence of effective schools (Cevik, 2023) where the views of stakeholders are valued, ideas are clearly put forward, and the school culture supports personal and social development. In this case, it is seen that the transformational leadership characteristics of school administrators have a positive effect on schools to be effective schools by influencing the teachers around them. Javornik and Klemenčič Mirazchiyski (2023) also stated that factors such as strong leadership, positive school climate, etc. contribute to effective schools. It can be thought that this situation will reduce teachers' perceptions of exclusion in the workplace (Hitlan et al., 2006; Mohsin et al., 2022; Qian et al., 2019; Zhang et al., 2023), which negatively affects their perceptions of job success, positive relationship, reputation, group commitment, job satisfaction and organizational citizenship. Thus, it can be interpreted that transformational leadership plays a mediating role of school effectiveness on workplace exclusion.

As a result of the study, it can be said that the fact that transformational leadership is effective on workplace exclusion and school effectiveness makes the study important. The fact that leadership is among the characteristics of effective schools (Javornik and Klemenčič Mirazchiyski, 2023) can bring transformational leadership to the forefront in policies and practices in Türkiye. It can be said that with the development of policies for transformational leadership, negative situations in schools will be eliminated and it will be easier for schools to become effective schools. This situation May lead decision makers in Türkiye to develop policies to equip school administrators with the characteristics of being transformational leaders. In fact, in the "2023 Vision" (2023 Eğitim Vizyonu, 2018), it is stated that postgraduate education will be given importance for the professional development of administrators and teachers. It can be said that by directing administrators to graduate education, administrators will have more knowledge about leadership and their awareness of transformational leadership will increase. In the same document, the fact that the goals for the development of teachers and students along with administrators are also stated can be interpreted as giving importance to school effectiveness. The result that both transformational leadership and school effectiveness reduce exclusion in the workplace can also guide future education policies. It can be interpreted that these issues will be given more importance in future education policies.

In the context of these results, suggestions can be made for practitioners to provide in-service courses for school administrators on transformational leadership and school effectiveness, to prevent exclusion in the workplace by giving teachers the opportunity to develop themselves and participate in the decisions taken. For practitioners, suggestions can be made to conduct similar studies in preschool schools or in different provinces.

Limitations

Although the study has reached important conclusions, it also has some limitations. First of all, only Bolu province center was taken as the study population. This does not represent the whole of Türkiye. Therefore, future studies can be expanded to include different provinces. Secondly, only transformational leadership was included among leadership types in the study. Considering that there are many different types of leadership, studies can be conducted on different leadership styles. Finally, this study is related to transformational leadership, school effectiveness and workplace exclusion. Considering

References

2023 Eğitim Vizyonu (2018). Available at: https://baklan.meb.gov.tr/meb_iys_dosyalar/2018_12/11144802_2023_EGITIM_VIZYONU.pdf (Accessed August 20, 2024).

Abdurrezzak, S. (2015). Etkili okul ve okul liderliğine ilişkin öğretmen algılarının incelenmesi [Explore of teachers' perceptions on effective school and school leadership]. (Unpublished Master's Thesis). Sivas: Cumhuriyet University.

Ada, S., and Baysal, Z. N. (2012). Türk eğitim sistemi ve etkili okul yönetimi. 2nd Edn. Ankara: Pegem.

Akçay Güngör, A. (2018). Etkili okul özelliklerinin dönüşümsel liderlik ve öğretmen bağlılığıyla ilişkisi [The relationships among effective school characteristics, teacher that many factors are important on schools, studies on different subjects can be included.

Data availability statement

The raw data supporting the results of the article can be made available if there is a request.

Ethics statement

The research data were collected face-to-face from volunteer teachers with the permission of Bolu Abant Izzet Baysal University Ethics Committee for Human Research in Social Sciences protocol No. 2024/69. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

AK: Writing - original draft.

Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

commitment and transformational leadership]. (Unpublished PhD Thesis). İzmir: Ege University.

