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Developing Innovative School Leadership Scale And Teachers' Views on Innovative School Leadership

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Abstract

The purpose of this research is to develop a valid and reliable "Innovative School Leadership Scale" and examine the innovation level of school principals. Within the scope of the research, an "Innovative School Leadership Scale" with 28 items was developed. In the trial application, 197 teachers were reached, and 523 teachers in the main application. Exploratory factor analysis and confirmatory factor analysis were performed to determine the construct validity, and Cronbach's alpha coefficient was calculated to test the reliability. The measurement tool, a one-dimensional scale with 28 items, was found to be valid and reliable (= 0.989). Teachers of different gender, age and marital status have similar views on innovative school leadership. Teachers have more positive attitudes than teachers with a master's degree. It is stated that the developed scale can be used by researchers.

Keywords: *Innovative School Leadership, Innovative School Leadership Scale, Validity, Reliability*

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Introduction

Today's rapidly changing business environment forces organizations to be dynamic and innovative in order to survive. To gain sustainability and stay competitive, organizations need to focus on innovation. It is important for organizations to be innovative in terms of efficiency and success (Slatten & Mehmetoğlu, 2015). In fact, innovation can be used as an important tool to nurture corporate growth (Baker et al., 2016).

In this context, an increasing number of studies have recognized components that facilitate and strengthen innovation. To be more specific, previous studies have documented many predictors of innovative behavior at the individual level; leadership behavior seems to show one of the most effective structures (Jyoti & Dev, 2015; Nusair et al., 2012; Shin & Zhou, 2003). Therefore, determining leadership behaviors is an important effort both theoretically and practically (Khalili, 2017).

The rationale for supporting the essential role of leadership behavior is that individuals' innovation often requires actions different from normal job duties; therefore, individuals often feel fear and anxiety while trying to produce and implement a new idea (Csikszentmihalyi, 1996). In this case, leadership behavior can play a vital role because it helps to create a risk-tolerant environment where staff are confident in going beyond the current situation and participate in the generation of new and useful ideas (Simmons & Sower, 2012). The importance of leadership behavior in the implementation of new ideas (innovative behavior) is also very clear. For example, leaders who provide authority and delegation to their subordinates and have creative ideas in their minds have been found to be more successful in transitioning from creative thinking to innovation (De Jong & Den Hartog, 2007). While innovative behaviors are important for all organizations to continue their lives, they are much more important, especially in schools that need to constantly renew themselves according to current developments. Thus, the good implementation of these innovative behaviors in schools requires effective school leadership.

Effective school leadership is a critical element for improving the quality of education. If school administrators cannot properly manage the school's resources, educational institutions will struggle to survive and thrive. The school principal's role is to be the administrator who oversees and directs all school improvement programs (Gaol, 2021). In addition, each school principal has the responsibility to direct and manage the quality of teaching and professional development resources for school programs (Yeigh et al., 2018) and is responsible for school success (Raihani, 2008). Therefore, the successful implementation of the education reform depends on the school leadership carrying out the reform (Ganon-Shilon & Schechter, 2017).

Internationally, the field of school leadership has become a priority issue on the agendas of education policy programs (Odhiambo & Hii, 2012). This topic is often explored through empirical studies on school reform. Leadership practice has gained significant recognition as a catalyst in the management of school change (Sofo et al., 2012). Effective education leaders, especially principals, are a key element in effective schools because of their significant impact on student and school success (Hariri et al., 2012) “printing and developing human resources and other resources” (Mulyani et al., 2020).

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In the 21st century, the importance of developing school leadership has increased through theory (Bush & Glover, 2014). As a result, at the beginning of the 21st century, research on educational leadership has become a major focus (Walker et al., 2012). This is because the quality of school leadership significantly contributes to student success and school quality (Bush, 2007). Qualified and innovative schools can be formed through quality school leadership.

