The influence of perceived role ambiguity and school leadership prototypes on teachers' anxiety about school leadership: The mediating role of leadership self-efficacy

Pınar Ayyıldız[1], Tuncer Fidan[2,*], İbrahim Duyar[3], Gökhan Arastaman[4], and Türker Kurt[5]

1 Lokman Hekim University, Rectorate, Ankara, Türkiye.
2 Alanya Alaaddin Keykubat University, Faculty of Education, Department of Educational Sciences, Antalya, Türkiye.
3 Arkansas State University, Center of Excellence in Education, Educational Leadership, Curriculum, and Special Education, College of Education and Behavioral Science, Jonesboro, Arkansas, USA.
4 Hacettepe University, Faculty of Education, Department of Educational Sciences, Ankara, Türkiye.
5 Gazi University, Gazi Faculty of Education, Department of Educational Sciences, Ankara, Türkiye.

Título: La influencia de la ambigüedad de roles percibida y los prototipos de liderazgo escolar en la ansiedad de los docentes sobre el liderazgo escolar: El papel mediador de la autoeficacia del liderazgo.
Resumen: El propósito del presente estudio fue examinar la influencia de la ambigüedad de roles percibida y los prototipos de liderazgo escolar en la ansiedad de los docentes por ocupar puestos de liderazgo escolar. También investigamos el papel mediador de las creencias de autoeficacia en el liderazgo de los docentes. En este estudio correlacional transversal participó una muestra aleatoria de 390 docentes. Se emplearon estadísticas multivariadas y modelos de ecuaciones estructurales para analizar la supuesta relación directa e indirecta entre las variables del estudio. Los hallazgos demostraron que, si bien la ambigüedad percibida en el rol aumentaba significativamente la ansiedad de los docentes sobre la búsqueda de liderazgo escolar, los prototipos de liderazgo escolar la disminuían. La autoeficacia del liderazgo medió parcialmente las relaciones entre los prototipos de liderazgo y la ansiedad de los docentes por perseguir el liderazgo escolar. Los hallazgos del estudio contribuirían al desarrollo de políticas que alivien la influencia adversa de los factores que contribuyen a la renuencia de los docentes a desempeñar roles de liderazgo y promoverían sus decisiones para hacerlo.
Palabras clave: Ansiedad por perseguir el liderazgo escolar. Ambigüedad de rol percibida. Prototipos de liderazgo escolar. Autoeficacia del liderazgo. Docentes.

Abstract: The current study aimed to examine the influence of perceived role ambiguity and school leadership prototypes on teachers' anxiety about pursuing school leadership positions. We also investigated the mediating role of teachers' leadership self-efficacy beliefs. A random sample of 390 teachers participated in this cross-sectional correlational study. Multivariate statistics and structural equation modeling were employed to analyze the hypothesized direct and indirect relationship between the study variables. The findings demonstrated whilst the perceived role ambiguity significantly increased teachers' anxiety about pursuing school leadership, school leadership prototypes decreased it. Leadership self-efficacy partially mediated the relationships between leadership prototypes and teachers' anxiety about pursuing school leadership. The study's findings would contribute to the development of policies that alleviate the adverse influence of the contributing factors to teachers' reluctance to pursue leadership roles and promote their decisions to do so.
Keywords: Anxiety about pursuing school leadership. Perceived role ambiguity. School leadership prototypes. Leadership self-efficacy. Teachers.

Introduction

School leadership is often portrayed as a reputable and desirable position. Howbeit, heavy responsibilities and compromises in one's personal life can turn leadership into an overwhelming and highly stressful profession. Teachers' decisions to pursue and assume leadership roles are usually made after a long, complicated contemplation process (Hancock et al., 2019). Teachers' observations of their own principals' struggles on the job curb their enthusiasm to happily embrace the possibility of seeking leadership paths. Verily, even talented and high-potential candidates oftentimes refuse to volunteer for leadership roles and take decisive actions to pursue becoming a school leader (Lee & Mao, 2023).

School principals are perceived as the leaders of their schools, owing to their hierarchical administrative positions in schools. They are responsible for the general functioning of their schools, the implementation of legal regulations, motivating teachers to align with the educational goals, and increasing student performance, hence the overall success of their schools. Today's highly diversified job roles and ever-increasing workloads lead to low job satisfaction, high work stress, and high burnout among school principals. The difficulties in improving student learning to the goals envisaged in the curriculum, problems gaining teachers' buyouts, and living in isolation without much personal or professional support have turned school principalship into an intense and backbreaking task (Oplatka, 2017). Turnover and exit from the profession are record high among them (Mahfouz, 2020). For instance, 11% of public school principals in the USA left the position and returned to teaching in the 2020-2021 school year (Taie & Lewis, 2023). In a similar vein, 43% of public school principals in Türkiye were dismissed from the principalship position by the Ministry of National Education in 2013-2014 school year (Şahin et al., 2017). School principalship is gradually losing its appeal among teachers. Even students pursuing postgraduate education in educational leadership appear reluctant to seek and assume school leadership roles or positions (Anderson et al., 2011).

