

Original Article

The Relationship Between Special Education Teachers' Satisfaction of Life and Perceived Stress with Health-Promoting Protective Behaviors

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Abstract

Background: Life satisfaction, perceived stress and health promoting behaviors are interrelated. Being satisfied with life and being able to cope with stress are very important in maintaining and sustaining health.

Objective: This study aimed to examine the relationship between the satisfaction of life and perceived stress of special education teachers and their health-promoting and protective behaviors.

Methodology: It is a descriptive type of study, actually a correlational design study. The sample of the study consisted of 193 special education teachers. The data was analyzed using independent samples t-test, Mann-Whitney U test, and Kruskal-Wallis analysis.

Results: A positive, weak, significant relationship was found between the teachers' mean scores on the Satisfaction with life scale and developing promotive and protective health behaviors scale ($r = .313$, $p = .000$). A positive, weak, significant relationship was found between the mean scores of the perceived stress scale and the developing promotive and protective health behaviors scale ($r = .413$, $p = .004$).

Conclusions: Interventions aimed at increasing life satisfaction and reducing stress levels will be effective in the realization of health-promoting and protective behaviors.

Key Words: Life satisfaction, Perceived stress, Health-promoting protective behaviors, Special education teacher, Stress

Background

Life satisfaction can be defined as the result or outcome obtained by comparing an individual's expectations with what they actually have, the positive evaluation of one's whole life in accordance with the criteria determined by oneself, a comprehensive component of overall happiness, the sum of a person's beliefs and evaluations about life, or an individual's general attitude toward life (Dagli & Baysal, 2016). Lack of good life

satisfaction will adversely affect the health of individuals.

Perceived stress plays a significant role in the negative impact on health. Just as stress adversely affects the normal functions of the human being, long-term exposure to stress causes various health problems to occur in the person and adversely affects the satisfaction of life (Eskin et al., 2013). In the literature, it is stated that stress has negative effects on human health (Schneiderman et al., 2005). Therefore, both life satisfaction and perceived

stress can affect the health behaviors of individuals. Health behavior is defined as a set of behaviors related to health, health

protection, and health promotion (Unalan et al., 2007). It is also the whole of the behaviors that the individual believes in and practices to stay healthy and protect against diseases (Zaybak & Dagli, 2004). For the individual, achieving a healthy lifestyle means eating healthier, increasing intellectual capacities, being protected from cardiovascular diseases, increasing immunity, maintaining normal body weight, and coping with stress appropriately (Gordon et al., 2002).

The literature has limited studies examining special education teacher's life satisfaction (Aydemir et al., 2015; Hamama et al., 2013) and perceived stress (Göçer et al., 2020; Hamama et al., 2013). The authors found no studies related to health-promoting and protective behaviors within this population. Special education teachers work with a special group. Therefore, the mental well-being of special education teachers, their exhibition of positive health behaviors, and their ability to teach these behaviors to their students and students' families are crucial for public health.

This study aimed to examine the relationship between the satisfaction of life and perceived stress of special education teachers and their health-promoting and protective behaviors.

Materials and Methods: The present study is a correlational design study and it was carried out between October 2022 and January 2023 in public schools affiliated with the Directorate of National Education in the central districts of a province.

Participants: The population of the descriptive study consisted of 329 special education teachers, who were working in public schools of the Directorate of National Education in the central districts of a province. The only inclusion and exclusion criteria was their willingness to participate in the study. The study did not employ any specific sampling method, and a total of 193 teachers who agreed to participate formed the sample of the study. Google form was used to

collect the data. The forms were delivered to the teachers electronically. The study was based on volunteerism.

Data collection tools: The study data were collected using the introductory information form, the satisfaction with life scale, the perceived stress scale, and the developing promotive and protective health behaviors scale.

Introductory Information Form: The introductory information form was prepared by the researchers based on the literature and consists of 8 questions (Dagli & Baysal, 2016; Eskin et al., 2013).

Satisfaction with Life Scale: In the study, the satisfaction with life scale developed by Diener et al. in 1985 was used to measure the life satisfaction of teachers. The satisfaction with life scale was developed to determine individuals' satisfaction with their lives. The scale consists of 5 items rated on a 7-point Likert scale (1: Strongly Disagree – 7: Strongly Agree). Diener et al. found the reliability of the scale to be Alpha = 0.87 in the original study (Diener et al., 1985). In Turkey, the validity and reliability study of the scale was conducted by Dagli and Baysal (2016). In the adapted scale for Turkish culture, the rating was reduced to 5 levels (1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree, 5-Strongly Agree). The Cronbach Alpha internal consistency coefficient of the scale is 0.88 (Dagli & Baysal, 2016). The Cronbach's alpha value in this study was found to be 0.85.

