Political Economy and Management of Education

ISSN: 2717 - 9613 dergipark.org.tr/peme

RESEARCH ARTICLE

The Relationship Between Teachers' Psychological Resilience and Job Satisfaction Levels

Mustafa Bayrakcı¹ | Ebru Yalçın Kaya²

- ¹ Prof. Dr., Educational Administration Department, Sakarya University, Sakarya, Turkey
- ² Ministry of National Education, Sakarya, Turkey

Correspondence:

Ebru Yalçın Kaya

Email: <u>yalcineebru@gmail.com</u>

Submitted: 26.03.2024 Revision Requested: 02.04.2024 Revision Received: 04.04.2024 Published Online: 05.04.2024

Citation: Bayrakcı, M. & Yalçın Kaya, E. (2024). The relationship between teachers' psychological resilience and job satisfaction levels. *Political Economy and Management Education*, 5(1), 1-19.

Abstract

This study aims to determine of teachers' psychological resilience and job satisfaction levels and examine these two variables demographics. The study employed a quantitative research method using a survey model. To this end, 392 teachers working at primary, middle, and high school levels affiliated with the National Education Directorate in the central districts of Sakarya Province participated in the research. To measure teachers' levels of psychological resilience, the Psychological Resilience Scale for Adults, developed by Friborg et al. (2003) and adapted into Turkish by Basım and Çetin (2011), was used. To determine job satisfaction levels, the Job Satisfaction Scale developed by Brayfield and Rothe (1951) and adapted by Judge et al. (1998) was utilized. The data were analyzed using the SPSS program, and the findings were interpreted. It was observed that teachers' levels of psychological resilience and job satisfaction were at a moderate. Teachers' levels of psychological resilience did not show statistically significant differences by gender, age, subject area, type of school, professional seniority, and tenure at the school. Job satisfaction levels did not show statistically significant differences by gender, subject area, and tenure at the school. However, job satisfaction levels showed statistically significant differences based on age, type of school, and professional seniority. Additionally, it can be said that as the levels of psychological resilience increase, teachers' job satisfaction also increases.

Keywords: Teacher, psychological resilience, job satisfaction.

Introduction

Teaching profession differs from other professions in many ways and has its specific requirements. For example, teachers must work separately from other colleagues because they spend most of their time in the classroom. However, reasons such as working with immature students, time pressure, and many duties and responsibilities to be done at school at the same time make it difficult to maintain this profession. Therefore, psychological resilience is of particular importance for teachers.

Teachers, who are the basis of the education system, train and develop qualified human resources from all walks of life and will serve in every field, contribute to the healthy socialization of individuals, and try to lay the foundations of the country by educating and developing individuals and transfer cultural values to young generations. It should be considered the most sacred profession of the past because it has an important function that ensures its transfer to the future, and guides and directs young generations (Yüksel & Bilgin, 2021). For these reasons, the professional satisfaction of teachers in the education sector is very important. In this study, the psychological resilience and job satisfaction of teachers were emphasized.

Psychological Resilience

The term was first used in the literature by Block in 1950. Psychological resilience is the belief that individuals who can overcome existing difficulties and develop better than expected despite the difficulties have a personal characteristic or capacity that enables them to survive, and the individual's ability to adapt quickly to stressful life experiences and stressful situations (Masten et al., 1990).

Individuals have different reactions and coping strategies to many challenges, negative events, and stress. While some people react to stressful and traumatic situations with psychological disorders such as anxiety and depression, others recover from negative mental states for a short time and continue to live their normal lives. This strength of people who recover and continue their lives is called psychological resilience according to the positive psychology approach (Doğan, 2015).

As can be seen, there are many definitions of psychological resilience. Each definition includes a different feature of psychological resilience. Masten et al. (1990) reviewed the common aspects of the definitions with the literature review they produced and discussed the concept of psychological resilience with three basic features. These are:

• The trait of primary psychological resilience was first used to describe the belief that individuals possess a particular characteristic or ability that allows them to exist, which allows them to overcome existing difficulties and develop better than expected despite adversity. The life stories of people who became famous or successful despite growing up in unfavourable and difficult life circumstances are always linked to this basic phenomenon. This relationship parallels and is consistent with the findings of systematic resilience studies that identify factors that allow children to grow up in high-risk conditions and high-risk groups to perform well.

- The second key feature of resilience is the individual's ability to rapidly adapt to stressful life experiences. In such resilience studies, major stressors such as divorce and family conflict are placed at the centre.
- The third characteristic of psychological resilience is the ability to overcome traumas such as experiencing a natural disaster, losing a loved one, or having an accident. Studies that include the third group are studies that examine individual characteristics and differences that play an important role in excluding the possible effects of trauma.

It can be said that there are three common variables associated with the concept of psychological resilience. The first of these variables is to react positively and remain positive in the face of risk in times of high risk. The second variable is the ability to continue to use skills effectively in highly stressful situations. The third variable is the ease of recovery from trauma (Polatcı et al., 2017).

Job Satisfaction

Job satisfaction, in the simplest terms, is a concept that covers all attitudes, behaviours, and thoughts of employees about their jobs. In other words, it is a measure of employees' satisfaction with their jobs (Aksu, 2012). Job satisfaction is essential for employees to be happy in their working life. The goal of increasing job satisfaction for personal development and enrichment of employees has been an important issue for many years. The development of knowledge, skills, and communication characteristics of the person will make his/her life meaningful in business life as well as in private life and will help him/her to act more confidently (Telman & Ünsal, 2004). Satisfaction of employees towards the organization and their jobs can be called job satisfaction and dissatisfaction can be called job dissatisfaction. In the research of researchers on job satisfaction, the happiness that the employee obtains in his/her job and the positive emotional state he/she feels from his/her job can be defined as job satisfaction. According to the most common view, job satisfaction is related to the extent to which the employee's expectations about his/her job and working environment are met (Ertan, 2019).

