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University Students' Ways Of Coping With Stress And Depression

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ABSTRACT

Correlation between Ways Of Coping With Stress and depression levels of students at the Adnan Menderes Universıty School of Physical Education and Sports for gender, playing sports, year of study, department and sociodemographic variables is evaluated. A total of 535 students participated. Tools used: "Personal Information Form" for students and their families, "Ways Of Coping With Stress Inventory" for students' stress coping attitudes and "Beck's Depression Scale" for depression levels. Data analysis: Kruskal-Wallis, Mann-Whitney U Tests, nonparametric correlations and Linear Regression analysis were used. Significance level: $p<0.01$ and $p<0.05$. Correlation for depression in female students was $p<0.05$ for gender. Optimistic approach and other stress coping subscales had a significant correlation ($p<0.05$). Students' depression scores and self-confident, optimistic approaches and social support had a negative and depression scores, helpless and submissive approaches had a positive correlation.

***Key Words**: Coping with stress; Depression; School of Physical Education and Sports*

INTRODUCTION

Today, the years spent during academic education (universıty years or period of higher education) are regarded as a crisis period. During this period, known in particular as turbulent years, because it is a transition period from adolescence to adulthood, young people undergo more difficulties concerning psychosocial development due to some rapid changes in social, cultural and economic conditions [1].

On the one hand, universıty students start living in a different place, and on the other hand, environmental factors intervene in the developmental period that they undergo. Thus, "universıty education" is transformed into a subject of study for many researchers [2,3]. Especially, universıty youth encounter such problems as anxiety about the future [4,5], educational difficulties, inability to get what is expected and to realize what is planned, dissatisfaction with the academic department where they study [6], social and economic difficulties and fear of not finding a profession after graduation [7, 8]. These social, cultural and economic changes negatively affect the psychology of young people. These anxiety-creating factors cause universıty students to experience maladaptation, depression and stress during universıty life due to the emotional and social characteristics specific to this period [9, 2, 10].

Stress is defined as a relationship between the environment and an individual that is beyond the individual's coping resources, as well as causing pressure and threatening well-being of that individual [11]. There are few areas of contemporary psychology that receive more attention than stress [12, 13,14]. This literature reflects researchers' belief that stress is a major factor affecting people's lives, is intimately tied with mental health, and is very possibly linked with many problems of physical health[15].

The correlation between such variables as stress coping [16, 17, 18, 19, 1, 20, 21], depression [2, 22, 23, 24, 25, 26, 27, 28, 29] and coping with stress and depression [30, 31, 32] has been investigated in different studies conducted with universıty students. Besides, there are studies in which hopelessness levels of students who experience stress and anxiety as well as depressive problems are found to be high compared to other students [33] and there are studies suggesting that there is a significant correlation between suicide tendency [33] and daily stress, depression, general and social hopelessness [34]. However, another study by Feng and Yı (2012) on Chinese universıty students reported that negative life events increased hopelessness depression levels and that there was a significant correlation between negative life events and hopelessness depression levels[35]. On the other hand, there are studies which point out that universıty students who perform sportive and physical activities have less depression [36, 37] and have positive emotional happiness [38, 39] compared to sedentary students and that adolescents whose social support level is high experience a lower level of anxiety, depression and behavioral problems compared to their peers with a low social support level [32].

In light of the information mentioned above, exploring the factors that generate stress and depression and knowing the measures to be taken will be helpful and illuminative so that the young people can lead a healthy universıty life and have a positive strength upon their own physical and psychological health.

Consequently, in the study, it was attempted to examine the relationship among the Ways Of Coping With Stress and the Beck's Depression Levels for the gender, year of study, playing sports, economic status, department and some variables of the students attending universıty.

In accordance with this general objective, the sub-objectives were determined as follows:
1. Is there a significant correlation for the gender variable between the Ways Of Coping With Stress and Beck's Depression Levels of the university students?
2. Is there a significant correlation for the year of study and departments between the Ways Of Coping With Stress and the Beck's Depression Levels of the universıty students?
3. Is there a significant correlation for the playing sports variable between the Ways Of Coping With Stress and the Beck's Depression Levels of the universıty students?
4. Is there a significant correlation between the Ways Of Coping With Stress and Beck's Depression Levels of the universıty students?
5. Is there an effect of the universıty student's age, gender, playing sports, voluntary selection of the school and economic status variables with the Ways Of Coping With Stress and Beck's Depression Levels?