Perceived Stress Scale (PSS): The scale was developed by Cohen, Kamarck, and Mermelstein in 1983 (Cohen et al., 1983), and its Turkish validity and reliability were conducted by Eskin et al. (Eskin et al., 2013). The scale consists of 14 items and is designed to measure the extent to which individuals perceive certain situations in their lives as stressful. There are two sub-dimensions; inadequate self-efficacy perception and stress/discomfort perception. The scale uses a 5-point Likert-type scale for scoring. Participants evaluate each item on a scale ranging from "Never" (0 points) to "Very Often" (4 points), with options including "Almost Never" (1 point), "Sometimes" (2 points), and "Often" (3 points). The scores that can be obtained from the scale range from

0 to 56, with a high score indicating a high level of stress. The reliability of the questions related to perceived stress in the scale was calculated to have an internal consistency coefficient of 0.84 (Eskin et al., 2013). The Cronbach alpha value in this study was found to be 0.78.

Developing Promotive and Protective Health Behaviors Scale: The scale developed by Bostan et al. (2016) consists of 24 items and three sub-dimensions. These are the physical (ten items), psychosocial (six items), and protection (eight factors) dimensions. The items 1, 3, 4, 5, 12, 13, 14, and 23 in the scale are negative and reverse-coded. The lowest score that can be obtained from the scale is 24 and the highest score is 120. The scale is a 5-point Likert-type scale. Positive statements are scored as follows: "Always" (5 points), "Mostly" (4 points), "Sometimes" (3 points), "Rarely" (2 points), and "Never" (1 point), while negative statements are reverse-scored accordingly (Bostan et al., 2016). The Cronbach alpha value in this study was found to be 0.80.

Data Analysis: The dependent variables of the study were formed as the mean scores of satisfactions with life scale, perceived stress scale, and promotive and protective health behaviors scale. The independent variables of the study included education, age, gender, marital status, educational background, professional experience, educational level they work in, health perception, and the presence of chronic illnesses. Statistical analysis of the data was performed by using the Statistical Package for Social Sciences package software. The significance value was set to $p < 0.05$. The numbers, percentages, and means were used to determine descriptive statistics for the questions in the questionnaire prepared by the researcher. In the study, normality analysis was performed, and skewness and kurtosis values were taken into consideration. In addition, independent samples t-test, Mann-Whitney U test, and Kruskal-Wallis were performed in the study.

Ethical Issues To conduct the study, permission was obtained from the Clinical Research Ethics Committee of a university (Date: 06.10.2022, Issue: 170422), the Provincial Directorate of National Education, and the participants. The issues of the Declaration of Helsinki were followed, in all the stages of the research.

Results

The average age of the participants is 31.62 ± 7.83 . Among the participants, 50.8% of them are male, 54.9% are married, 93.8% are graduates, 15.5% have chronic diseases, 83.9% of them work in primary education, and 55.4% perceive their health as good (Table 1).

The participants have a mean score of 18.35 ± 6.56 on the satisfaction with life scale, a mean score of 38.54 ± 4.29 on the perceived stress scale, and a mean score of 78.35 ± 10.03 on the developing promotive and protective health behaviors scale (Table 2).

There was no significant difference between the perceived stress scale mean score and the developing promotive and protective health behaviors scale mean score according to gender, marital status, education status, educational level they work, presence of chronic disease, and professional experience of the participants ($p > 0.05$) (Table 3).

There was a significant difference in the mean score of the satisfaction with life scale according to marital status ($p < 0.05$) (Table 4). A positive, weak, significant relationship was found between the teachers' mean scores on the satisfaction with life scale and developing promotive protective health behaviors scale ($r = 0.313$, $p = 0.000$). A positive, weak, significant relationship was found between the mean scores of the perceived stress scale and the developing promotive protective health behaviors scale ($r = 0.413$, $p = 0.004$) (Table 4).

