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Examination of Psychological Symptom Levels of Physical Education Teachers and Teachers in Different Branches

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ABSTRACT

Purpose of this research is to determine differences between teachers' branches in terms of mental health status according to whether they do regular sports or not. Research was carried out using descriptive scanning model. Research population consist of schools in Turkey affiliated to the Ministry of Education, active working teachers in 2018-2019 education term. The sample consists of teachers working in Şanlıurfa and Mersin. 461 teachers were participated in the study. Easy sampling method was preferred as sampling method. Revised Symptoms Checklist (SCL-90-R) was used to measure psychological symptoms and distress developed by Derogatis. Descriptive statistics and independent samples t test was used to analyze differences between two groups. In terms of branches of teachers, there was a significant difference in all other sub-scales and GSI except HOS sub-scale. It was found that there was a significant difference in favor of teachers doing regular sports in all sub-scales according to which teachers did regular sports regardless of their branch. There was a significant difference between some sub-scales and GSI of other teachers who participated regular sports. There was no significant difference in all sub-scales between all teachers who did regular sports. As a result, GSI score of each participant who declared that they participate in regular sports was lower than those who did not. There were no significant differences in mental health status of the teachers. The difference between individuals was found to be significant compared to whether or not to do regular sports. Sub-scales scores of teachers who participated in regular sports were found to be low.

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1. Introduction

Exercise has been advocated by health scientists and doctors for many years to prevent physical health problems such as obesity and hypertension. Its effectiveness as a therapeutic measure after the occurrence of certain diseases has also been abolished. The last decade has seen the notion that exercise can also prevent the onset of emotional and psychological problems. In addition, many health professionals now believe that exercise is an effective treatment for mental health problems. For example, a survey conducted by approximately 2000 primary care physicians in 1983 found that 85 percent regularly recommended exercise in the treatment of depression (Morgan and Goldston, 2013).

Positive effects of sport and exercise on health as well as its' benefits for mental health are now well known (Raglin JS, Morgan WP, O'Connor PJ, 1991). Individual state of doing sport or exercise is inversely

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proportional to level of stress, anxiety and depression; and also it is directly proportional to self-esteem and self-perception. These positive effects of exercise have sometimes made it a part of treatment of mental illnesses. (Karakaya, Coşkun, & Ağaoğlu, 2006). In 2005, the World Health Organization included sports as one of the measures to protect mental health. Studies on effects of sport activities on mental health are generally evaluated from four perspectives. Mood, fear, depression and self-functions (Ersan, Dogan and Dogan, 2007). Massive studies conducted for many years have investigated effects of sport and exercise on individuals' mental health. It was determined that exercising mild to moderate intensity and maintaining exercise about 20-30 minutes had significant effects on reducing anxiety and depression (Raglin and Morgan, 1990). The researches has shown that exercise not only reduces level of depression but also provides protection from depression. In addition, the first review of the 26-year literature review on the protection effects of sports on mental health showed that even dealing with tasks requiring mild physical activity, such as walking or gardening about twenty-thirty minutes a day for all age groups can prevent depression (Mammen and Faulkner, 2013).

The US National Institute of Mental Health considers exercise to be a valid treatment for anxiety and depression and recommends it as an alternative to standard medication (Hastürk and Şenışık, 2011). It was stated that those who exercise are more extroverted and emotionally balanced than those who do not (Tiryaki, 2000). Individuals who participate in skill and physical activity programs increased social, family, academic achievement and self-esteem scores (Aşçı, Gökmen and Öner, 1993). Athletes' athletic competence and self-esteem scores were found to be significantly higher than non-athletes (Yegül, 1999).

Throughout the history of psychology, a variety of methods have been developed to determine level of psychological disorders that may occur in individuals. Various tests are used to determine psychological disorders in Turkey and all over the world. One of these tests is the Symptoms Check List-90 (SCL-90; and SCL-90-R). It is an advantage for fast data collection especially in field studies and in clinical setting. This test is a multidimensional list for assessment of psychopathology and it has been reported to be highly compatible with Minnesota Multidimensional Personality Inventory (MMPI) (Askin et al., 1995). This test has been used in a wide range of application areas such as education, health and forensic environment. In literature studies, although there are many researches about benefits of sports to mental health, few studies have been found by using Symptoms Check List (SCL-90-R) in sports environment.