MATERIALS AND METHODS

The model of the study

This study was conducted with a relational survey. In survey analysis, the main objective is to explain what are the events, objects, beings, institutions and various events with descriptive statistics, such as frequency, percentage, mean and standard deviation [40].

Participants

The data in the study was carried out during the 2010/2011 academic year fall semester from Adnan Menderes University, School of Physical Education and Sport in Aydin Province of Turkey. The population of the study was composed of the students of School of Physical Education and Sports (n=756) and the sample of the study was made up by the 1st year, 2nd year, 3rd year and 4th students (n=535) with 226 females (42.2%) and 309 males (57.8%). The participant students were recruited using non probability convenience sampling [41]. The rate of return of the questionnaires was % 70.

Data Collection Tools

In the study, the following were used: "Personal Information From", to obtain information about students and their families; "Ways of Coping with Stress Inventory (WCSI)", to determine students' stress coping approaches; and "Beck's Depression Inventory", to reveal their depression levels.

Ways of Coping with Stress Inventory (WCSI): In 1980 Lazarus and Folkman developed this inventory[42], which has a Likert-type scale and consists of 30 items. Şahin & Durak (1995) performed the validity and reliability tests for the Turkish version of the inventory[43]. The scale is divided into five subgroups. They are: self-confident

approach (SCA), optimistic approach (OA), unconfident self-approach (helpless approach-UCSA), submissive approach (SA) and social support seeking approach (SSSA). The points scored from the subscales were calculated by dividing them into the number of items. They are scored as 0 "no.t suitable at all", 1 "not suitable", 2 "suitable", and 3 "completely suitable", excluding item numbers 1 and 9. The SCA, OA and SSSA are evaluated as the effective ways of coping with problems. The UCSA and SA are evaluated as effective/emotional directed ways of coping with problems. It was established that the Cronbach's alpha coefficient values ranged between 0.49-0.68 for the optimistic approach, between 0.62-0.80 for the self-confident approach, between 0.64-0.73 for the helpless approach, between 0.47-0.72 for the submissive approach and between 0.45-0.47 for the social support approach. In this study, the Cronbach's alpha coefficient values were 0.65 for the optimistic approach, 0.78 for the self-confident approach, 0.65 for the helpless approach, 0.66 for the submissive approach and 0.39 for the social support approach. The 8th, 10th, 14th, 16th, 20th, 23rd and 26th items were related to the self-confident approach; the 2nd, 4th, 6th, 12th and 18th items to the optimistic approach; the 3rd, 7th, 13th, 15th, 21st and 24th items to the hopeless approach; the 5th, 7th, 13th, 15th, 21st and 24th items to the submissive approach and the 1st, 9th, 29th and 30th items to the social support approach.

Beck's Depression Inventory (BDI): The Beck's Depression Inventory was developed by Beck (1961) and measures the symptoms related to decreased level of motivational, mental and emotional aspects and self-esteem of depressive people[44]. Every item determines a behavioral pattern unique to depression and includes 21 self-evaluation sentences, which have four choices going from less to more (0-3). Lower scores obtained from the inventory indicate lower depressive symptoms, while higher scores indicate high depressive symptoms. The lowest score on the scale is 0 and the highest score is 63. The items in the scale are aimed at the symptoms of depression and do not reflect any etiological theory. The cutting points of the scale were determined to be 17 for universıty students in Turkey. Interpretation according to the points received is made in the form of there is no depression for 0-17 points, there is a medium-level depression for 18-29 points and there is a serious-level depression for 30-63 points. The validity and reliability tests of the Turkish version of Beck's Depression Inventory were performed by Teğin (1980)[45] and Hisli (1988)[46]. The test-retest reliability coefficient was 0.65 and internal consistency of the inventory was found to be 0.78 with the split-half correlation method. The Cronbach's alpha value in our study was 0.88. Validity and reliability tests of the inventory on universıty students were performed by Teğin and it was proven that the inventory was valid and reliable enough to distinguish depressive and non-depressive universıty students. In our study, 5.6% (30 persons) of the sampling reported serious-level depression, 24.1% (129 persons) reported medium-level depression and 70.3% (376 persons) did not express depressive symptoms.