According to Fullan (2001), the qualities that lead schools to be innovative are as follows: Schools cannot disconnect from the outside world; education is the foundation for a democratic structure; technological developments open the school to innovations and break down the walls; competition in education, the desire to increase one's self-perception capacity, and family preference require schools to be in a relationship with their environment; schools are the hope for the development and renewal of society; schools should have features from life. Entrepreneurship and risk-taking are among the main characteristics of innovative schools. Coordinated and collaborative work also adds an innovative quality to the school environment. A school can be described as innovative because of its flexible structures, processes that enable new ideas, encouragement and support of different initiatives, and sharing of knowledge. Innovative schools are innovative because of creative people who want to constantly improve the environment they work with and who can take risks, as well as managers with a clear vision who care about the school, support and trust of people (Watt, 2002). Managers with a clear vision can be described as innovative school leaders as long as they can effectively achieve the goals of their innovative schools. Innovative school leadership is the state of leading innovation in line with change and development, creating innovation opportunities, encouraging innovation and giving importance to personal development in the context of innovation. So, the innovative school leader is the person who motivates and mobilizes all school stakeholders in line with innovation.

It can be stated that the phenomenon of leadership is as old as human history. Technological, social, cultural, economic and political developments in the global context in a changing and developing world; led to differences in the leadership process and its types. A new concept related to leadership is “innovative school leadership”. In the process of restructuring and developing schools, there is a need for a leadership approach that adopts an innovative management style and acts by considering the innovations rather than displaying an ordinary and classical management style in the school's practices of the administrator. Thus, with the existence of innovative school leaders and the implementation of innovative school leadership, development and quality education can be provided in schools in the context of innovation. Achieving this requires effective leadership for innovative schools.

Innovative school leadership can be counted among contemporary leadership approaches because two different leadership approaches are put forward from the past to the present; traditional and modern leadership . As a result of the literature review, Jiang (2014) classified the leadership styles and characteristics that emerged in the historical process as follows: 1) Traditional leadership approaches; traits approach (1930-1940), behavioral approaches (1940-1960), and situational approaches (1960s and later). In the personality traits approach, there is a characteristic that "leaders are born with superior characteristics". In the behavioral approach, there is the quality of “leadership traits can be learned later”; leadership styles include libertarian, democratic, autocratic and bureaucratic leadership styles. In the situational approach, there is the quality of “having different leadership styles in different situations”; leadership styles include

directive, supportive, participatory and achievement-oriented leadership styles. 2) Modern leadership approaches; visionary or charismatic leadership approaches (1980-1990), emotional intelligence approach (1990s and later), and full-fledged leadership approach (2000s and later). In visionary or charismatic leadership approaches, "leadership styles are defined according to the state of the process and relationships"; leadership styles include transactional, transformational, and libertarian leadership styles. In the emotional intelligence approach, there is the quality of "emotional intelligence of leaders affects the performance of subordinates more"; leadership styles include visionary, coaching, affiliation, and democratic leadership style. In the all-encompassing approach to leadership, there is a characteristic that "influences the leader's personality traits, qualities and skills to the fullest extent"; leadership styles include an engaging, comprehensive, and goal-oriented leadership style. In the context of educational administration, modern leadership approaches include "teaching, teacher, distributive, visionary, transformational, processor, servant, spiritual and quantum" leadership styles. Innovative school leadership can also be included among modern leadership approaches. Because, in contemporary leadership approaches, there are generally goal and vision-oriented, inclusive and sharing leadership qualities. Leaders of this nature can exhibit innovative approaches. Success, positive climate and rich cultural environments can be achieved in schools, especially through some innovative practices in schools. Those who can provide this in schools are primarily school administrators, that is, innovative school leaders.

In order to increase leadership quality in line with innovative school leadership, policy makers, researchers and educators have turned to understanding how leadership programs are effective. In some countries, licensure for school leaders usually requires completion of an approved advanced degree program in educational leadership, a teaching degree and at least three years of teaching experience (Anthes, 2004). A number of countries differ greatly in terms of school leader requirements (Huber, 2004). In recent years, international concerns have increased about how best to define and increase the effectiveness of quality leadership as a way to develop better school leaders (Jacobson et al., 2002; Wallace Foundation, 2003). In this context, some practices were carried out in order to create and develop innovative school leadership.

