## İnovatif Okul Liderliği ve Girişimci Öğretmen Davranışlarının Okul Mutluluğu Üzerindeki Etkisi: Özel Okullar Örneği Muhammet İbrahim AKYÜREK<sup>1</sup> ve Erkan GÖKTAŞ<sup>2</sup>

# The Impact of Innovative School Leadership and Entrepreneurial Teacher Behaviors on School Happiness: The Case of Private Schools

#### **Abstract**

This study examined the effect of innovative school leadership and entrepreneurial teacher behaviors on school happiness according to private school teacher perceptions. The study employed a model of descriptive and relational scanning. The sample of the study consists of 270 teachers working in private schools in Turkey in the 2022-2023 academic year. In the study, innovative school leadership scale was used to determine the innovative school leadership level of principals, entrepreneurial teacher behavior scale to determine the level of entrepreneurial teacher behavior, and school happiness scale to determine the level of school happiness. The findings revealed that perceptions of private school teachers about innovative school leadership level of the principals are at a high level. Their perception of the level of entrepreneurial teacher behavior is at a high level. Perception of the level of school happiness is also at a high level. Findings showed that there is a low, positive significant relationship between innovative school leadership and entrepreneurial teacher behavior. There is a high, positive, significant relationship between innovative school leadership and school happiness. Additionally, there is a moderate, positive, significant relationship between entrepreneurial teacher behaviors and school happiness. Innovative school leadership and entrepreneurial teacher behaviors significantly predict school happiness.

**Keywords:** Innovative school leadership, entrepreneurial teacher behaviors, school happiness.

## Özet

Bu çalışma, özel okul öğretmeni algılarına göre yenilikçi okul liderliği ve girişimci öğretmen davranışlarının okul mutluluğu üzerindeki etkisini incelemektedir. Çalışma, tanımlayıcı ve ilişkisel tarama modelini kullanmıştır. Araştırmanın örneklemini 2022-2023 eğitim öğretim yılında Türkiye'de özel okullarda görev yapan 270 öğretmen oluşturmaktadır. Araştırmada okul müdürlerinin yenilikçi okul liderliği düzeyini belirlemek için yenilikçi okul liderliği ölçeği, girişimci öğretmen davranışı düzeyini belirlemek için girişimci öğretmen davranışı ölçeği ve okul mutluluk düzeyini belirlemek için okul mutluluğu ölçeği kullanılmıştır. Bulgular, özel okul öğretmenlerinin müdürlerin yenilikçi okul liderliği düzeyine ilişkin algılarının yüksek düzeyde olduğunu ortaya koymaktadır. Girişimci öğretmen davranışı düzeyine ilişkin algıları üst düzeydedir. Okul mutluluğu düzeyi algısı da üst düzeydedir. Bulgular, yenilikçi okul liderliği ile girişimci öğretmen davranışı arasında düşük, pozitif anlamlı bir ilişki olduğunu göstermiştir. Yenilikçi okul liderliği ile okul mutluluğu arasında yüksek, pozitif, anlamlı bir ilişki vardır. Girişimci öğretmen davranışları ile okul mutluluğu arasında orta düzeyde, pozitif ve anlamlı bir ilişki vardır. Yenilikçi okul liderliği ve girişimci öğretmen davranışları, okul mutluluğunu önemli ölçüde yordamaktadır. Anahtar kelimeler: İnovatif okul liderliği, girişimci öğretmen davranışları, okul mutluluğu.

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#### Introduction

Contemporary competition and quality-oriented organizational management is shaped and influenced by the developing technology and human understanding. In this age of change and transformation, educational organizations are constantly turning to new searches and approaches. School leaders can sustain the organization's managerial success to the extent that they keep up with innovation and change. It is the entrepreneurial teacher behaviors that will strengthen the leaders in this direction. With innovative school leadership supported by entrepreneurial teachers eager to bring about change, it is possible for schools to be adopted by all stakeholders and an organizational happiness to be realized. In this direction, examining innovative school leadership, entrepreneurial teacher behaviors and school happiness and determining the relationship between them may lead important results.

The unique structure of educational organizations makes it special being influenced by the innovation approach. Unlike innovations in the production process of any product, innovation in educational organizations is related to the execution of educating and teaching activities. The idea of innovation must be compatible with educational objectives. Teachers, students, and parents, who are the basic components of the educational organization, should adopt the idea of innovation and participate in this process themselves. These conditions must be considered for innovation in the educational organization to be successful (Fullan, 1972). The main purpose of innovation in education should be to improve the quality of the educational process, to educate students in a way that seeks solutions to current problems and think creatively (Taş, 2017). Mobilizing educational organizations in this direction requires highlevel leadership skills. Innovative school leaders play a leading role to realize innovation in schools. Innovative leaders reassure their audience. In their previous leadership lives, they have demonstrated an example of cooperation and good work as an effective team member. They go to extra lengths to ensure that the organization achieves its goal (Cunniff, Elder & Padover, 2013). School leaders' active participation in and management of the innovation process reflects their innovative leadership qualities. Leaders also needs to be innovative to embrace and implement innovation. Marron & Cunniff (2014), expressed innovative educational leadership skills in the form of heart, empathy, learning, passion, perseverance, strategy and speed. The innovative education leaders must be able to manage their emotions well and approach issues with a heart. They must be able to empathize in order to be able to hear how their actions make people feel and to act accordingly. They should be able to learn from anyone and everything without praising their own talents. They must always be able to find reasons to work passionately to actively manage the process. They must be able to persevere in order to maintain effective management. Have strategies to review and implement their plan and program appropriately. They should be able to implement changes and innovations quickly.