Considering irrefutable effects of sports and physical activity on individuals' mental health, purpose of the research is to determine mental health status of physical education teachers who are intertwined with sports and exercise almost every day compared to other branch teachers, and also to determine whether there is a significant difference in terms of mental health status according to whether they do regular sports between do regular sports or not. Taking these measurements with SCL-90-R in accordance with the purpose of the study will allow us to reach new data on an area and subject that has not been studied much in literature and to reach new information about effects of sports on teachers' mental health status.

2. Method

The research population consist of the teachers in Turkey affiliated to the Ministry of Education who were actively working during the 2018-2019 Education term. Also the sample consists of teachers working in Şanlıurfa and Mersin. A total of 461 teachers, 164 males, 71 females (n = 235) physical education teachers, 139 males, 87 females (n = 226) teachers in different branches, were participated in the study. Easy sampling method was preferred as sampling method.

2.1. Data Collection

Revised Symptoms Checklist (SCL-90-R) was used in the study. Symptoms Checklist is a 90-item personal symptom inventory which was used to evaluate psychological symptoms and psychological distress developed by L. R. Derogatis in the 1970s (Derogatis and Unger, 2010). Turkish version of SCL-90-R was adapted by Dağ (1991) that was used in this study. The list includes "not at all" , "a little bit", "moderately",

“quite a bit”, “extremely” choices for all items. Scoring is done by giving zero to four points for each item (Dağ, 1991). The test is a system that has been approved in a wide range of clinical subjects (Croft, 1999). SCL-90-R evaluates psychological disorders in terms of ten sub-scales and three summary scores which are called global scores (Derogatis and Unger, 2010).

1. **Somatization (SOM):** This 12-item sub-scale reflects problems associated with potential disorders of stomach, vascular, heart, excretory, respiratory and other systems.
2. **Obsessive-compulsive(OBS):** This sub-scale, which has a total of ten items, indicates ideas that are undesirable but persistent and irresistible.
3. **Interpersonal sensitivity(INT):** This sub-scale contains nine-item. Negative aspects of this sub-scale represent inferiority, introversion, personal inadequacy. Positive aspects of this scale represent undesirable impulsive behaviors and extroversion. This sub-scale also consists of interpersonal relationship conflicts, interaction and communication problems.
4. **Depression (DEP):** Contains 13 items. This scale indicates negative and dysfunctional affective states including somatic symptoms, such as loneliness, withdrawal symptoms, mood swings, uncertainty, hopelessness, suicidal ideation and helplessness.
5. **Anxiety (ANX):** Contains 10 items. These items indicate with clinical anxiety, such as nervousness, chronic worry (neurosis), tension, panic fear and trembling.
6. **Hostility (HOS):** Contains 6 items. This sub-scale measures feelings, beliefs, thoughts and actions related to state of anger such as violence, aggression, rage, hate, irritability, psychopathy tendencies, lack of empathy.
7. **Phobic Anxiety (PHOB):** Contains 7 items. This sub-scale indicates a constant fear response of other places, other people (social phobia), events or objects which is irrational and unrealistic.
8. **Paranoid Ideation (PAR):** Contains 6 items. This sub-scale evaluates disordered behaviors, such as narcissist, grandiosity, suspicious behaviors, confrontational behavior, closedness, oppositional, nonconforming tendencies and disobedience. These personality traits are frequently related with violence, criminal ideation and aggression. Criminal individuals score easily high level on this scale.
9. **Psychoticism (PSY):** Contains 10 items. This sub-scale evaluates psychosis and psychopathic characteristics such as lack of empathy, aggression, withdrawal symptoms, isolation, alienation, hallucinations, delusions, schizoid lifestyle, first-rank schizophrenia symptoms and thought broadcasting including absence of meaningful relationship with others. Criminal individuals score easily high level on this scale.
10. **Additional items (It isn't a scale):** Contains 7 items. These items address disorders in sleep and nutrition patterns and contribute to global scores of the checklist (Benk, 2006).

