

Full Length Research Paper

A research on the levels of perceived stress and quality of life of physical education teachers: A pilot study in Türkiye

Numan Alpay

Faculty of Sports Sciences, Balıkesir University, Balıkesir, Türkiye.

Received 19 May, 2022; Accepted 29 June, 2022

The study focuses on the classification of occupational stressors perceived by physical training teachers in Turkey and the correlations of these stressors between some workload, biographic and quality of life variables. This research was conducted face to face among physical education teachers in public and private schools in the cities of Balıkesir, Kocaeli, Bursa, Kütahya, Osmaniye, Yalova, Ankara, Antalya, Adana, Uşak, Manisa, Kayseri, İzmir, Şanlıurfa, in 2021 and 2022. The cluster method was applied. This research on physical education teachers in Turkey is a cross-sectional study. Data analysis was done using t-test and analysis of variance. First, the Pearson correlation analysis was done by examining the relationship between the variables of quality of life and perceived stress and its effect. A linear regression analysis was done with the purpose of identifying its predictability negatively and significantly ($p < 0.001$).

Key words: Physical education, teacher, stress, stress perception, quality of life.

INTRODUCTION

Teachers experience stresses such as anxiety, tension, anger, frustration or depression due to the tedious nature of their job. When these unpleasant problems are confronted in the early years of teaching, they get bigger. Kyriacou and Sutcliffe are the first scientists who brought forward the concept of “Teacher Stress” in the occupational sense on the agenda in 1977. The number of studies that reported teacher stress proliferated rapidly in the 1980s, and the number of research on teacher stress increased even more in the 1990s (Kyriacou, 2001). Interprofessional comparisons were made in this context

–a high-stressed occupation” in terms of the negative results on physical and psychological health and job satisfaction (Johnson, 2005; Kyriacou, 2011). Stress of teaching profession and the quality of Balıkesir University Faculty of Sports Sciences life is a current issue drawing a significant attention in recent years due to its relation to poor health caused by burnout, being occupationally worn-out, absenteeism, or leaving employment. Lack of facilities/equipment required for the subject of Physical Education, discipline problems of students, lack of motivation and frequency of loud noise, having limited

E-mail: numanalpay@gmail.com.

Author(s) agree that this article remain permanently open access under the terms of the [Creative Commons Attribution License 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

resources, high expectations from physical education teachers or excessive desires of students and density of workload can lead to the environmental and psychological stress on physical education teachers (Guglielmi and Tatrow, 1998; Montgomery and Rupp, 2005; Pels et al., 2022). Furthermore, this issue poses some problems for the school /education system as a whole besides the affected physical education teachers (Pels et al., 2022).

The different protocols and theoretical frameworks/ methodologies of the study and the environmental factors indicate that the factorial researches repeated by numerous studies about many physical education teachers perceive a high level of stress (Kastrup, 2007; Kastrup et al., 2008; Schäfer et al., 2019; Alsaihe et al., 2021). Physical education teaching involves many features of teaching profession due to the nature of the work. That is to say, a physical education teacher can provide his/her students with physical, physiological, and psychological training that will enable them cope with various difficulties they encounter in the classroom atmosphere or in their social lives. When considered from this point of view, the role that physical education teachers play is undeniable. Physical education lesson not only contributes to students positively but also paves the way for discovering their talents. Thus, the lesson makes it possible to produce elite athletes can involve in national and international athletic sports.

Determining the related sources of stress and eradicating or minimizing them is important not only because of their serious consequences on the health of physical education teachers but also due to their positive impacts on teachers' work performance and absenteeism.

Depending on the origin and duration of the effect, stress can be acute, chronic, daily or occupational (Morgan, 1996). Stress is an action valued as pushing one's individual limits or going beyond them as a result of the interaction between the individual and the environment (Lazarus and Folkman, 1987). In another definition, the stimuli causing negative response in individuals environmentally are defined as stress (Selye, 2013). Eskin et al. (2013) define stress as pressure and strain resulting from internal and external stimuli. In addition, Lazarus and Folkman (1987) emphasize that stress has a sociopsychological aspect and state that it is a combination of an individual's cognitive features, that is one's beliefs, objectives, and way of thinking, and social and cultural features. Stress, which is likely to be encountered in all areas of social life, is more likely to be encountered in work life. When examining its impact on work life, stress can affect the performance of an employee with all its aspects. It might be difficult for employees to cope with stress depending on the origin of stress and individual readiness. Although learning how to cope with stress requires experience, its intensity can lead to negative consequences for employees such as getting bored with the work atmosphere or being

dissatisfied. There are many stimuli that individuals come across in work environment and especially in terms of the duty teachers undertake. This pressure increases in variety. Many of the negative factors teachers face in school environment can create stress for them. It has been found in the studies that burnout syndrome and stressors caused by heterogeneous students are prominent (Bümen, 2010; Navickienė et al., 2018).