Al-Mekhlafi, A. M., and Osman, M. E. T. (2022). School effectiveness: a key to academic success. *Multicult. Educ.* 8, 36–44. doi: 10.5281/zenodo.6963537

Alzoraiki, M., Ahmad, A. R., Ateeq, A., and Milhem, M. (2024). The role of transformational leadership in enhancing school culture and teaching performance in Yemeni public schools. *Front. Educ.* 9, 1–11. doi: 10.3389/feduc.2024.1413607

Andoka, B. W., Prawoto, N., Wahyuningsih, S. H., and Susilowati, I. (2024). The future of leadership: exploring the relationship between transformational leadership and

organizational performance. Rev. Gestão Soc. Ambient. 18, 1-26. doi: 10.24857/rgsa. v18n7-045

Aydın, M. (2010). Eğitim Yönetimi. 9th Edn. Ankara: Hatipoğlu.

Barutçugil, İ. (2014). Liderlik. İstanbul: Kariyer.

Bass, B. M. (1996). A new paradıgm of leadership: An inquiry into transformational leadership. Alexandria, Virginia: U.S. Army Research Institute for the Behavioral and Social Sciences.

Berger, R., Romeo, M., Guardia, J., Yepes, M., and Soria, M. A. (2012). Psychometric properties of the spanish human system audit short-scale of transformational leadership. *Span. J. Psychol.* 15, 367–376.

Buil, I., Martinez, E., and Matute, J. (2018). Transformational leadership and employee performance: the role of identification engagement and proactive personality. *Int. J. Hosp. Manag.* 77, 64–75. doi: 10.1016/j.ijhm.2018.06.014

Büyüköztürk, Ş. (2010). Sosyal bilimler için veri analizi el kitabı: İstatistik, araştırma deseni SPSS uygulamaları ve yorum. *12th* Edn. Ankara: Pegem.

Celep, C. (2004). Dönüşümcü Liderlik. Ankara: Anı.

Çevik, A. (2023). Okul yöneticilerinin yönetim süreçlerinde veri kullanımının etkili okul bağlamında incelenmesi: Bir karma yöntem araştırması [Investigation of school administrators' use of data in management processes in the context of an effective school: A mixed methods research] (Unpublished master's thesis). Malatya: İnönü University.

Çiftçi, K. (2023). Okul etkililiğinin pygmalion etkisi bağlamında değerlendirilmesi: Pozitif psikolojik sermayenin aracılık rolü [The evaluation of school effectiveness in the context of pygmalion effect: The mediation role of positive psychological capital]. (Unpublished PhD Thesis). Ankara: Hacettepe University.

Cohen, J. (1988). Statistical power analysis. 2nd Edn. Hillsdale NJ: Erlbaum.

Cohen, J. (1992). A power primer. Psychol. Bull. 112, 155–159. doi: 10.1037/0033-2909.112.1.155

Dancey, C. P., and Reidy, J. (2017). Statistics without maths for psychology. Pearson: Harlow.

Demirtaş, E., and Şama, E. (2016). Okullarda dönüşümcü liderlik ve örgütsel bağlılık İlişkisi [Relationship between transformational leadership and organizational commitment at schools]. *Iğdır Üniv. Sosyal Bilimler Dergisi* 10, 275–298.

DeVellis, R. F. (2017). Ölçek Geliştirme Kuram ve Uygulamalar (Translator. Ed. Totan, T.). Ankara: Nobel.

Diş, O. (2023). Öğretmen görüşlerine göre okul müdürlerinin yönetim tarzları, anlam yaratmaları, okul etkililiği ve okulların değişime açıklığı arasındaki ilişkiler [The relationships between school principals' management styles, sensemaking, school effectiveness and schools openness to change according to teachers' views]. Unpublished PhD Thesis. Ankara: Hacettepe University.

Dufour, R., Dufour, R., Eaker, R., and Karhanek, G. (2004). Whatever it takes: How professional learning communities respond when kids don't learn. Bloomington, IN: National Educational Service.

Ermeydan, M., and Can, N. (2020). Okul yöneticilerinin liderlik stilleriyle okul etkililiği arasındaki ilişki [the relationship between school leaders' leadership styles and school effectiveness]. *Gaziantep Univ. J. Educ. Sci.* 4, 94–121.