The relevant literature tends to focus on separately select individual, organizational, or system-wide factors contributing to teachers' decisions to become a school leader. However, the literature lacks inclusive studies that examine

* **Correspondence address [Dirección para correspondencia]:**
Tuncer Fidan. Alanya Alaaddin Keykubat University, Faculty of Education, Department of Educational Sciences, Antalya, Türkiye.
E-mail: tuncerfidan@gmail.com

the influences of environmental, cognitive, and individual factors on teachers' anxiety to pursue school leadership (Hancock et al., 2019). As noted by Aycan & Shelia (2019) and Lee & Mao (2023), studies concentrating on teachers' anxiety about seeking school leadership are particularly scarce. The current study attempted to address this gap and aimed to examine whether cognitive, individual, and environmental factors influence teachers' anxiety to pursue school leadership roles and positions. More specifically, the study investigated whether teachers' perceived role ambiguity of school leadership, school leadership prototypes, and leadership self-efficacy beliefs contribute directly and indirectly to their anxiety about seeking school leadership roles. Furthermore, teachers' demographic attributes, such as their education level, gender, professional seniority, and prior administrative experience, were also included in the analyses as the control variables. The findings of the study would contribute to the development of policies that can alleviate the adverse effects of the contributing factors to teachers' reluctance to pursue leadership roles and promote their decisions to assume leadership positions. Acknowledging the plausible effect of context on hypothesized relationships between study variables, the following section discusses the unique attributes in this regard.

School Principalship in Türkiye

K-12 schools operate in a highly centralized education system in Türkiye. The Ministry of National Education (MoNE) lies at the center of the system. It enacts policies on all aspects of education and supervises the implementation efficacy of policies to ensure compliance. Teachers, school administrators, district administrators, and all other professional staff in public schools are directly employed by the MoNE. Teachers must have the educational administrator certificate and take a centralized exam organized by the MoNE to apply for the assistant principalship positions. After working for at least a year, assistant principals can apply for school principalship positions. Principals are expected to lead schools in all respects and guide professional educators and teachers to comply with the policies enacted by the MoNE. School principals' legal statuses and financial rights resemble those of teachers, and school principalship is considered as if teachers assume additional administrative tasks (Kurt et al., 2012).

Theoretical Underpinnings and Hypotheses

The first part of the section discusses the conceptual premises of guiding theories. The remainder of the section presents the relevant hypotheses developed in light of the accumulated body of related literature.

The *Implicit Leadership Theory* (Medvedeff & Lord, 2007) was adopted as one of the guiding theories of the current study. The implicit leadership theory assumes employees reconstruct their work environments in their minds as mental representations. After evaluating the demands of the work and the expectations of their co-workers, these employees envisage the attributes (e.g., education, gender, previous experience, etc.) that one should have and the tasks they should perform to be conceived as a leader by their co-workers. In this regard, each employee possesses unique leadership prototypes—implicit expectations and assumptions about the expected characteristics and behaviors of those who can lead at work. Each teacher can construct and assess self and peers as those who "can be a leader" or "cannot be a leader" by utilizing the leadership prototypes.

Teachers make their decisions about whether they are fit for leadership roles by considering environmental, cognitive, and individual factors (Medvedeff & Lord, 2007). Environmental factors such as the role ambiguity that leaders may experience and teachers' leadership prototypes (i.e., expectations and assumptions about characteristics that leaders should have and practices that they should perform) can be influential in such assessments (Acton et al., 2019). Teachers usually abstain from leadership roles when facing uncertainties (Hameiri et al., 2014). On the contrary, the more their characteristics and behaviors are appropriate to meet the expectations and assumptions of their co-workers, the more likely they envision themselves as potential leadership candidates (Medvedeff & Lord, 2007). Cognitive factors such as leadership self-efficacy are also important to undertake leadership roles and meet co-workers' expectations. Individual factors, such as education level, gender, work experience, and previous leadership experiences, can be influential on teachers' self-assessment when they decide to assume (or not to assume) a leadership role (Acton et al., 2019).

Aycan and Shelia's (2019) *Anxiety about Leadership Theory* was also adopted as a guiding theory in the current study. This depicts leadership as a role that individuals choose (or do not choose) to assume depending on the perceived balance between work expectations and their qualifications. Individuals who believe they are competent in leadership are more likely to pursue leadership roles (Chan & Drasgow, 2001). Aycan and Shelia (2019) claim that individuals are often reluctant to pursue leadership roles as such roles carry risks. The risks in question, like being unsuccessful, not being able to balance work and personal life, and harming others, are some of the possible sources of anxiety they consider in the decision process of assuming leadership roles. Role ambiguity and leadership prototypes can be influential on candidates' anxiety about assuming a leadership role (Aycan & Shelia, 2019).

Teachers may stay away from the school leadership roles, although it is tempting and generally encouraged (Anderson et al., 2011). It is noteworthy that school leadership often entails taking on a formal role within the school's organizational hierarchy (Hancock et al., 2019). Aycan and Shelia (2019) argue that teachers decide to be (or not to be) school leaders following a process that is shaped by their emotions. Teachers' anxiety about pursuing school leadership can be examined in three different dimensions: Anxiety about failure,

anxiety about work-life imbalance, and anxiety about harming others (Aycan & Shelia, 2019).

School leaders may experience failures—such as student underachievement and failing to meet accountability requirements—from time to time and struggle with the consequences of such failures and beyond. Those failures, particularly in instructional matters, cause school stakeholders to be discontented, leading to school leaders' questioning their self-competence. Such kinds of failures pose the risk of not fulfilling the need for competence for school leaders as well. Even teachers who are far from an anxious mood in their general life can become highly anxious when it comes to assuming a school leadership role (Mombaers et al., 2023). It is worthwhile to stress that teachers tend to assume leadership roles more frequently in high-performing schools than in low-performing ones due to the stress caused by the relatively low standardized test results and accountability pressures (Lee & Mao, 2023).

Work-life imbalance also poses a menace to meeting the need for autonomy for school leaders. While the school leadership role elevates the level of autonomy in professional life, it can indeed restrict independence in social life. As Oplatka noted (2017), not being able to devote enough time to their families and private lives is among the issues school leaders complain about the most. Mahfouz (2020) also identified work-life imbalance as one of the major stressors incumbent school principals encounter.

