

Investigation of the Relationship Between Problem Solving Skills and Student-Related Social Stress of Teachers Working in High Schools *

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Abstract

This study aims to examine the relationship between the teachers' problem-solving skills in high schools and their student-related social stress. The population of this research consists of 1574 teachers working in high schools in the city center of Batman in the 2019-2020 academic year. The sample of the study consists of the 615 teachers selected randomly from the high schools in the city center of Batman. As data collection tools, "Problem Solving Inventory" developed by Heppner and Peterson (1982) and adapted into Turkish by Şahin, Şahin and Heppner (1993) and the "Student Related Social Stress Scale" developed by Taddei, Contena, and Venturini (2017) and adapted into Turkish by İlhan and Kinay were used (2018). As a result of the study, no statistically significant relationship was found between teachers' problem solving skills and student-related social stress. On the other hand, while there was no significant difference in the perceptions of teachers' problem solving skills according to the variable of professional seniority, they differ in terms of age and educational status variables. While no significant difference was found in terms of teachers' student-related social stress, educational status and age variables, a significant difference was found according to the seniority variable.

Keywords: Problem-Solving Skills, Student- Related Social Stress, Stress

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INTRODUCTION

The individual and society are in a rapid development and change in our century. Individuals and institutions that concern them are trying to keep up with this rapid change. Education, a tool for development, change and progress, has become the most important instrument for the development of society. As a matter of fact, each dynamic that belongs to an individual or the society in it can only be shaped at the end of the education process and contribute to that individual and society (Beycioğlu & Konan, 2008: 370). Considering that the basis of education and training is human and the biggest building block of education is the teaching profession, it is clear that the determination of the problems of this profession and offering solutions are of vital importance (Demir & Arı, 2013: 110).

In education, which prepares people's present and future, the teacher not only transfers knowledge, but also guides the states of knowing and doing. The teacher shows the students the target behaviors and asks the students to put them into action. There are two dimensions to doing this: providing students with an appropriate environment and making it easy for students to understand. The role of the teacher here is to guide and motivate the students in the school, which is isolated from the negative situations of the external environment, and to help them overcome the obstacles (Tahiroğlu, 2006: 2). Only teachers, while fulfilling their important roles, face many problems in and out of school (Çınar, Hatunoğlu, & Hatunoğlu, 2009: 216; Dağlı & Han, 2017: 109). Physical problems, problems with colleagues, problems with parents, problems with students and administration, etc. are the main problems faced by teachers (Dağlı and Han, 2017: 109). Among these, one of the biggest shares is undoubtedly student-related problems. In addition, teachers' teaching obligations, responsibilities, and their intense and face-to-face relationships with different people in schools cause intense stress. This is one of the main factors that distinguishes teaching from other professional group members. The teaching profession requires people-oriented, continuous, balanced and healthy relationships. (Engin and İpek, 2020: 184). The performance of the stressed teacher herself/himself and the physical and mental state of herself/himself and her/his family may be negative (Çolak, 2019: 22).

A stress-free, peaceful teacher will have more effective communication skills (Akpınar, 2008: 360). On the other hand, work-overload and stressed teachers can negatively affect students' learning (Naylor, 2001: 14). For this reason, examining the causes of stress in teachers and its effects on education will increase the quality of teachers, students and education itself. (Balaban, 2000: 6). There are many factors that cause stress in teachers. Crowded classrooms, socio-economic problems, low and irrelevant parent profiles, and students' unattainable goals are among these factors. Especially the problems experienced while maintaining classroom discipline are among the most important sources of stress. It is a must for the teacher to prevent misbehaviors during the lesson and to conduct the lessons vividly and carefully. The fact that an undesirable behavior of the students does not become a problem depends on the teacher's being alert and intervening immediately (Çolak, 2019: 27). Kaya and Alım (2015: 177-180) explained the sources that cause stress in teachers as follows:

- Educational reasons: Low success rates of students, disrespect towards teachers, low readiness, insensitivity to the lesson are the main sources of stress. Apart from students, crowded classes, problems with the curriculum and evaluation are other factors of stress.

- Reasons related to the teaching profession: Having to do additional work due to low salary, depreciation of the profession in the eyes of the society, and excessive workload in and out of school are sources of stress.