Erkorkmaz, Ü., Etikan, İ., Demir, O., Özdamar, K., and Sanisoğlu, S. Y. (2013). Doğrulayıcı faktör analizi ve uyum indeksleri [Confirmatory factor analysis and fit indices]. *Türkiye Klinikleri Tip Bilimleri Dergisi*, 33, 2010–2023. doi: 10.5336/ medsci.2011-26747

Eymen, U. E. (2007). SPSS 15.0 ile veri analizi yöntemleri. İstatistik Merkezi. Available at: https://yunus.hacettepe.edu.tr/~tonta/courses/spring2009/bby606/SPSS_15.0_ile_ Veri_Analizi.pdf (Accessed July 25, 2024).

Ferris, D. L., Brown, D. J., Berry, J. W., and Lian, H. (2008). The development and validation of the of the workplace ostracism scale. *J. Appl. Psychol.* 93, 1348–1366. doi: 10.1037/a0012743

Florek-Paszkowska, A. K., and Hoyos-Vallejo, C. A. (2023). A comprehensive bibliometric analysis and future research directions in the nexus of sustainable business practices and turnover intention. *Clean. Respons. Consump.* 11:100146. doi: 10.1016/j. clrc.2023.100146

Fritz, M. S., and MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychol. Sci.* 18, 233–239. doi: 10.1111/j.1467-9280.2007.01882.x

Gemeda, F. T., and Tynjälä, P. (2015). Exploring teachers' motivation for teaching and professional development in Ethiopia: voices from the field. *J. Stud. Educ.* 5, 169–186. doi: 10.5296/jse.v5i2.7459

George, D., and Mallery, P. (2003). SPSS for windows step by step: A simple guide and reference. *4th* Edn. Boston: Allyn & Bacon, USA.

Hair, J. F., Matthews, L. M., Matthews, R. L., and Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *Int. J. Multivar. Data Anal.* 1, 107–123. doi: 10.1504/IJMDA.2017.087624

Harms, P. D., and Crede, M. (2010). Emotional intelligence and transformational and transactional leadership: a meta-analysis. *J. Leadersh. Org. Stud.* 17, 5–17. doi: 10.1177/1548051809350894

Hay, I. (2006). Transformational leadership: characteristics and criticisms. *E-J. Organ. Learn. Leadersh.* 5, 1–19.

Hitlan, R. T., Cliffton, R. J., and DeSoto, M. C. (2006). Perceived exclusion in the workplace: the moderating effects of gender on work-related attitudes and psychological health. *N. Am. J. Psychol.* 8, 217–236.

Hoy, W. K. (2014). School effectiveness index (SE-index). Available at: https://www. waynekhoy.com/school-effectiveness/ (Accessed August 25, 2024).

İlhan, M., and Çetin, B. (2014). LISREL ve AMOS programları kullanılarak gerçekleştirilen yapısal eşitlik modeli (YEM) analizlerine ilişkin sonuçların karşılaştırılması [Comparing the analysis results of the structural equation models (SEM) conducted using LISREL and AMOS]. J. Measure. Eval. Educ. Psychol. 5, 26–42. doi: 10.21031/epod.31126

Javornik, Š., and Klemenčič Mirazchiyski, E. (2023). Factors contributing to school effectiveness: a systematic literature review. *Eur. J. Investig. Health Psychol. Educ.* 13, 2095–2111. doi: 10.3390/ejihpe13100148

Jiatong, W., Wang, Z., Alam, M., Murad, M., Gul, F., and Gill, S. A. (2022). The impact of transformational leadership on affective organizational commitment and job performance: the mediating role of employee engagement. *Front. Psychol.* 13, 1–12. doi: 10.3389/fpsyg.2022.831060

Joo, B. B., and Lim, T. (2013). Transformational leadership and career satisfaction: the mediating role of psychological empowerment. *J. Leadersh. Org. Stud.* 20, 316–326. doi: 10.1177/1548051813484359

Kale, M. (2023). Relation between school effectiveness and trust in the instructor based on the candidate teachers' views. *Int. J. Educ. Res. Rev.* 8, 29–43. doi: 10.24331/ ijere.1202331

Kang, H., and Ahn, J. W. (2021). Model setting and interpretation of results in research using structural equation modeling: a checklist with guiding questions for reporting. *Asian Nurs. Res.* 15, 157–162. doi: 10.1016/j.anr.2021.06.001