Data Collection

The data of the study were gathered by the researcher in a classroom using the face-to-face interview technique during the fall semester of the 2010-2011 academic year and data collection lasted for 15 minutes. The participants were thoroughly instructed on the aims and details of the study, an information sheet was provided and informed consent was obtained.

Data Analysis

The SPSS 16.00 version was used for the data analysis. Whether or not the data followed normal distribution was established with the Kolmogorov-Smirnov Test and Shapiro-Wilk Test and it was observed that not all variables followed a normal distribution. Since variables did not follow normal distributions, the Mann-Whitney U test was used for pair-wise comparisons and the Kruskal-Wallis Test was used for multi comparisons. When there was a significant difference in the Kruskal-Wallis Test made for multi comparisons, then the Bonferrroni corrected Mann-Whitney U test was performed in order to determine which groups caused the difference. Correlations between the scales and subscales were analyzed with correlation analysis and Linear Regression analysis was performed. For all analyses, a probability level of $p<0.01$ and $p<0.05$ defined statistical significance.

RESULTS

According to the Mann-Whitney Test results for the Ways of Coping with Stress Inventory (WCSI) and Beck's Depression Inventory (BDI) scores for gender, there was a statistically significant difference only in the optimistic approach of the WCSI (U=28439.00, p=.000) and depression scores (U=30106.50, p=.006). Depression levels of female universıty students were higher than male universıty students. According to the comparison of the (WCSI) and BDI scores for years of study of the students, there was a statistically significant difference only in the self-confident approach of the WCSI (X^2 =18.014, p=.000) and this difference resulted from the 1st and 3rd year students

(U=5347.500, p=.017), from the 2nd and 3rd year students (U=9651.500, p=.000), from the 2nd and 4th year students (U=8055.500, p=.001) and from the 1st and 4th year students (U=4458.500, p=.024). Similarly; there was also a significant difference between the years of study of the students for depression levels (X^2=24.663, p=.000) and this difference resulted from the 1st and 3rd (U=5419.000, p=.025) year students, 2nd and 3rd year students (U=10386.000, p=.009), 2nd and 4th year students (U=7181.500, p=.000) and 1st and 4th year students (U=3920.500, p=.001).

Table 1. Mann-Whitney U Test and Kruskal-Wallis Test for Ways of Coping with Stress Inventory (WCSI) and Beck's Depression Inventory (BDI)

WCSI		Gender	N	MeanRank	U	P
	optimist approach	Female	226	239.34	28439.00	.000**
		Male	309	288.96		
		Year	N	MeanRank	X^2	P
	self-confident approach	1.Year	78	242,41	18,014	,000**
		2 Year	148	231,46		
		3. Year	169	292,39		
		4. Year	140	291,44		
BECK DEPRESSiON	Depression	Gender	N	MeanRank	U	P
		Female	226	289.29	30106.50	.006**
		Male	309	252.43		
		Year	N	MeanRank	X^2	P
		1.Year	78	306,25	24,663	,000**
		2.Year	148	301,96		
		3.Year	169	258,12		
		4.Year	140	222.71		
	Voluntary preference of school		N	MeanRank	U 18784,000	P
		Yes	424	256,80		,001**
		No	111	310,77	X^2	
	Economical Status		N	MeanRank	15,029	P
		Low	88	326,25		,001**
		Moderate	407	256,01		
		high	40	261,81		

***p<0.01*

Significant correlations were found (p<0.05) for voluntary selection of the department (U=18784.000, p=.001) and economic income (X^2=15.029, p=.001) with the Beck's Depression Levels of the universıty students. On the other hand, according to the results of the statistical analysis made, while a significant correlation was not found (p>0.05) for department, playing sports, voluntary selection of the department and economic income, education and working status of the parents, number of siblings and place lived with the WCSI levels, in a similar manner, a significant correlation was not found (p>0.05) between department, playing sports, education and working status of the parents, number of siblings and place lived with Beck's Depression Levels.

Similarly; when the data of the study were socio-demographically investigated, no statistically significant difference was found in the analysis in terms of parental educational status (illiterate, literate, primary school, high school, university), mothers' professional status (housewives, state officer, private sector, retired), fathers' professional status (unemployed, state officer, private sector, retired), living place (with family, private student dormitory, state student dormitory, house), family type (nuclear family, extended family) in WCSI and BDI (p>0.05). However; the data regarding family type revealed a significant difference in seeking social support of WCSI on behalf of the students who had fragmented family (X^2 =7.706; P=.021).