Moreover the scale has 3 general indicators. These are summary or global indexes which evaluate by SCL-90-R

Global Severity Index (GSI): Mean score of 90 items ranging between 0.00 and 4.00 in the scale.

Positive Symptom Total (PST): Number of items with scores above zero.

Positive Symptom Distress Index (PSDI): Mean score of the items with scores above zero.

First adaptation study was conducted in Turkey with 122 university students in 1987. Invariance coefficients of the Pearson correlation technique were 0.82 for SOM., 0.84 for OBS., 0.79 for INT., 0.78 for DEP., 0.73 for ANX., 0.79 for HOS., 0.78 for PHOB., 0.63 for PAR., 0.73 for PSY. and 0.77 for additional scales (Kılıç, 1987).

2.2. Data Analysis

The research was carried out using descriptive scanning model. Statistics of the data were analyzed with SPSS 17.0 program. Participants were randomly selected from volunteer teachers working in schools in Şanlıurfa and Mersin. Participants at school were informed by face-to-face the scale was applied to participants after informing face to face at schools. In the analysis of the research data, descriptive statistics were used and independent samples t-test was used to analyze differences between two groups.

3. Results

Table 1. Frequency Distribution of Participants

		Physical Education Teachers		Teachers in Different Branches	
		<i>n</i>	%	<i>n</i>	%
Gender	Female	71	30.2	139	61.6
	Male	164	69.8	87	38.4
	Total	235	100	226	100
Regular Sports Status	Yes	111	39.6	33	14.6
	No	124	60.4	193	84.4
	Total	235	100	226	100
Experience Years in Teaching	1 - 10	120	51.06	128	56.6
	11 - 20	84	35.74	79	34.9
	21 – 30	31	13.19	19	8.4
	31-above	0	0	0	0
	Total	235	100	226	100

Gender, regular sports status experience in teaching status of teachers participated in the study are shown in Table 1.

Table 2. SCL-90-R Sub-scales t-test Results in Terms of Branch of Teachers

	Branch	<i>n</i>	\bar{x}	<i>sd</i>	<i>t</i>	<i>p</i>
Somatization	Physical edu.	235	.6408	.44552	3.516	.000*
	Diff. branches	226	.8060	.55920		
Obsessive Compulsive Interpersonal Sensitivity	Physical edu.	235	1.0528	.51576	3.191	.002*
	Diff. branches	226	1.2155	.57849		
Depression	Physical edu.	235	.8506	.56005	3.860	.000*
	Diff. branches	226	1.0728	.67269		
Anxiety	Physical edu.	235	.9093	.60324	3.591	.000*
	Diff. branches	226	1.1205	.65676		
Anger Hostility	Physical edu.	235	.5957	.44719	3.013	.003*
	Diff. branches	226	.7385	.56527		
Phobic Anxiety	Physical edu.	235	.7390	.59474	1.507	.132
	Diff. branches	226	.8245	.62196		
Paranoid Ideation	Physical edu.	235	.3161	.38724	2.902	.004*
	Diff. branches	226	.4355	.49197		
Psychoticism	Physical edu.	235	.9362	.61009	2.416	.016*
	Diff. branches	226	1.0796	.66243		
Additional Scales	Physical edu.	235	.5170	.45174	2.664	.008*
	Diff. branches	226	.6398	.53292		
Global Severity Index	Physical edu.	235	.9234	.55693	2.137	.033*
	Diff. branches	226	1.0411	.62192		
	Physical edu.	235	.7568	.44179	3.556	.000*
	Diff. branches	226	.939	.50547		

