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Investigation of Perceived Stress Levels together with Positive and Negative Moods of Students in School of Physical Education and Sports

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Abstract

The aim of this study was to investigate perceived stress levels together with positive-negative moods of students in School of Physical Education and Sports.

200 students getting education from Department of Physical Education and Sports Teaching, Department of Coaching Education, Department of Sports Management and Department of Recreation Education in Mugla Sitki Kocman University, School of Physical Education and Sports voluntarily participated in the research. In order to determine perceived stress levels of participants, "Perceived Stress Scale" developed by Cohen, Kamarck and Mermelstein (1983) was used while "Positive and Negative Emotion Scale" developed by Watson et al., (1988) was used to indicate their positive and negative moods.

As a result; it was determined that a significant difference was found between sports age variable and negative mood of students participated in the research from School of Physical Education and Sports. Moreover, a significant relationship was also determined between perceived stress level and positive-negative emotion level.

Key Words: Physical Education and Sports, Perceived Stress Level, Positive and Negative Emotion

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Beden Eğitimi ve Spor Yüksekokulu Öğrencilerinin Algılanan Stres Düzeyleri İle Pozitif ve Negatif Duygu Durumlarının İncelenmesi

Özet

Bu araştırmanın amacı, Beden Eğitimi ve Spor Yüksekokulu öğrencilerinin algılanan stres düzeyleri ile pozitif- negatif duygu durumlarının incelenmesidir.

Araştırmaya Muğla Sıtkı Koçman Üniversitesi Beden Eğitimi ve Spor Yüksekokulu'nda öğrenim gören Beden Eğitimi ve Spor Öğretmenliği Bölümü, Antrenörlük Eğitimi Bölümü, Spor Yöneticiliği Bölümü ve Rekreasyon Eğitimi Bölümlerinde öğrenim gören 200 öğrenci gönüllü olarak katılmıştır. Katılımcıların algılanan stres düzeyini belirlemek için Cohen, Kamarck ve Mermelstein (1983) tarafından geliştirilen "Algılanan Stres Ölçeği" pozitif ve negatif duygu durumlarını belirlemek için Watson ve ark.(1988) tarafından geliştirilen "Pozitif ve Negatif Duygu Ölçeği" kullanılmıştır.

Sonuç olarak; araştırmaya katılan Beden Eğitimi ve Spor Yüksekokulu öğrencilerinin spor yaşı değişkeni ile negatif duygu durumu arasında anlamlı farklılık bulunmuştur. Algılanan stres düzeyi ile pozitif- negatif duygu düzeyi arasında anlamlı bir ilişki tespit edilmiştir.

Anahtar Kelimeler: Beden Eğitimi ve Spor, Algılanan Stres Düzeyi, Pozitif ve Negatif Duygu



1. Introduction

Scientific studies have revealed that stress has negative effects on human health (Schneiderman et al., 2005). Stress is a psychological situation which is difficult o define and measure, however, is experienced frequently by almost all people (Gadzella, 1991). Stress is a situation revealed when people are encountered with events perceived as danger in terms of physical or psychological means (Atkinson et al., 1996). Two types of stresses were mentioned in the researches: first one is positive stress (eustress) which activates and motivates people and the second one is negative stress (distress) which damages physically and emotionally (Gadzella and Masten, 2005). Stress is an important psychological problem that university students are faced with. When the researches are investigated, the main reason of this situation is growth problems together with university life are indicated (Perine and Lisle, 1995). While enduring people display talents such as struggling, survival and overcoming with developing against imposed stress and negative conditions, indurable people have low-level of self-confidence and bear negative opinions about personal success and developments (Sergek and Sertba, 2006).