- School-related and personal reasons: School administrators' biased behavior, their understanding of discipline, unethical and negative behaviors in rewarding, grouping of other teachers, and being hurtful as teachers are unable to control their emotions cause stress.

The way teachers deal with stress is important in preparing individuals for society (Engin and İpek, 2020: 184). Here are some direct strategies suggested for teachers to deal with stress (Kyriaco, 2016: 87-112):

Avoiding Over-Stimulation: The goal of coping with stress is not to reduce stress completely. Important activities that are worth dealing with will inevitably create stress. In addition, a moderate amount of stress in some jobs increases the quality of the job as it will increase enthusiasm and effort. Therefore, in order to cope, it is necessary to keep the stress level at a certain level and to prevent overstimulation.

Direct action strategies: Direct action, increasing the ability and ability to move, adapting to the situation, eliminating the source of stress and asking for help from colleagues are examples of direct action strategies.

Stress is a situation that occurs around the individual and negatively affects his life by forcing his mental, physical and spiritual limits (Engin and İpek, 2020: 185). Excess stress can lead to emotional and physical distress in the individual, leading to a decrease in effectiveness. Long-term high-level stress leads to other problems (Başaran, 1997, as cited in Demirtaş 2006: 50; Kuday, 2020: 13,15). Stress can also be defined as an individual's response to changes. The faster the change occurs, the faster the individual should adapt to it. In cases where the change is above the power and ability of the individual, intense stress awaits the individual. Since it is not possible to completely eliminate stress, the individual's incorporating this situation into their lives and adapting to changes will reduce stress (Çolak, 2019: 20).

If an individual is stressful and stress is caused by sadness, problems increase. When the teacher and emotionality are combined and effective solutions to the problems are offered, an acceptable level of stress will occur and satisfactory educational activities will be realized (Abacı, 2006: 11). It has been stated that low-level stress is beneficial for teachers to find new solutions, while high-level stress negatively affects teachers' abilities (Ataklı, 1996, as cited in Akpınar 2008: 360). Anxiety and stress play an important role in learning problem solving. Individuals with high stress levels have difficulties in focusing on problem solving, so they cannot offer proper solutions. As such, teachers' stress levels continue to increase and teachers cannot effectively solve the problems encountered (Jerah, Hasija, & Malhotra, 1993, cited in Saracaloğlu, Serin, & Bozkurt 2001: 124).

The individual who encounters problems has difficulty in overcoming the problems alone and experiences intense stress. Today, people experience a feeling of loneliness because of the decrease in social relations. In order to find solutions to these problems, the society and the individual should act jointly to offer appropriate solutions, in short, they should develop their problem-solving skills (Genç and Kalafat, 2007: 11).

The main purpose of education is to prepare individuals for life by raising individuals knowing how to behave and solve the problems they encounter in daily life (Saracaloğlu, Serin and Bozkurt, 2001: 121). Problem is a word that people come across a lot throughout their lives. There are many problematic situations that the individual has to solve. While this may be a simple problem such as deciding what to eat, there may also be situations that will reveal big problems and negatively affect people's lives when it is not solved (Arslan, 2005: 50). The problem is defined as the obstacle that stands in the way of an individual's power to achieve his goal (Bingham, 1976: 7).

The problem has three main components. These are (Kesgin, 2006: 35):

- a) A difficulty for the individual who encounters the problem,
- b) The individual needs a solution,
- c) The person has not met problem before and has not made any preparations.

Every individual faces many problems throughout their lives. Every individual has problem-solving skills, although at different levels against these problems. In fact, the situation that negatively affects the individual against a problem is the inadequacy of the individual in problem solving (Akat,

2020: 16). Individuals with problem solving experience quickly identify the means to reach the goal and tend to solve complex problems through their developed networks. However, those with less experience get stuck on unnecessary details (Senemoğlu, 2018: 539). It is important to anticipate errors that may occur in the problem solving process, because errors are key to achieving proper results. One of the requirements of problem solving is to keep up with the changes. As a matter of fact, the aim in problem solving is to remove the obstacles in reaching the goals. In addition, individuals with this ability can foresee the problem and manage the process more effectively. (Toprak, 2019: 43,46).