Mean scores of SCL-90-R sub-scales and *t*- test analysis results of teachers participated in the study in terms of branch are given in the table. There is no significant difference between two groups in anger-hostility sub-scale ($p > .05$), but there is a significant difference in all other sub-scales and global severity index ($p < .05$). Scores in favor of physical education teachers are low

Table 3. SCL-90-R Sub-scales t-test Results in Terms of Regular Sports Status of Teachers

		n	\bar{x}	sd	t	p
Somatization	Yes	144	.5023	.37163	6.492	.000*
	No	317	.8215	.53402		
Obsessive Compulsive	Yes	144	.9486	.50300	5.121	.000*
	No	317	1.2161	.55498		
Interpersonal Sensitivity	Yes	144	.7623	.50953	4.651	.000*
	No	317	1.0491	.65514		
Depression	Yes	144	.7511	.51853	6.171	.000*
	No	317	1.1318	.65250		
Anxiety	Yes	144	.4924	.37061	5.018	.000*
	No	317	.7445	.54860		
Anger Hostility	Yes	144	.5995	.50841	4.394	.000*
	No	317	.8633	.63345		
Phobic Anxiety	Yes	144	.2639	.33421	3.648	.000*
	No	317	.4250	.47948		
Paranoid Ideation	Yes	144	.9178	.62641	2.032	.045*
	No	317	1.0468	.64250		
Psychoticism	Yes	144	.4236	.40469	4.573	.000*
	No	317	.6470	.51873		
Additional Scales	Yes	144	.8363	.54587	3.717	.000*
	No	317	1.0469	.60116		
Global Severity Index	Yes	144	.6507	.38892	5.706	.000*
	No	317	.9170	.49475		

Mean scores of SCL-90-R sub-scales and t test analysis results of teachers participated in the study in terms of regularly do sports or not regardless of their branches are given in the table. In all sub-scales and global severity index between two groups, a significant difference was found in favor of the teachers who did sports regularly ($p < .05$).

Table 4. SCL-90-R Sub-Scale t-test Results of Branches in Terms of Regular Sports Status

Branch		Physical Education					Different Branches					
		n	\bar{x}	sd	t	p	n	\bar{x}	sd	t	p	
Somatization	Yes	111	.49	.345	4.9	.000*	Yes	33	.52	.453	3.2	.001*
	No	124	.76	.484			No	193	.85	.561		
Obsessive Compulsive	Yes	111	.92	.495	3.7	.000*	Yes	33	1.03	.525	2.1	.050
	No	124	1.16	.507			No	193	1.24	.582		
Interpersonal Sensitivity	Yes	111	.74	.504	2.8	.005*	Yes	33	.82	.528	2.3	.022*
	No	124	.94	.591			No	193	1.11	.686		
Depression	Yes	111	.74	.518	4.0	.000*	Yes	33	.77	.525	3.3	.001*
	No	124	1.05	.636			No	193	1.18	.659		
Anxiety	Yes	111	.47	.370	4.1	.000*	Yes	33	.55	.369	2.0	.046*
	No	124	.70	.481			No	193	.76	.587		
Anger Hostility	Yes	111	.56	.505	4.4	.000*	Yes	33	.72	.506	1.2	.308
	No	124	.89	.625			No	193	.84	.639		
Phobic Anxiety	Yes	111	.25	.321	2.4	.014*	Yes	33	.30	.374	2.0	.105
	No	124	.37	.430			No	193	.45	.506		
Paranoid Ideation	Yes	111	.89	.615	.9	.345	Yes	33	.98	.666	.83	.401
	No	124	.97	.605			No	193	1.09	.662		
Psychoticism	Yes	111	.41	.399	3.4	.001*	Yes	33	.46	.425	2.1	.036*
	No	124	.61	.476			No	193	.67	.544		
Additional Scales	Yes	111	.81	.535	2.8	.004*	Yes	33	.90	.583	1.3	.188
	No	124	1.02	.560			No	193	1.06	.626		
Global Severity Index	Yes	111	.63	.384	4.1	.000*	Yes	33	.70	.403	2.6	.010*
	No	124	.86	.461			No	193	.94	.513		