The most important feature of job satisfaction is that it is an emotional concept. Therefore, it puts mental states in the second plan. Since job satisfaction varies from person to person, the most important factor that a manager can do in this situation is to help the employee in every way necessary to reach the maximum. In studies on job satisfaction, it is generally considered a factor that provides effective productivity gains in terms of improving organizational behavioural performance (İşcan & Sayın, 2010). Although intrinsic satisfaction and extrinsic satisfaction are similar in job satisfaction definitions, the situations in which they are affected are different. Intrinsic satisfaction comes from the expectations of employees that motivate them emotionally. The satisfaction of the employee in creating joint work with colleagues is evaluated in terms of intrinsic satisfaction. External satisfaction, on the other hand, is formed under the influence of factors external to the individual. For example, an employee with a low salary has a low level of external satisfaction although he/she enjoys his/her job. As a result, employees' self-discovery and achievement of personal goals affect intrinsic satisfaction. If employees can use their skills at work and ensure their personal development, the level of intrinsic satisfaction will be high (Öcal, 2011).

According to Sertçe (2003), the importance of job satisfaction can be categorized under three headings. These are;

Personal aspect: It is believed that a high level of job satisfaction will contribute to employee happiness, whereas a low level of job satisfaction will lead to disengagement from one's job and thus to apathy and disharmony.

Organizational perspective: Organisations that can meet employee expectations do not have problems in finding employees and their employees are permanent, whereas organizations that cannot provide job satisfaction and cannot meet expectations, have difficulty in finding employees, increase the absenteeism of existing employees, and as a result, decrease productivity, show how important job satisfaction is for the organization.

The view from the manager's point: The Manager's success depends on the employee's performance in line with the organization's goals. Being appreciated by managers, especially in the presence of others, increases employees' enthusiasm for their work and their respect for their managers.

Teachers, who are the foundation of the education system, train and develop qualified human resources from all walks of life, contribute to the healthy socialization of individuals who will serve in every field and try to lay the foundations of the country by educating and developing individuals and transfer cultural values to young generations. Teaching should be regarded as the most sacred profession of the past because it has an important function that ensures its transfer to the future, and guides and directs young generations (Yüksel & Bilgin, 2021). For this reason, the professional satisfaction of teachers and institutions in the education sector is very important. Schools need to make efforts to ensure teacher satisfaction, to identify and respond to teachers' needs, and to provide opportunities for personal development and skill development because teacher satisfaction is reflected in their attitudes and behaviours towards students. Their outlook on life, thoughts, and respect will affect their values, guide students in healthy lifestyles, and influence their habits. Since teachers educate the next generation, they are the foundation for building the future (Safia, 2020).

One of the most important factors for teachers to work healthily and efficiently and for the education and training process to run smoothly is the employment factor. To be more efficient, to remain competitive, and to develop, organizations depend only on the motivation and dynamics of their employees. Achieving high employee performance and creating synergy in the organization by sustaining this performance depends on job satisfaction (Yavuz & Karadeniz, 2009).

This study aims to investigate whether different variables affect the psychological resilience and job satisfaction levels of teachers, who are the most important factors in education and training. These variables were determined as gender, age, and branch, type of school, length of service in teaching, and length of service in the school.

Method

Research Model

This research, in which the quantitative research method is used, is in the survey model. Survey research, which aims to describe a situation existing in the past or present as it is, allows to work on large groups and is frequently used in the field of social sciences (Karasar, 2012). This research model was used in this study to investigate the relationship between teachers' psychological resilience and job satisfaction.

Population and Sample

In this study, an accessible research group was formed since it would not be possible to reach all the people in the population. For this reason, researchers prefer to use easily accessible case examples as a sampling method. In this sampling method, researchers focus on easily accessible people and situations (Yıldırım & Şimşek, 2008). A total of 392 classroom and branch teachers participated in the study, which was conducted to examine teachers' psychological resilience and job satisfaction. Demographic characteristics of the participants are shown in Table 1.

Table 1. *Demographics of the Participants*

	Demographic Variables	N	%
Gender	Male	237	60.5
Gender	Female	155	39.5
	21-30years	46	11.7
Acc	31-40 years	169	43.1
Age	41-50 years	133	34.0
	51 years and over	44	11.2
D 1	Classroom Teacher	172	43.9
Branch	Branch Teacher	220	56.1
	Primary School	186	47.4
School Type	Middle School	140	35.8
	High School	66	16.8
	1-5 years	31	7.9
Tenure Time in Teaching	6-10 years	115	29.3
Tenure Time in Teaching	11-15 years	82	20.9
	16 years and over	164	41.8
	1-3 years	121	30.9
Tanana at Cabaal	4-6 years	115	29.3
Tenure at School	7-9 years	68	17.3
	10 years and over	88	22.4

Table 1 shows the demographics of the teachers participating in the study. As Table 1 shows, the gender distribution is 60, 5% (f=237) for male participants and 39, 5% (f=155) for female participants. When the ages of the participants are analysed, it is seen that the highest average age

group is 31-40 years old with 43,1% (f=169) and the lowest average age group is 51 years and over with 11,2% (f=44). The other age groups are the 41-50 age group with 34,0% (f=84) and 21-30 age group with 11,7% (f=46). When the branches of the participants are analysed, it is seen that 43, 9% (f=172) are classroom teachers and 56, 1% (f=220) are branch teachers. When the school type of the participants was analysed, it was found that 47, 4% (f=186) of the participants were primary school teachers, 35, 8% (f=140) were middle school teachers and 16, 8% (f=66) were high school teachers. As for the tenure of the participants in teaching, it was seen that 7,9% (f=31) had a seniority of 1-5 years, 29,3% (f=115) had a seniority of 6-10 years, 20,9% (f=82) had a seniority of 11-15 years and 41,8% (f=164) had a seniority of 16 years or more. When the tenure of the participants in their schools is analysed, it is understood from the data in the table that 30,9% (f=121) have been working for 1-3 years, 29,3% (f=115) have been working for 4-6 years, 17,3% (f=68) have been working for 7-9 years and 22,4% (f=88) have been working for 10 years or more.