When these factors are examined, they emerge as environmental and psychological factors, lack of motivation, pressure depending on time and workload, feeling of being inspected, friendships at work, self-respect, status, administrative and managerial problems, and difficulties of working conditions (Göçer et al., 2020). Moreover, an immense amount of stress can become hard to control and can have negative consequences like difficulty in concentration and occupational burnout as a result of decrease in professional satisfaction of teachers. Due to this situation, physical education teachers can be under a high amount of occupational stress, and thus negative physical and psychological results can arise (Schäfer et al., 2019).

Besides the difficulties teachers encounter while practicing their profession is the increase in the density of workload and the stress occurring; this can cause teachers to experience psychosocial problems. In case of the continuation of this process, acute stress turns into chronic stress and this causes the quality of life of teachers to reduce. In the context of The World Health Organization (WHO)'s definition of health in 1946, health is the state of a complete well-being in physical, social and psychological sense rather than the absence of diseases or defects and the quality of life should be handled as the consequence of this (WHO, 1947). For this reason, life quality should be considered as being satisfied with one's whole life in the general sense. The perception of quality regarding school life can be said to express the satisfaction with the quality of the school that covers a significant period of time in a teacher's life and with the quality of education (Sarı et al., 2018). From this aspect, it can be considered to be an important concept.

Emphasis should be laid on the quality of life of physical education teachers especially with focus on its influence on their educational integration. Furthermore, it should be taken into consideration that the correct definition of the relationship between life quality and stress and setting forth the relationship between them with all its aspects will have serious consequences on students, education and society as well as physical education teachers.

METHODS

Turkey consists of seven regions and the provinces included in the study were randomly selected from these regions. This research was conducted face to face among physical education teachers working in public and private schools in the cities of Balıkesir,

Table 1. Demographic distribution of physical education teachers participating in the research.

Demographic characteristics		f	%
Gender	Male	180	65.2
	Female	96	34.8
Marital status	Married	199	72.1
	Single	77	27.9
Age (year)	25-30	37	13.4
	31-36	44	15.9
	37-42	64	23.2
	43- 48	74	26.8
	48-48	57	20.7
State of doing sport actively	Doing	198	71.3
	Not doing	78	28.3
Disease	Exists	24	8.7
	Does not exist	252	91.3
Total		276	100

Source: Author

Kocaeli, Bursa, Kütahya, Osmaniye, Yalova, Ankara, Antalya, Adana, Uşak, Manisa, Kayseri, İzmir, and Şanlıurfa from 2021 to 2022. Clustering method was used. This research done on physical education teachers in Turkey is a cross-sectional study.

Study group

In Table 1, it is seen that 180 of the physical education teachers that participated in the research are males and 96 of them are females. 199 of the participants are married and 77 of them are single; 37 of them are between 25 and 30 years old, 44 of them are between 31 and 36 years old, 64 of them are between 37 and 42 years old, 74 of them are between the ages of 43 and 48, and 57 of them are 48 years or above. 198 of the participants do sport actively, whereas 78 of them do not do sport actively. 24 of the participants have any disease, while 252 of them do not have any diseases.

Data collection tools

The World Health Organization Quality of Life-WHOQOL-BREF

WHO Quality of Life-Bref scale was developed by the World Health Organization (1998). Eser et al. (1999) studied its adaptation to Turkish, reliability and validity. It is a scale of 5-point Likert-type consisting of 26 questions and a total of 5 subscales as follows: general health, physical domain, psychological domain, social domain, and environmental domain. A high score indicates that the quality of life of an individual is high.

The perceived stress scale

The study of the validity, reliability and adaptation of the scale to Turkish which was developed by Cohen et al. (1983), was conducted by Eskin et al. (2013). The Perceived Stress Scale was

designed to assess the degree to which some situations in the respondents' life are perceived as stressful. Perceived Stress Scale whose items are scored between the ranges of Never (0) and Very Often (4) is a 5-point Likert scale. The scale consists of the subscales of the perception of lack of self-efficacy and stress/disorder, and the increase in the total score obtained indicates that the level of the stress the individual has perceived is high. In this study, the Cronbach alpha level was found to be 0.91 for the quality of life scale and 0.752 for the perceived stress scale.

Statistical analysis

Descriptive analysis was carried out through the data obtained, and afterwards Kolmogorow-Smirnov (K-S) test for normality was conducted with the purpose of determining if the data show a normal distribution or not. States of normality of general distribution and distribution according to factors were analyzed (± 2) and parametric tests were used in analyzing the data as it shows a normal distribution (George and Mallery, 2010). An independent sample t-test was used in comparative analysis based on the variables such as gender, marital status, status of doing sport actively, and status of disease; and as for the comparative analysis according to the age variable, a one-way analysis of variance (one-way ANOVA) was used. Prior to the t-test and the analysis of variance, the values of Levene's test were analyzed and the assumption of the homogeneity of variances was seen to have been proved. In analyzing the effect and correlation between the quality of life and perceived stress, the Pearson correlation analysis was first realized and with the aim of determining predictiveness, a linear regression analysis was used. The 25th version of Statistical Package for Social Science (SPSS) was used for the analysis of the data.

FINDINGS

Table 2 shows the averages of the overall score of PSS,

Table 2. Descriptive values on dependent variables.