Mean scores of SCL-90-R sub-scales and t test analysis results of branches of teachers participating in the study in terms of regular sports status variable are given in the table. According to results, there is no significant

difference between physical education teachers who do regular sports according to the paranoid ideation sub-scale ($p > .05$), and there is a significant difference in favor of physical education teachers in all other sub-scales and global severity index ($p < .05$). According to t-test analysis results of the SCL-90-R subscales, there is a significant difference between teachers in different branches according to interpersonal sensitivity, somatization, anxiety, depression and psychoticism sub-scales and global severity index. It is found that there is a significant difference in favor of teachers doing regular sports ($p < .05$), but there is no significant difference in other sub-scales ($p > .05$).

Table 5. SCL-90-R Sub-Scale t-test Results of Regular Sports Status in Terms of Branches of Teachers

		Regular Sports					Non-Regular Sports					
		n	\bar{x}	sd	t	p	n	\bar{x}	sd	t	p	
Somatization	Phy. Edu	111	.49	.345	.2	.754	Phy. Edu	124	.63	.484	1.4	.383
	Dif. Bran.	33	.52	.453			Dif. Bran.	193	.70	.561		
Obsessive Compulsive	Phy. Edu	111	.92	.495	1.0	.272	Phy. Edu	124	.76	.507	1.2	.152
	Dif. Bran.	33	1.03	.525			Dif. Bran.	193	.85	.582		
Interpersonal Sensitivity	Phy. Edu	111	.74	.504	.7	.424	Phy. Edu	124	1.16	.591	2.3	.209
	Dif. Bran.	33	.82	.528			Dif. Bran.	193	1.24	.686		
Depression	Phy. Edu	111	.74	.518	.2	.797	Phy. Edu	124	.94	.636	1.6	.021*
	Dif. Bran.	33	.77	.525			Dif. Bran.	193	1.11	.659		
Anxiety	Phy. Edu	111	.47	.370	1.1	.251	Phy. Edu	124	1.05	.481	.07	.097
	Dif. Bran.	33	.55	.369			Dif. Bran.	193	1.18	.587		
Anger Hostility	Phy. Edu	111	.56	.505	1.5	.115	Phy. Edu	124	.70	.625	.7	.293
	Dif. Bran.	33	.72	.506			Dif. Bran.	193	.76	.639		
Phobic Anxiety	Phy. Edu	111	.25	.321	.7	.397	Phy. Edu	124	.89	.430	1.5	.453
	Dif. Bran.	33	.30	.374			Dif. Bran.	193	.84	.506		
Paranoid Ideation	Phy. Edu	111	.89	.615	.7	.453	Phy. Edu	124	.37	.605	1.7	.119
	Dif. Bran.	33	.98	.666			Dif. Bran.	193	.45	.662		
Psychoticism	Phy. Edu	111	.41	.399	.5	.552	Phy. Edu	124	.97	.476	1.0	.090
	Dif. Bran.	33	.46	.425			Dif. Bran.	193	1.09	.544		
Additional Scales	Phy. Edu	111	.81	.535	.8	.385	Phy. Edu	124	.61	.560	.6	.302
	Dif. Bran.	33	.90	.583			Dif. Bran.	193	.67	.626		
Global Severity Index	Phy. Edu	111	.63	.384	.8	.368	Phy. Edu	124	1.02	.461	1.5	.526
	Dif. Bran.	33	.70	.403			Dif. Bran.	193	1.06	.513		

Mean scores of SCL-90-R sub-scales and t test analysis results of regular sports status in terms of branches of teachers variable are given in the table. It is observed that there is no significant difference between physical education teachers who do regular sports and teachers in different branches who do regular sports in all sub-scales ($p > .05$). It is found that there is a significant difference only in depression sub-scale ($p < .05$), whereas there is no significant difference in all other sub-scales. Scores in favor of physical education teachers who do non regular sports are low in depression sub-scale.