Kartika, N. D. (2024). The influence of transformational leadership on nurses' performances in Indonesia. *Am. J. Phys. Educ. Health Sci.* 2, 11–16. doi: 10.54536/ajpehs. v2i1.2502

Khun-Inkeeree, H., Yusof, M. R., Maruf, I. R., Mat, T. R. T., and Sofian, F. N. R. M. (2022). Enhancing school effectiveness by implementing identified and intrinsic motivation among primary school teachers. *Front. Educ.* 7, 1–12. doi: 10.3389/feduc.2022.852378

Kline, R. B. (2015). Principles and practice of structural equation modeling (4. Basim). New York: Guilford Press.

Kurum, G., and Erdemli, Ö. (2022). İş yerinde dışlanma ölçeğini öğretmenler için Türkçeye uyarlama çalışması[The study of adapting workplace ostracism scale to Turkish for teachers]. *Milli Eğitim Dergisi*, 51, 279–301. doi: 10.37669/milliegitim.787864

Lafcı-Tor, D., and Yavuz, E. (2020). Algılanan okul etkililiği ölçeği'nin geliştirilmesi: Geçerlik ve güvenirlik çalışması [Development of Perceived School Effectiveness Scale: Validity and Reliability Study]. *PAU J. Educ.* 49, 506–529. doi: 10.9779/pauefd.595719

Lai, F. Y., Tang, H. C., Lu, S. C., Lee, Y. C., and Lin, C. C. T. (2020). Transformational leadership and job performance: the mediating role of work engagement. *SAGE* 10, 215824401989908–215824401989911. doi: 10.1177/2158244019899085

Lance Ferris, D., Fatimah, S., Yan, M., Liang, L. H., Lian, H., and Brown, D. J. (2019). Being sensitive to positives has its negatives: an approach/avoidance perspective on reactivity to ostracism. Organ. Behav. Hum. Decis. Process. 152, 138–149. doi: 10.1016/j. obhdp.2019.05.001

Lane, S. D. (2017). Understanding everyday incivility: Why are they so rude? Published by Rowman & Littlefield.

Li, M. C. C., Lin, M.-H., Srinivasan, P. M., and Carr, S. C. (2023). Transformational leadership and organizational citizenship behavior: new mediating roles for trustworthiness and trust in team leaders. *Curr. Psychol.* 43, 9567–9582. doi: 10.1007/ s12144-023-05095-x

Li, D., and Zhang, M. (2019). Are they isolating me? The influence of workplace ostracism on employees' turnover tendency. 5th annual international conference on social science and contemporary humanity development (SSCHD 2019). Atlantis Press.

Liu, J., Kwan, H. K., Lee, C., and Hui, C. (2013). Work-to-family spillover effects of workplace ostracism: the role of work-home segmentation preferences. *Hum. Resour. Manag.* 52, 75–93. doi: 10.1002/hrm.21513

Loyless, L. H. (2023). Competence in virtual communication: remote transformational leadership. *Public Adm. Rev.* 83, 702–709. doi: 10.1111/puar.13618

Luo, S., Huang, Y.-H., Lee, C.-Y., and Cai, Y. (2023). Workplace exclusion impacts on knowledge-sharing via moderation of digital media and organizational culture. *SAGE* 13, 215824402311659–215824402311615. doi: 10.1177/21582440231165944

Marks, H., and Nance, J. (2007). Contexts of accountability under systemic reform: implications for principal influence on Instruction and supervision. *Educ. Adm. Q.* 43, 3–37. doi: 10.1177/0013161X06291414

Marks, H. M., and Printy, S. M. (2003). Principal leadership and school performance: an integration of transformational and instructional leadership. *Educ. Adm. Q.* 39, 370–397. doi: 10.1177/0013161X03253412

McShane, S. L., and Von Glinow, M. A. (2016). Örgütsel davranış (Günsel, A., and Bozkurt, S., Translator). Ankara: Nobel. Mohsin, M., Jamil, K., Naseem, S., Sarfraz, M., and Ivascu, L. (2022). Elongating Nexus between workplace factors and knowledge hiding behavior: mediating role of job anxiety. *Psychol. Res. Behav. Manag.* 15, 441–457. doi: 10.2147/PRBM.S348467