It is noticeable that there are not many studies on innovative educational leadership in Turkey. There are a limited number of theses and articles investigating innovative leadership qualities in schools. Most of them are conducted in the last two decades. When these studies are excluded from the field of business and management science, it can be said that innovative leadership studies in the field of educational sciences are relatively few. In the studies carried out, according to the opinions of the teachers, a positive relationship was determined between the innovation competence of the school administrators and the school culture (Kurt, 2016). The positive contribution of school principals to the innovation process has

been determined by establishing an innovation-oriented school culture with the understanding of being a team leader (Erdemet, 2017). A positive significant relationship was found between the innovation competencies of school administrators and school culture (Yaman, 2018). According to the teachers' opinions, it was concluded that there was a meaningful, positive, and moderate relationship between the innovation competencies and organizational image of school administrators. And it was stated that the innovation competencies of school administrators were a significant predictor of organizational image (Selçuk, 2018). By examining the opinions and suggestions of school administrators about innovation in education, it was concluded that administrators have an awareness of the concept of innovation, but it has not yet been determined that the concept of innovation has not gone beyond the dissemination of the use of technological tools, that is, the concept is not yet fully understood (Sağlam, 2018). A moderate, positive, and meaningful relationship was found between entrepreneurial leadership characteristics, which is a dimension of the innovation competencies of school administrators, and the innovation levels of schools (Eroğlu Bozkurt, 2019). By examining the relationship between the concepts of innovation and leadership, it was concluded that the people who will lead innovations are innovative leaders, and it was emphasized that innovative leaders can adapt to innovations without ignoring the changes brought about by globalization in order to achieve the goals of the organization (Akyürek, 2020).

## **Innovative School Leadership**

The concept of innovation, which is usually used in the sense of "new, novelty" in Turkish, is based on the origin of renewal and change in Latin. In this respect, innovation is actually an extension of change rather than a radical neology. In other words, innovation is the process of original ideas that are created to meet needs and demands and the implementation of these ideas (Ağca & Böyükaslan, 2016). Innovation is a fundamental concept that all organizations focus on with its broad scope. Organizations that are open to renewal and innovation develop innovation strategies to adapt more easily to new conditions. Nowadays, organizations are experimenting with different methods and techniques for this purpose. The structure of organizations with innovative culture is open to innovation. It provides development and training opportunities to employees at all levels. Possesses certain innovational symbols. Rewards innovation. Has an institutionalized innovative management and control system (Gümüşlüoğlu, 2009). Drucker (2002), explains the concept of innovation together with entrepreneurship. He argues that innovation in organizations emerges because of systematic work. All kinds of innovation must necessarily focus on leadership. Additionally, he evaluates innovation as a managerial responsibility. In this respect, every leader and manager should be aware of innovations and put them into practice.

## **Entrepreneurial Teacher Behaviors**

The concept of entrepreneurship, like the concept of innovation, has been mostly referred to in management and business sciences. In these fields, entrepreneurship is the change and innovation
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oriented actions of individuals with an assertive spirit who have the capacity to recognize opportunities, take initiative and risks (Valenciano, Uribe-T & Real, 2019) The history of this concept in educational sciences does not go back very long (Ho, 2018). The way entrepreneurship, which describes the implementation of a certain technological innovation in a business line, is defined in terms of school and teacher is also specific to education. In this direction, the entrepreneurial behavior of teachers expresses their ability to act like an entrepreneur while carrying out education and training activities rather than making a new venture or starting a business (Neto, Picanco, Campbell, Polega & Ochsankehl, 2019). Entrepreneurs in the field of education are defined as benevolent, idealistic, people who want to make a difference by responding to the needs of students by influencing and developing the academic environment (Aurini & Quirke, 2011; Maranto, 2015). The purpose of entrepreneurship in education is not for teachers to leave the profession and start a new business, but rather their ability to act like an entrepreneur. Entrepreneurial teachers creatively overcome the lack of resources and materials while planning and delivering their lessons with a technology-based approach, and act like entrepreneurs when collaborating with others to increase student engagement and success (Van Dam, Schipper & Runhaar, 2010). The characteristic behavior of entrepreneurial teachers prioritizes their entrepreneurship. Entrepreneurial teacher behaviors are defined as teachers making innovations that will add value to educational environments, taking risks to recognize opportunities and taking advantage of them, taking initiative in all processes of education, having the ability to start and implement a project and providing the necessary resources to achieve their professional goals (Ho, 2018).