Lastly, the possibility that school leaders' decisions may harm other school members' interests can become a strong concern, as it threatens the satisfaction of their need for relationship-building (Aycan & Shelia, 2019). For example, the task of dealing with inappropriate teacher behaviors, student misconduct, and unsatisfied parents can be a source of stress for school leaders, as the consequences of their decisions may deteriorate their relationships with teachers, students, and parents (Oplatka, 2017). Dealing with unsatisfied parents who are not content with principals' decisions can also be a strong source of stress for school principals (Mahfouz, 2020).

The Influence of Teachers' Perceived Role Ambiguity and Leadership Prototypes on their Anxiety about School Leadership

Choices regarding leadership roles are shaped by unique dynamics and factors within the work environment (Acton et al., 2019). The highly demanding needs of diverse student populations present a real change for educators worldwide. Students possess different characteristics and abilities and learn at varying paces. Depending on distinct socioeconomic and cultural demographics, interference from families and the local society adds to the varying expectations from schools and educators (Mahfouz, 2020). In such highly demanding environments, designated leadership positions such as school principalship become harder as schools operate under uncertainties. Principals are expected to serve constit-

uencies with differing needs following extremely complex legal regulations and programs. They are forced to make decisions without accessing sufficient data, and the inability to predict the results of decisions to be taken can cause anxiety. Such uncertainties make the principalship position a worrying task for teachers (Hameiri et al., 2014).

The external environment within which schools operate also adds additional complexity to the process (Kim & Weiner, 2022). This urges, if not forces, school administrators and teachers to act merely within the limits of legal regulations and policies. Insensitivity to country-level policies and regional regulatory differences add additional barriers to candidates' decisions to pursue school leadership roles in schools. Frequent changes in the top leaders at the national level and the varying visions of these leaders further complicate the dynamics within schools and the individual educators within schools. The demands of teacher unions and nongovernmental education-related organizations, which are also influential on the functioning of schools, tend to contradict the directions of the administrative bureaucracies (Kim & Weiner, 2022). The internal and external factors collectively pose uncertainties and role ambiguities for school leadership and adversely influence the decisions of educators to pursue leadership roles (Hancock et al., 2019). Consequently, we argue that the more teachers perceive school leadership as ambiguous, the more they tend to be anxious about pursuing school leadership. We formulated the following hypothesis:

H1: Perceived role ambiguity regarding school leadership positively influences teachers' anxiety about school leadership.

Leadership prototypes are another environmental factor influencing teachers' choices about school leadership roles (Acton et al., 2019). Teachers own implicit expectations and assumptions about the qualifications a school leader should possess and the behaviors they should exhibit. These are called "leadership prototypes". They play an important role in confirming the leadership of school principals or deputy principals and in evaluating their effectiveness. The more the individual exhibits the characteristics and behaviors in the leader category, the easier it gets them to get approved by teachers as a school leader. The mistakes of perceived leadership candidates draw less attention and are considered more effective as school leaders. Teachers also carry out self-assessments through school leadership prototypes (Medvedeff & Lord, 2007).

Questions such as "What qualities should a school leader have?" and "What behaviors should a school leader exhibit?" can also affect teachers' decisions to pursue school leadership roles (Lee & Mao, 2023). One of the reasons for such influence is that there frequently exist differences between the answers to such questions and the existing teacher characteristics and behaviors. As differences between the expected and the existing characteristics/behaviors rise, the anxiety to pursue leadership roles also rises (Burkett & Hayes, 2023). Aycan et al. (2013) stated that individuals'

leadership prototypes involve what they expect from an ideal leader regarding the frequencies of leadership behaviors such as paternalist, authoritarian, transformational, participative, and supportive behaviors. The difference between the frequency of certain leadership behaviors of an ideal school leader and the frequency of those leadership behaviors that teachers can perform can potentially cause anxiety among teachers about assuming a school leadership role (Aycan & Shelia, 2019). Similarly, as teachers observe the behaviors of school principals and the consequences of these behaviors, they become more aware of the human-bound and societal costs that this position can bring about for themselves and the other parties involved. These can add onto teachers' anxiety about school leadership (Weiner & Holder, 2019), which was accentuated by the following hypothesis:

H2: Teachers' school leadership prototypes positively influence teachers' anxiety about school leadership.

The Mediating Role of Leadership Self-Efficacy

Self-efficacy is the capability to exhibit behaviors that may influence events shaping individuals' lives (Bandura, 1988). A strong sense of self-efficacy means viewing challenging tasks as obstacles to be overcome, not as threats to be avoided. Leadership self-efficacy can be defined as an individual's self-beliefs in exhibiting the actions required by the leadership role (Paglis & Green, 2002). These actions are categorized as direction setting, gaining followers' commitment, and overcoming obstacles. Direction setting entails identifying the goals of change an organization needs and sharing these goals with the members of that organization. Gaining commitment calls for the leader to build high-quality relationships with organizational members, motivate them, and gain their commitment to change. The efforts made toward change may encounter barriers in educational organizations that need to operate under complex and restrictive legal regulations on the one hand and serve a population with very different individual, economic, and social characteristics on the other. Such a challenging position requires the ability to cope with a fair number of obstacles, solve problems in the change process, and work in harmony with other organizational members alongside the ones in the ecosystem in this manner (Paglis & Green, 2002).

Environmental factors like perceived role ambiguity and leadership prototypes can stimulate individuals to strengthen their self-efficacy through gaining knowledge and sharpening skills (Bandura, 1988). This is because individuals cannot fully control environmental factors. They can only seek to establish their control over these factors to some extent. School leaders often search for ways to learn how to control their reactions and cope with the negative influences of environmental factors in the event that they cannot establish control over these factors. To illustrate, Wang and Hsu (2014) found that a moderate level of perceived role ambiguity strengthened self-efficacy by encouraging learning new work methods and changing unsuccessful work procedures.