Although policymakers and educators in the implementation of innovative school leadership have faced some challenges due to the scarce research on quality leadership and its impact on leadership practices and schools (Lumby, Crow, & Pashiardis, 2008; McCarthy & Forsyth, 2009), current results have shown these challenges important to rectify. Researchers use innovative program models (Bush & Jackson, 2002; Earley & Evans, 2004; Jacobson, Johansson & Day, 2011; Twale & Kochan, 2000; Walker & Dimmock, 2006) and synthesized research on quality program features (Davis et al., 2005; Jackson and Kelley, 2002). Such research has shown that quality innovative programs share common characteristics. These are standards-based, have a well-defined theory of leadership for school improvement that integrates program features within a shared vision and philosophy, have a coherent curriculum that addresses effective instructional leadership and school improvement, recruiting and selecting candidates based on leadership potential, provide quality internships and other field-based experiences that provide intensive leadership development, using systematic structures to enhance learning, using adult learning theory, developmental learning principles or active learning strategies, engaging knowledgeable teachers with relevant field-based experiences and collaborating or partnering with local

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organizations in program development and delivery, benefit from evaluations for the continuous improvement of the person and program to be developed (Orphanos & Orr, 2014). Leaders who implement such innovative programs and practices in schools can be called “innovative school leaders”. It is important that innovative school leaders primarily create innovative schools and keep innovative qualities in their schools.

Research on innovative leadership approaches (Darling-Hammond vd., 2010; Milstein ve Kruger, 1997; Orr, 2011; Orr ve Barber, 2007), principalship practices and school improvement studies (Orr & Orphanos, 2011) are important indicators for innovative school leadership. In this context, it will be possible to train innovative school leaders well and innovative process management in schools. In this , innovative school leadership; It is the process of implementing innovative practices and programs in schools by leaders as a result of educating the leader to internalize innovation. The innovative school leader is the manager who implements innovative practices and programs in schools. These administrators are generally people who work as principals in schools.

The history of studies on innovative school leadership in international literature goes back 5-10 years (Korach & Agans, 2011; Orphanos & Orr, 2014; Tutt & Williams, 2013). The subject of innovative school leadership has been examined in the international literature as a literature review and no scale development study has been found. In Turkey, there is no study on innovative school leadership. This may be due to the fact that innovative school leadership is a very new topic that needs to be explored. The fact that this study is a scale development study; it will be able to contribute to the literature by differing from the literature. In this context, the reason for the research is to develop the scale by determining the validity and reliability of the Innovative School Leadership Scale (ISLS). The development of the ISLS may contribute to the data collection process for scientists who will conduct research on innovative school leadership. In this context, the main purpose of this research is to develop a valid and reliable "Innovative School Leadership Scale". Within the scope of the purpose, answers to the following questions were sought:

1. Is ISLS a valid and reliable measurement tool?
2. At what level are teachers' opinions on innovative school leadership?
3. Do the innovative school leadership levels of the participants differ or show a relationship with their demographic characteristics?

Method

Research Model

This research, which aims to develop the “Innovative School Leadership Scale” and to examine the innovation level of school principals, is in the quantitative research type. It is screening research. In this type of research, participants' opinions or attitudes, etc. on a subject, psychological characteristics are tried to be revealed (Fraenkel & Wallen, 2006). In this study, teachers' opinions on "Innovative School Leadership" are investigated.

Universe and Sample

Two applications (trial and main) were made within the scope of the research. The trial application was made with 197 teachers and the main application was made with 523 teachers. The developed scale has been tried to be applied to all teachers who can be reached on the internet. In this regard, no random sampling method was applied. The group was tried to be reached

according to the convenience sampling method. In this sampling method, the researcher tries to reach the number she determined without using any sampling method (Cohen & Manion, 1989; as cited in Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2011). The demographic characteristics of the participants where the main application was made are given in Table 1.

Table 1

Distribution of Teachers According To Some Demographic Characteristics

Demographic Characteristics		**n**	**%**
Gender			
	Female	283	54.1
	Male	240	45.9
Marital status			
	Married	338	64.6
	Single	185	35.4
Education status			
	Associate degree	4	.8
	Undergraduate	465	88.9
	Graduate	51	9.8
	Postgraduate	3	.6

When Table 1 is analyzed, it is seen that the number of female and male participants is close to each other, but women are more (54.1%) than men (45.9%). Nearly two-thirds of the teachers (64.6%) are married according to marital status. According to the education level, the majority of the teachers (88.9%) are undergraduate degrees and the rest (9.8%) are graduates.

Data Collection Tool

"Innovative School Leadership Scale" was developed in this research. First , the literature was scanned, the dimensions of innovativeness were determined, and the opinions of 15 teachers were taken. Then, 28 items were written by using the literature and teachers' opinions. Expert opinions were taken from academicians in the fields of measurement and evaluation, language and expression and education management for the created item pool. Corrections were made based on expert opinion. The prepared form was applied to 20 teachers. In line with the feedback from teachers, the scale was finalized and a trial application was made.