There are few studies on entrepreneurial teacher behaviors in Turkish context. In the international literature, entrepreneurship and entrepreneurial teacher behaviors have been the subject of more studies. Borasi and Finnigan (2010) listed entrepreneurial teacher behaviors as acting in line with a vision, initiating and sustaining innovation, exploring, and evaluating opportunities, overcoming resource constraints, mastery of networking and connection, fast and timely decision-making, creative problem solving, safe risk-taking, and taking advantage of crisis and uncertainty. Van Dam et al. (2010) listed the individual characteristics that may be related to teachers' entrepreneurial behavior in the form of career adaptation, creative thinking, entrepreneurial knowledge, networking, and team-building skills. In addition, the entrepreneur concluded that the climate directly and indirectly affects entrepreneurial behavior. Oplatka (2017) stated that teachers' entrepreneurial behaviors have the characteristics of innovation and initiative.

#### **School Happiness**

School happiness is a concept that relates to all stakeholders of the school. Happiness at school is directly related to the happiness of the people there. In general, school happiness can be defined as a state of emotional well-being that occurs because of harmony between the goals of the school and the goals of teachers, students, and other employees (Engels, Aelterman, Petegem & Schepens, 2004). The fact that individual goals are compatible with organizational goals allows individuals to participate in organizational activities eagerly. In a happy school, teachers, students, parents, administrators, and other employees adopt the school environment. It is not only the physical dimension that is adopted, but also the psychological and social dimensions in which human relations play a role. But school happiness as

an organization is different from the happiness of any organization. *Because* in educational organizations, the human factor other than the employees may be happy, while the employees may not be happy. There may be no total happiness. In this respect, school happiness differs from organizational happiness because it is related to physical, individual, social-emotional and teaching factors (Talebzadeh & Samkan, 2011). Because organizational happiness is the level of joint effort spent on the realization of the goals of the organization with the goals of the people (Bulut, 2015). This level of effort doesn't mean people are really happy.

School happiness has been the subject of various studies conducted in Turkey. While there was a significant difference between the organizational happiness of school administrators and teachers depending on the school type variable, a negative significant relationship was found between the organizational silence of school administrators and teachers and their organizational happiness levels (Moçosoğlu & Kaya, 2018). According to the opinions of parents, it was determined that the factors that provide student happiness in a school are physical equipment, learning environment, school environment, teacher qualifications, communication, and cooperation, learning activities, social activities, school administration and education policies (Sezer & Can, 2018). According to student views, the school climate related to positive behavior, classroom and school support, school safety, school enjoyment and school norms and rules positively predicted school happiness at a moderate and significant level (Akyürek, 2022). On the other hand, a moderate and positive correlation was found between the organizational happiness of the teachers and their organizational socialization. While the communication dimension has the greatest impact on socialization, it has been found that organizational happiness is a meaningful predictor of socialization (Tösten, Avcı & Şahin, 2018). It was stated that there was a significant relationship between teachers' political skills and school happiness (Özgenel & Bozkurt, 2020). In addition, it was concluded that there was a significant positive relationship between paternalistic leadership behaviors of school principals and organizational happiness (Özgenel & Canuylası, 2020).

## **Present Study**

Innovative school leadership, entrepreneurial teacher behavior, and school happiness are all interrelated in terms of the foundations on which they are based and the results they produce. Innovative school leaders provide opportunities for innovation and change, making it easier especially for teachers and the other staff. Keeping up with change is achieved through the entrepreneurial behavior of employees. Personnel who have adapted to innovation and change with entrepreneurial behaviors reach satisfaction and happiness. This assumption needs to be supported by experimental data. On the other hand, number of studies in the literature investigating innovative school leadership, entrepreneurial teacher behaviors and school happiness is quite small. There is a need to examine the innovative leadership qualities of private school administrators together with entrepreneurial teacher behaviors and school happiness. The goal of this study is to examine the innovative leadership qualities and entrepreneurial teacher behaviors of private school administrators by associating them with school happiness. In this context, the aim of the research is to examine the effect of innovative school leadership and entrepreneurial teacher behaviors on school happiness according to private school teacher perceptions. For this purpose, the following sub-problems were sought to be answered:

- 1. According to the perceptions of private school teachers, what is the level of innovative school leadership of principals?
- 2. According to the perceptions of private school teachers, what is the level of entrepreneurial teacher behavior?
- 3. According to the perceptions of private school teachers, what is the level of school happiness?
- 4. According to private school teacher perceptions, what are the relationships between innovative school leadership, entrepreneurial teacher behaviors and school happiness?
- 5. According to private school teacher perceptions, do innovative school leadership and entrepreneurial teacher behaviors significantly predict school happiness?

#### Method

## **Model of the Research**

The descriptive relational survey model underlies this study. A quantitative research model called a relational survey tries to identify the existence and strength of covariance between two or more variables (Karasar, 2015).

## **Participants**

Ethics Committee Approval (the letter of Selcuk University Rectorate Education Faculty Dean's Scientific Ethics Evaluation Committee dated 04.11.2022 and numbered E-16343714-605.02-399060) was received to carry out this study.

Teachers who work in private primary, middle and high schools in Turkey's Sakarya province's central Adapazarı region make up the study's population. According to the data of Sakarya Provincial Directorate of National Education, the number of teachers working in these schools is 810 (Ministry of National Education [MNE], 2022). Considering these data, the 95% confidence interval states that the minimum sample size for the study is 265 participants (Gürbüz & Şahin, 2014). 270 teachers employed at private schools in Sakarya's central area in the 2022–2023 academic year make up the study's sample. The 95% confidence interval indicates that the number of samples used in this study is adequate for the population. (Gürbüz & Şahin, 2014).