Data Collection Technique and Instrument

In this study, it was aimed to reach classroom and branch teachers working in Sakarya Province. Data collection tools were saved in Google Forms and they were sent to the teachers and the data were downloaded from here. Of the teachers to whom the scales were sent, 392 of them responded, permission to use the scales was obtained from researchers who adapted the scales via e-mail.

"Psychological Resilience Scale for Adults", which was developed by Friborg et al. (2003) to determine the psychological resilience levels of adult individuals and adapted into Turkish by Basım and Çetin (2011), is a 5-point Likert-type measurement tool consisting of 33 items. The lowest score that can be obtained from the scale is 33 and the highest score is 165. An increase in the score obtained from the scale means that the participants have a high level of psychological resilience. In the six-factor scale, 'structural style' (3,9,15,21) and 'future perception' (2,8,14,20) are 4 items each; 'family cohesion' (5,11,17,23,26,32), 'self-perception' (1,7,13,19,28,31) and 'social competence' (4,10,16,22,25,29) with 6 items each and 'social resources' (6,12,18,24,27,30,33) with 7 items (Basım & Çetin, 2011). The rating system for this scale takes the form of a five-point Likert scale. If the psychological resilience is expected to increase as the teacher's score increases, the answer boxes are 12345 from left to right. If the aim is to increase mental resilience as the values decrease, the answer boxes should be evaluated as 54321 from left to right. In addition, there are reverse coded items in the scale and these items should be scored in reversely. In addition, the total Cronbach's alpha coefficient of the scale was .86.

To determine the level of satisfaction of teachers with their jobs, the "Job Satisfaction Scale", which was developed by Brayfield and Rothe (1951) and created as a 5-item short form by Judge et al. (1998), was used. The scale items, whose third and fifth items were reverse coded, were evaluated as a 5-point Likert-type rating (1 - Strongly disagree and 5 - Strongly agree) (Aryee et al., 1999). The reliability coefficient was .88 (Judge et al., 1998).

Data Analysis

Quantitative analysis methods were used to analyse the data collected within the scope of the study using SPSS 26. Quantitative analysis is defined as "the analysis that aims to conclude by analysing the data collected for the research and converting them into statistics" (Dawson, 2015). Basic statistical methods such as mean, standard deviation, frequency, and percentage analysis were used to determine the participants' socio-demographic and occupational characteristics, work-related observations, and descriptive observations on psychological resilience and job satisfaction. Mann-Whitney U-test and Kruskal-Wallis Variance tests, which are non-parametric tests, were used to analyse the data of this scale.

Table 2. Normality Test

	Mean	S. D	Kolmogorov- Simirnov(K-S)
Psychological Resilience Scale	3,10	0,22	0,00
Job Satisfaction	3,10	0,42	0,00

According to the results of the normality test, the Kolmogorov-Smirnov (n>50) coefficient of the data belonging to the psychological resilience scale and job satisfaction scales is p<.05, thus the data did not show a normal distribution. Mann-Whitney U test and Kruskal-Wallis Variance tests, which are nonparametric, were used to compare teachers' levels of resilience and satisfaction. The scales used in the study were previously validated and reliable scales. Reliability analyses were applied to the scales for the sample applied in this study. Cronbach's alpha coefficient was used as the reliability criterion of the scales. Cronbach's alpha is the most widely used method in internal consistency calculations. In addition, Cronbach's alpha coefficient is used when the number of values that an item can take is above two (Akbulut, 2010).

Reliability tests were applied to all variables in the scales in the SPSS 26.0 package program, and the reliability results and Cronbach's alpha values of the reliability tests are shown in Table 3.

Table 3. Reliability Results of Psychological Resilience Scale and Job Satisfaction Scale

Scale Name	Cronbach's Alpha	Item Number
Psychological Resilience Scale	,823	33
Job Satisfaction Scale	,901	5

As Table 3 shows, Cronbach's Alpha Reliability Coefficient were α >.70, thus the reliability criteria was satisfied (Karasar, 2000).

Findings

Descriptive Findings on Psychological Resilience and Job Satisfaction Levels of Teachers

Descriptive Findings on Teachers' Psychological Resilience

When the variables in the psychological resilience scale of the teachers are analysed, the variable "I solve my problems ..." has the highest mean \bar{x} =4,03, and the variable "When I am with

my family, I feel..." has the lowest mean $\bar{x}=1$, 92. The mean values of the other variables are shown in Table 4.