Variable		n	s	Skewness	Kurtosis
WHOQOL-BREF-TR	General state of health	276	7.15±1.54	-0.524	0.292
	Physical domain	276	26.97±4.11	-0.484	0.183
	Psychological domain	276	23.41±3.52	-0.811	1.646
	Social domain	276	11.27±2.13	-0.648	0.603
	Environmental domain	276	29.02±4.60	-0.455	0.618
	Overall score	276	100.18±13.05	-0.527	0.988
Perceived stress scale	Overall score	276	23.45±8.06	0.102	0.800
	Total	276			

Source: Author

and scores from the subscales of physical education teachers who participated in the study are seen in the quality of life scale to be 7.15(±1.54) in the general state of health subscale, 26.97 (±4.11) in the physical domain subscale, 23.41 (±3.52) in the psychological domain subscale, 11.27 (±2.13) in the social domain subscale, 29.02 (±4.60) in the environmental domain subscale, 100.18 (±13.05) in the overall score of the quality of life, and 23.45 (±8.06) in the overall score of perceived stress. Looking at the values of skewness-kurtosis (±2), it is seen that all values indicate normal distribution (George and Mallery, 2010).

In Table 3, in the subscales of the scale of the quality of life of physical education teachers, the scores of general state of health were identified to be significantly higher in men than in women, higher in participants who do not do active sports than participants doing sports actively, higher in participants with no disease than in participants with certain diseases ($p < 0.05$); whereas, it was determined that there was no statistically significant difference according to the status of being married or single ($p > 0.05$). The scores of the physical domain subscale were determined to be significantly higher in men than in women statistically ($p < 0.01$); but it was found that, statistically, there was no significant difference in terms of the variables of marital status, doing sport actively, or disease ($p > 0.05$). The scores of the psychological domain subscale were found to be meaningfully higher in men than in women and higher in married participants than in the single ones statistically ($p < 0.01$); yet it was identified that, statistically, there was not a significant difference based on the variables of doing sport actively or disease ($p > 0.05$). The scores of the social domain subscale were determined to be meaningfully higher in married participants than in the single ones statistically ($p < 0.01$); however, no significant difference based on the variables of gender, doing sport actively or disease was identified statistically ($p > 0.05$). The scores of the environmental domain subscale were found to be meaningfully higher in men than in women and higher in married people than in the single ones statistically ($p < 0.05$); statistically, no meaningful difference

was detected according to the variables of doing sport actively or disease ($p > 0.05$). The scores of perceived stress were found to be significantly higher in women than in men, higher in single participants than in the married ones, higher in people with any disease than with no disease statistically ($p < 0.05$); for the variable of doing sport actively, it was identified that there was no meaningful difference ($p > 0.05$).

In Table 4, it was determined that there was not a statistically significant correlation between groups in the general state of health subscale, in the physical domain subscale, and in the social domain subscale of the quality of life scale based on the age variable of physical education teachers ($p > 0.05$). On the other hand, a statistically significant difference was found to exist between groups in the psychological domain subscale, in the environmental domain subscale and in the level of perceived stress ($p < 0.05$). When Bonferroni post-hoc values were analyzed with the objective of specifying which groups caused the significant differences between groups, it was identified that physical education teachers at the age of 48 and above have significantly higher scores of the quality of life than physical education teachers who are between the ages of 25 and 30 in the psychological domain subscale; in the environmental domain subscale, physical education teachers aged 43-48 and above the age of 48 have meaningfully higher scores of quality of life than physical education teachers between the ages of 25-30 ($p < 0.01$). In terms of perceived stress scores, it was determined that physical education teachers aged 25-30 have significantly higher scores than physical education teachers aged between 43 and 48 statistically ($p < 0.05$).

As Table 5 indicates, the scores of the quality of life of physical education teachers were identified to be statistically positive and significantly correlated on the basis of subscale and general score ($p < 0.001$); perceived stress and all subscales of life quality scale and general scores were found to be statistically negative and significantly correlated ($p < 0.001$).

As Table 6 reveals, perceived stress levels of physical education teachers were found to predict their quality of

Table 3. The results of the independent group t-test on the differences of the scale scores according to demographic variables.

Variable		n	Mean	Standard deviation	t	Degree of Freedom	p	
General state of health	Gender	Male	180	7.32	1.50	2.457	274	0.015*
		Female	96	6.84	1.55			
	Marital status	Married	199	7.24	1.55	1.639	274	0.102
		Single	77	6.90	1.46			
	Doing sport actively	Yes	198	7.02	1.54	-2.290	274	0.023*
No		78	7.48	1.46				
Disease	Existent	24	6.20	1.67	-3.201	274	0.002**	
	Nonexistent	252	7.24	1.50				
Physical domain	Gender	Male	180	27.56	4.01	3.296	274	0.001**
		Female	96	25.87	4.09			
	Marital status	Married	199	27.24	3.96	1.764	274	0.079
		Single	77	26.27	4.39			
	Doing sport actively	Yes	198	26.96	4.09	-.073	274	0.941
No		78	27	4.16				
Disease	Existent	24	25.88	3.61	-1.371	274	0.172	
	Nonexistent	252	27.07	4.14				
Psychological domain	Gender	Male	180	23.91	3.52	3.229	274	0.001**
		Female	96	22.49	3.38			
	Marital status	Married	199	23.84	3.22	3.362	274	0.001**
		Single	77	22.29	4.03			
	Doing sport actively	Yes	198	23.28	3.48	-.977	274	0.330
No			23.74	3.64				
Disease	Existent	24	22.58	3.28	-1.206	274	0.229	
	Nonexistent	252	23.49	3.54				

Table 3. Cont'd. The results of the independent group t-test on the differences of the scale scores according to demographic variables.