Moolenaar, N. M., Daly, A. J., and Sleegers, P. J. C. (2010). Occupying the principal position: examining relationships between transformational leadership, social network position, and schools' unnovative climate. *Educ. Adm. Q.* 46, 623–670. doi: 10.1177/0013161X10378689

Nguyen, V. Q., Turner, N., Barling, J., Axtell, C. M., and Davies, S. (2023). Reconciling general transformational leadership and safety-specific transformational leadership: a paradox perspective. *J. Saf. Res.* 84, 435–447. doi: 10.1016/j.jsr.2022.12.006

Noor, S., and Abbas, M. (2024). Workplace ostracism and employees' affective commitment: testing the role of resource depletion and psychological safety. *Cogent Bus. Manag.* 11, 1–13. doi: 10.1080/23311975.2024.2331087

Okan, N., and Okan, N. T. (2021). Kısa dönüşümcü liderlik ölçeğinin türkçeye uyarlanması ve psikometrik yönden incelenmesi [Turkish adaptation and psychometric analysis of the short transformational leadership scale]. *Turkish Studies - Social*, 16, 687–700. doi: 10.47356/TurkishStudies.48329

Özgenel, M. (2020). An organizational factor predicting school effectiveness: school climate. *Int. J. Psychol. Educ. Stud.* 7, 38–50. doi: 10.17220/ijpes.2020.01.004

Özgenel, M., and Koç, M. H. (2020). An investigation on the relationship between Teachers' occupational commitment and school effectiveness. *Int. J. Euras. Educ. Cult.* 8, 494–530. doi: 10.35826/ijoecc.77

Pineda, C. (2023). Understanding Leaders' experiences of a leadership institute: A combination of transformational leadership, cross-sector collaboration, and charitable foundations as catalysts: Liberty University.

Qian, J., Yang, F., Wang, B., Huang, C., and Song, B. (2019). When workplace ostracism leads to burnout: the roles of job self-determination and future time orientation. *Int. J. Hum. Resour. Manag.* 30, 2465–2481. doi: 10.1080/09585192.2017.1326395

Robbins, P. S., and Judge, A. T. (2012). Örgütsel davranış. (Erdemİ., Translation). Ankara: Nobel

Sammons, P. (2010). "Equity and educational effectiveness" in International encyclopedia of education in. eds. P. L. Peterson, E. Baker and B. McGaw (Netherlands: Elsevier), s. 41–s. 51.

Samson, D., Donnet, T., and Daft, R. (2021). Management (7th edition). Asia. *Pasific* Edn. Australia: Cengage Learning.

Sesli, E. (2023). Dönüşümsel liderlik ile okul etkililiği arasındaki ilişkide öğretmen liderliği ve kolektif öğretmen yeterliğinin aracılık rolü [The mediating role of teacher leadership and collective teacher efficacy in the relationship between transformational leadership and school effectiveness]. (Unpublished Master's Thesis). Erzurum: Atatürk University.

Sulea, C., Filipescu, R., Horga, A., Ortan, C., and Fischmann, G. (2012). Interpersonal mistreatment at work and burnout among teachers. *Cogn. Brain Behav. Interdiscip. J.* 16, 553–570.

Şencan, H. (2005). Sosyal ve davranışsal ölçümlerde güvenirlik ve geçerlilik. Ankara: Seçkin.

Tabachnick, B. G., and Fidell, L. S. (2007). Using multivariate statistics. 5th Edn. New York: Allyn and Bacon.

Teo, T., Tsai, L. T., and Yang, C. C. (2013). "Applying structural equation modeling (SEM) in educational research" in Application of structural equation modeling in educational research and practice. ed. M. S. Khine (Sense Publishers).