As a result, teachers encounter many problems while performing their profession, and they experience some stress situations. In particular, teachers who experience stress caused by students are negatively affected both in their professions and socially. Keeping student-related social stress levels at a reasonable level will enable teachers to be more efficient and effective. One of the best ways to achieve this is to have problem-solving skills. Because it is thought that teachers who have effective problem-solving skills can better cope with student- related social stress. In this study, it was aimed to examine the relationship between the problem-solving skills of high school teachers and student-related social stress. For this purpose, answers to the following questions were sought:

- 1) What is the level of problem solving skill perceptions and student- related social stress of the teachers in high schools?
- 2) What is the relationship between problem solving skills and student- related social stress of the teachers in high schools?
- 3) Is there a significant difference according to variables given below?
 - a) age
 - b) professional seniority
 - c) educational status

METHOD

In this section, the model of the research, the universe and the sample, the data collection tool and the analysis of the data are presented.

Research Model: Relational screening model was used in this research. Relational screening model is a model that aims to determine the existence and/or degree of change between two or more variables (Karasar, 2016: 114).

Population and Sample: The population of this research consists of 1574 teachers working in high schools in the city center of Batman in the 2019-2020 academic year. Due to the difficulty of reaching all of the teachers who make up the population, a sample that is believed to represent the population has been studied. The sample of the research consists of 615 teachers who are selected by simple random method from the teachers working in high schools in the city center of Batman. Various demographic variables related to the teachers in the sample were discussed and the descriptive statistics are presented in Table 1.

Table 1. Descriptive Statistics on the Levels of Demographic Variables

Variables		f	%
Sex	Female	268	43,58
	Male	347	56,42
Age	22-29	230	37,40
	30-39	233	37,89
	40 and over	152	24,72
Seniority	1-5 years	243	39,51
	6-10 years	173	28,13
	11-15 years	78	12,68
	16 years and over	121	19,67
Educational status	Bachelor's degree	507	82,44
	Postgraduate	108	17,56

In Table 1, the distribution of the teachers in the study group according to the levels of the demographic variables is indicated with frequencies and percentages. When the distribution of demographic variables is examined, it is seen that 43.58% of the teachers are female and 56.42% are male. When the age ranges are examined, 37.40% of the teachers are between 22-29; 37.89% of them are between 30-39% and 24.72% of them are 40 and over. When the distribution of teachers is examined by seniority, 39.5% of them have 11-5 years; 28.13% 6-10 have years; 12.68% of them have 11-15 years and 19.67% of them have 16 or more years of experience. When their educational status is examined, it is seen that 82.44% of the teachers have bachelor's and 17.56% of them have postgraduate degrees.

Data Collection Tools: "Problem Solving Inventory (PSI)" and "Student- Related Social Stress Scale (SRSS)" were used as data collection tools.

Problem Solving Inventory: It was developed by Heppner and Petersen (1982) and adapted into Turkish by Şahin, Şahin and Heppner (1993). The problem solving skill perception scale was examined on the basis of total points. The application form of this scale consists of 35 items. However, as stated by the scale developer/adapter, the 9th, 22nd and 29th items were excluded from the scoring after the application, and the remaining 32 items were processed. The 1st, 2nd, 3rd, 4th, 11th, 13th, 14th, 15th, 17th, 21st, 25th, 26th, 30th, 32nd, and 34th items were reversed before the total score is taken. After the items were reversed, a total score was obtained based on 32 items and analyzes were carried out over the total score. Since the PSI has a six-point scale, the score range varies between 32 and 192, and the high score obtained from the scale indicates an inability to solve problems (Şahin, Şahin, & Heppner, 1993; Savaşır & Şahin, 1997).

Student-Related Social Stress Scale: It was developed by Taddei, Contena, and Venturini (2017) and adapted into Turkish by İlhan and Kinay (2018). SRSS is a measurement tool that includes 18 items with a seven-point Likert-type rating and does not contain reverse scored items. In the original form of the scale, there is a four-factor structure called verbal aggression, antipathic behaviors, irritating reactions and exaggerated requests. Since SRSS has a seven-point rating, the scores that can be obtained from SRSS vary between 18 and 126. High scores on the scale indicate that student- related social stress is high (İlhan & Kinay, 2018: 600).