Collection of Data

Data were collected in two stages. Trial application was made between 20-30 September 2020. The main application was made between 15-25 October 2020. In both stages, the data were collected on the internet using Google Forms.

Data Analysis

Two basic analyses were made in order to provide evidence for the construct validity in the study. These analyses are Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Descriptive statistics were calculated in the analysis of the data, unrelated samples t-test and one-way analysis of variance in unrelated measurements were performed. SPSS 25, LISREL 8.8 and R Studio softwares were used for analyzing the data.

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Findings and Interpretation

Findings Related to The Validity and Reliability of Innovative School Leadership Scale

Within the scope of the research, first EFA and then DFA were conducted in order to examine the construct validity. Findings obtained are given below.

Results of Exploratory Factor Analysis

For trial implementation, 200 teachers were reached. EFA was conducted to test the construct validity of the "Innovative School Leadership Scale". Exploratory Factor Analysis (EFA) was performed in order to determine the relationship between unknown latent variables and observed variables, to determine the items under the relevant factors and to obtain high factor load values (Çokluk, Şekercioğlu, & Büyüköztürk, 2014).

There is no missing data in the data set. No reverse coding was used because there was no negative item in the scale. Before applying EFA; sample size, missing values, normality, linearity, multicollinearity, singularity and outliers were examined. In order to examine the univariate outliers, the minimum and maximum values were examined. The total score was obtained to examine the multivariate extreme values. Later, the total score obtained was converted to the Z standard score and three data other than +3 and -3 were excluded from the analysis. The analysis was done with the data of 197 teachers.

According to the EFA results, the KMO test was calculated as .97 and shows that the sample size is perfectly adequate. Bartlett's test result shows that the data meet the multiple normality assumption ($p < .01$). In this case, it was concluded that the data obtained from the trial application of the scale was suitable for factor analysis.

As a result of factor analysis, a factor with an eigenvalue greater than 1 was found. The Scree-plot obtained according to the result of the exploratory factor analysis is given in Figure 1.

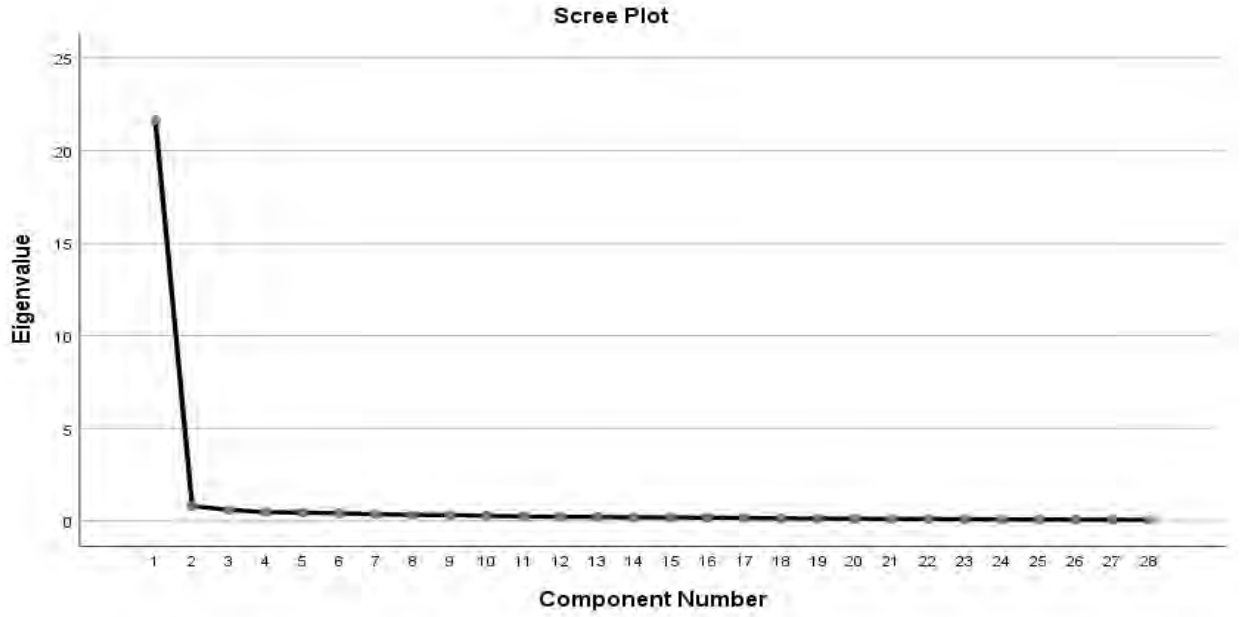

Figure 1. Scree Plot Obtained from Scale

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When the figure is examined, it is seen that the Scree-plot also supports the one-dimensional structure. Accordingly, the scale was evaluated as one-dimensional.