Table 4. Means and standard deviations of the psychological resilience

Psychological Resilience	Mean	S.D
Item1 When something unexpected happens	2,60	1,15
Item2 The plans I made for the future	3,76	1,03
Item3 I am at my best when	2,70	1,36
Item4I like being	2,62	1,28
Item5 My parents' understanding of what matters in life	3,19	1,26
Item6 Personal topics	3,53	1,25
Item7 My personal problems	4,03	0,96
Item8 My future goals	2,33	1,13
Item9 When I start a new job/project	3,54	1,17
Item10 For me, being comfortable/flexible in social environments	3,96	0,98
Item11 When I am with my family, I feel	1,92	1,15
Item12 Me	3,80	1,18
Item13 My abilities	3,68	1,16
Item14 I feel like my future is	3,36	1,21
Item15 I am good at this	3,31	1,26
Item16 The topic of new friendship is thing	3,38	1,25
Item17 My family can be described as	3,68	1,11
Item18 The relationships between my friends	3,83	0,90
Item19 To my judgements and decisions	3,87	0,86
Item20 My aims for the future	3,72	0,90
Item21 Rules and regular habits	3,97	0,97
Item22 Meeting new people	3,73	1,08
Item23 In difficult times, my family	3,48	1,14
Item24 When a member of my family has an emergency	3,95	1,16
Item25 When I am with others:	3,87	1,06
Item26 When it comes to other people, my family behaves like this:	3,91	0,98
Item27 I get support	3,78	1,15
Item28 In difficult times I have a tendency to	3,49	1,08
Item29 Thinking of nice topics for mutual conversation, for me	3,79	1,03
Item30 When I need	3,99	0,97
Item31 The events in my life that I cannot control (with)	3,68	1,15
Item32 In my family, we like to	3,36	1,14
Item33 My close friends/family members	3,83	1,08
Psychological Resilience Levels Scale	3,50	0,43

The scale of psychological resilience levels was scored between 1-5, and since the average score of the scale was \bar{x} =3.50, it was seen that the psychological resilience levels of the teachers were medium.

Descriptive Findings on Teachers' Job Satisfaction

When the variables in the job satisfaction scale of the teachers are examined, the variable "I think that my job is unpleasant" has the highest mean \bar{x} =3.68, and the variable "Every day at work feels like it will never end" has the lowest mean of \bar{x} =3.51. Descriptive findings obtained regarding teachers' job satisfaction levels are given in Table 5.

Table 5. Means and standard deviations of job satisfaction scale

Job Satis	Job Satisfaction		
Item1	I'm quite satisfied with my current job.	3,58	1,13
Item2	Most days I go to work with enthusiasm.	3,56	1,18
Item3	Every day at work seems never-ending.	3,51	1,07
Item4	I find my job enjoyable.	3,53	1,06
Item5	I think my job is unpleasant.	3,68	1,15
	Job Satisfaction Levels Scale	3,56	0,96

The scale of teachers' job satisfaction levels was scored between 1-5, and the mean score of the scale was \bar{x} =3, 56, indicating that teachers' job satisfaction levels were moderate.

Investigation of Teachers' Psychological Resilience and Job Satisfaction Levels by Variables

In this section, whether psychological resilience and job satisfaction show statistically significant differences by demographics is analysed under sub-headings.

Investigation of psychological resilience and job satisfaction levels of teachers by gender

The results of Mann Whitney U-test of teachers' mean scores of psychological resilience and job satisfaction levels by gender variable are shown in Table 6.

Table 6. *U-test results of psychological resilience and job satisfaction levels by gender*

	Gender	n	Mean Rank	Sum of Ranks	U	p
Psychological	Female	237	205,60	48726,50	16211,50	,06
Resilience	Male	155	182,59	28301,50		
Job Satisfaction	Female	237	198,59	47066,50	17871,50	,65
	Male	155	193,30	29961,50		

As Table 6 shows the psychological resilience levels of teachers do not show a statistically significant difference by the gender variable (U= 16211,50, p>0.05). On the other hand, job satisfaction levels do not show a significant difference by gender variable (U=17871, 50, p>0.05), as well.

Investigation of teachers' psychological resilience and job satisfaction levels by age

The Kruskal Wallis H-test for the age variable of the participants' psychological resilience and job satisfaction levels is in Table 7.

Table 7. H-test results of psychological resilience and job satisfaction levels by age

	Age	n	Mean Rank	sd	x^2	P	Significant Difference
Psychological Resilience	21-30 years (A)	46	200,78	3	2,52	0,47	-
	31-40 years (B)	169	196,33				
	41-50 years (C)	133	203,20				

	51 years and over (D)	44	172,40				
Job Satisfaction	21-30 years (A)	46	197,63	3	18,61	0,00	D-B
	31-40 years (B)	169	175,22				
	41-50 years (C)	133	203,54				
	51 years and over (D)	44	255,75				

In Table 7, when the mean scores of teachers' psychological resilience levels were analysed in terms of age variable, no statistically significant difference was observed (x_2 (sd=3, n=392) =2,52, p>0,05). However, when the mean scores of teachers' job satisfaction levels were analysed in terms of age variable, a significant difference was observed (x_2 (sd=3, n=392) =18,61, p<0,05). According to the rank mean of the age groups, it was seen that the highest mean job satisfaction was in the age group of 51 years and over (D) and the lowest was in the age group 31-40 (B). As a result of the post-hoc test to determine from which groups the significant difference between the age groups is, the job satisfaction of the teachers in the age group 51 years and over (D) is higher than the teachers in the age group 31-40 (B).

Investigation of teachers' psychological resilience and job satisfaction levels by branch

Mann Whitney U-test results of the mean scores of teachers' psychological resilience and job satisfaction levels according to the branch variable are shown in Table 8.