Analysis of Data: In order to answer the research questions, firstly, the minimum, maximum, arithmetic mean and standard deviation values of the individuals' total scores were obtained and descriptive analyzes were made. For the descriptive analysis of the general total, score ranges were created by taking into account the Likert rating of each scale. After the descriptive analysis, it was tested whether the difference between the means of the groups was statistically significant. In this direction, in order to answer the sub-problems for the comparison of the mean scores of the groups, when the independent variable level is two, the independent samples t-test; In cases where the level of independent variable is more than two, it is aimed to use one-way analysis of variance (ANOVA). After the statistically significant ANOVA results, Scheffe test, one of the multiple comparison tests, was used. In order to carry out the tests related to the mentioned parametric tests, the assumptions of

the normal distribution of the universes regarding the levels of the independent variable and the homogeneity of the variances of the populations must be taken into consideration (Gravetter & Walnau, 2013).

FINDINGS

The arithmetic mean and standard deviations related to student-related social stress and problem-solving skills perceptions of teachers working in high schools are given in Table 2.

Table 2. Descriptive Statistics on Scores

	N	Minimum	Maximum	\bar{X}	ss
Student-related social stress	615	18,00	126,00	56,82	23,51
Problem Solving	615	39,00	165,00	85,53	23,44

When Table 2 is examined, the minimum score observed in the research regarding the student-related social stress scores of high school teachers is 18.00; the maximum score is 126.00. The arithmetic mean of the aforesaid scores is 56.82; the standard deviation was found to be 23.51. Considering the score ranges related to the ratings, it was observed that the arithmetic mean value of the scores of the teachers regarding the student-related social stress corresponds to the 3rd degree, that is, slightly below the medium level. When the problem solving skill perceptions are examined, the minimum score observed in the research is 39.00; and the maximum score is 165.00. The arithmetic mean of problem solving skill perception scores was 85.53; and the standard deviation was found to be 23.44. Considering the score ranges related to the ratings, it was observed that the arithmetic mean value of the teachers' scores on their perceptions of inadequacy in problem solving corresponded to the "I often do this" rating.

The findings regarding the examination of the relationship between the problem-solving skills of teachers working in high schools and their student-related social stress are given in Table 3.

Table 3. Spearman Rank Differences Correlation Coefficient

	r	p
Student-related Social Stress Problem solving	0.042	0.296

p<0.05

When Table 3 is examined, it is observed that the relationship between teachers' student-related social stress and their perception of problem-solving skills is not statistically significant, $r=0.042, p>.05$.

The findings regarding the student-related social stress of teachers working in high schools according to the age variable are given in Table 4.

Table 4. Findings Related to Student-related Social Stress Scores of Teachers Working in High Schools by Age

Age	N	\bar{X}	ss	Minimum	Maximum
22-29	230,00	59,08	22,81	18,00	120,00
30-39	233,00	56,45	23,76	18,00	116,00
40 and over	152,00	53,97	23,99	18,00	126,00
Total	615,00	56,82	23,51	18,00	126,00

When Table 4 is examined, it is seen that the mean scores of student-related social stress differ from each other on a descriptive level depending on the age ranges given. In order to test the

statistical significance of the difference, one-way analysis of variance was conducted and the results are presented in Table 5.

Table 5. Investigation of Student- Related Social Stress of Teachers Working in High Schools by Age

The source of variance	The sum of squares	sd	The mean of squares	F	p
Inter groups	2441,12	2,00	1220,56	2,216	,110
Within groups	337067,20	612,00	550,76		
Total	339508,33	614,00			

p<.05

ANOVA results show that there is no statistically significant difference between the scores of Student-Related Social Stress in terms of the levels of the age variable, $F(2, 612) = 2.216$, $p > .05$. In other words, teachers' student- related social stress scores do not change depending on the age ranges studied.

Table 6. Findings on Problem Solving Skills Perceptions of High School Teachers by Age Variable

Age	N	\bar{X}	ss	Minimum	Maximum
22-29	230,00	88,00	23,54	46,00	154,00
30-39	233,00	82,59	23,10	40,00	165,00
40 and over	152,00	86,28	23,48	39,00	150,00
Total	615,00	85,53	23,44	39,00	165,00

When Table 6 is examined, it is seen that the mean scores of perceptions of problem solving skills differ from each other on a descriptive level depending on the age ranges given. In order to test the statistical significance of the difference, one-way analysis of variance was conducted and the results are detailed in Table 7.