Simple random sampling was used to sample the teachers. The likelihood of selecting the units based on the sample being equal is known as randomness (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2012). In Table 1, descriptive statistics of the sample group regarding demographic variables (gender, educational status, professional seniority, and school level) are given.

Table 1

Descriptive Statistics on Demographic Variables

Variables		N	%
Gender	Female	114	42.2
	Male	156	57.8
Educational status	Undergraduate	189	70.0
	Postgraduate	81	30.0
Professional seniority	1-6 years	41	15.2
·	7-12 years	44	16.3

	13-18 years	54	20.0
	19 years and over	131	48.5
School level	Primary school	93	34.4
	Middle school	57	21.2
	High school	120	44.4
Total		270	100

When Table 1 is analyzed, it can be observed that the percentage of males is higher than the rate of females, with 57.8%. According to the educational status variable it is seen that those with undergraduate are more than those with postgraduate, with 70%. According to the variable of professional seniority, the group with the highest rate is 19 years and over with 48.5%, and the group with the lowest rate is 15.2%, with teachers in the 1-6 years group. Teachers employed by private high schools have the highest rate (44.4%), while those employed by private secondary schools have the lowest rate (21.1%), in accordance with the school level variable.

#### **Data Collection Tools**

## Innovative school leadership scale

In the study, the "Innovative school leadership scale" developed by Akyürek and Karabay (2022) was utilized to assess the innovative school leadership level of principals. The innovative school leadership scale is a five-point Likert scale. The 28-item scale, which is intended to gauge the level of innovative school leadership, was created based on a single theoretical dimension. Confirmatory factor analysis was used in this situation to validate the scale's factor structure. Confirmatory factor analysis revealed that the t values of the latent variables that explained the observed variables were significant at the 01 level. All indicators were incorporated into the model as significant t values were found for each component. Table 2 provides the findings of the innovative school leadership scale's confirmatory factor analysis.

Table 2

Confirmatory Factor Analysis Results of the Innovative School Leadership Scale

Fit measurements	Measurement value	The reference range
_ p	.00	< .01
$X^2/sd$	2.64	≤3
RMSEA	.07	≤.07
SRMR	.02	≤ .05
NNFI	.93	≥ .90
CFI	.95	≥ .95

The p value is significant at the 01 level, as shown in Table 2. It is typical for the p value to be significant in many confirmatory factor analyses because of the huge sample size. Hence, different fit indices for the fit of the two matrices were assessed. In this framework, X<sup>2</sup>/sd, SRMR and CFI values are excellent; it can be infered that the RMSEA and NNFI values have a good level of agreement.

In light of this, it is possible to say the 28-item innovative school leadership scale's single factor structure was validated as a model. Within the purview of reliability analysis, item analysis was initially studied by utilizing the item-total correlation model. Additionally, the reliability of the scale was assessed by

using the Cronbach's alpha criterion. Table 3 depicts the findings of the reliability analysis of the innovative school leadership scale.

Table 3
Reliability Analysis Results of the Innovative School Leadership Scale

Dimensions	Alpha value	Item-total correlation
Scale	.98	.6688

The overall internal consistency coefficient (Cronbach alpha) of the innovative school leadership scale is .98. This finding demonstrates that the innovative school leadership scale's general internal consistency coefficient is adequate for the reliability of the scale scores. It is observed that the item-total correlations for all items in the scale range between .66 and .88. These values of item-total correlations can be viewed as items in the scale distinguish individuals well.

## **Entrepreneurial teacher behavior scale**

In the study, the "Entrepreneurial teacher behaviors scale" developed by Van Dam, Schipper and Runhaar (2010) and adapted into Turkish by Akkaya and Çetin (2022) was utilized to ascertain the level of entrepreneurial teacher behaviors. Entrepreneurial teacher behavior scale was prepared in a five-point Likert type. This scale, which consists of 13 items and targets to gauge the level of entrepreneurial teacher behaviors, was developed on the basis of three theoretical dimensions. These dimensions are recognizing opportunities, taking initiative, and taking risks. In this circumstance, confirmatory factor analysis was conducted to verify the factor design of the scale. As a consequence of confirmatory factor analysis, the t values of the latent variables describing the observed variables were judged to be significant at the .01 level. All indicators were incorporated into the model as significant t values could be found for each component. Table 4 provides the findings of the entrepreneurial teacher behavior scale's confirmatory factor analysis.

Table 4

Confirmatory Factor Analysis Results of the Entrepreneurial Teacher Behavior Scale

Fit measurements	Measurement value	The reference range
_p	.00	< .01
$X^2/sd$	1.84	≤3
RMSEA	.05	≤ .05
SRMR	.05	≤ .05
NNFI	.96	≥ .95
CFI	.97	≥ .95

The p value is significant at the 01 level, as can be shown in Table 4. It is typical for the p value to be significant in many confirmatory factor analyses because of the huge sample size. Because of this, various fit indices for the fit of the two matrices were assessed. In this circumstance, it may be assumed that  $X^2$ /sd, RMSEA, SRMR, NNFI and CFI values have a perfect fit.