Table 8. *U-test results of psychological resilience and job satisfaction levels by branch*

	Branch	n	Mean Rank	Sum of Ranks	U	p
Psychological	Classroom	172	183,62	31583,00	16705,00	,47
Resilience	Branch	220	206,57	45445,00		
Job Satisfaction	Classroom	172	206,28	35481,00	17237,00	,13
	Branch	220	188,85	41547,00		

When Table 8 is examined, it is seen that teachers' psychological resilience levels do not show a significant difference according to the branch variable U= 16705,00, p>0.05. Again, job satisfaction levels do not show a significant difference in terms of branch variable U=17237,00, p>0.05.

Investigation of teachers' psychological resilience and job satisfaction levels by the type of school

The Kruskal Wallis H-test of the participants' psychological resilience and job satisfaction levels for the school-type variable is shown in Table 9.

Table 9. *H-test results of psychological resilience and job satisfaction levels by school type*

	Type of School	n	Mean Rank	sd	x ²	p	Significant Difference
	Primary School (A)	186	195,97	2	0,06	0,97	-
Psychological Resilience	Middle School (B)	140	198,19				
	High School (C)	66	194,42				
Job Satisfaction	Primary School (A)	186	215,38	2	10,43	0,01	A-B

Middle School (B)	140	175,47
High School (C)	66	187,91

According to Table 9, when the mean scores of teachers' psychological resilience levels are analysed in terms of the school type variable, there is no significant difference. x2 (sd=2, n=392) =0,06, p>0,05. When the mean scores of teachers' job satisfaction levels were examined in terms of school type variable, a significant difference was observed x2 (sd=2, n=392) =10,43, p<0,05. According to the rank mean of the school type groups in which teachers work, it was seen that the highest mean job satisfaction was in the primary school (A) school type group and the lowest was in the secondary school (B) school type group. As a result of the posthoc test to determine the groups from which the significant difference between the school type groups in which the teachers work is seen, the job satisfaction of the teachers in the primary school (A) school type group is higher than the teachers in the secondary school (B) age group.

Investigation of teachers' psychological resilience and job satisfaction levels by length of professional service

The Kruskal Wallis H-test of the participants' psychological resilience and job satisfaction levels for the variable of teachers' length of professional service is shown in Table 10.

Table 10. H-test results of psychological resilience and job satisfaction levels by the length of professional service

							Significant
	Professional Seniority	n	Mean Rank	Sd	\mathbf{X}^2	p	Difference
	1-5 years (A)	31	191,74	3	7,64	0,05	-
Psychological	6-10 years (B)	115	190,60				
Resilience	11-15 years (C)	82	172,74				
	16 years and over (D)	164	213,42				
	1-5 years (A)	31	226,73	3	17,82	0,00	D-C, D-B
Iala Catiafaatiaa	6-10 years (B)	115	170,39				
Job Satisfaction	11-15 years (C)	82	175,90				
	16 years and over (D)	164	219,40				

In Table 10, when the mean scores of teachers' psychological resilience levels were analysed in terms of professional service time variable, no significant difference was observed x2 (sd=3, n=392) =7,64, p=0,05. Again, when the mean scores of job satisfaction levels of the participants were analysed in terms of the professional service time variable, a significant difference was observed x2 (sd=3, n=392) =17,82, p<0,05. According to the rank mean of the professional service period groups, it was seen that the highest job satisfaction mean was in the 1-5 years (A) service period group and the lowest was in the 6-10 years (B) service period group. As a result of the post-hoc test to determine from which groups the significant difference between the lengths of service groups is, the job satisfaction levels of teachers with 16 years and above (D) professional service period are higher than the teachers with 11-15 years (C) professional service period and 6-10 years (B) service period.

Investigation of teachers' psychological resilience and job satisfaction levels by the length of service in school

The Kruskal Wallis H-test of the participants' psychological resilience and job satisfaction levels for the variable of the length of service in the school is shown in Table 11.

Table 11. H-test results of psychological resilience and job satisfaction levels by the length of service at school

	Length of service in						Significant
	school	n	Mean Rank	sd	x ²	p	Difference
Psychological Resilience	1-3 years (A)	121	208,04	3	2,73	,44	-
	4-6 years (B)	115	185,69				
	7-9 years (C)	68	202,13				
	10 years and over (D)	88	190,41				
Job Satisfaction	1-3 years (A)	121	198,98	3	2,88	,41	-
	4-6 years (B)	115	186,84				
	7-9 years (C)	68	214,93				
	10 years and over (D)	88	191,47				

When the mean scores of teachers' psychological resilience levels were analysed in terms of length of service at school, no significant difference was found x2 (sd=3, n=392) =2,73, p>0,05. When the mean scores of job satisfaction levels were analysed in terms of length of service at school, no significant difference was found x2 (sd=3, n=392) =2,88, p>0,05.

Findings on the Relationship between Teachers' Psychological Resilience and Job Satisfaction Levels

The analysis conducted to examine the relationship between teachers' psychological resilience levels and job satisfaction levels is shown in Table 12.

Table 12. Correlation analysis between psychological resilience levels and job satisfaction levels

		Job Satisfaction
	Spearmans Corr.	,26**
Psychological Resilience	p	0,00
	n	392

As Table 12 shows, there is a low-level, positive, and significant relationship between psychological resilience levels and job satisfaction (r=0, 26, p<0, 05). It can be said that as psychological resilience levels increase, teachers' job satisfaction also increases. Considering the coefficient of determination (r2 =0, 07), it can be said that 7% of the whole variance in the tendencies of psychological resilience levels is caused by job satisfaction.