Table 7. Investigation of Problem Solving Skills Perceptions of High School Teachers by Age Variable

The source of variance	The sum of squares	sd	The mean of squares	F	p	Eta square
Inter groups	3503,65	2,00	1751,83	3,211	,041*	.010
Within groups	333937,66	612,00	545,65			
Total	337441,31	614,00				

*p<.05

ANOVA results show that there is a significant difference between problem solving skill perception scores in terms of age variable, $F(2,612)=3,211$, $p<.05$. In other words, teachers' problem solving skill perception scores differ significantly depending on the specified age given. The Sheffe test was used to reveal between which age groups had the difference. According to the results obtained from the Sheffe test, it was observed that the problem-solving skill perception scores of the teachers in the 22-29 age range ($\bar{X}=88.00$) were significantly higher than the problem-solving skill perception scores of the teachers in the 30-39 age range ($\bar{X}= 82.59$). This result shows that the perception of inadequacy in problem solving of teachers aged 22-29 is significantly higher than the perception of inadequacy of teachers aged 30-39.

Findings related to student- related social stress according to the seniority variable of teachers working in high schools are given in Table 8.

Table 8. Findings Related to Student- Related Social Stress Scores of Teachers Working in High Schools According to the Variable of Seniority

Seniority	N	\bar{X}	ss	Minimum	Maximum
1-5 years	243	59,00	24,03	18,00	120,00
6-10 years	173	56,72	22,31	18,00	115,00
10-15 years	78	59,27	26,59	18,00	126,00
16 years and over	121	51,01	21,22	18,00	112,00
Total	615	56,82	23,51	18,00	126,00

When Table 8 is examined, it is seen that the average score of student- related social stress differs from each other on a descriptive level depending on seniority. In order to test the statistical significance of the difference, one-way analysis of variance was conducted and the results are presented in Table 9.

Table 9. Investigation of Student- Related Social Stress of Teachers Working in High Schools According to the Variable of Seniority

The source of variance	The sum of squares	sd	The mean of squares	F	p	Eta square
Inter groups	5715,87	3,00	1905,29	3,488	,016*	,017
Within groups	333792,46	611,00	546,31			
Total	339508,33	614,00				

ANOVA results show that there is a significant difference between student- related social stress scores in terms of seniority variable, $F(3, 611) = 3.488$, $p < .05$. In other words, teachers' student- related social stress scores differ significantly depending on seniority. Scheffe test was used to reveal between which group pairs the difference in question was. According to the results obtained from the Sheffe test, the student- related social stress levels of teachers with 1-5 years of experience ($\bar{X}=59.00$) are significantly higher than those with 16 or more years of experience ($\bar{X}=51.01$).

Table 10. Findings on Problem Solving Skills Perceptions of High School Teachers According to the Variable of Seniority

Seniority	N	\bar{X}	ss	Minimum	Maximum
1-5 years	243	87,25	23,24	45,00	154,00
6-10 years	173	84,24	23,01	40,00	153,00
10-15 years	78	83,74	24,15	45,00	165,00
16 years and over	121	85,07	24,05	39,00	150,00

When Table 10 is examined, it is seen that the mean scores of perceptions of problem solving skills differ from each other on a descriptive level depending on seniority. In order to test the statistical significance of the difference, one-way analysis of variance was conducted and the results are presented in Table 11.

Table 11. Examining the Problem Solving Skills Perceptions of the Teachers Working in High Schools According to the Variable of Seniority

The source of variance	The sum of squares	sd	The mean of squares	F	p
Inter groups	1280,50	3,00	426,83	,776	,508
Within groups	336160,81	611,00	550,18		
Total	337441,31	614,00			

$p < .05$

The ANOVA results show that there is no statistically significant difference between the problem solving skill perception scores in terms of the levels of the seniority variable, $F(3, 611) = .776$, $p > .05$. In other words, teachers' perception levels of problem solving skills do not change depending on their seniority.

Findings related to student- related social stress of teachers working in high schools according to the variable of educational status are given in Table 12.