Ultimately, it can be asserted that the three-factor structure of the entrepreneurial teacher behavior scale consisting of 13 items (recognition of opportunities factor with 4 items, taking initiative factor with 5 items and risk-taking factor with 4 items) was verified as a model. On the other hand, within the scope of reliability analyses, firstly, item analysis was reviewed by using item-total correlation. Moreover, the

reliability of the scale was tested using Cronbach's alpha. Table 5 presents the findings of the reliability analysis of the entrepreneurial teacher behavior scale.

Table 5
Reliability Analysis Results of the Entrepreneurial Teacher Behavior Scale

Dimensions	Alpha value	Item-total correlation
Recognizing opportunities	.79	.5665
Taking initiative	.81	.5767
Risk taking	.81	.4676
Scale (General)	.87	.3270

The general internal consistency coefficient (Cronbach alpha) of the entrepreneurial teacher behavior scale is .87. This finding indicates that the entrepreneurial teacher conduct scale's general internal consistency coefficient is enough for the reliability of the scale's results. The range of the item-total correlations for the entire scale was from .32 to .70. The results of the item-total correlations indicate that the scale's items are effective at differentiating people from one another.

## School happiness scale

In the study, the "School happiness scale" developed by Sezer and Can (2019) was utilized to ascertain the level of school happiness. The school happiness scale was prepared in a five-point Likert type. The scale, which consists of 26 items and targets to gauge the level of school happiness, was formed on the basis of five theoretical dimensions. These dimensions are physical equipment, learning environment, cooperation, activities, and school administration. In this circumstance, confirmatory factor analysis was conducted to verify the factor design of the scale. The t values of the latent variables describing the observed variables were determined to be significant at the 01 level as a consequence of confirmatory factor analysis. All indicators were included in the model because significant t values could be found for each component. Table 6 presents the findings of the school happiness scale's confirmatory factor analysis.

Table 6
Confirmatory Factor Analysis Results of the School Happiness Scale

Fit measurements	Measurement value	The reference range
_ p	.00	< .01
X <sup>2</sup> /sd	2.53	≤3
RMSEA	.07	≤ .07
SRMR	.06	≤ .08
NNFI	.90	≥ .90
CFI	.91	≥ .90

As seen in Table 6, the p value is significant at the .01 level. It is typical for the p value to be significant in many confirmatory factor analyses because of the huge sample size. Due to this, various fit indices for the fit of the two matrices were examined. In this circumstance, it can be said that the  $X^2$ /sd value has an excellent level, while the RMSEA, SRMR, NNFI and CFI values have a good level of fit. As a result, it is seen that the five-factor structure of the 26-item school happiness scale (4 items for physical equipment, 7 items for learning environment, 8 items for cooperation factor, 3 items for activities factor and 4 items for school management factor) is verified as a model.

In the context of the scale's reliability analyses, firstly, item analysis was performed using item-total correlation. Moreover, the reliability of the scale was measured using Cronbach's alpha. Table 7 presents the findings of the reliability analysis of the school happiness scale.

Table 7
Reliability Analysis Results of School Happiness Scale

Dimensions	Alpha value	Item-total correlation
Physical equipment	.85	.6379
Learning environment	.90	.6183
Cooperation	.92	.6780
Activities	.83	.6377
School administration	.94	.8289
Scale (General)	.96	.5977

The general internal consistency coefficient (Cronbach alpha) of the school happiness scale is .96. This finding indicates that the school happiness scale's general internal consistency coefficient is enough for the reliability of the scale's results. All of the scale's items had item-total correlations that varied from .59 to .77. The findings of the item-total correlations indicate that the scale's items are effective at differentiating people from one another.

## **Data Collection and Analysis**

The measurement tools used in the research was applied between 5-16 December 2022. Within the scope of the analysis of the data, firstly, the condition of meeting the normality assumption of the data set was examined. In this direction, standard deviation, skewness, and kurtosis coefficients and mean, median and mode values were examined. The calculated standard deviation, skewness and kurtosis values of the innovative school leadership scale are as follows; .89, -.53, .01. The overall scale of entrepreneurial teacher behavior and the standard deviation, skewness, and kurtosis values calculated on the basis of dimensions are as follows: Overall scale is .53, -.20, -.06; recognizing opportunities dimension .64, -.38, .28; initiative dimension .58, -.49, 1.01; risk taking dimension .74, -.01, -.10. The values of standard deviation, skewness, and kurtosis calculated on the basis of the overall and dimensions of the school happiness scale are as follows: The overall scale of the scale is .63, -.64, .95; physical equipment size .92, -.45, -.28; learning environment dimension .64, -.96, 2.16; cooperation dimension .63, -.66, 1.43; activities dimension .87, -.73, .37; school administration dimension .96, -.65, .05. The kurtosis and skewness values in the study are between ±2. According to these findings, the data set exhibits a normal distribution (George & Mallery, 2010). Moreover, in the analyzes conducted, it was ascertained that the arithmetic mean was 3.56, the median value was 3.78, and the mode value was 4.00 in the innovative school leadership scale. In the scale of entrepreneurial teacher behaviors, it was determined that the arithmetic mean was 3.67, the median value was 3.69, and the mode value was 3.62. In the school happiness scale, it was ascertained that the arithmetic mean was 3.71, the median value was 3.78, and the mode value was 4.04These numbers' proximity demonstrates that the data set is regularly distributed (Hair, Ringle, & Sarstedt, 2011). To examine the research's sub-problems in this situation, parametric test techniques were selected.