The only factor that emerges explains 75.35% of the variance. The factor loadings of the items are given in Table 2.

Tablo 2

Factor Loading Values of The Items in The "Innovative School Leadership Scale"

Item Number	New Item Number	Factor Loading Value	Item-Total Correlation
V19	V1	.930	.924
V20	V2	.926	.920
V15	V3	.922	.915
V16	V4	.916	.908
V8	V5	.912	.905
V18	V6	.908	.900
V25	V7	.908	.901
V17	V8	.902	.893
V11	V9	.898	.889
V22	V10	.897	.889
V9	V11	.894	.885
V4	V12	.886	.875
V12	V13	.884	.875
V6	V14	.882	.872
V13	V15	.881	.871
V3	V16	.880	.868
V14	V17	.876	.866
V2	V18	.870	.857
V10	V19	.867	.857
V7	V20	.867	.855

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V24	V21	.866	.857
V1	V22	.865	.853
V5	V23	.865	.853
V21	V24	.864	.854
V26	V25	.835	.825
V23	V26	.820	.808
V28	V27	.819	.806
V27	V28	.764	.750

According to the table, there are 28 items in the scale. The factor loading values of the items vary between .764 and .930. Item total correlations are high and between .750 and .924.

Results of Confirmatory Factor Analysis

533 teachers were reached in the main application of the "Innovative School Leadership Scale" developed within the scope of the research. The other analysis performed after EFA to examine the construct validity is CFA. The assumptions of DFA include sample size, missing values, normality, linearity, multicollinearity, singularity, and extreme values. First of all, 10 data, which are extreme values, were removed from the data set and the analysis continued with data belonging to 523 people. Comrey and Lee (1992) describe the sample size of 523 teachers. Another criterion for sample size is KMO test results. KMO results calculated within the scope of the research are given in Table 3.

Table 3

KMO Values Calculated for The Innovative School Leadership Scale

KMO	**p**
.98	.000

As can be seen from the table, KMO was calculated as .97. A KMO value of .90 and above indicates that the sample size is perfectly adequate (Leech, Barrett, & Morgan, 2005). Normality was examined. For normality, total scores were taken, Kolmogorov-Smirnov test was performed, and the values of skewness and curtosis were examined. According to the results of the Kolmogorov-Smirnov normality test, the scores obtained from the scale do not show a normal distribution ($p < .05$). However, the decision of normality is not made only based on this test result. Skewness and kurtosis of the scores are between -1 and +1 values (skewness = -.90, kurtosis = .78). In this case, the scores obtained from the scale do not show a significant deviation from the normal distribution, in other words, they show a normal distribution. After testing the assumptions, CFA analysis was started. There is no blank value in the data set. The t values of the DFA result are given in Table 4.

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Table 4

Innovative School Leadership Scale CFA T Values

Item Number	t	Item Number	t
1	27.39	15	25.02
2	25.68	16	26.49
3	26.87	17	26.09
4	25.94	18	25.57
5	25.20	19	26.63
6	27.51	20	24.83
7	25.86	21	22.79
8	26.99	22	25.11
9	26.03	23	25.71
10	25.86	24	26.16
11	24.34	25	23.86
12	26.07	26	24.41
13	26.59	27	24.74
14	26.37	28	18.48

As seen in the table, t values were examined first in CFA. For the items, a t value of 1.96 and above indicates that it is significant at the 0.05 level, and if it exceeds 2.58, it is significant at the 0.01 level. The t values of all items were found to be significant at the .01 level. This finding shows that the observed variables are correctly explained by latent variables. The standardized solution values alculated after the T values are given in Table 5.