Further, vicarious experiences gained through observing leaders in a work environment can encourage individuals to self-assess their qualities and acquire the knowledge and skills necessary to undertake a leadership role (Bandura, 1988). Guillén et al. (2015) reported that individuals' leadership self-efficacy tended to augment to the extent they perceived themselves to share similar qualities with their cognitively constructed ideal leaders. When individuals perceive slight differences between their qualities and ideal leader qualities, they might choose to acquire the knowledge and skills necessary to overcome these differences (Guillén et al., 2015). We developed the following accordingly:

H3: Perceived role ambiguity regarding school leadership positively influences leadership self-efficacy.

H4: Teachers' school leadership prototypes positively influence leadership self-efficacy.

The relevant literature identifies leadership self-efficacy as one of the cognitive factors shaping the decision to assume leadership roles (e.g., Acton et al., 2019; Chan & Drasgow, 2001). When it comes to taking the school leadership role, leadership self-efficacy could make teachers believe they can initiate the actions required by the leadership roles, persist in the face of hardships, and attain desired results for all. The higher the leadership self-efficacy level, the higher the self-confidence teachers have in resolving the challenges the school leadership role may bring and in fulfilling this role successfully (Mombaers et al., 2023). Put differently, self-confidence gained through leadership self-efficacy paves the way for managing anxiety-provoking situations and diminishing the level of anxiety (Paglis & Green, 2002). The following hypotheses reflect the above discussions:

H5: Leadership self-efficacy negatively influences the anxiety about school leadership.

H6: Leadership self-efficacy mediates the influence of teachers' perceived role ambiguity and school leadership prototypes on their anxiety about school leadership.

The Influence of Individual Attributes

Individual attributes like teachers' education level (Anderson et al., 2011), gender, professional seniority, and previous administrative experience (Acton et al., 2019) were listed as potential influencing factors for teachers' decisions for assuming (or not assuming) a school leadership role. An advanced educational background can help teachers acquire the knowledge and skills necessary for school leadership relatively quickly. Candidates with relatively more advanced educational backgrounds were reported to be preferred by top educational administrators (Lee & Mao, 2023). Lee and Mao (2023) also stressed male candidates were preferred over female ones. They also stated females tended not to choose school leadership positions due to their responsibilities in house chores (Lee & Mao, 2023).

Experienced teachers are inclined to choose school leadership as a career path. Those with previous administrative

experience are especially likely expected to assume school leadership roles (Mombaers et al., 2023). Based on these, we formulated the following hypotheses:

H7a: Teachers with bachelor's degrees have more anxiety about school leadership than those with graduate degrees.

H7b: Female teachers have more anxiety about school leadership than male teachers.

H7c: Teachers with 15 years and below of professional experience have more anxiety about school leadership

than teachers with 16 years and above professional experience.

H7d: Teachers with no administrative experience have more anxiety about school leadership than teachers with administrative experience.

Figure 1 demonstrates the study's conceptual framework, where the hypothesized relationships between the study variables were examined.

Figure 1
Conceptual framework: Environmental, cognitive, and individual contributing factors to teachers' anxiety about leadership.
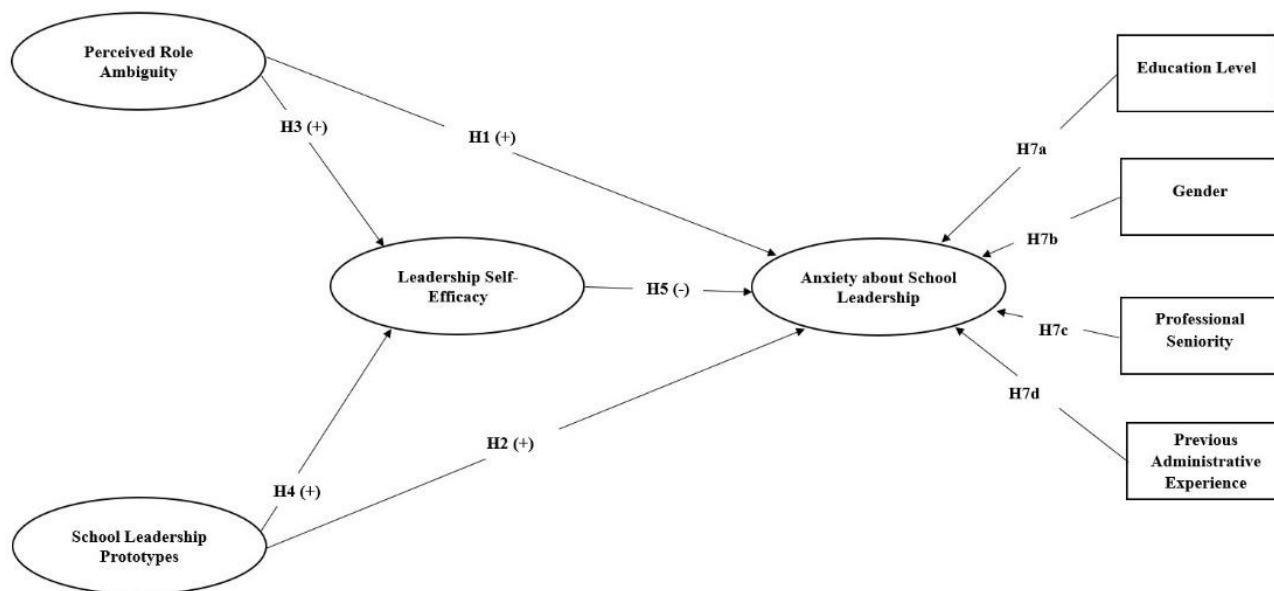
Research Design and Methods

This quantitative correlational study employed a cross-sectional design to examine contributing factors to teachers' anxiety to pursue school leadership. Correlational studies aim to explore the direct and indirect relationships between independent and dependent variables. The data were collected from April to November 2023.