Tuncel, H. (2013). Etkili okul oluşturmada okul müdürünün dönüşümcü liderlik rolü [the transformational leadership role of the principle in forming an effective school]. (Unpublished Master's Thesis). Kayseri: Erciyes University. Wang, G. H., Li, J. H., Liu, H., and Zaggia, C. (2023). The association between workplace ostracism and knowledge-sharing behaviors among Chinese university teachers: the chain mediating model of job burnout and job satisfaction. *Front. Psychol.* 14, 1–11. doi: 10.3389/fpsyg.2023.1030043

Wang, L. M., Lu, L., Wu, W., and Luo, Z. (2023). Workplace ostracism and employee wellbeing: a conservation of resource perspective. *Front. Public Health* 10:1075682. doi: 10.3389/fpubh.2022.1075682

Williams, K. D. (1997). "Social ostracism" in Aversive İnterpersonal Behaviors. ed. R. M. Kowalski (New York: Plenum Press), 133–170. doi: 10.1007/978-1-4757-9354-3_7

Wu, W., Qu, Y., Zhang, Y., Hao, S., Tang, F., Zhao, N., et al. (2019). Needs frustration makes me silent: workplace ostracism and newcomers' voice behavior. *J. Manag. Organ.* 25, 635–652. doi: 10.1017/jmo.2017.81

Xing, Y., and Li, Y. (2022). How does workplace ostracism affect employee innovation behavior: an analysis of chain mediating effect. *Front. Psychol.* 13, 1–16. doi: 10.3389/ fpsyg.2022.920914

Yang, J. (2012). Workplace ostracism and performance related outcomes: A process model incorporating social influence and social identity theories [unpublished doctoral thesis]. New York: State University.

Yang, Q., and Wei, H. (2018). The impact of ethical leadership on organizational citizenship behavior: The moderating role of workplace ostracism. *Leadersh. Organ. Dev. J.* 39, 100–113. doi: 10.1108/LODJ-12-2016-0313

Yao, N., Guo, T., and Zhang, L. (2024). How CEO transformational leadership affects business model innovation: a serial moderated mediation model. *J. Manag. Psychol.* 39, 421–434. doi: 10.1108/JMP-10-2022-0515

Yaşlıoğlu, M. M. (2017). Sosyal bilimlerde faktör analizi ve geçerlilik: Keşfedici ve doğrulayıcı faktör analizlerinin kullanılması [Factor analysis and validity in social sciences: application of exploratory and confirmatory factor analyses]. *Istanbul Univ. J. Sch. Bus.* 46, 74–85.

Yazıcıoğlu, Y., and Erdoğan, S. (2014). SPSS uygulamalı bilimsel araştırma yöntemleri. Ankara: Detay.

Yıldırım, İ., and Ada, Ş. (2018). Algılanan okul etkililiği ölçeği'nin (se-ındex) Türkçeye uyarlanması [Adaptation of the perceived school effectiveness index (se-ındex) to Turkish]. *Milli Eğitim Dergisi*, 47, 19–32.

Yılmaz, G., and Kasımoğlu, M. (2024). Uzaktan çalışma modelinde dönüşümcü liderliğin örgüt bağlılığına etkisi üzerine bir araştırma [Examining the effect of transformational leadership on organizational commitment in remote work model]. *Iğdır Univ. J. Econ. Admin. Sci.* 11, 15–34. doi: 10.58618/igdiriibf. 1491961

Yu, X., and Jang, G. (2024). A framework for transformational leadership to enhance teacher's work performance. *Front. Psychol*, 1–19. doi: 10.3389/fpsyg.2024.1331597

Yukl, G. (2018). Örgütlerde liderlik (Ş. Çetin & R. Baltacı. *Translated*. Edn. Ankara: Nobel.

Yumuşak, H., and Korkmaz, M. (2024). Liderlik ve okul etkililiği arasındaki ilişkide okulun bağlamsal niteliklerinin düzenleyici rolü [The moderating role of contextual characteristics of school on the relationship between leadership and school effectiveness]. *J. Turk. Educ. Sci.* 22, 587–611. doi: 10.37217/tebd.1372078

Zhang, R., Niu, X., and Zhang, B. (2023). Workplace ostracism and turnover intention: a moderated mediation model of job insecurity and coaching leadership. *Can. J. Admin. Sci.* 41, 109–122. doi: 10.1002/cjas.1731

Zigarelli, M. A. (1996). An empirical test of Conculisions from effective schools research. J. Educ. Res. 90, 103–110. doi: 10.1080/00220671.1996.9944451