Table 5

Innovative School Leadership Scale CFA Standardized Solution Results

Item Number	Error	Item Number	Error
1	.16	15	.25
2	.22	16	.19
3	.18	17	.21
4	.21	18	.23
5	.24	19	.19
6	.16	20	.26
7	.22	21	.33

8	.18	22	.24
9	.21	23	.22
10	.22	24	.21
11	.27	25	.31
12	.21	26	.27
13	.19	27	.26
14	.20	28	.50

According to the table, error variances of all items can be evaluated as small. Values range from .16 to .50. It is seen that the errors of the items are low according to the results of both t values and error values. It is also necessary to examine the goodness of fit indices in CFA. The values regarding the goodness of fit are given in Table 6.

Table 6

The Goodness of Fit Statistics of The Innovative School Leadership Scale CFA Results

Indices	**Values for Items**	**Perfect fit**	**Good fit**
χ^2	2592.73		
sd	350		
p	0.0		
χ^2/sd	7.41	χ^2/sd ≤ 3.00	3.00 < χ^2/sd ≤ 8.00
RMSEA	0.12	0 ≤ RMSEA ≤ .05	.05 < RMSEA ≤ .08
RMSEA (.90 GA)	0.12-0.12		
SRMR	0.029	0 ≤ SRMR ≤ .05	.05 < SRMR ≤ .10
GFI	0.71	.95 ≤ GFI ≤ 1.00	.90 ≤ GFI < .95
AGFI	0.67	.90 ≤ AGFI ≤ 1.00	.85 ≤ AGFI < .90
CFI	0.98	.97 ≤ CFI ≤ 1.00	.95 ≤ CFI < .97
NFI	0.98	.95 ≤ NFI ≤ 1.00	.90 ≤ NFI < .95
NNFI	0.98	.97 ≤ NNFI ≤ 1.00	.95 ≤ NNFI < .97

Source: Hu and Bentler, 2004; Jöroskog and Sörbom, 1993; Kline, 2005; Steiger, 2007; Sumer, 2000; Tabachnick and Fidell, 2001.

The criteria for goodness of fit and the goodness of fit values obtained from the scale are shown in Table 6. As a result of the analysis, χ^2 did not show fit (p <.01). But χ^2 can be meaningful as the sample gets bigger. Therefore, the value of 2.85 obtained by dividing the χ^2 by

the degrees of freedom shows the perfect fit. RMSEA, SRMR, CFI, NFI and NNFI show good fit. GFI and AGFI were rated under good fit. When a holistic evaluation is made, it can be stated that the items of the Innovative Teacher Characteristics Scale show a generally acceptable fit.

Findings Related to The Reliability of Innovative School Leadership Scale

Internal consistency reliability of the scale was calculated by Cronbach's alpha coefficient and was found .989. Accordingly, the reliability of the scale is very high.

The Level of Innovative School Leadership Scores of Participants

Within the scope of the research, in order to determine the innovative school leadership levels, the average score was divided into the number of items and evaluated according to Table 9.

Table 9

The Levels of The Innovative School Leadership Scale Scores of The Participants

Mean	Mean/Number of items	Criterion	Decision
		1.00-1.79	Very low
		1.80-2.59	Low
		2.60-3.39	Moderate
109.13	**3.90**	**3.40-4.19**	**High**
		4.20-5.00	Very high

When the Table 9 is examined, it is seen that the innovative school leadership score averages are 109.13, and the value obtained from the division of the average to the number of items is 3.90. When compared with the criterion in the table, it can be stated that teachers see their administrators as highly innovative school leaders.

Comparison or Relation of Innovative School Leadership Levels according to Demographic Features

In order to compare the mean scores of Innovative School Leadership Scale by gender, unrelated samples t-test was conducted. Analysis result is given in Table 10.

Table 10

Comparison of The İnnovative School Leadership Mean Scores of The Participants By Gender

Group	n		S	df	T	P
Female	283	109.03	22.15	521	-.11	.913
Male	240	109.25	24.49			

Examining the Table 10, it is seen that the Innovative School Leadership mean scores of the participants do not differ significantly according to their gender, $t_{(521)} = -.11$, $p > .05$. In other words, the difference between the innovative school leadership scores of the participants is due to chance, and whether they are male or female does not affect their scores.

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In order to examine the relationship between the Innovative School Leadership scores of the participants and their age, Pearson correlation coefficient was calculated. Analysis result is given in Table 11.