Conclusion, Discussion and Recommendations

Conclusion and Discussion

This study aims to determine the psychological resilience and job satisfaction levels of teachers working in the central districts of Sakarya province and to compare them by various demographic variables. In addition, the relationship between the two variables was analysed. As a result of the research, it was seen that the psychological resilience and job satisfaction levels of teachers were at a medium level. The current research findings show that the psychological resilience and job satisfaction levels of teachers are at a medium level. The findings obtained overlap with previous studies (Dilekçi,2022; Limon, Dilekçi & Sipahioğlu,2021; Karataş, 2016; Yıldırım-Usta, 2018 and Yalçın, 2013). In these studies, it was concluded that the psychological resilience levels of teachers were moderate. Kelekçi and Yılmaz (2015), and Tösten and Özgan (2017) found teachers' psychological resilience levels high in their studies. The results of these studies are not consistent with our findings.

Teachers' psychological resilience levels do not differ statistically significantly by gender. Akbaba (2023) had a similar finding. There are similar findings in the literature (Çetin, 2019; Sönmezer, 2015). The results of these studies overlap with our study. However, Kara (2020), in his study concluded that the psychological resilience levels of male teachers were significantly higher than female teachers. There are studies in the literature that do not overlap with our findings.

In our study, there was no significant difference between the psychological resilience levels of teachers by their ages. There are similar findings in the literature (Sezgin, 2012; Yalçın & Saygı, 2021). The findings of these studies overlap with our study. Bozkurt and Levent (2021) found a significant difference at psychological resilience by age variables. The findings of this study do not coincide with our study.

In the current study, there was no significant difference between the psychological resilience levels of teachers and the branch variable. Karakaya (2019), in his study titled "Examining the Relationship between teachers' psychological Resilience and Motivation." did not find a significant difference between psychological resilience levels and branch variables. Yılmaz (2019) did not find a significant difference between the psychological resilience levels of teachers and the branch variable in his study. The findings of this study overlap with our study.

There is no significant difference between teachers' psychological resilience and school-type variables. Sönmezer (2015) concluded that there is a significant relationship between psychological resilience and the level of the school where the teachers work and that the psychological resilience levels of teachers working in primary school are higher than those working in high school. The results of this study contradict our findings.

In the study, when the mean scores of teachers' psychological resilience levels were examined in terms of professional service time variable, no significant difference was found. Yılmaz (2019) did not find a significant difference between teachers' psychological resilience levels and seniority variables in his study. Karataş (2016), in his study with special education teachers, concluded that there is a positive relationship between seniority variables and psychological resilience levels. There are studies with different results in the literature.

There was no significant difference between teachers' psychological resilience levels and their length of service at school. Sezgin Nartgün and Mor (2015) examined the psychological resilience levels of teachers according to the length of service in the institution and found no significant difference. Yalçın (2013), in his study titled "Teachers' Occupational Burnout, psychological resilience, and Academic Optimism", concluded that there was a significant relationship between teachers' working time at school and their psychological resilience. These studies do not overlap with our study.

Teachers' job satisfaction levels do not differ significantly according to gender. There are similar findings in the literature (Mansuroğlu, 2023; Soydaş, 2021; Kurşunoğlu, Bakay & Tanrıöğen, 2010). The results of these studies are like the results of our study. Kabakçı and Güdek (2020) concluded in their research that the job satisfaction levels of female teachers were higher than male teachers. There are also similar studies in the literature that do not match our findings.

Job satisfaction levels of teachers differ significantly according to age variables. According to our study findings, the job satisfaction levels of teachers aged 51 and over are higher than the job satisfaction levels of teachers aged 31-40. Yakupoğlu (2019) found a significant difference between job satisfaction and age variables. In this study, job satisfaction levels of teachers aged 21-25 are higher than those of teachers aged 31-35. Büyükgöze and Özdemir (2017) concluded in their study that as the age of teachers increases, their professional experience increases, and therefore their job satisfaction levels are higher. Akbaba, Çelebi, and Aslan (2023) concluded that there is a significant difference between job satisfaction and age. The results of these studies support our study. In the study conducted by Çiçek (2018), unlike our research findings, no statistically significant relationship was found between the job satisfaction levels of classroom teachers and their age. The results of this study are not compatible with our study.

The branch of the teachers does not create a significant difference in their job satisfaction levels. Öznacar et al. (2016) concluded that teachers' job satisfaction levels do not differ according to branch. Karataş and Güleş (2010) concluded that job satisfaction levels of branch teachers are higher than classroom teachers.

School type creates a significant difference in satisfaction. The job satisfaction of teachers working in primary school is higher than that of teachers working in secondary school. Soydaş (2021) found a significant difference between teachers' job satisfaction levels and school-type variables.

In the present study, a significant difference was observed between teachers' job satisfaction levels and their length of professional service. According to the length of professional service, the highest level of job satisfaction was observed in teachers with 1-5 years of service, and the lowest level was observed in teachers with 6-10 years of service. The job satisfaction levels of teachers with 16 years of service and above are higher than teachers with 11-15 years and 6-10 years of service. There are similar findings in the literature (Akgün, 2021; Günbayı & Toprak, 2010). The results of these studies support our study. Gafa and Dikmen (2019) stated that the length of professional service did not create a significant difference in job satisfaction. The results of this study contradict the findings of our study.

In our study, the mean scores of teachers' job satisfaction levels do not show a significant difference according to the length of service in the school. Acar (2017) examined the relationship

between teachers' school tenure and job satisfaction and found no significant difference between these two variables.

When the results of the study were examined, it was concluded that the psychological resilience and job satisfaction levels of the teachers were at medium level, and there was no significant difference between the psychological resilience levels of the teachers by gender, age, and branch, type of school, professional seniority and length of service in the school. There was a low-level, positive, and significant relationship between psychological resilience levels and job satisfaction. It can be said that as the psychological resilience levels of teachers increase, their job satisfaction also increases.