Table 12. Findings Related to Student-Related Social Stress of Teachers Working in High Schools According to the Variable of Educational Status

The source of variance	N	\bar{X}	ss	sd	t	p
Bachelor's degree	507	56,54	23,18	613	-,646	,519
Postgraduate degree	108	58,15	25,10			

When Table 12 is examined, it is seen that the student- related social stress mean score of the postgraduate level teachers (\bar{X} =58.15,SD=25.10) is higher than the student- related social stress mean score of the bachelor's level teachers (\bar{X} =56.54,SD=23.18). ; In other words, it is seen that postgraduate teachers have higher stress levels. Independent samples t-test was conducted to determine whether this difference was statistically significant. According to the results of the analysis, it was concluded that the difference in the mean scores of the teachers at the undergraduate and graduate level was not statistically significant, $t(613) = -,646, p > ,05$.

Table 13. Examination of High School Teachers' Perceptions of Problem Solving Skills by Educational Level

The source of variance	N	\bar{X}	ss	sd	t	p	Eta square
Bachelor's degree	507	87,04	23,15	613	3,508	,00*	.02
Postgraduate	108	78,41	23,60				

*p<.05

When Table 13 is examined, it is seen that the problem solving skill perception average score of the bachelor's degree teachers (\bar{X} = 87.04, SD = 23.15) is higher than the average score of the postgraduate level teachers (\bar{X} = 78.41, SD = 23.60). This difference between the averages indicates that bachelor's degree teachers perceive themselves to be more inadequate in problem solving. Independent samples t-test was conducted to determine whether this difference was statistically significant. According to the results of the analysis, it was concluded that the difference in the mean scores of bachelor's degree and postgraduate level teachers was statistically significant, $t(613) = 3,508, p < ,05$. Therefore, it can be stated that the level of perception of inadequacy of bachelor's teachers in problem solving is significantly higher than the level of perception of inadequacy of postgraduate teachers.

DISCUSSION AND CONCLUSION

The results and discussions of the research are listed according to the research questions.

When the findings of the first question of the research are examined, it is seen that teachers' student- related social stress is below the medium level. According to this finding, it can be concluded that teachers' student- related social stress levels are moderate. In the study conducted by Karakaya (2015) on the stress of female and male teachers working in high schools, it was concluded that the stress levels of the teachers were below the medium level and the result of the research was supported. When the literature is examined, it is possible to reach different conclusions. In the study conducted by Benmaounsour (1998), teachers described themselves as highly stressed which is contrary to the research findings. When the other findings of the first question of the research are examined, it is seen that the scores of the teachers in the Likert (6) type rating scale, in which the perceptions of the problem-solving skills of the teachers are measured, correspond to the "I often do this" degree, which we can call the medium level. According to the findings obtained, it can be concluded that the perception levels of teachers' problem solving skills are at "moderate" level. The fact that the problem-solving skills of the teachers are at a moderate level can be interpreted as that they can produce

solutions to the problems they encounter at a certain level. The findings of Demirtaş and Dönmez (2008) support the findings of the research, and the perceptions of teachers' problem solving skills are at a moderate level. Apart from the findings, there are also studies in which teachers see themselves as problem solvers at a high level (Tavlı, 2009; Çınar, Hatunoğlu, & Hatunoğlu, 2009). In undergraduate education, lessons and courses aiming to help the teacher candidates cope with the stress and solve problems can be taught.

When the findings of the second question of the study were examined, no significant relationship was found between teachers' perceptions of problem solving skills and student- related social stress. In fact, there are many studies in which one of the most stressful issues causing stress for teachers is found to be student- related (Çidem, 2019; Kaya & Alım, 2015; Abacı, 2006; Akpınar, 2008; Olivier & Venter, 2003; Benmansour, 1998; Wole, 2002; Merkan, 2011; Sugar, 1995). Because students are the element with which teachers communicate most intensively, spend time most, and cover an important part of their professional life. It is clear that teachers' ability to cope with these problems has an impact on their stress levels. As a matter of fact, in the study conducted by Jerah, Hasija and Malhotra (1993, as cited in Saracaloğlu, Serin and Bozkurt 2001: 124), it is stated that individuals with high stress levels have problems in focusing on problem solving. Likewise, in the study conducted by Genç and Kalafat (2007: 11) it was stated that the individual has difficulty in coping with intense stress alone, and that the individual has to develop problem solving skills by acting in partnership with the society he/she lives in and producing solutions. Teachers' problem-solving skills and their ability to cope with stress can be developed through in-service training activities, seminars, conferences, etc.