Table 11

Relationship between Participants' Ages and İnnovative School Leadership Scores (N = 521)

	ILS	**Age**
ILS		-.058 (p = .185)
Age		

When Table 11 is examined, it is seen that there is no significant relationship between the Innovative School Leadership scores of the participants and their ages (r = -.058, p> .05). Accordingly, younger and older participants think similarly about innovative school leadership. Age is not a determining variable in this regard.

In order to examine whether Innovative School Leadership mean scores differ according to the marital status of the teachers, unrelated samples t-test was conducted. The analysis result is given in Table 12.

Table 12

Comparison of The İnnovative School Leadership Mean Scores of The Participants According To Their Marital Status

Group	**n**		**S**	**df**	**T**	**P**
Married	338	109.89	23.82	521	1.01	.314
Single	185	107.75	22.11			

When Table 12 is analyzed, it is seen that the Innovative School Leadership mean scores of the participants do not differ significantly according to marital status, $t_{(521)} = 1.01$, $p > .05$. In other words, the difference between the innovative school leadership scores of the participants is due to chance, and whether they are married or single does not affect their scores.

In order to examine the difference according to the educational status, the category was combined because there were a small number of participants with associate and doctorate degrees. New categories were realized as associate/undergraduate and graduate degrees. In order to examine the difference, an unrelated samples t-test was conducted. The analysis result is given in Table 13.

Table 13

Comparison of The İnnovative School Leadership Mean Scores of The Participants According To Their Educational Background

Group	**n**		**S**	**df**	**T**	**P**
Undergraduate	469	110.38	22.66	521	3.64	.000
Graduate	54	98.35	25.51			

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When Table 13 is examined, it is seen that the innovative school leadership mean scores of the participants differ significantly according to their educational status, $t_{(521)} = 3.64$, $p < .05$. The mean score of undergraduate graduates (= 110.38) is higher than the mean of graduates (= 98.35).

Conclusion and Discussion

In this study, which aims to develop the Innovative School Leadership Scale, a one-dimensional scale with 28 items was implemented and validity and reliability evidences of the scale were obtained.

It was concluded that the Innovative School Leadership Scale is a valid and reliable measurement tool. It is thought that the scale will fill a deficiency in the literature and can be used by researchers. Three studies have been found in the literature on innovative school leadership. Two of these studies (Korach & Agans, 2011; Tutt & Williams, 2013) examine innovative school leadership in a conceptual framework; one study (Orphanos & Orr, 2014) examined innovative school leadership in a quantitative approach. The results of the study conducted by Orphanos and Orr (2014); demonstrated that innovative leadership preparation has a direct and significant effect on basic leadership practices and an indirect and significant effect on teacher satisfaction and collaboration. Effectiveness in schools can be achieved by determining the innovative characteristics of school administrators through the innovative school leadership scale. Because by determining the current strengths and weaknesses in education management and planning, more active, qualified and modern schools can be created through more innovative practices and cooperation between education stakeholders.

It was found that the Innovative School Leadership mean scores of the participants do not differ significantly according to their gender. Innovative school leadership can be counted among new and contemporary leadership approaches and styles. Studies on new and contemporary leadership approaches and styles (Akyürek, 2016; Arabacı, Alanoğlu, & Doğan, 2014; Başaran, 2020; Brown & Reilly, 2008; Manafzadehtabriz, 2020; Mandell & Pherwani, 2003; Safia, 2020; Vicky, 2005; Yıldırım and Çelikten, 2019) support the results of the research on the gender variable. Similar thoughts of male and female teachers about innovative school leadership are considered to be positive. In supportive studies, male and female teachers have similar views on leadership approaches. The fact that male and female teachers have the same view on innovative school leadership in schools may be an indicator of equality in schools, and this may show that innovation in schools can be achieved through a more participatory practice.

It was found that there is no significant relationship between the Innovative School Leadership scores of the participants and their ages. Studies on new and contemporary leadership approaches and styles (Arabacı, Alanoğlu, & Doğan, 2014; Manafzadehtabriz, 2020; Yıldırım & Çelikten, 2019) support the results of the research on the age variable. As a result of the research, it was concluded that younger and older teachers think similarly about innovative school leadership. Younger and older teachers have similar views on leadership approaches in supportive research. The fact that young and older teachers have the same views on innovative school leadership in schools can be an indicator of unity in schools, more innovative school environments can be created through this unity.