Social domain	Gender	Male	180	11.38	2.17	1.117	274	0.265
		Female	96	11.08	2.04			
	Marital status	Married	199	11.50	2.01	2.843	274	0.005**
		Single	77	10.70	2.31			
Doing sport actively	Yes	198	11.26	2.10	-0.266	274	0.790	
	No	78	11.33	2.19				
Disease	Existent	24	11.20	1.69	-0.170	274	0.865	
	Nonexistent	252	11.29	2.17				
Environmental domain	Gender	Male	180	29.44	4.70	2.101	274	0.037*
		Female	96	28.22	4.32			
	Marital status	Married	199	29.65	4.34	3.749	274	<0.001**
		Single	77	27.39	4.88			
	Doing sport actively	Yes	198	28.71	4.67	-1.787	274	0.075
		No	78	29.80	4.36			
	Disease	Existent	24	28.08	3.78	-1.045	274	0.297
		Nonexistent	252	29.11	4.67			
Perceived stress	Gender	Male	180	22.53	8.60	-2.615	274	0.009**
		Female	96	25.17	6.66			
	Marital status	Married	199	22.80	7.75	-2.138	274	0.033*
		Single	77	25.10	8.68			
	Doing sport actively	Yes	198	23.80	7.71	1.156	274	0.248
		No	78	22.53	8.89			
Disease	Existent	24	27.20	5.73	2.412	274	0.017*	
	Nonexistent	252	23.08	8.18				

*= $p < .05$; **= $p < .01$; ***= $p < .001$.

Source: Author

Table 4. The results of one-way analysis of variance on the differences of scale scores according to the variable of age.

Variable		Sum of squares	Degree of freedom	Mean of squares	F	p	Post-hoc
General State of Health	Within-group	10.458	4	2.614	1.109	0.353	
	Between-groups	639.151	271	2.358			
	Total	649.609	275				
Physical Domain	Within-group	52.859	4	13.215	0.781	0.538	
	Between-groups	4584.909	271	16.918			
	Total	4637.768	275				
Psychological Domain	Within-group	121.257	4	30.314	2.487	0.044*	e>a
	Between-groups	3303.657	271	12.191			
	Total	3424.913	275				
Social Domain	Within-group	10.209	4	2.552	0.561	0.691	
	Between-groups	1233.309	271	4.551			
	Total	1243.518	275				
Environmental Domain	Within-group	306.645	4	76.661	3.761	0.005**	d>a e>a
	Between-groups	5523.224	271	20.381			
	Total	5829.870	275				
Perceived Stress	Within-group	678.107	4	169.527	2.667	0.033*	a>d
	Between-groups	17226.078	271	63.565			
	Total	17904.185	275				

*=p<.05; **=p<.01 a=25-30 years; b=31-36 years; c=37-42; d=43-48; e=48 and over.

Source: Author

life level significantly and negatively ($p < 0.001$). Variable of stress perceived in physical education teachers was detected to explain the variance of the variable of quality of life at the level of 20,9 % ($R = 0.457$, $R^2 = 0.209$, $p < 0.001$).

Furthermore, it was determined that one unit increase in the perceived stress causes a decrease equivalent to 0.74 units ($B = -0.740$) in the quality of life.

DISCUSSION

Stress in one's occupation and quality of life can vary in terms of scale and effect. As a matter of fact, it has more impact on teachers than on other professions. Physical education teachers are affected by stress far more than teachers of other branches. This is because unlike the theoretical teaching that physical education teachers learn in the university, they frequently engage in other activities such as teaching, grading of scores, occupational self-concept, and meeting the requests of their organization especially in their daily school lives. Moreover, they face a great number of new and unexpected demands, which makes their job less satisfying and leads to more anxieties (Schäfer et al.,

2019). Facing these potential stressors frequently, especially when they turn into real psychological stressors due to "negative evaluation" may cause physical and mental disorder. In a recent meta-analysis study conducted in this context (Alsalhe et al., 2021), it has been stated that a large number of burnout syndromes of physical education teachers were reported (Mack et al., 2019; Pels et al., 2022). Potential stressors, which are frequently reported at all career stages, such as inadequate curriculum, noise, and heterogeneity, should be taken seriously owing to the fact that these may be the causes of failure and severe health problems.