The rating range of the innovative school leadership scale is as follows; strongly disagree (1.00-1.79), disagree (1.80-2.59), neither agree nor disagree (2.60-3.39), agree (3.40-4.19), completely agree (4.20-5.00). The rating range of the entrepreneurial teacher behavior scale is as follows; never (1.00-1.79),

very rarely (1.80-2.59), sometimes (2.60-3.39), often (3.40-4.19), always (4.20-5.00). The rating range of the school happiness scale is as follows; never (1.00-1.79), rarely (1.80-2.59), sometimes (2.60-3.39), mostly (3.40-4.19), always (4.20-5.00). In the process of analyzing the data, primarily arithmetic mean and standard deviation techniques were utilized. Pearson product-moment correlation coefficient (r) was gauged in the analysis of the relationships between the variables. The correlation coefficient being between 0.70-1.00 in absolute value is high; between 0.70-0.30, moderate; If it is between 0.30-0.00, it can be defined as a low-level relationship (Büyüköztürk, 2013). Multiple linear regression analysis was carried out so as to ascertain the predictive levels of independent variables for dependent variables. Standardized Beta ( $\beta$ ) coefficients and their significance t-test results were considered in the interpretation of the regression analyses.

#### **Results**

Within the scope of the first sub-problem of the research; according to private school teacher perceptions, the innovative school leadership level of principals was studied. Table 8 includes descriptive statistics regarding the innovative school leadership level of principals.

Table 8

Descriptive Statistics on Innovative School Leadership Level

Dimensions	N	$\overline{x}$	SD
Innovative school leadership	270	3.56	.89

When Table 8 is analyzed, it is observed that teachers' perceptions of principals' innovative school leadership level are at the "agree" level ( $\bar{x}$ = 3.56).

Within the scope of the second sub-problem of the research; according to private school teacher perceptions, the level of entrepreneurial teacher behaviors was examined. In Table 9, descriptive statistics regarding the level of entrepreneurial teacher behaviors are given.

Table 9

Descriptive Statistics on the Level of Entrepreneurial Teacher Behaviors

Dimensions	N	$\overline{x}$	SD	
Recognizing opportunities	270	3.74	.64	
Taking initiative	270	3.95	.58	
Risk taking	270	3.25	.74	
Entrepreneurial teacher behaviors (General)	270	3.67	.53	

When Table 9 is analyzed, it is observed that teachers' perceptions about the level of entrepreneurial teacher behaviors are at the level of "agree" ( $\bar{x}$ = 3.67). In addition, "agree" in the dimensions of recognizing opportunities ( $\bar{x}$ = 3.74) and taking initiative ( $\bar{x}$ = 3.95) of teachers' perceptions of the level of entrepreneurial teacher behaviors; In the risk-taking ( $\bar{x}$ = 3.25) dimension, it is seen that it is at the level of "neither agree nor disagree". When the dimensions are examined, the dimension in which teachers perceive the level of entrepreneurial teacher behaviors the highest is taking initiative and it is seen that the dimension they perceive the least is risk taking.

Within the scope of the third sub-problem of the research; according to the perceptions of private school teachers, the level of school happiness was examined. Table 10 includes descriptive statistics on the level of school happiness.

Table 10

Descriptive Statistics on Level of School Happiness

Dimensions	N	$\overline{x}$	SD	
Physical equipment	270	3.44	.92	
Learning environment	270	3.84	.64	
Cooperation	270	3.88	.63	
Activities	270	3.48	.87	
School administration	270	3.57	.96	
School happiness (General)	270	3.71	.63	

As seen in Table 10, the perceptions of teachers about the level of school happiness are at the level of "agree" ( $\bar{x}$ = 3.71). In addition, the level of school happiness of teachers in the dimensions of physical equipment ( $\bar{x}$ = 3.44), learning environment ( $\bar{x}$ = 3.84), cooperation ( $\bar{x}$ = 3.88), activities ( $\bar{x}$ = 3.48) and school administration ( $\bar{x}$ = 3.57). It is seen that their perceptions about the subject are at the level of "I agree". When the dimensions are analyzed, the dimension in which teachers perceive the highest level of school happiness is cooperation and the lowest perceived dimension is physical equipment.

Within the scope of the fourth sub-problem of the research; according to private school teacher perceptions, the level of relations between innovative school leadership, entrepreneurial teacher behaviors and school happiness were examined. Table 11 includes the results of correlation analysis between variables.

Table 11
Correlation Analysis Results Between Variables

Variables	1	2	3
1.Innovative school leadership	1.00	.27*	.73*
2.Entrepreneurial teacher behaviors		1.00	.34*
3.School happiness			1.00

<sup>\*</sup> *p*< .01

When Table 11 is analyzed, it is observed that there is a low-level positive and significant relationship between innovative school leadership and entrepreneurial teacher behaviors (r= .27, p< .01). In other terms, as the innovative school leadership level of principals increases, there is a slight increase in the level of entrepreneurial teacher behaviors.