Table 2. Correlation between the WCSI and BDI Scores

	1	2	3	4	5	6
1.Self-confident approach						
2.optimist approach	,541**					
3.Helpless approach	-,168**	-,166**				
4.Submissive approach	-,335**	-,134**	,521**			
5.Seeking support approach	,294**	,178**	-,150**	-,223**		
6.Depression	-,361**	-,344**	,309**	,220**	-,199**	

*** p<0.01*

There was a negative correlation between the depression scores and self-confident approach (r= -.361, p= .000), optimistic approach (r= -.344, p= .000) and social support approach (r= -.199, p= .000) of the WCSI, while there was a positive correlation between the hopeless approach (r= .309, p= .000) and submissive approach (r=.220, p= .000).

Table3. Linear Regression Analysis of variables that explained Beck's Depression and Ways of Coping with Stress

					β	Sd	t	P	% of variance	VIF
Beck Depression			Age		-,053	,244	-,218	,827	,758	1,319
			Gender		-2.143	.878	-2.441	.015*	,848	1,180
			Year		-2.214	.441	-5.014	.000**	,796	1,256
	BDI		Sport participation		1,077	,922	1,168	,243	,891	1,123
			Voluntary pref.		3.547	.995	3.564	.000**	,979	1,021
			Economic Status		.099	.046	2.148	.032*	,982	1,018
					Total R^2=.110		F=10,887			
Ways of Coping with Stress Inventory (WCSI)			Age		,008	,013	,580	,562	,758	1,319
			Gender		,047	,048	,981	,327	,848	1,180
	Self-confident app.		Year		.071	.024	2.939	.003**	,796	1,256
			Sport participation		-,072	,051	-1,421	,156	,891	1,123
			Voluntary pref.		-,022	,055	-,395	,693	,979	1,021
			Economic Status		.099	.046	2.148	.032*	,982	1,018
					Total R^2= ,041		F= 3,800			
			Age		,007	,013	,524	,601	,758	1,319
			Gender		.153	.047	3.235	.001**	,848	1,180
			Year		.058	.024	2.450	.015*	,796	1,256
	Optimist approach		Sport participation		-,072	,050	-1,448	,148	,891	1,123
			Voluntary pref.		-,059	,054	-1,101	,271	,979	1,021
			Economic Status		,005	,045	,109	,913	,982	1,018
					Total R^2= ,051		F= 4,734			
			Age		,011	,013	,842	,400	,758	1,319
			Gender		-,071	,046	-1,565	,118	,848	1,180
			Year		-,022	,023	-,942	,347	,796	1,256
	Helpless approach		Sport participation		,020	,048	,417	,677	,891	1,123
			Voluntary pref.		,059	,052	1,133	,258	,979	1,021
			Economic Status		,000	,044	,003	,998	,982	1,018
					Total R^2= ,010		F= ,850			
			Age		-,009	,014	-,663	,508	,758	1,319
			Gender		,060	,052	1,155	,249	,848	1,180
			Year		,001	,026	,045	,964	,796	1,256
	Submissive app.		Sport participation		,064	,054	1,178	,239	,891	1,123
			Voluntary pref.		-,032	,058	-,554	,580	,979	1,021
			Economic Status		-,030	,049	-,607	,544	,982	1,018
					Total R^2= ,005		F= ,451			
			Age		,000	,013	-,026	,979	,758	1,319
			Gender		,004	,047	,083	,934	,848	1,180
			Year		,025	,024	1,040	,299	,796	1,256
	Social support app.		Sport participation		-,035	,050	-,700	,484	,891	1,123
			Voluntary pref.		,033	,053	,612	,541	,979	1,021
			Economic Status		,002	,045	,038	,970	,982	1,018
					Total R^2= ,005		F=,394			

p<0.05 p<0.01***

At the conclusion of the Linear Regression Analysis made, according to the standardized regression coefficients, the relative order of importance on Beck's Depression scores of the (β) determinator variables was gender, year, voluntary selection of school and economic income; whereas, for the WCSI, we are confronted with year and economic income in the subdimension of self-confident approach and gender and year in the optimistic approach. When the t-test results for the correlation of the regression coefficients are examined, while only the voluntary selection of department, economic income, gender and year variables appear to be significant determinators on Beck's Depression Level, whereas, the subdimensions of gender and year in the self-confident approach, the subdimensions of gender and year variables in the optimistic approach appear to be significant determinators.