From the general findings, noise, heterogeneity of students and inadequate curriculum have been among the "potential stressors" seen most frequently. The more the course load increases, the more the frequency of "potential stressors" increases. The reflection of stress on the present surroundings and the society is inevitable due to the teaching profession (Achinstein, 2002).

When teachers' quality of life is evaluated, it is evident that the most dominant impact on them is the factor of excessive workload. At the heart of this factor, besides teachers having no time for various tasks, there are also perceptions that there are difficulties in completing the task and resting in leisure time. The factor of behavioral

Table 5. The result of pearson correlation analysis on the relationship between the variables of the quality of life and perceived stress.

Variable	General state of health	Physical domain	Psychological domain	Social domain	Environmental domain	Overall quality of life	Perceived stress
General State of Health	1						
Physical Domain	0.594***	1					
Psychological Domain	0.627***	0.719***	1				
Social Domain	0.419***	0.449***	0.583***	1			
Environmental Domain	0.594***	0.597***	0.684***	0.613***	1		
Overall Quality of Life	0.732***	0.845***	0.884***	0.715***	0.878***	1	
Perceived Stress	-0.452***	-0.401***	-0.430***	-0.249***	-0.396***	-0.457***	1

**=p<0.001.

Source: Author

Table 6. The result of simple linear regression analysis on the effect of perceived stress level on the quality of life.

Variable	B	Standard error	β	T	p
Fixed (LQ)	117.534	2.155		54.539	<0.001***
PS	-0.740	0.087	-0.457	-8.511	<0.001***

F=72.432; R = .457; R² =.209; Adj.R² =.206; *** = p<.001, LQ= Life Quality; PS= Perceived Stress.

Source: Author

disorder is the second negative effect on teachers' quality of life. Actually, more than the factor of work overload, students disrupting the flow of the lesson and conflicts between students hinder teachers' target-driven efforts and make it hard for them to concentrate on teaching subjects (Mykletun, 1984).

Stress can cause physical and psychological health-related illnesses and as a result of this, it reduces the quality of life (von Haaren-Mack et al., 2020). When health-related factor was analyzed, the level of the quality of life of male physical education teachers caused by their general state of health was found to be higher than that of female teachers (Yeşil et al., 2010; Wang et al., 2000; Group, 1998; Borglin et al., 2005; Ashada

and Ohkusa, 2004; Çalıştır et al., 2006; Ceremnych, 2003; Hsu, 2007; Drageset et al., 2006). However, there are also studies putting forward that gender is not effective in determining the quality of life (Chien et al., 2003; Avcı and Pala, 2004; Pels et al., 2022). When teachers' quality of life was analyzed within the scope of the physical factor, it was determined that the quality of life of male teachers was higher than that of female ones. Avcı and Pala (2004) determined in their studies that the quality of life of the male participants was higher than that of the female ones in physical domain. In the study, it is seen that the quality of life of men is higher than women physically and psychologically. Also, in the research of The WHOQOL Group and World

Health Organization (1998) conducted, it was stated that the physical and psychological quality of life of men was higher than that of women.

It has been specified that psychological and environmental factors and perceived stress vary according to the ages of individuals. However, life qualities of general state of health, physical and social factor do not change depending on age. In particular, teachers' burnout can affect the objectives of teaching and the educational environment, and this situation can cause severe problems not only at individual level but also in the organizational context. Other organizational results such as poor job performance, health problems, adverse outcomes of students, quitting, job-absenteeism, intention of quitting the job, and

actual wearing out have really been identified. These can cause lower efficiency and productivity in business life. Being burnout significantly affects teachers' perceived quality of life and thus may bring up their choice of quitting the job (Mykletun, 1984; Mack et al., 2019; Mack et al., 2020; Alsalhe et al., 2021; Pels et al., 2022).

It is career optimism in the first years of their careers that provides a significant contribution to teachers' occupational motivation. In the following years, as the process progresses, this optimism decreases. Within this context, as experience increases, skills in coping with stressors develop as well (Adams, 1999; Nasser and Alhija, 2015).

Physical education teachers with young age factor are seen to have a lower quality of life in terms of psychological and environmental factors. Additionally, perceived stress of the ones in this age category is understood to be higher. However, with the increase in their age, they have less problems with their colleagues but experience more physical strain. Thus, as age increases, the quality of life of people decreases (Şahin and Emiroğlu, 2014; Kaya et al., 2008; Özyurt et al., 2007; Pels et al., 2022).

Physical activity is an essential non-pharmacological tool needed to be in a good condition physically and mentally and to counteract various chronic-degenerative disorders. Physical training is the main factor used to prevent the occurrence of various diseases (Alsalhe et al., 2021). General state of health life quality of individuals who are active and do sports was found to be much higher than those who are inactive and do not do any sports. Tunç et al. (2020) stated in the study they conducted that there exists differences in the status of general health, in social and environmental subscales of individuals who do regular exercise. Altay et al. (2016), on the other hand, concluded in their study that the presence of any disease in individuals does not affect their quality of life.