Sample

The participants were a random sample of 500 public school teachers in İstanbul, Türkiye. The school type was the main sampling criterion to allow an equal voice to teachers teaching at diverse school configurations. The questionnaires were delivered by the researchers. Of the 500 questionnaires delivered, 390 were returned, with a return rate of 78%. There were no missing cases.

Instrumentation and Measures

The data were collected with an online questionnaire. The questionnaire was organized into two main sections. The first part included the questions regarding the demographic attributes of participants and their schools. The second part of the questionnaire contained the measures (i.e., scales) of study variables. The following measures were adopted from the literature for the study variables.

Anxiety about school leadership. The Anxiety about Leadership Scale developed by Aycan and Shelia (2019) was adopted as the measure of the dependent variable. The original scale consisted of 16 items. The validity studies yielded a three-factor scale consisting of 12 items. The teachers were asked to what extent the mentioned issues would cause their anxiety if they accepted a leadership position such as school principalship. This is a 5-point Likert-type scale ranging between a "very little extent" (1) and a "large extent" (5). The anxiety about leadership scale consists of three subscales:

anxiety about failure, anxiety about the work-life imbalance, and anxiety about harming others.

Perceived role ambiguity. This variable was measured through Hameiri et al.'s (2014) Perceived Role Uncertainty Scale. The teachers were requested to share the extent to which role ambiguity issues would be a source of uncertainty if they accepted a school leadership position, that is, school principalship. The scale included seven items and was a 5-point Likert scale ranging between "never" (1) and "always" (5).

School leadership prototypes. The Leadership Prototypes Scale was adapted from Aycan et al. (2013). These authors claim leadership prototypes can be examined by leadership styles such as paternal/maternal, authoritarian, transformational, supportive, and participatory leadership. The participants were asked, "As a good school leader, how often should a school principal exhibit the following leadership styles?" The Leadership Prototypes Scale is a 5-point Likert-type scale ranging between "never" (1) and "always" (5).

Leadership self-efficacy. The Leadership Self-Efficacy Scale developed by Paglis and Green (2002) was adopted. The original scale included 12 items. The number of items was reduced to 11 by the validation studies. The teachers were asked questions on how much confidence they had in the subjects mentioned about leadership. The scale is a 5-point Likert-type scale ranging from "I do not trust at all" (1) to "I completely trust" (5). The Leadership Self-Efficacy Scale has three subscales: direction setting, gaining commitment, and overcoming obstacles.

Control variables. Education level, gender, professional seniority, and previous administrative experience were included in this study as control variables. These variables were dummy coded as bachelor's degree = 0, graduate degree = 1, female = 0, male = 1; 15 years and below professional experience = 0, 16 years and above professional experience = 1; no administrative experience = 0, administrative experience = 1.

Data Analysis Strategy

A three-step data analysis strategy was employed. Before running the analyses, a confirmatory factor analysis for the scales was employed to test each scale's suitability to the data. The composite reliability, average variance extracted, and Cronbach's Alpha values of scales/subscales were calculated and examined for irregularities. Descriptive and multivariate statistics were employed to analyze data upon the completion of preliminary analyses. In the third stage of data analyses, the hypotheses were tested with the structural equation model (SEM) using the AMOS 25 software. Chi-square Model Fit Criterion (X^2/df), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR), and Root Means Square Error of Approximation (RMSEA) in the SEM analysis were applied as goodness-of-fit indices. Since the number of the observed variables was greater than 30 and the number of observations was greater than 250, the X^2/df ratio was less than 3.0 (significant p values are expected), RMSEA was less than or equal to .07, SRMR was less than or equal to .08 and TLI and CFI were greater than or equal to .92 indicated that the model was acceptable (Hair et al., 2014). The SEM model was tested using scale items. Each item of the scales was studied as an observed variable, and the subscales and the main variables were studied as latent variables. In the last stage, the bootstrapping method was performed to test the total, direct, and indirect effects between the variables in the model. Bootstrapping was conducted with a sample of 5,000, as suggested by Preacher and Hayes (2008).

Results

Table 1 presents the fit statistics of the confirmatory factor analysis results for the measures study variables. The fit statistics suggested strong factor structures of all study measures.

Table 1
Fit statistics of the scales.

Scales	X^2	df	X^2/df	RMSEA	SRMR	TLI	CFI
Anxiety about School Leadership	168.840	48	3.52	.08	.04	.92	.94
Perceived Role Ambiguity	33.553	12	2.80	.07	.02	.98	.99
School Leadership Prototypes	7.428	4	1.86	.05	.03	.98	.99
Leadership Self-Efficacy	84.133	39	2.16	.05	.03	.97	.98

Table 2 presents the descriptive statistics of the participants. The majority of participants were female (65%) and held a bachelor's degree (69.5%). Similarly, 61.5% had less than 15 years of work experience. Only 31.8% had subject-level administrative experience, such as department head teacher.

Table 2
Descriptive statistics of participants.

Variables	Categories				Total	
	Bachelor's Degree		Graduate Degree			
Education Level	*n*	%	*n*	%	*n*	%
	271	69.5	119	30.5	390	100
	Female		Male			
Gender	*n*	%	*n*	%	*n*	%
	254	65.1	136	34.9	390	100
	15 yrs and below		16 yrs and above			
Professional Seniority	*n*	%	*n*	%	*n*	%
	240	61.5	150	38.5	390	100
	No		Yes			
Administrative Experience	*n*	%	*n*	%	*n*	%
	266	68.2	124	31.8	390	100

Table 3 presents the descriptive statistics of the study variables. Table 3 showed participants predominantly presented moderate levels of anxiety about school leadership, perceived self-efficacy, school leadership prototypes, and leadership self-efficacy. We calculated composite reliability and Cronbach's Alpha coefficients as .70 or above for all study measures and their sub-scales. Moreover, AVE values were found above .50. The anxiety about school leadership and leadership self-efficacy were highly correlated with their sub-scales. More specifically, the anxiety about school leadership was moderately correlated with the perceived role ambiguity and school leadership prototypes. The highly correlated items were checked for multicollinearity, and adjustments were made accordingly.