4. Discussion and Conclusion

In today's challenging life conditions, importance and protection of mental health in society is becoming more and more important. In this concept, mental health of teachers who play a key role in education of children and young people, and constitute future of a society, has a more important position. As mentioned above, physical activity and sport, which is one of the ways to protect mental health, can be seen as a research subject. With this idea whether there is a difference between physical education teachers who do regular sports or do not do regular sports and other sports teachers who do regular sports or not, in terms of mental health status, also purpose of our study is to examine whether there is a significant difference between "doing regular sports or not" status. In the study according to the mean scores of SCL-90-R sub-scales and t-test analysis results of teachers participated in the study in terms of branch. there is no significant difference between two groups in anger-hostility sub-scale), but there is a significant difference in all other sub-scales and global severity index. Although it is observed that there is no significant difference only in anger-hostility sub-scale, at the same time there is a significant difference in all other sub-scales and global severity index but mean scores of physical

education teachers in all sub-scales and global severity index were lower than. It can be said that physical education teachers are in better condition than teachers in different branches in terms of mental health status. There is no generally valid standart point system for the "abnormal" assessment of SCL-90R score, but it is commonly reported that in this study over 1 (Derogatis, Lipman and Covi, 1977) and in this study over 1.5 (Kılıç, 1987) points show symptom of mental problems.

In a study, mean scores of anger and anger expression style sub-scales of all teachers were examined (Temel et al., 2015). As a result of this study; It was found that mean score of the trait anger and anger expression style sub-scales of teachers from different branches included in the study was moderate and there was no significant difference between anger and anger subscales between the branches (Temel et al., 2015). In this study, it was observed that scores of anger-hostility sub-scales were similar and low according to branches of the teachers and it was found to support this study's findings. Furthermore, in another study (Temel, 2015); it was observed that mean score of anger mean score of anger in control, mean score of introvert anger, and mean score of extrovert anger of the teachers' continuous anger and anger expression style sub-scales. So it can be said that being low mean score of anger was parallel to current study. According to mean scores of SCL-90-R sub-scales and t test analysis results of teachers participated in the study in terms of regularly do sports or not regardless of their branches, there is a significant difference between two groups in all sub-scales and global severity index, it is observed that scores are lower in favor of teachers who did regular sports. In other words, it can be said that general mental health status of teachers participating in regular sports is healthier than those who do not do regular sports.

Rimer et al.(2012) found that exercise reduces the severity of depression complaints; and Mammen and Faulkner (2013) also found that exercise is effective in preventing depression (, 2013). In a different study (Dunn et al., 2005), it was found that exercise, which corresponds to a daily walking time of thirty-five minutes, six days a week, reduces the participants' depression complaint by 47%. This study showed that three hours of physical activity per week was as effective as antidepressants in reducing complaints for individuals with mild to moderate depression (Dunn et al., 2005). The studies show that participating in physical activity not only reduces depression but also provides protection from depression. In the first review of twenty-six years of manuscript on the preservation of mental health with physical activity, it was stated that even mild activities such as walking or gardening for thirty minutes a day for all age groups can prevent depression (Mammen and Faulkner, 2013). In the study which investigated effects of regular exercise on depression in adolescents aged 14-18, it was found that depression levels of adolescents exercising regularly were lower than depression levels of non-exercising adolescents and as a result, regular exercise has a protective effect against depression processes (Hastürk and Şenişik, 2011). It can be said that regular sports, where all the above mentioned studies overlap with the findings of our research, have positive effects on mental health as well as the other groups mentioned. According to mean scores of SCL-90-R sub-scales and t test analysis results of branches of teachers participating in the study in terms of regular sports status variable results, there is no significant difference between physical education teachers who do regular sports according to the paranoid ideation sub-scale, and there is a significant difference in favor of physical education teachers in all other sub-scales and global severity index. According to t-test analysis results of the SCL-90-R subscales, there is a significant difference between teachers in different branches according to somatization, interpersonal sensitivity, depression, anxiety and psychoticism sub-scales and global severity index. It is found that there is a significant difference in favor of teachers doing regular sports, but there is no significant difference in other sub-scales. Except one scale, all sub-scales and global severity index scores of physical education teachers participating in regular sports were lower than physical education teachers who did not participate in regular sports. Most of the sub-scales and global severity index scores were lower in favor of doing regular sports teachers in different branches compared to not doing. In addition, global severity index and most sub-scales mean scores were lower in physical education teachers do regular sports than physical education teachers who do not do sports, and scores of teachers in different branches who do regular sports were lower than who do not sports. So it can be said to they have better mental health status in teachers who do regular sports. According to the findings of a study on mental health status of Flemish teachers (Bogaert et al., 2014), physical education teachers who participate physical activities reported better mental health status and less occupational stress than their colleagues. In a similar study (Erick and Smith, 2011), it was reported that physical education