Positive emotionality can be high-end defined with energy, cheer and happiness qualities. It was revealed that people with high positive emotionality get pleasure out of life. Low positive emotionality can be interpreted as no positive emotionality instead of negative emotionality. It was observed that people not having positive and negative emotionality are insensitive and impassive (Weiss and Cropanzano, 1996; Doğan, 2005). Negative emotionality, on the other hand, has different moods. It was stated that people with negative emotionality have emotions such as anger, tension, anxiety, guiltiness (Doğan, 2005). Positive and negative emotionality might reveal during the day (mood) or might base on past (emotion). Positive emotionality arouses a feeling of satisfaction and negative emotionality arouses a feeling of dissatisfaction (Cropanzano et al., 2003). Positive and negative emotionality are not concepts which are opposite to each other. They express two different dimensions of a concept. Level of positive or negative emotionality of individuals has a significant effect on moods and emotions in organizational behavior (Greenberg, 2002). Positive mood as a personality trait corresponds to tendency which helps living positive emotional experiences and is described as emotions such as interpersonal relationships, self-confidence and good feeling (Clark and Watson, 1991). Positive emotions forwards the person to positive and increase psychological development and psychological well being (Fredrickson, 2000; Lyubomirsky, King, & Diener, 2005). In spite of this, negative emotions increase anxiety, depressive signs and stress while they decrease psychological well-being and psychological health (Dua, 1993; Fredrickson, 2000). High levels of negative emotions indicate that the individual feels "bad" and has high dissatisfaction whereas high levels of positive emotions indicate that the individual feels "good" and has a positive relationship with his/her environment (Crowford & Henry, 2004). Regular physical activity and exercise are accepted as effective methods for people not having psychological problems or to prevent and treat psychiatric diseases such as anxiety and depression (Leppamaki et al., 2002).

In the light of this information, the aim of this study was to determine whether there is a significant relationship between dealing styles of university students with stress and their positive and negative emotions.



2. Method

Totally 200 university students voluntarily participated in this research including 50 students from Department of Physical Education and Sports Teaching, 50 from Department of Coaching Education, 50 from Department of Sports Management and 50 from Department of Recreation Education in School of Physical Education and Sports of Mugla Sitki Kocman University. In the research, in order to determine perceived stress levels of participants, "Perceived Stress Scale" developed by Cohen, Kamarck and Mermelstein (1983) which was adapted to Turkish by Yerlikaya and Inanç (2007) was used while "Positive and Negative Emotion Scale" developed by Watson et al., (1988) and adapted to Turkish by Gençöz (2000) was used to indicate their positive and negative moods.

Perceived Stress Scale (PSS): it was developed by Cohen, Kamarck and Mermelstein (1983) and adapted to Turkish by Yerlikaya and Inanc (2007). The individuals were desired in the scale to rank how frequently they experienced certain emotions or opinions in the last month between 0 (never) and 4 (too often). The grades of each item were summed, the stress level perceived by the individual was determined and high grade indicated high level of perceived stress level (Cohen et al., 1983). It was observed that alpha coefficient of internal consistency calculated to examine the reliability of the scale was found as 0.84 (Yerlikaya and Inanc, 2007).

Positive and Negative Emotion Scale (PNES): the positive emotion sub-scale of PNES developed by Watson et al., (1988) evaluates how a person feels interested, active and vigilant; Negative emotion sub-scale, on the other hand, evaluates how a person feels subjective distresses such as anger, revulsion, guiltiness and fear. Watson et al., (1988) informed internal consistency reliability of the scale for positive and negative emotions as 0.88 and 0.87, respectively. Turkish reliability and validity study of the scale was carried out by Gencoz (2000). In the study of Gencoz, it was found that Turkish PNES consisted of two dimensions in accordance with its original, moreover, it was reported that internal consistency of test-repeatability was found as 0.40 and 0.54, respectively. While positive emotion scale was resulted in correlations for these scales as - 0.48 and -0.22, respectively; negative emotion scale was resulted in correlations for these scales as 0.51 and 0.47, respectively.

In the statistical analysis of the data, SPSS 16.0 software program in computer environment was used. The averages and standard deviations of the data were calculated and the relationship between them was investigated by correlation. The level of significance was taken as p < 0.05.



3. Findings

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Gender	Ν	Х	SS	Sd	t	р
Male	125	3.75	0.57	20	0.69	.49
Total Grade Female	75	3.69	0.67	20	0.09	.+)
Male	125	2.08	0.54	20	_1 30	.17
Female	75	2.20	0.63	20	-1.57	.17
Male	125	2.25	0.49	• •		
Female	75	2.35	0.41	20	-1.46	.15
	Gender Male Female Male Female Male	GenderNMale125Female75Male125Female75Male125Female75Male125	Gender N X Male 125 3.75 Female 75 3.69 Male 125 2.08 Female 75 2.20 Male 125 2.25	Gender N X SS Male 125 3.75 0.57 Female 75 3.69 0.67 Male 125 2.08 0.54 Female 75 2.20 0.63 Male 125 2.25 0.49	Gender N X SS Sd Male 125 3.75 0.57 20 Female 75 3.69 0.67 20 Male 125 2.08 0.54 20 Female 75 2.20 0.63 20 Female 75 2.25 0.49 20 Formala 20 20 20 20	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Table 1. Investigation of Perceived Stress Levels of students in terms of gender variable together with their negative and positive moods