Table 1. Distribution of demographic characteristics of teachers (n = 193)

Characteristics		Number (n)	Percentage (%)
Gender	Female	95	49.2
	Male	98	50.8
Marital status	Married	106	54.9
	Single	87	45.1
Educational status	Licence	181	93.8
	Graduate	12	6.2
Level of education in which he/she works	Primary education	162	83.9
	High school	31	16.1
Years of working	1-5 years	109	56.5
	6-10 years	43	22.3
	11-25 years	19	9.8
	26 years and above	22	11.4
Health perception status	Good	107	55.4
	Middle	76	39.4
	Bad	10	5.2
Presence of chronic disease	Yes	30	15.5
	No	163	84.5

Table 2. Distribution of Participants' Satisfaction with Life Scale, Perceived Stress Scale, and Developing Promotive and Protective Health Behaviors Scale Mean Scores

Scales	\bar{X}	SD	Minimum Point	Maximum Point
Satisfaction with Life Scale	18.35	6.56	5.00	35.00
Perceived Stress Scale	38.54	4.29	29.00	48.00
Developing Promotive and Protective Health Behaviors Scale	78.35	10.03	46.00	104.00

\bar{X} : Mean, SD: Standart Deviation

Table 3. Distribution of Satisfaction with Life Scale, Perceived Stress Scale, and Developing Promotive and Protective Health Behaviors Scale Mean Scores According to Some Descriptive Characteristics of Teachers

		Satisfaction with Life Scale		Perceived Stress Scale		Developing Promotive and Protective Health Behaviors Scale	
		\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Gender	Female	18.69	6.51	37.47	2.48	78.06	9.60
	Male	18.01	6.62	39.17	5.00	78.62	10.46
		t= 0.724	p=.470	t= -1.539	p=.131	t= -.387	p=.700
Marital status	Married	19.62	5.94	38.65	4.85	78.08	10.69
	Single	16.79	6.96	38.40	3.56	78.68	0.99
		t= 3.047	p= 0.003	t= 0.197	p=0.845	t= -0.415	p=0.679
Educational status	Licence	18.13	6.54	38.12	3.91	78.25	10.09
	Graduate	21.58	6.22	43.00	6.16	79.83	9.32
		U=784.500	p= 0.107	U=47.000	p=0.160	U=1018.500	p=0.718
Level of Education in which he/she works	Primary education	18.23	6.20	38.36	3.99	78.07	9.47
	High school	18.94	8.27	40.14	5.79	79.77	12.65
		t= -0.449	p= 0.656	t= -1.072	p= .289	t= -0.864	p= 0.388
Presence of Chronic Disease	Yes	18.73	5.76	40.50	9.19	78.37	9.06
	No	18.28	6.71	38.45	4.14	78.34	10.22
		t= 0.350	p= 0.727	t= 0.655	p= 0.516	t= 0.012	p= 0.991
Years of Working	1-5 years	17.86	6.86	39.00	3.72	77.88	10.18
	6-10 years	17.95	6.46	39.38	4.87	79.23	9.74
	11-25 years	18.00	6.01	40.25	6.18	74.26	9.05
	26 years and above	21.82	4.69	34.17	2.71	82.45	9.53
		KW=0.067	p=0.967	KW=0.009	p=.996	KW=.067	p=.967

\bar{X} : Mean, SD: Standart Deviation t: Independent samples t-test, U: Mann-Whitney U test, KW: Kruskal-Wallis, p<0.05

Table 4. The Correlation between Satisfaction with Life Scale, Perceived Stress Scale, and Developing Promotive and Protective Health Behaviors Scale Mean Scores

Scales	Developing Promotive and Protective Health Behaviors Scale Mean Scores	
	r	p
Satisfaction with Life Scale Mean Scores	0.313	0.000
Perceived Stress Scale Mean Scores	0.413	0.004

Discussion

One of the main factors affecting the efficiency of the educational process is the performance of teachers. From this point of view, teachers' life satisfaction and perceived stress, which affect their performance and health-promoting and protective behaviors, are very important. In this regard, it is also essential to examine teachers' life satisfaction, perceived stress, and health-promoting and protective behaviors according to some variables and to evaluate the results.