It was specified that psychological, social and environmental life quality of married individuals is higher than that of single ones. Yıldırım and Hacıhasanoğlu (2011) and Lerner et al. (1994), expressed in their studies that social life quality of married individuals is higher than that of single individuals. They added that individuals with good family relationships and who have strong family ties increase their quality of life affect their physical and psychological states positively (Testa and Simonson 1996; Hjaltdóttir and Gústafsdóttir, 2007; Hsu, 2007).

It has been determined that the perceived stress level of female physical education teachers is higher than that of male teachers. There are also studies in literature showing that the perceived stress level of women is higher than that of men (Leung et al., 2010; Şahin, 2018; Shaw et al., 2017; Andreou et al., 2011; Smith et al., 2014; Roberti et al., 2006). These results in literature support the results in the study. The result in the study reveals that women are more sensitive to stress than men. The impacts of gender on perceived stress are at

medium level and unilateral only for male physical education teachers (Mykletun, 1984).

Individuals who suffer from any illness have been seen to have a much higher level of perceived stress than other individuals without any diseases. Çalışkan et al. (2018) concluded in their study that individuals with a physician-diagnosed disease have a higher level of perceived stress than those who are without and they stated that factors such as treatment, medication, and deterioration in family relationships may increase stress in individuals with a disease.

It has been determined that perceived stress, general state of health, physical domain, psychological domain, social domain and environmental domain are negatively correlated with the overall quality of life and an increase in individuals' perceived stress decreases their quality of life. When literature is reviewed, there are studies showing that low perceived stress level means a high quality of life and therefore these two concepts are negatively correlated (Koch et al., 2020; Khodami et al., 2021; Kent et al., 2019; Seo et al., 2018; Mahmoud et al., 2012).

Whether or not a real stressor is relevant to the thoughts of harm or loss, threat or challenge, potential stressors never occur only through the environmental factors but they occur as a result of an interaction between the environment and the individual. Physically and psychologically burnout of physical education teachers represents a global public health problem, which is prominent in the studies conducted. Decision makers in healthcare should design preventive and protective interventions and should apply them in practice taking into account the findings of studies reported at the country level. In this context, burnout syndrome puts a significant burden on physical education teachers and reduces their quality of life.

Physical education teachers should be made sensitive against potential stressors they will encounter as physical education teachers during their daily routines. Within this context, possible individual stress reactions should be the subject of debate. All physical education teachers should then learn psychological strategies. These recommendations are all about the individual level of physical education teacher and the organizational level; that is, related to the school/university system both of which are interdependent. For physical education teachers as individuals, interventions for proactive coping that have been adapted to the salient stressors in a particular career are needed.

Conclusion

In conclusion, this is a problem for both physical education teachers which has also affected individuals and for the school/education system as a whole. In order to solve this problem, the causes of it need to be understood. In prospective researches, studies should be

deepen on stressors and should be made common. Also, within the context of physical education teachers, researches should be done to compare longitudinal different career stages.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES

- Achinstein B (2002). Conflict Amid Community: The Micropolitics of Teacher Collaboration. *Teachers College Record* 104(3):421-455.
- Adams E (1999). Vocational Teacher Stress and Internal Characteristics. *Journal of Vocational and Technical Education* 16(1):7-22.
- Altay B, Çavuşoğlu F, Çal A (2016). The factors affecting the perception of elderly patients towards health, quality of life and health-related quality of life. *TAF Preventive Medicine Bulletin* 15(3):181-189.
- Alsahhe TA, Chalghaf N, Guelmami N, Azaiez F, Bragazzi NL (2021). Occupational Burnout Prevalence and Its Determinants Among Physical Education Teachers: A Systematic Review and Meta-Analysis. *Frontiers in Human Neuroscience*, pp. 1-14.
- Andreou E, Alexopoulos EC, Lionis C, Varvogli L, Gnardellis C, Chrousos GP, Darviri C (2011). Perceived stress scale: reliability and validity study in Greece. *International Journal of Environmental Research and Public Health* 8(8):3287-3298.
- Ashada Y, Ohkusa Y (2004). Analysis of health-related quality of life (HRQL), its distribution, and its distribution by income in Japan, 1989 and 1998. *Social Science and Medicine* 59(7):1423-1433.
- Avcı K, Pala K (2004). Evaluation of the quality of life of research assistants and specialists working in Uludag University School of Medicine. *Journal of Uludag University Faculty of Medicine* 30(2):81-5.
- Bümen NT (2010). The relationship between demographics, self efficacy, and burnout among teachers. *Eurasian Journal of Educational Research* 40:17-36.
- Borglin G, Jakobsson U, Edberg AK, Hallberg IR (2005). Self-reported health complaints and their prediction of overall and health-related quality of life among elderly people. *International Journal of Nursing Studies* 42(2):147-158.
- Ceremnych J (2003). Focus group discussions with older adults and carers for development of pilot WHOQOL-OLD measure. *Acta Medica Lituanica* 3(10):152-158.
- Chien LY, Lo H, Chen CJ, Chen YC, Chiang CC, Chao YMY (2003). Quality of life among primary caregivers of Taiwanese children with brain tumor. *Cancer Nursing* 26(4):305-311.
- Cohen S, Kamarck T, Mermelstein R (1983). A global measure of perceived stress. *Journal of health and social behavior*, pp. 385-396.
- Çalışkan S, Aydoğan S, Işıklı B, Metintaş S, Yenilmez F, Yenilmez Ç (2018). Assessment of perceived stress level and related factors in university students. *Journal of Public Health of the Turkish World Application and Research Center* 3(2):40-49.
- Çalıştır B, Dereli F, Ayan H, Cantürk A. (2006). Life quality of the elder people living in the city centre of Muğla. *Turkish Journal of Geriatrics* (9):30-33.
- Drageset J, Natvig GK, Eide GE, Clipp EC, Bondevik M, Nortvedt MW, Nygaard HA (2008). Differences in health-related quality of life between older nursing home residents without cognitive impairment and the general population of Norway. *Journal of Clinical Nursing* 17(9):1227-1236.
- Eser E, Fidaner H, Fidaner C, Eser SY, Elbi H, Göker E (1999). Psychometric properties of the WHOQOL-100 and WHOQOL-BREF. *Journal of Psychiatry Psychology Psychopharmacology* 7(2):23-40.
- Eskin M, Harlak H, Demirkıran F, Dereboy Ç (2013). The Adaptation of the Perceived Stress Scale Into Turkish: A Reliability and Validity Analysis. In *New/Yeni Symposium Journal* 51(3):132-140.
- George D, Mallery M (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference*, 17.0 update (10a ed.) Boston: Pearson.
- Göçer V, Bayat S, Dayan G, Dayan K (2020). Study of the Relationship between perceived Stress and Job Satisfaction of Teachers Working In Special Education Schools. *Anatolian Turkish Journal of Education* 2(2):33-51.
- Group TW (1998). The World Health Organization quality of life assessment (WHOQOL): development and general psychometric properties. *Social Science and Medicine* 46(12):1569-1585.
- Guglielmi S, Tatrow K (1998). Occupational stress, burnout, and health in teachers: A methodological and theoretical analysis. *Review of Educational Research* 68(1):61-99.
- Hjaltadóttir I, Gústafsdóttir M (2007). Quality of life in nursing homes: perception of physically frail elderly residents. *Scandinavian Journal of Caring Sciences* 21(1):48-55.
- Hsu HC (2007). Gender differences in health-related quality of life among the elderly in Taiwan. *Asian Journal of Health and Information Sciences* 1(4):366-376.
- Johnson S (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology* 20(2) 178-187.
- Kastrup V (2007). Wahrnehmung von Differenzen im Sportunterricht – wie gehen Sportlehrkräfte damit um? [Perception of differences during physicaleducationclasses—howdophysicaleducation teachers deal with it?]. *Sportunterricht* 56(11):329-333.
- Kastrup V, Dornseifer A, Kleindienst-Cachay C (2008). Belastungswahrnehmung von Sportlehrkräften verschiedener Schulformen: Eine empirische Studie zur Belastungswahrnehmung von Sportlehrkräften in Abhängigkeit von Schulform, erteilter Sportstundenzahl, Alter und Geschlecht. [Perceived strain of physical education teachers from different types of school]. *Sportunterricht* 57(10):307-313.
- Kaya M, Aslan D, Vaizoğlu SA, Doruk C, Dokur U, Biçici V, Ertekin Ö (2008). Determination of life quality of elderly and related factors in a district of Ankara, Turkey. *Turkish Journal of Geriatrics* 11(1):12-17.
- Kent W, Hochard KD, Hulbert-Williams NJ (2019). Perceived stress and professional quality of life in nursing staff: how important is psychological flexibility? *Journal of Contextual Behavioral Science* 14:11-19.
- Khodami M, Seif M, Koochakzadeh R, Fathi R, Kaur H (2021). Perceived Stress, Emotion Regulation and Quality of life During the Covid-19 outbreak: A Multi-Cultural Online Survey. *Annales medico-psychologiques*. Advance online publication. DOI: <https://doi.org/10.1016/j.amp.2021.02.005>
- Koch AK, Schöls M, Langhorst J, Dobos G, Cramer H (2020). Perceived stress mediates the effect of yoga on quality of life and disease activity in ulcerative colitis. Secondary analysis of a randomized controlled trial. *Journal of Psychosomatic Research* 130:109917.
- Kyriacou C (2011). Teacher stress: Directions for future research. *Educational Review* 53(1):27-35.
- Lazarus RS, Folkman S (1987). Transactional theory and research on emotions and coping. *European Journal of Personality* 1(3):141-169.
- Lerner DJ, Levine S, Malspeis S, D'Agostino RB (1994). Job strain and health-related quality of life in a national sample. *American Journal of Public Health* 84(10):1580-1585.
- Leung DY, Lam TH, Chan SS (2010). Three versions of Perceived Stress Scale: validation in a sample of Chinese cardiac patients who smoke. *BMC Public Health* 10(1):1-7.
- Mahmoud JSR, Staten RT, Hall LA, Lennie TA (2012). The relationship among young adult college students' depression, anxiety, stress, demographics, life satisfaction, and coping styles. *Issues in Mental Health Nursing* 33(3):149-156.
- Mack BH, Schaefer A, Pels F, Kleinert J (2019). Stress in Physical Education Teachers: A Systematic Review of Sources, Consequences, and Moderators of Stress. *Research Quarterly for Exercise and Sport* 1-20.
- von Haaren-Mack B, Schaefer A, Pels F, Kleinert J (2020). Stress in physical education teachers: a systematic review of sources, consequences, and moderators of stress. *Research Quarterly for Exercise and Sport* 91(2):279-297.
- Morgan G (1996). *İşte ve Yaşamda Stresi Yenmenin Yolları*, Çev.