It was found that the Innovative School Leadership mean scores of the participants do not differ significantly according to marital status. Studies on new and contemporary leadership approaches and styles (Uçan, 2012; Yıldırım & Çelikten, 2019) support the research result on the marital status variable. Single and married teachers share similar views on innovative school leadership. In supportive studies, single and married teachers have similar views on leadership approaches. It is very important for the realization of innovative school leadership that single and married teachers have the same view on innovative school leadership in schools, and that marriage does not affect the innovation practices in schools.

It was found that the innovative School Leadership mean scores of the participants differ significantly according to their educational status. The mean score of undergraduate graduates is higher than the mean of graduates. Studies on new and contemporary leadership approaches and styles (Manafzadehtabriz, 2020; Yıldırım & Çelikten, 2019) support the research result on the educational status variable. In supportive studies, undergraduate teachers have more positive views on leadership approaches than graduate teachers. The effect of education level on innovative leadership in schools is an important issue. By investigating the reasons why especially undergraduate teachers see school administrators as more innovative, it can be ensured and encouraged that school administrators behave more innovatively in order to have more positive opinions of graduate teachers.

The innovative School Leadership Scale was developed in this study for Turkey sample. The scale can be adapted to different languages and cultures.

In this study, Innovative School Leadership was examined alone. Other characteristics that may be associated with Innovative School Leadership can also be examined. For example; school climate, school culture etc with Innovative School Leadership. The relationship among these variables can be revealed.

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Innovative School Leadership Scale (Turkish Version: İnovatif Okul Liderliği Ölçeği)

**Öğretmenlerin bakış açısından;*
➢ *Okul müdürüm;*
Tüm personel tarafından paylaşılan yenilikçi bir vizyon oluşturulmasına liderlik eder.
Yenilikçi uygulamaların yönetici ve öğretmenler arasında güven ilişkisi içinde gerçekleştirilmesi için çalışır.
Yenilikçiliğe etkin bir biçimde rehberlik eder.
Okuldaki değişim ve gelişime önderlik eder.
Eğitim ve öğretim ile ilgili yenilikler konusunda sürekli yol gösterir.
Yeni yaklaşımların uygulanmasına liderlik yapar.
Yenilikçiliği sağlamak amacıyla yönetici, öğretmen ve öğrenciler arasında sosyal ağların etkin bir biçimde kullanılmasına önderlik eder.
Öğretmenlerin yenilikçi ürünler üretebilmeleri için ortamlar oluşturur.
Öğretmenlerin yenilikçi ürünler üretebilmeleri için maddi ve manevi kaynak sağlar.
Yenilikçi uygulamaların önündeki engelleri kaldırmak için çaba harcar.
Yenilikçi fikirlerin üretilmesi için öğretmenlere yeterli zaman sağlar.
Okuldaki yeniliklerin hayata geçirilmesinde çevre ile işbirliği sağlar.
Yenilikçi uygulamalar için teknolojik imkânlar oluşturur.
Okulun küresel bağlamda yenilikçi olmasını sağlamak amacıyla sosyal ağların etkin bir biçimde kullanılacağı bir atmosfer oluşturur.
Öğretmenleri yenilikçi fikirler üretmesi için teşvik eder.
Öğrenilen yeni bilgilerin paylaşılmasını sağlar.
Okuldaki tüm paydaşların yenilikçi olmalarını sağlamak amacıyla araştırma yapmalarını teşvik eder.
Eğitim ve öğretim ile ilgili yenilikler konusunda öğretmenleri sürekli daha fazla öğrenme isteği duymaları için cesaretlendirir.
Yenilikçi ürünler için öğretmenlerin teknolojik imkânlardan faydalanmasını teşvik eder.
Öğretmenlerin performans değerlendirmelerinde yenilikçi uygulamaları göz önünde bulundurur.
Öğretmenleri yenilikçi olabilmeleri için yetkilendirir.
Yenilikler doğrultusunda kendi kişisel gelişimi için çaba sarf eder.
Teknolojik gelişmeleri takip eder.
Yenilikçi olabilmek amacıyla sosyal ağları etkin bir biçimde kullanır.
Araştırma ve geliştirme faaliyetleri yürütür.
Kendini geliştirmek amacıyla yeni gelişmelerle ilgili eğitimlere katılır.
Küresel bağlamda gelişen yenilikleri takip edebilmek amacıyla en az bir yabancı dile hâkim olabilmek amacıyla çaba harcar.
Yenilik ve gelişim için farklı fikirlere açıktır.