Table 3
Descriptive statistics, results of the reliability and validity tests, and correlation between variables.

	$\bar{X}$	SD	CR	AVE	*a*	AASL	AAF	AAW	AAH	PRA	SLP	LSE	DS	GC
AASL	3.65	.73	-	-	-									
AAF	3.47	.87	.78	.55	.77	.86**								
AAW	3.71	.78	.82	.60	.82	.89**	.64**							
AAH	3.78	.81	.75	.51	.78	.90**	.64**	.77**						
PRA	3.21	.85	.93	.65	.92	.30**	.29**	.27**	.24**					
SLP	3.87	.51	.71	.52	.72	.18**	.16**	.16**	.17**	.19**				
LSE	3.74	.54	-	-	-	.14**	.05	.15**	.17**	.10*	.22**			
DS	3.96	.57	.91	.73	.90	.05	.01	.07	.07	.05	.21**	.78**		
GC	3.84	.67	.89	.67	.89	.19**	.08	.20**	.22**	.11*	.19**	.87**	.55**	
OO	3.31	.78	.78	.54	.77	.09	.05	.09	.12*	.08	.14**	.79**	.43**	.53**

Note: n = 390; **p < .01; *p < .05; $\bar{X}$: Mean; *SD*: Standard Deviation; CR: Composite Reliability; AVE: Average Variance Extracted; *a*: Cronbach's Alpha; AASL: Anxiety about School Leadership; AAF: Anxiety about Failure; AAW: Anxiety about Work-Life Imbalance; AAH: Anxiety about Harming Others; PRA: Perceived Role Ambiguity; SLP: School Leadership Prototypes; LSE: Leadership Self-Efficacy; DS: Direction Setting; GC: Gaining Commitment; OO: Overcoming Obstacles

In the third stage, an SEM analysis was conducted to test the research hypotheses and the theoretical model. The fit indices of the measurement model denoted an acceptable level of fit (X^2 = 1171.586, *df* = 684, X^2/df = 1.71, *p* = .00; RMSEA = .04; SRMR = .06; TLI = .93; CFI = .94). The SEM analysis results revealed that the measurement model was validated. Table 4 presents the hypotheses testing results.
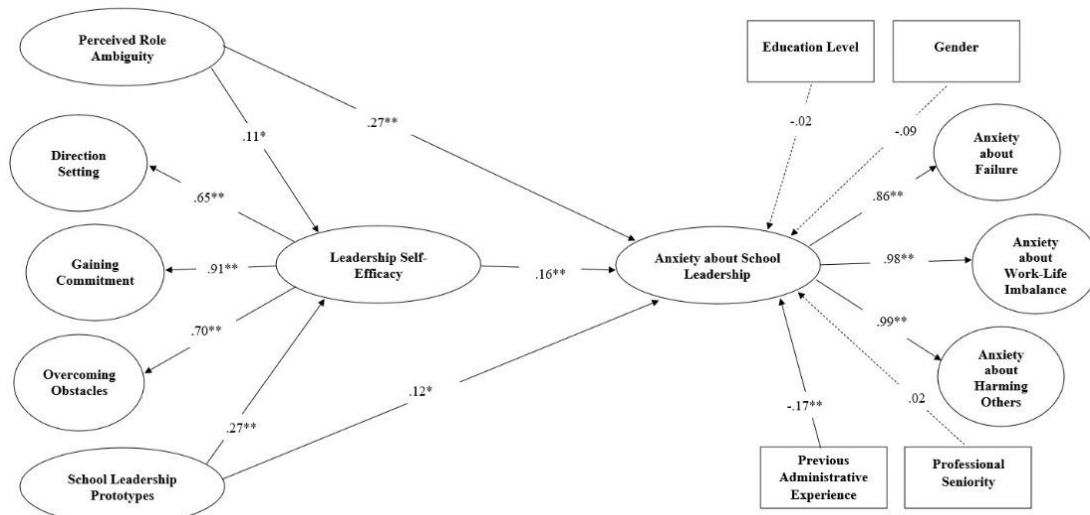
Table 4
Hypotheses testing results.

Paths	β	*p*	Support
Perceived Role Ambiguity→Anxiety about School Leadership	.27	< .01	Yes
School Leadership Prototypes→Anxiety about School Leadership	.12	< .05	Yes
Perceived Role Ambiguity→Leadership Self-Efficacy	.11	< .05	Yes
School Leadership Prototypes→Leadership Self-Efficacy	.27	< .01	Yes
Leadership Self-Efficacy→Anxiety about School Leadership	.16	< .01	No
Education Level→Anxiety about School Leadership	-.02	.74	No
Gender→Anxiety about School Leadership	-.09	.06	No
Professional Seniority→Anxiety about School Leadership	.02	.75	No
Previous Administrative Experience →Anxiety about School Leadership	-.17	< .01	Yes

Table 4 indicated that hypotheses 1, 2, 3, and 4 were supported. Teachers' perceived role ambiguity and school leadership prototypes significantly and positively influenced both anxiety about school leadership and leadership self-efficacy. Yet, as indicated in Table 3, Hypothesis 5 was not supported. Contrary to what is proposed by Hypothesis 5, we found that leadership self-efficacy positively influenced teachers' anxiety about school leadership. Among the control variables, having previous administrative experience was the only significant factor influencing teachers' anxiety about school leadership. The direction of the relationship implies that teachers with no administrative experience had more anxiety about school leadership than teachers with administrative experience. These results demonstrated Hypothesis 7d was supported while 7a, 7b, and 7c were not.