In this study, it was determined that there was no significant difference between perceived stress and health-promoting and protective behaviors of participants according to their gender, marital status, education status, educational level they work, presence of chronic disease, and years of experience in the profession. Therefore, it can be stated that participants had similar attitudes toward perceived stress levels and health-promoting and protective behaviors. Consistent with the results of our study, several studies have reported that variables such as gender, marital status, years of teaching experience, subject area, and school type do not lead to differences in teachers' perceived stress and health-promoting and protective behaviors (Caz & Yildirim, 2019; Sanli, 2017). This situation may be attributed to similar job-related challenges faced by special education teachers in Turkey, such as long working hours, low salaries, excessive paperwork, difficulties in obtaining educational materials, and poor physical conditions in institutions (Yavuz, 2019).

On the other hand, in this study, it was determined that the life satisfaction mean

scores differed according to marital status and that the life satisfaction mean scores of married teachers were higher than those of singles. In the literature, marriage is described as a social institution that helps individuals derive satisfaction from their lives, directly influences their satisfaction of life, reduces levels of loneliness, and provides individuals with psychological, social, and economic benefits, allowing them to lead healthier lives (Oter & Dagli, 2022; Sayin et al., 2019). Therefore, this situation may have led married teachers to achieve a lifestyle closer to their ideals, be satisfied with their lives, and consequently, have higher life satisfaction compared to singles.

In this study, a positive relationship was determined between the life satisfaction of teachers working in special education schools and their health-promoting and protective behaviors. Similarly, Pekel et al. (2015) determined that there was a significant positive relationship between the life satisfaction and healthy life attitudes of special education teachers; and those teachers with high life satisfaction were more inclined to health-promoting and protective behaviors (Pekel et al., 2015).

Therefore, it has been reported that life satisfaction, which is defined as individuals' positive evaluation of their whole life in accordance with the criteria they determine and the result they obtain by comparing their expectations with what they have, shapes health behavior (Dagli & Baysal, 2016). Considering that the majority of the teachers participating in this study have a good perception of health and do not have chronic diseases, this may have caused the teachers to

want to maintain their current health status and to turn to health-promoting and protective behaviors as their life satisfaction increased.

A significant positive and weak difference was found between the perceived stress scale mean scores and the promotive and protective health behaviors scale mean scores of special education teachers. Consistent with the results of this study, many studies have found that special education teachers are sensitive to emotional exhaustion, frustration, and higher levels of stress and that teachers tend to engage in behaviors related to maintaining and improving health as stress levels increase (Adigun et al., 2021; Fu et al., 2022; Park & Shin, 2020). Teachers, regardless of the type of school, are at the forefront of providing education for students with special needs. They make an intense effort to implement the curriculum using appropriate instructional strategies that respond to each student's behavioral, cognitive, and learning abilities, regardless of their specific needs situation. In addition to curriculum implementation, knowledge transfer, improving the learning outcomes of students with special needs, and ensuring commitment, these teachers often have to deal with challenging behavioral characteristics such as hyperactivity, impulsivity, self-harm, anxiety, and/or aggression, as well as other psychophysiological traits that may hinder effective teaching and learning processes (Adigun et al., 2021). Additionally, studies have shown that teachers face high demands, severe challenges, and low rewards and motivation that can prevent them from doing their best for the educational and behavioral development of students with special needs (Adigun et al., 2021; Kebbi & Al-Hroub, 2018). It has been reported that these situations significantly affect the level of stress experienced by teachers (Park & Shin, 2020). The frequency and duration of stress that exceed an individual's coping abilities can have negative effects on their physical and mental well-being and lead to various problems. Therefore, as the level of stress increases, teachers may have to focus on aspects such as controlling situations that affect their lives, scheduling daily activities that are in line with their health condition,

engaging in regular and adequate exercise, maintaining a balanced diet, and adopting effective coping and stress management strategies, which may have led to an increase in behaviors aimed at protecting and improving health.

Limitations of the Research: Since this study was conducted with teachers working in a provincial center at a certain period, the study findings cannot be generalized.

Conclusion: It was determined that as teachers' life satisfaction and perceived stress levels increased their health-promoting and protective behaviors increased at a weak level positively ($r = .313$, $p = .000$).

Recommendations: It is recommended to study the perceived stress, life satisfaction, and health-promoting and protective behaviors of teachers with a broader sample group and with teachers working in different regions and times. In addition, perceived stress, life satisfaction, and health-promoting and protective behaviors are dynamic concepts. Therefore, they can change and develop. Therefore, it is recommended to reevaluate at different times and compare the results. In addition, interventions aimed at increasing teachers' life satisfaction and reducing their stress levels is recommended.

Topics related to life satisfaction and stress management should be included in in-service training courses/seminars to be organized for teachers.

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