When Table 1 is investigated, it was observed that there was no significant difference between average grades of perceived stress levels and negative-positive moods of students in terms of gender variable. The average grade of positive mood for male students was calculated as 3.75 (Ss: 0.57) whereas it was found for female students as 3.69 (Ss: 0.67). Positive emotion level of male students was found higher than that of female students. Average of perceived stress level for female and male students was calculated as 2.35 (Ss: 0.41) and 2.25 (Ss: 0.49), respectively.

Table 2. Investigation of Perceived Stress Levels together with their negative and positive moods of students in terms of sports age variable

		Department	Sports age	Stress total
Perceived Stress total	r	170^{*}	.004	
	р	.016	.952	
	Ν	200	200	
Positive mood Total Grade	r	.107	.094	.212**
	р	.132	.188	.003
	Ν	200	200	200
Negative mood total	r	030	156*	.254**
	р	.671	.027	.000
	Ν	200	200	200

p<0.01** p<0.05

As it can be seen from Table 2, there is a negative correlation between sports age and negative moods (r=-156*). As sports age increases, negative mood decreases. It was observed that there is a positive correlation between perceived stress and negative mood (r=.254**). Moreover, a positive correlation was found between perceived stress grades and positive mood (r=.212**). As perceived stress level increases, it was observed that positive and negative moods also increase.



4. Results and Discussion

In this study where perceived stress levels together with positive and negative moods of university students were investigated, the following results were determined;

A significant difference was not found between perceived stress and positive-negative moods of students in terms of gender variable. However, average grade of positive mood for male students was 3.75 (Ss: 0.57) while average grade for female students was calculated as 3.69 (Ss: 0.67). Positive mood of male students was found higher than that of female students. In addition to this, average of perceived stress level for female and male students was calculated as 2.35 (Ss: 0.41) and as 2.25 (Ss: 0.49), respectively. It was determined that female students perceived stress levels more than male students. It was also indicated for male students that male students had low level of perceived stress but high level of positive mood (Table 1). It was found that perceived stress levels of female students were significantly higher than those of male students (Altunkol, 2011). It was considered that this result was due to males encumbered with role properties such as "dominant, having control, calm, hakim, getting over difficulties easily, nonconciliatory". While examining the sources of stress for university students, it was determined that they were mainly negative psychological effects occurred by university life, long-lasting anxiety, tension and sadness as well as pressure and unwillingness situations exposed to in daily life (Sahin, 1998). Researches indicated that positive emotionality expresses inclination for a positive emotional state. Negative emotionality, on the other hand, expresses negative inclination towards the events (Ozkalp and Cengiz, 2003). The findings of this study were in accordance with our results.

A negative correlation was found between sports age and negative mood. As sports age increases, negative mood decreases. It was observed that there is a positive correlation between perceived stress and negative mood. A positive correlation was also found between perceived stress grades and positive mood grades. It was determined that as perceived stress level increases, positive and negative moods also increase. When university students participated in the research perceived stress, positive and negative thinking property significantly increased since they used both positive and negative emotion methods in order to cope with stress and get rid of stress (Table 2).

In a study where loneliness and hopelessness levels of students were investigated according to their sports situations, it was determined that as sports age increases, a decrease was observed in hopelessness level which is a negative emotion (Kırımoglu and Cokluk, 2010). Properties such as confidence, optimism, perfection, sociality, look alive, individuality and tolerance are frequently observed in people who experience positive emotions very often (Lyubomirsky, King, & Diener, 2005). The findings of this study were similar with the results of our study.

Consequently; a significant difference was not found between perceived stress and positivenegative moods of students in terms of gender variable. It was determined that female students perceived stress levels more than male students. It was indicated for male students that their perceiving stress level was low but their positive mood was high. A significant difference was found between sports age variable and negative mood of students taking education in School of Physical Education and Sports participated in the research. Also, a significant relationship was determined between perceived stress level and positive-negative emotion level.



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