Figure 2 presents SEM analysis results. Perceived role ambiguity and school leadership prototypes significantly influenced both leadership self-efficacy and anxiety about school leadership. The effect of perceived role ambiguity on teachers' anxiety about school leadership was found to be higher than that of school leadership prototypes. School leadership prototypes, on the other hand, had a higher effect on leadership self-efficacy than perceived role ambiguity.

Figure 2
SEM results.

Note: Dashed lines indicate insignificant paths; **p < .01; *p < .05.

At the last stage of analyses, we conducted bootstrapping to test the indirect effects of perceived role ambiguity and school leadership prototypes on teachers' anxiety about school leadership. Table 5 presents the total and direct effects of bootstrapping analysis, which uncovered results similar to those of the SEM analysis. The standardized indirect effects demonstrated that leadership self-efficacy did not mediate the relationship between perceived role ambiguity and teachers' anxiety about school leadership. That said, teachers' leadership self-efficacy mediated the relationship between school leadership prototypes and teachers' anxiety about school leadership. These results implied that Hypothesis 6 was partially supported.

Table 5
Bootstrapping results

Paths	Coefficient		95% Confidence Interval		
	β	SE	Lower	Upper	p
Standardized Total Effects					
PRA→AASL	.28	.06	.16	.40	.00
SLP→AASL	.17	.06	.04	.30	.00
Standardized Direct Effects					
PRA→AASL	.27	.06	.15	.38	.00
SLP→AASL	.12	.06	.00	.27	.05
Standardized Indirect Effects					
PRA→LSE→AASL	.01	.01	-.01	.01	.11
SLP→ LSE→AASL	.05	.02	.01	.05	.03

Note: n = 5,000; *SE*: Standard Error; AASL: Anxiety about School Leadership; PRA: Perceived Role Ambiguity; SLP: School Leadership Prototypes; LSE: Leadership Self-Efficacy

Discussions and Conclusions

The current study examined the direct and indirect influences of select environmental, cognitive, and individual variables on teachers' anxiety about school leadership. In this respect, the influence of teachers' perceived role ambiguity and school leadership prototypes on their anxiety to pursue school leadership positions was investigated. The study also investigated the mediating role of teachers' leadership self-efficacy and the influence of a number of their demographic attributes on their anxiety to pursue leadership roles and positions.

The findings of the study unveiled select variables that exerted significant direct and indirect influences on teachers' anxiety about school leadership. Findings highlighted the significance of teachers' perceived role ambiguity and school leadership prototypes on their anxiety about school leadership. This is consistent with the relevant literature. The literature presents ample evidence of the influence of perceived role ambiguity on employees' anxiety for leadership roles that commonly refrain them from taking on leadership roles (Gillet et al., 2016). Mombaers et al. (2023) similarly identified perceived ambiguity regarding the content of school leadership as one of the factors deterring teachers from choosing school leadership roles. Such behavior can be attributed to teachers' tendency to avoid potential uncertainties about their future job trajectories (Acton et al., 2019).

Maintaining less emotionally challenging work environments also helps individuals build cognitive structures (or schemas) based on the conceptualizations of their existing (or potential) work environments. When conceptualizations of their work environments are not fully realized, employees cannot foresee potential environmental challenges that may jeopardize their future job trajectories. These prevent employees from developing appropriate responses or coping mechanisms in dealing with potential work challenges. In the end, their anxiety arises. Employees wish to alleviate their anxiety via avoiding preferences that may cause uncertainty (LeDoux & Hofmann, 2018).

The findings unearthed a similar relationship about the effect of leadership prototypes. Leadership prototypes recurrently encompass ideal leader traits and behaviors. The emerging studies suggest the majority of peers respond positively to those presenting leadership attributes, but as the difference between potential candidates' self-perceptions and their ideal leader images intensifies, so does the distrust of their own leadership competencies (Acton et al., 2019). Moreover, ideal school leadership prototypes of teachers predominantly encompass supportive, participatory, and transformational characteristics like behaving as a role model in a school, being understanding, helpful, and empathizing with others' emotions and needs (Or & Berkovich, 2023). The issues pertinent to closing the discrepancies between what ideal school leaders offer to their environment and what teachers perceive they can offer and how to compensate for the human costs of school leadership can turn into a source of anxiety (Weiner & Holder, 2019).

The findings indicated that teachers' perceived role ambiguity and school leadership prototypes amplified their leadership self-efficacy beliefs. This is largely consistent with the results of the studies in the relevant literature. Wang and Hsu (2014) and Markowska and Wiklund (2020) noted a low or moderate level of perceived role ambiguity regarding the content of a position or task role could lead to increased self-efficacies. This happens as employees choose to engage in learning activities to eliminate ambiguities and find the most effective way of doing their work in conditions with a low or moderate level of uncertainty (Wang & Hsu, 2014). Likewise, Twyford et al. (2017) pointed out that teachers tend to engage in professional learning and development to acquire new knowledge and skills if they experience uncertainties about their work.

The findings suggested teachers' school leadership prototypes have a resembling effect with the influence of teachers' perceived role ambiguity on their leadership self-efficacy. This largely supports the results of studies like Foti et al.'s (2012) which found significant positive relationships between employees' leadership prototypes featuring ideal leader characteristics and behaviors, and their leadership self-efficacy. The more teachers think they carry characteristics and behaviors similar to ideal leaders, the stronger they tend to have leadership self-efficacy (Mombaers et al., 2023). Foti et al. (2012) argued that individuals not only judge others' suitability for leadership roles by using leadership prototypes but also judge themselves. The overlap between teachers' school leadership prototypes and their own leadership attributes results in the verification of teachers' knowledge and skills necessary to lead a school (Burkett & Hayes, 2023). The extent of this overlap often determines the level of positive influence of school leadership prototypes on teachers' leadership self-efficacy (Mombaers et al., 2023).