Recommendations

- 1. In future studies, individual, organizational, and environmental variables affecting teachers' psychological resilience and job satisfaction can subjected to research and more comprehensive model studies can be conducted.
 - 2. In future studies, analyses can be made by separating only the branches of teachers.
- 3. How teachers' differences (personality, self-efficacy, career expectations, etc.) affect their psychological resilience and job satisfaction can be the subject of future research, and more indepth studies can be conducted.

References

- Acar, S. (2017). *Job satisfaction of x and y generation teachers: An application in Konya province schools* (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 472023).
- Acar, S. (2018). Examination of the prediction of exam anxiety in terms of psychological resilience and decision-making skills (Unpublished Master's Thesis). Sabahattin Zaim University, Institute of Social Sciences, Istanbul.
- Akbaba, O. (2023). Investigation of the relationship between teachers' psychological resilience and organizational commitment (Master's Thesis). Retrieved from YÖK Thesis Centre database (Thesis No: 783918).
- Akbaba, H., Çelebi, N., & Aslan, A. (2023). Investigation of job satisfaction levels of classroom teachers in terms of various variables. *International Journal of Unique Perspective on Education*, 1(2), 282-301. doi:/10.5281/zenodo.8247228
- Akbulut, Y. (2010). SPSS applications in social sciences. Istanbul: Ideal Culture Publishing.
- Akgün, Ö. (2021). Examination of psychological resilience and job satisfaction levels of preschool teachers (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 664725).
- Aksu, N. (2012). Investigation of job satisfaction in terms of some demographic variables. *Journal of Police Sciences*, 14(1), 59-79.

- Akşit Aşık, N. (2010). A conceptual evaluation of individual and organizational factors affecting employees' job satisfaction and their results. *Turkish Administrative Journal*, (467), 31-51.
- Arslantürk, Z. (2004). Research methods and techniques for social scientists. Istanbul: Çamlıca Publications.
- Aryee, S., Fields, D., & Luk, V. (1999). A cross-cultural test of a model of the work-family interface. *Journal of Management*, 25(4), 491-511. doi: /10.1016/S0149-2063(99)00015-X
- Basım, N. H., & Çetin, F. (2011). Validity and reliability study of psychological resilience scale for adults. *Turkish Journal of Psychiatry*, 22(2), 104-114.
- Başaran, İ. E. (2000). Organisational behaviour human production power. Ankara: Feryal Publishing.
- Bastemur, Y. (2006). Relations between job satisfaction and life satisfaction: A research in Kayseri Police Department (Master Thesis). Accessed from YÖK Thesis Centre database (Thesis No. 190318).
- Bozkurt, D., & Levent, A. F. (2021). The relationship between teachers' psychological resilience and burnout levels. *International Journal of Social Research*, 18(44); 7968-8000. doi: 10.26466/opus.937692
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35(5), 307. doi:10.1037/h0055617
- Büyükgöze, H., & Özdemir, M. (2017). Examining the relationship between job satisfaction and teacher performance within the framework of Emotional Events Theory. İnönü University Journal of Faculty of Education, 18(1), 311-325. doi: 10.17679/inuefd.307041
- Çetin, E. (2019). Examination of the relationship between teachers' psychological resilience and stress coping styles (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No. 548655).
- Çiçek, G. (2018). An analysis on occupational burnout and job satisfaction levels of high school teachers: Siirt sample (Unpublished Master's Thesis). Van Yüzüncü Yıl University Institute of Social Sciences, Van.
- Davis, K., (1998). *Human behaviour in business*. Istanbul: Istanbul University Business Economics Publications.
- Dawson, C. (2015). Introduction to research methods. Konya: Education Publishing House.
- Dogan, T. (2015). Turkish adaptation of the brief psychological resilience scale: Validity and reliability study. *The Journal of Happiness*, 3(1), 93-102.
- Dilekçi, Ü. (2022). Teacher autonomy as a predictor of job satisfaction. *Bartın University Journal of Faculty of Education*, 11(2), 328-337. https://doi.org/10.14686/buefad.1020340
- Ertan, G. (2019). The effect of fear of being without a mobile phone (nomophobia) on job satisfaction, work commitment, and social isolation (Master's Thesis). Retrieved from YÖK Thesis Centre database (Thesis No: 551376).

- Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: What are the central protective resources behind healthy adjustment? *International Journal of Methods in Psychiatric Research*, 12(2), 65-76. doi:10.1002/mpr.143
- Gafa, İ., & Dikmenli, Y. (2019). Investigation of classroom teachers' job satisfaction and loneliness levels in work life. *Ahi Evran University Journal of Institute of Social Sciences*, *5*(1), 131-150.doi: d/10.31592/aeusbed.567562
- Günbayı, İ., & Toprak, D. (2010). Comparison of job satisfaction levels of primary school classroom and special class teachers. İlköğretim Online, 9 (1), 150-169.
- İşcan, Ö. F., & Sayın, U. (2010). The relationship between organizational justice, job satisfaction, and organizational trust. *Atatürk University Journal of Economics and Administrative Sciences*, 24(4), 195-216.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: the role of core evaluations. *Journal of Applied Psychology*, 83(1), 17. doi:10.1037/0021-9010.83.1.17
- Kabakçı, B., & Güdek, B. (2020). Investigation of music teachers' job satisfaction levels. *International Journal of Social and Human Sciences Research*, 7(59), 2718-2730. doi:10.26450/jshsr.2063
- Kara, E. (2020). Factors affecting the level of psychological soundness of teachers (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 650153).
- Karadal, H. (1999). The relationship between manager lifestyles and manager's effectiveness and job satisfaction: research in some sectors (Doctoral Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 89605).
- Karakaya, Y. (2019). *Investigation of the relationship between teachers' psychological resilience and motivation* (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 579779).
- Karasar, N. (2000). Scientific research method. Ankara: Nobel Publications.
- Karasar, N. (2012). Scientific research method. Ankara: Nobel Publications.
- Karataş, R. (2016). *Investigation of psychological resilience levels and coping strategies of teachers working in special education* schools (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 435214).
- Karataş, S., & Güleş, H. (2010). The relationship between job satisfaction and organizational commitment of primary school teachers. *Uşak University Journal of Social Sciences*, 3(2), 74-89.
- Kelekçi, H., & Yılmaz, K. (2015). The relationship between teachers' positive psychological capital and efficacy beliefs. *Mersin University Journal of Faculty of Education*, 11(3),0-0. doi:/10.17860/efd.96988
- Kurşunoğlu, A., & Tanrıöğen, E.B.A. (2010). Organizational commitment levels of primary school teachers. *Pamukkale University Journal of Faculty of Education*, 28(28), 101-115.