When the findings of the third question of the study were examined, no significant difference was found in teachers' student- related social stress according to the age variable. According to this finding, it can be said that the age variable does not have a significant effect on teachers' student-related social stress. While young teachers' higher expectations for students and their desire to do more cause them to experience social stress, it is thought that factors such as the anxiety of older teachers not being able to respond to student demands and undisciplined behaviors of students cause these teachers to experience social stress. In other words, since it is estimated that teachers' responsibilities and perspectives differ according to their age, it is thought that the age variable is not significant on social stress. Şeker (1995) and Akalın (2006) has had results that support the findings obtained in their research and stated that there was no significant relationship between the age variable and stress. When the findings of the third question of the study were examined, a significant difference was found in the perceptions of teachers' problem solving skills according to the age variable. According to the findings, it can be said that the problem solving skill perceptions of the older teachers are higher than the younger teachers. The biggest reason for this can be expressed as 'experience'. Because the diversity of the problems faced by the older teachers until that age, the different solutions applied, and the fact that they employ the shortest and most reliable solution they have when they encounter new problems are thought to be effective in their higher perception of problem solving skills. Güler (2006: 108) also has had similar results in his research, and he related the progress of teachers' age with the variable of professional seniority, and stated that the experience of teachers will increase as they get older, thus the way teachers perceive the problems they encounter and develop different solutions will improve. The fact that young teachers have a longer internship period in undergraduate education may contribute to the perception of problem solving skills of these teachers.

When the findings of the third question of the research are examined, it is seen that there is a significant difference in the student- related social stress of teachers according to the variable of professional seniority. According to the findings, it was concluded that teachers who are in the first years of their profession (1-5) have higher student- related social stress than teachers with 16 or more years of experience. The reason for this situation is that teachers with higher professional seniority have higher ability to manage and cope with student- related social stress, thanks to the experience they have gained. Çidem (2019) also stated in her research that teachers with a seniority of 1-5 years experienced more stress than teachers with a seniority of 11 and above, and reached results that support the findings. In order to reduce the high level of student- related social stress of teachers with

lower professional seniority, moral activities, rewarding activities, etc. can be organized. When the findings of the third sub-problem of the study are examined, it can be concluded that there is no significant difference in the perceptions of teachers' problem solving skills according to the variable of professional seniority. The fact that the perceptions of problem solving skills did not change according to the variable of seniority may be due to the fact that newly appointed teachers are equipped with problem-solving skills, and that teachers with high professional seniority are good problem solvers thanks to their experience. Kesgin (2006), Serin (2010), Bal (2011), Özgül (2009), Tavlı (2009), Çınar, Hatunoğlu, and Hatunoğlu (2009) reported that the variable of seniority did not have a significant effect on problem solving skills and has had results that support the finding.

When the findings of the third question of the study were examined, no significant difference was found in the student- related social stress of teachers according to the variable of educational status. According to this finding, it can be concluded that the educational status of the teachers is not an effective variable on the social stress caused by the students. In fact, it can be expected that a high level of education will positively affect the ability to cope with stress and reduce the level of stress. However, it is thought that teachers with higher education are more equipped, so the practices they want to do in education increase, and the expectations of teachers with postgraduate education balance the stress levels. Akalın (2006), who reached conclusions supporting these findings, stated in his research that the sources of stress do not differ according to the education received, regardless of the education level of the teachers. When the findings of the third question of the study are examined, it is seen that there is a significant difference in the perceptions of teachers' problem solving skills according to the variable of educational status. According to this finding, problem solving skill perceptions of postgraduate teachers are higher than those of undergraduate teachers. It can be said that the higher level of education increases the diversity of the problems faced by the teachers, enables them to develop positive attitudes towards problem-solving skills, so that teachers with higher education levels perceive themselves more positively in terms of problem solving. When the relevant literature is examined; Bal (2011) reached results that support the findings obtained in the study and stated that increasing the level of education increases problem solving skills. In the same way, Bağçeci and Kinay (2013) reached results that support the findings, and stated that increasing the level of education is positive in terms of gaining new skills, improving existing skills, looking at problems from different perspectives and offering different solutions. By encouraging teachers to have postgraduate education, problem solving skills can be developed.

Conflicts of Interest:

No potential conflict of interest was declared by the authors.

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