Contrary to the expectations, the findings pointed to leadership self-efficacy could escalate teachers' anxiety about school leadership. A trend in the relevant line of literature suggests that leadership self-efficacy encourages individuals to take on leadership roles by generating positive expectations about performance (Chan & Drasgow, 2001; Paglis & Green, 2002). Comparably, Mombaers et al. (2023) and Arar (2010) identified self-efficacy as one of the contributing factors influential in teachers' decisions to assume school leadership roles. That being said, the current study underlined teachers' leadership self-efficacy may further stimulate anxiety about school leadership, which could potentially deter individuals from assuming school leadership roles. At this point, Bandura (1983) pinpointed self-efficacy may inflate both individuals' self-confidence motivating them to fulfill their tasks, and their knowledge about possible worrying situations they may experience while performing their tasks. This hints the higher the leadership self-efficacy of teachers, the higher their level of knowledge about the emotional cost of school leadership. Bandura (1988) also pronounced that

anxiety cannot be soothed by a type of self-efficacy that covers professional competencies but the one that covers capabilities necessary for coping with anxiety-causing factors. People evaluate dangers in distinct ways and react in emotionally different ways, which implies subjectivity. Emotional responses to external factors posing a danger vary according to individuals' coping capabilities (Bandura,1988). Shortly, although the findings do not agree with the literature about the possible effects of leadership self-efficacy on anxiety about leadership, they are still in line with Bandura's (1983; 1988) early arguments for the emotional effects of self-efficacy.

The findings cast light on school leadership prototypes that had indirect effects on teachers' anxiety about school leadership through leadership self-efficacy, whereas perceived role ambiguity did not. Previously, Guillén et al. (2015) noted leadership prototypes could influence employees' leadership-related attitudes through leadership self-efficacy. The indirect effects of leadership prototypes became stronger as the congruence between the characteristics and behaviors of employees and those of ideal leaders grew (Guillén et al., 2015). Individuals predominantly use the knowledge and skills they have when making evaluations based on their school leadership prototypes (Foti et al., 2012). They mostly consider the knowledge and skills they lack when making evaluations based on perceived role ambiguity (Wang & Hsu, 2014). This may cause school leadership prototypes to have stronger influences on leadership self-efficacy and increase the probability of significant indirect effects on teachers' anxiety about school leadership.

Lastly, among the control variables, merely previous administrative experience significantly influenced teachers' anxiety about pursuing school leadership roles. The participants with previous administrative experience had relatively lower anxiety about school leadership. Along the same lines, Weiner and Holder (2019) underpinned that teachers who learn to control the effects of potential sources of anxiety, like failure, work-life imbalance, and the risk of making decisions against the interests of others, through previous administrative or leadership experiences were more likely to assume school leadership roles. This is because past administrative and leadership experiences reduce anxiety levels. Leadership is closely related to the ability to cope with anxiety (Sherman et al., 2012).

Theoretical and Practical Implications

The current study sheds light to that teachers' anxiety about leadership is predominantly shaped by external factors in the Turkish context. This underpins teachers' anxiety about school leadership would be mostly an emotional reaction to uncontrollable environmental factors (Aycan & Shelia, 2019), also supporting it is an emotional response to an outside danger. A low level of anxiety is perceived as a warning of potential danger and hints at signs of problems that need to be worked on. An unbearably high level of anx-

iety, in reverse, pushes a search for security and predictability (Bandura, 1983). Thus, to comprehend the reactions of teachers reluctant to lead or those who cannot identify themselves with their roles despite being in an appointed leadership position, viz. school principalship, it is deemed crucial to consider the effects of external factors first.

The findings confirm that leadership self-efficacy increased teachers' anxiety about school leadership, which can be inferred as a need for a coping self-efficacy construct that incorporates capabilities to reduce or control anxiety—not leadership capabilities. This construct should accommodate abilities and skills crucial for enduring the effects of factors giving rise to anxiety about school leadership. It may be possible to test if environmental factors affect anxiety in seeking leadership through coping capabilities (Bandura, 1988).

Collectively, lessening the uncertainties about the task roles of school leadership positions can be meaningful. It can also be propositioned to develop detailed job descriptions for incumbent school principals and to prepare detailed protocols to be followed by principals to ease decision-making processes in conditions full of uncertainties. The activities that fall under the duties of school principals can be included in teachers' pre-service and in-service professional development programs. In this respect, training programs addressing teachers' leadership competencies can be organized. Adding strategies into these programs for managing the anxiety-provoking situations caused by school leadership and for relieving emotional costs can reduce teachers' anxiety about school leadership. We offer developing internship practices through which teachers can experience challenging aspects of school leadership and acquire the strategies school principals use to manage the sources of work stress and their emotions. Incumbent school principals can function as mentors in these programs by sharing their experiences and helping interns assume school leadership roles.

Limitations and Further Research Implications

Firstly, this was a non-experimental cross-sectional study. The data were collected from teachers in public schools in a selected province in Türkiye within a certain time period. Therefore, the results may not be generalizable to private schools. To this end, selecting samples from private schools in future studies might be purposeful and meaningful. Equivalently, quasi-experimental and experimental studies can curtail the number of alternative hypotheses about cause-effect relationships.

Secondly, prospective studies may use different data sources beyond self-reports. Lastly, future studies may revisit the effects of demographic attributes such as gender and ability to cope with anxiety, which may be influential in teachers' anxiety levels.

Complementary information

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