It is seen that there is a highly positive and significant relationship between innovative school leadership and school happiness (r= .73, p< .01). In other terms, as the innovative school leadership level of the principals increases, there is a high increase in the level of school happiness.

It is seen that there is a moderately positive and significant relationship between entrepreneurial teacher behaviors and school happiness (r= .34, p< .01). In other words, as the level of entrepreneurial teacher behaviors increases, there is a moderate increase in the level of school happiness.

Within the scope of the fifth sub-problem of the research; according to private school teacher perceptions, innovative school leadership and entrepreneurial teacher behaviors, predicting school

happiness at a significant level were examined. Table 12 presents the findings of the multiple linear regression analysis on the prediction of school happiness.

Table 12

Multiple Linear Regression Analysis Results on Predicting School Happiness

	Standard	!				Partial
В	Error B	β	t	p	Dual r	$\boldsymbol{R}$
1.263	.190		6.641	.000		
.491	.030	.688	16.256	$.000^{*}$	.730	.705
.190	.051	.159	3.755	$.000^{*}$	.344	.224
$F_{\ell}$	<sub>2, 267)</sub> = 167.6	577	p = .000			
	1.263 .491 .190	B         Error B           1.263         .190           .491         .030           .190         .051	1.263 .190 .491 .030 .688	B         Error $_B$ $\beta$ $t$ 1.263         .190          6.641           .491         .030         .688         16.256           .190         .051         .159         3.755	B         Error $_B$ $\beta$ $t$ $p$ 1.263         .190          6.641         .000           .491         .030         .688         16.256         .000*           .190         .051         .159         3.755         .000*	B         Error $_B$ β         t         p         Dual r           1.263         .190          6.641         .000            .491         .030         .688         16.256         .000*         .730           .190         .051         .159         3.755         .000*         .344

<sup>\*</sup> *p*< .01

In Table 12, when the bilateral and partial correlations between the predictor variables and the predicted (dependent) variable were analyzed, it was found that there was a positive and high level of relationship (r= .73) between innovative school leadership and school happiness, but when other variables were controlled, the correlation between the two variables was calculated as r= .71. is seen. It is seen that there is a positive and moderate relationship (r= .34) between entrepreneurial teacher behaviors and school happiness, but when other variables are controlled, the correlation between the two variables is calculated as r= .22.

Innovative school leadership and entrepreneurial teacher behavior variables together give a high and significant relationship with school happiness (R= .746, R<sup>2</sup>= .557, p< .01). Together, these two variables explain 56% of the total variance in school happiness scores.

According to the standardized regression coefficient ( $\beta$ ), the relative importance of the predictor variables on school happiness is innovative school leadership and entrepreneurial teacher behavior variables. When the t-test results regarding the significance of the regression coefficients are analyzed, it is observed that the variables of innovative school leadership and entrepreneurial teacher behaviors are important (significant) predictors of school happiness.

According to the results of the regression analysis, the mathematical form of the regression equation for the prediction of school happiness is as follows: School happiness = 1.263+.491Innovative school leadership+.190 Entrepreneurial teacher behaviors.

## **Discussion, Conclusion and Suggestions**

In this research, the effect of innovative school leadership and entrepreneurial teacher behaviors on school happiness was examined according to teacher perceptions in the context of private schools. According to the findings, the perceptions of private school teachers about the level of innovative school leadership of their principals are at a high level. Private school teachers' perceptions of the level of entrepreneurial teacher behavior are at a high level. Private school teachers' perceptions of school

happiness level are also high. There is a low, positive, significant relationship between innovative school leadership and entrepreneurial teacher behavior. There is a high, positive, significant relationship between innovative school leadership and school happiness. As the level of innovative school leadership of the principals increases, there is a high degree of increase in the level of school happiness. There is a moderate, positive, significant relationship between entrepreneurial teacher behaviors and school happiness. As the level of entrepreneurial teacher behavior increases, there is a moderate increase in the level of school happiness. Innovative school leadership and entrepreneurial teacher behaviors significantly predict school happiness.

According to the findings obtained from this study, private school teachers perceive that their principals show innovative leadership behaviors at a high level. Depending on this result, it may be concluded that the school principals in the sample, possessed innovative leadership characteristics and used them effectively. A study conducted by Pamuk (2022) similarly found that teachers' perception about the school administrators they worked with showed high levels of innovative leadership characteristics. Innovative leadership positively affects teachers. As a matter of fact, Orphanos and Orr (2014) concluded that innovative school leadership behaviors increase teacher satisfaction and motivation and affect students' learning level. In order to achieve competitive advantage, it must benefit from innovations at a high level and be managed according to new management approaches (Hitt, Ireland, Camp & Sexton, 2001). This awareness leads to private school principals being more innovative. As a leader, exploring innovations and trying to implement them in the school environment is a necessity both in terms of their personal career and organizational solidity. But it doesn't mean that innovative behavior isn't expected and shown from leaders of public schools. The leaders of all educational organizations, whether in the private or public sector, must demonstrate contemporary management and leadership qualities. People in the organizations must be governed according to twenty-first century definition and characteristics (Marquardt, 2000). A school leader with an innovative understanding of leadership and management is aware of what humans are and how they should be managed.