DISCUSSION

The current study aimed at assessing the correlation between stress coping styles and depression levels of students who attended the School of Physical Education and Sports (SPES) at the Adnan Menderes universıty for some variables. A total of 535 students (42.2% females and 57.8% males) who attended different departments of the SPES volunteered to participate in the study.

According to the Mann-Whitney U Test results for gender, it was found that there was a statistically significant difference only in the optimistic approach of the WCSI (U=28439.00, p=.000) for male universıty students, whereas, for female students (U=30106.50, p=.006), a statistically significant difference existed in the depression scores. The mean depression scores of female students (Mean Rank=289.29) were found to be higher than male students (Mean Rank= 252.43). Whereas, as a result of the Linear Regression Analysis t-test made, it was observed that only the optimistic approach was a significant determinator of the gender variable on the WCSI (Table 3). The study by Özgan et al.[1] reported that female students experienced more stress than male students and the study by Misra et al. pointed out that female students had more stress than male students due to anger, internal and external pressures and that the pressure factor caused female students to experience more stress. Moulton(1980) argued that women are vulnerable to stress because they are often challenged with new expectations prior to the acquisition of revelant resources[47]. Türküm (2001) emphasized that seeking social support for stress coping was higher among girls[48], while the study by Meyers et al. [19] on rodeo riders found no difference between 130 male rodeo riders and 55 female rodeo riders for use of stress coping styles. The results of some studies on the same topic [16, 17, 49] suggested that stress coping styles of the students did not differ for gender, which was in accord with our findings. The results of a thorough search of the literature made to determine whether or not stress coping styles differed for gender contradicted with each other; which -it may be argued- may have resulted from stressful situations (academic problems, adjustment problems, emotional relations, economic problems, etc.) to which the universıty students were subjected. The study by Çetin (2009) indicated that the stress coping levels of students attending the Department of Physical Education and Sports were generally high and concluded that they used problem-focused coping styles and seeking social support more and avoidant coping strategies moderately[21]. In our study, it was determined that the stress coping levels of the students were at a moderate level, and of the WCSI subscales, they used the helpless approach and social support approach at a high level, while the self-confident approach and optimistic approach at a lower level. This outcome was due to social, cultural and economic differences and different opportunities as well as many other factors.

Not only physiological changes, but also psychological and social changes, force young people during adolescence and their reactions to these changes may be different and depressive symptoms constitute some of these reactions [50]. Generally speaking, the point prevalence of depressive symptoms in the community ranges between 13% and 20% [51]. Even if its prevalence and symptoms are slight, it should be considered as an important public health problem, because these symptoms cause individuals to be inactive, unproductive and to lose ability in many areas [2]. In our study, the depression reliability coefficient of universıty students was found to be 95%, while the average low and average high values were between 12.00 and 13.65 and it was concluded that their depression reliability was at a low level.

In some studies [52, 22], depressive symptoms were significantly high among girls and it is reported that depression is generally observed more among women [53]. In the study by Sasaki and Yamasaki (2005) on 292 Japanese universıty students, it was determined that women were more likely to undergo depression when faced with difficult situations[2] . Aylaz et al. [10] found that the mean BDI scores of female students were higher than male students, but no statistically significant difference was obtained for the mean BDI scores for gender. In the study by Çelikel and Erkorkmaz (2008), it was observed that the hopelessness levels of male students were higher than female students and depressive symptoms and hopelessness levels of young people increased with low parental educational status[54]. Besides, Çelikel and Erkorkmaz (2008) emphasized that living away from family, failure in courses and economic difficulties increased depressive symptoms and hopelessness levels[54]. We can conclude that these findings were generally similar to our findings.