- Limon, İ., Dilekçi, Ü., & Sipahioğlu, M. (2021). The relationship between change fatigue and job satisfaction of teachers: gender and experience as moderators. *i.e.: inquiry in education: 13*(2), Article 5.
- Mansuroğlu, C. N. (2023). The relationship between music teachers' job satisfaction and organizational commitment: The case of Central Anatolia region (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 808658).
- Öcal, Ö. (2011). Investigation of job satisfaction levels of teachers working in primary schools according to demographic characteristics: Istanbul province Maltepe district example (Unpublished Master's Thesis). Maltepe University Institute of Social Sciences, Istanbul.
- Ölçüm, D. (2015). The effect of school administrators' decision-making styles on teachers' job satisfaction (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 385888).
- Özcan, E. D. (2011). *Organizational structure and job satisfaction from a personality perspective*. Istanbul: Beta Basım Yayım.
- Öznacar, B., Çoban, Ö., & Yılmaz, E. (2016). Examination of teachers' job satisfaction in terms of empowerment of teachers and some variables. International Academic Research Congress.
- Pehlivan, İ. (2000). Stress in work life. Ankara: Pegem A Publishing.
- Polatcı, S., Irk, E., Gültekin, Z., & Sobacı, F. (2017). Do psychological resilience and personality traits affect satisfaction levels? *Süleyman Demirel University Journal of Institute of Social Sciences*, 4(29), 553-578. doi: 10.26466/opus.827411
- Rüzgâr, N. (2018). *Investigation of the effect of employees' perceptions of human resources management models and managers' humour styles on job satisfaction* (Doctoral Dissertation). Accessed from YÖK Thesis Centre database (Thesis No: 494276).
- Safia, M. (2020). According to teachers' perceptions, examining the relationship between secondary school principals' transformational leadership roles and schools' being a learning organization and teachers' job satisfaction levels (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 643346).
- Sezgin, F. (2012). Investigation of psychological resilience levels of primary school teachers. *Kastamonu Journal of Education*, 20(2), 489-502.
- Sezgin Nartgün, Ş., & Mor, K, D. (2015). The relationship between ethical leadership and psychological resilience according to teachers' views. *Bolu Abant Izzel Baysal University Journal of Institute of Social Sciences*, 15(2): 269-290.
- Soydaş, İ. (2021). Examination of job satisfaction and organizational trust levels of teachers working in high schools (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 681050).
- Sönmezer, B. (2015). *Investigation of burnout and psychological resilience of teachers* (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 418051).
- Telman, N. & Ünsal, P. (2004). Employee satisfaction. Istanbul: Epsilon Publishing.

- Tösten, R., & Özgan, H. (2017). Examining teachers' perceptions of positive psychological capital. *Electronic Journal of Social Sciences*, *6*(62), 867-889. doi: 10.17755/esosder.306900
- Tümlü, G, Ü. (2012). Investigation of contact barriers of university students with different levels of psychological resilience (Unpublished Master's Thesis). Hacettepe University, Institute of Social Sciences, Ankara.
- Uygur, A. (2009). Organizational commitment and commitment to work. Ankara: Barış Platin Publishing.
- Yakupoğlu, A. (2019). The effect of job satisfaction levels of secondary school teachers on their work performance (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 619320).
- Yalçın, S. (2013). The relationship between primary school teachers' professional burnout levels and stress, psychological resilience and academic optimism (Master Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 330260).
- Yalçın, S., & Saygı, E. (2021). Examining the relationship between psychological resilience, organizational opposition and organizational silence perceptions of secondary school teachers. *Anadolu University Journal of Faculty of Education*, 5(4); 402-426. doi:10.34056/aujef.928300
- Yıldırım, A. & Şimşek. H. (2008). Qualitative research methods in social sciences. Ankara: Seçkin Publishing.
- Yıldırım Usta, E. (2018). Analysing the relationship between life's meaning perception and psychological resilience level: An example of teachers working in official high schools in Istanbul Province, Üsküdar District. (Unpublished Master's Thesis), Nişantaşı University Institute of Social Sciences, Istanbul.
- Yılmaz, M. (2019). *Investigation of the relationship between teachers' psychological resilience and quality of work life* (Master's Thesis). Accessed from YÖK Thesis Centre database (Thesis No: 571302)
- Yüksel, İ., & Bilgin, Ü. (2021). Investigation of the relationship between physical education teachers' perceptions of organizational cynicism and attitudes towards profession and salary satisfaction. *Anatolia Sport Research*, 2(2), 34-45. doi: 10.29228/anatoliasr.14