According to the results of the research, it was concluded that private school teachers showed highly entrepreneurial teacher behaviors. This result is consistent with the fact that private school teachers want to maintain their position and improve their competitiveness. It is of particular importance to demonstrate entrepreneurial teacher behaviour in the competitive environment of the private sector. As a matter of fact, entrepreneurial teacher behaviors are defined as acting in line with a vision, initiating and sustaining innovation, discovering and evaluating opportunities, overcoming resource constraints, mastery in networking and connecting, and making fast and timely decisions (Borasi & Finnigan, 2010). The ability of teachers to demonstrate these behaviors positively affects their position in the organization. On the other hand, considering that the most important factors that predict entrepreneurial teacher behaviors are positive attitudes towards learning and proactive personality (Usaci, 2015), it is also meaningful to obtain this result. The fact that entrepreneurial teachers are interested in learning by taking an active role in business processes helps to establish a positive climate in their schools.

Another finding of the study revealed that the school happiness perception of private school teachers is at a high level. This result, may come out due to the circumstances in which the private school teachers in the sample find themselves. However, this finding shows that teachers' own personal goals and organizational goals are compatible. There is a state of emotional well-being experienced due to the unity of goals (Engels, Aelterman, Petegem & Schepens, 2004). School happiness depends not only on

the unity of the goal, but also on various physical and psychological dimensions. The organizational happiness of the teachers is also related to their organizational socialization (Tösten, Avcı & Şahin, 2018). The fact that private school teachers have the opportunity to socialize positively affects school happiness. In addition, the political skills that teachers have shown in the school environment may have contributed to school happiness (Özgenel & Bozkurt, 2020). On the other hand, a significant positive relationship was also identified between the paternalistic leadership behaviors of school principals and organizational happiness (Özgenel & Canuylası, 2020). The result shows that private school principals may have increased the happiness of teachers with their paternalist leadership behaviors.

According to another conclusion reached in the study, there is a low-level, positive-oriented significant relationship between innovative school leadership and entrepreneurial teacher behaviors. There is a high, positive, significant relationship between innovative school leadership and school happiness. These results show that there are significant correlations between innovative school leadership, entrepreneurial teacher behavior, and school happiness. As innovative leadership qualities increase, it can be expected that entrepreneurial teacher behavior and school happiness will also increase. As a matter of fact, innovative school leaders put extra effort into increasing teachers' entrepreneurship and creating a happy school environment (Cunniff, Elder & Padover, 2013; Akyürek, 2020). Entrepreneurial teachers have career fit, creative thinking, entrepreneurial knowledge, networking and team-building skills (Van Dam et al., 2010). These features make it easier to work in concert with innovative leaders. Innovation and initiative-taking characteristics reflect the entrepreneurship of teachers (Oplatka, 2017). Innovative school leaders can use these teacher traits as opportunities for change and transformation. As a matter of fact, the fact that there is a meaningful relationship between entrepreneurial leadership characteristics and innovation levels of schools (Eroğlu Bozkurt, 2019), which is a dimension of innovation competencies of good managers, confirms that both leaders and teachers should have entrepreneurial qualities.

The research findings showed that innovative school leadership and entrepreneurial teacher behaviors significantly predicted school happiness. This result shows that organizational happiness will be realized in an educational institution where innovative school leadership and entrepreneurial teacher behaviors are exhibited. Innovative school leaders easily embrace entrepreneurial teachers and want to work together. The ability of entrepreneurial teachers to bring change and transformation, take risks and initiative allows them to be influenced by innovative leaders. Those who work in schools where this unity is achieved are happy. In fact, the ability of entrepreneurial teachers to innovate to add value to educational environments, to recognize opportunities and take risks to take advantage of them, to take initiative in all processes of education, to have the ability to initiate and implement a project and to provide the resources necessary to achieve their professional goals (Ho, 2018) make it easier for them to work effectively with innovative leaders. Greeting teachers with appreciation, love, respect and tolerance in the organization, living the love of teaching and students, seeing empathy, witnessing the happiness of the students leads to their happiness and therefore to the happiness of the school (Ertong, 2018). In this respect, it can be thought that innovative leaders bring features to the school environment that will make teachers happy.

In the light of the research findings, the following recommendations can be taken into consideration:

- In-service trainings can be given to school leaders in order to activate innovative leadership behaviors.
- In order to introduce entrepreneurial teacher behaviors and to adopt entrepreneurship, activities that can be functional in practice can be organized for teachers.
- Innovation and entrepreneurship can be effectively included in the curriculum of courses at all levels of education, especially in the training of teacher candidates.
- The sample of this study consists of private school teachers. Broader work involving teachers in both private and public schools could be conducted.
- Comprehensive research can be carried out to define school happiness with the participation of all stakeholders such as teachers, students, administrators, parents and civil servants.

#### **Author Contribution Rates**

The authors contributed equally to the study.

#### **Ethical Declaration**

All rules included in the "Directive for Scientific Research and Publication Ethics in Higher Education Institutions" have been adhered to, and none of the "Actions Contrary to Scientific Research and Publication Ethics" included in the second section of the Directive have been implemented.

#### **Conflict Statement**

The author declares no competing interests.

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