- Sebnem Çağla, Ruh Bilim Yayınları, İstanbul 13-16.
- Montgomery C, Rupp AA (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education* 28(3):458-486.
- Mykletun RJ (1984). Teacher Stress: Perceived and Objective Sources, and Quality of Life. *Scandinavian Journal of Educational Research* 28(1):17-45.
- Nasser F, Alhija A (2015). Teacher Stress and Coping: The Role of Personal and Job Characteristics, *Procedia - Social and Behavioral Sciences* 185:374-380
- Navickienė L, Stasiūnaitienė E, Kupčikienė I, Misiūnas D (2018). Stressors in teacher's work. *Sveikatos Mokslai / Health Sciences In Eastern Europe* 6:29-34
- Özyurt BC, Eser E, Çoban G, Akdemir SN, Karaca İ, Karakoç Ö (2007). The evaluation of influencing factors of "quality of life" in the elderly in Muradiye district, Manisa. *Turkish Journal of Geriatrics* 10(3):117-123.
- Pels F, Hartmann U, Schaefer A, MackBvon H (2022). Potential stressors in (prospective) physical education teachers: a comparison of different career stages. *German Journal of Exercise and Sport Research* 1-16.
- Roberti JW, Harrington LN, Storch EA (2006). Further psychometric support for the 10-item version of the perceived stress scale. *Journal of College Counseling* 9(2):135-147.
- Sarı M, Canoğulları E, Yıldız E (2018). An investigation of teachers' professional motivation levels and quality of school life perceptions. Mehmet Akif Ersoy University. *Journal of the Faculty of Education* (47):387-409.
- Schäfer A, Pels F, MackBvon H, Kleinert J (2019). Perceived stress and coping in physical education teachers in different career stages. *German Journal of Exercise and Sport Research* 49(4):435-445.
- Selye H (2013). *Stress in health and disease*. Butterworth-Heinemann.
- Seo EJ, Ahn JA, Hayman LL, Kim CJ (2018). The association between perceived stress and quality of life in university students: the parallel mediating role of depressive symptoms and health-promoting behaviors. *Asian Nursing Research* 12(3):190-196.
- Shaw MP, Peart DJ, Fairhead OJW (2017). Perceived stress in university students studying in a further education college. *Research in Post-Compulsory Education* 22(3):442-452.
- Smith KJ, Rosenberg DL, Timothy HG (2014). An assessment of the psychometric properties of the perceived stress scale-10 (PSS 10) with business and accounting students. *Accounting Perspectives* 13(1):29-59.
- Şahin A (2018). Analysing Students' Perceived Stress Degrees In Terms Of Faculty And Gender Variables. Kilis 7 Aralık University. *Journal of Physical Education and Sport Sciences* 2(1):28-35.
- Şahin NE, Emiroğlu O (2014). Quality of Life and Related Factors of Older People in Nursing Home. *Journal of Hacettepe University Faculty of Nursing* 1(1):57-66.
- Testa MA, Simonson DC (1996). Assessment of quality-of-life outcomes. *New England Journal of Medicine* 334(13):835-840.
- The WHOQOL Group and World Health Organization. (1998). *Quality of Life Assessment (WHOQOL): Development and general psychometric properties*. *Social Science and Medicine* 46(12):1569-85.
- Tunç AÇ, Zorba E, Çingöz YE (2020). The Effect of Exercise on Quality of Life in the Period of Pandemic (Covid 19). *International Journal of Contemporary Educational Studies (IntJCES)* 6(1):127-135.
- Wang X, Matsuda N, Ma H, Shinfuku N. (2000). Comparative study of quality of life between the Chinese and Japanese adolescent populations. *Psychiatry and Clinical Neurosciences* 54(2):147-152.
- Whoqol Group (1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine* 28(3):551-558.
- World Health Organization WHO (1947). *The constitution of the WHO*. WHO Chronicle 1:29.
- Yeşil A, Ergün Ü, Amasyalı C, Er F, Olgun NN, Aker AT (2010). Validity and Reliability of the Turkish Version of the Professional Quality of Life Scale. *Archives of Archives of Neuropsychiatry* 47(2).
- Yıldırım A, Hacıhasanoğlu R (2011). Quality of Life and Effective Variables Among Health Care Professionals. *Journal of Psychiatric Nursing* 2(2):61-68.