teachers' mental disorder prevalence scores were lower than other branch teachers. They argued that PE teachers could be physically more active and could spend more time on physical activity than other teachers. It is seen that results of the studies support the findings of our study. According to mean scores of SCL-90-R sub-scales and t-test analysis results of regular sports status in terms of branches of teachers variable, it is observed that there is no significant difference between physical education teachers who do regular sports and teachers in different branches who do regular sports in all sub-scales. It is found that there is a significant difference between PE teachers who do not regular sports and teachers in different branches who do not regular sports only in depression sub-scale), whereas there is no significant difference in all other sub-scales. Specific for branches reason why there is no significant difference between those who do regular sports or those who do not do sports is that the concept of regular sports is a general condition, so physical education teachers do not show that they are in a better position as mental health than teachers in different branches who do regular sports even if PE teachers do regular sports. Regardless of teachers' branches mean scores of the test subscales and global severity index scores of the teachers doing regular sports were lower than those who did not do regular sports. In summary, an important criterion for teachers is to ensure regular participation in sports, not teachers' branches. A study (Scheuch, Haufe and Seibt, 2015) found that teachers working in Germany, especially those who are more conscious about sports and physical activity, differ from the general population, have less pronounced cardiovascular risk factors such as overweight, metabolic disorders and smoking, and less mental health complaints reported. The results of this study also coincide with the findings of the current study.

In this research, it was aimed to determine differences between teachers' branches in terms of mental health status according to whether they do regular sports or not. As a result, global severity index score of each participant who declared that they do regular sports was lower than those who do not. There were no significant differences in mental health status of the teachers according to specific branches. The difference between individuals' scores was found to be significant compared to whether or not to do regular sports. Sub-scales scores and global severity index score of teachers who participated in regular sports were found to be low. It is one of the limitations that the research consists of teachers working only in Mersin and Şanlıurfa. Another limitation is inclusion of teachers in the research regardless of type or degree of school which they work. Although large number of studies about SCL-90-R literature have reached, one of handicaps of the study is that there has been very limited resources about sports and teachers in SCL-90-R context. On the other hand, despite very limited resources, it is the first study investigating teachers' sports behaviors and their psychological symptoms levels in Turkey are also thought to be very important in terms of making a new contribution and perspective to the literature.

Most studies have demonstrated positive effects of regular sport participation at optimum level on human physical and mental health. Teachers in the school are primary and effective guide to the children and young people who are guarantee of our future. Undoubtedly teachers have a great duty to raise healthy individuals and generations. Regardless of their branches, the physical and mental health of teachers we consider to raise healthy individuals and generations, has a great importance. Young people or children who receive education from an unhealthy teacher in an unhealthy environment will undoubtedly experience chronic negative consequences of this throughout their lives. Contribution of sports should not be denied in order to protect and strengthen mental health of individuals and to improve their coping capacity. It is thought that individuals who have mental health problems and who do not have healthy mental processes will create socializing environments other than clinical precautions, ensure their participation in sports or exercise, and that they will hold on to life more closely and contribute to society. For this reason, it may be suggested that education, health and sports policies should be encouraged teachers to participate in sports regularly in order to improve their own mental health quality and contribute to their role models.

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