When the coefficients of the scores for the WCSI of the students were analyzed for years of study of the students, there was statistically significant difference only in the self-confident approach of the WCSI (X^2 =18.014, p=.000) and this difference resulted from the 1st and 3rd year students (U=5347.500, p=.017), from the 2nd and 3rd year students (U=9651.500, p=.000), from the 2nd and 4th year students (U=8055.500, p=.001) and from the 1st and

4th year students (U=4458.500, p=.024). Nevertheless, at the conclusion of the Linear Regression Analysis t-test made, it was observed that only the subdimensions of the year variable for the self-confident approach and the optimistic approach were significant determinators on the WCSI. Similarly, there was also a significant difference between the years of study of the students for Beck's Depression scores (X^2 =24.663, p=.000) and this difference resulted from the 1st and 3rd year students (U=5419.000, p=.025), the 2nd and 3rd year students (U=10386.000, p=.009), the 2nd and 4th year students (U=7181.500, p=.000) and the 1st and 4th year students (U=3920.500, p=.001). It was determined that depression levels of the students reduced towards the end of universıty life (towards the 3rd and 4th years of universıty education). Some studies [55, 1] reported no significant difference between the age of the universıty students and their stress levels (p>0.05). The reason may be attributed to the fact that students study in the same setting, same style and under similar conditions. Temel, Bahar, & Çuhadar (2007) found significant difference in depression scores for years of study of the students and emphasized that particularly the 4th year students had higher mean depression scores compared to other students(56. Likewise, the studies by Tully (2004), Özdel et al. (2002) and Bakır et al. (1997) supported this result[20, 2, 52]. We were of the opinion that depression scores may have increased due to the difficulties of finding jobs and worries about the future. However, our findings contradicted the findings of the above studies.

According to the results of the Kruskal-Wallis Test, there was no significant difference in the subscales of the WCSI for academic departments (p>0.05). In the study by Çetin (2009), there was a significant difference in academic departments (p<0.05) and particularly students studying Sports Management had higher mean scores in the subscales compared with the other academic departments[21]. In our study, there was no significant difference in the BDI scores (p>0.05). Besides, it was remarkable that students at the Training Department had higher BDI scores than other departments (recreation, management, teaching). We thought that the reason for this may have been the small probability of finding jobs in Turkey and anxiety about the future.

When the findings were analyzed for playing sports, it was observed that there was a statistically insignificant difference between sport playing students and non-sport playing students for the self-confident approach (U=27516.500, p=.112), the helpless approach (U=28580.000, p=.350), the submissive approach (U=29089.000, p=.533) and the seeking support approach (U=28984.500, p=.488). Whereas, a significant difference at a lower level existed in the optimistic approach for those who played sports.

It was observed that there was a significant difference in the Beck's Depression Levels for those who played sports (U=26633.000, p=.034) and the Beck's Depression scores of those who did not play sports were higher. The study by Karakaya, Coşkun, and Ağaoğlu (2006) concluded that the effect of sport reduced depression, anxiety and augmented self-esteem[57]. Similarly, Canan and Ataoğlu (2010) stated that playing sports regularly had a positive effect upon anxiety and that especially playing team-sports regularly were positively effective upon depression and problem-solving skills[24]. Many other studies highlight that playing sports regularly may reduce depressive symptoms [25, 26]. Research clearly indicates a positive association between exercise and psychological health. Physical activity promotes positive emotional well- being [39], including improvements in depressed mood [27, 29], anxiety and stress [27, 57]. On the other hand, the study by Taliaferro et al. compared universıty students who engaged in some physical activity every week to sedentary universıty students and demonstrated that those who engaged in physical activities had a lower degree of hopelessness risk, depression and suicidal behaviors[36]. Similarly, Simon et al. [37] also indicated that the hopelessness and depression levels of those who engaged in physical activities and played sports were lower. In light of the literature and our study findings, it may be suggested that sports and physical activities positively affected anxiety and depression levels.

As for the variable of voluntary selection of the academic department, no significant difference was obtained for the WCSI (P>0.05), while a significant difference was found for depression (U=18784.00, p=0.001). As the result of the Linear Regression Analysis, when the t test results related to the significance of the regression coefficient were analyzed, it was observed that only the variables of gender, years of study of the students, voluntary selection of the academic department and economic income were significant determinants on the Beck's Depression Level, but age and playing sports did not have a significant effect upon the Beck's Depression Level (Table 4). The study by Temel et al. (2007) showed that the mean depression scores of students who were dissatisfied with their academic life were significantly high(56). In a similar study by Tata and Özgür (2005) on nurses[31], it was found that nurses who were satisfied with their jobs demonstrated fewer depressive symptoms. Besides, it was observed that students who were satisfied with their academic life presented higher mean scores for the self-confident approach and optimistic approach.

When the perception of income status was examined as well, no significant difference was obtained for the WCSI ($p>0.05$). On the other hand, at the conclusion of the Linear Regression Analysis made, it was observed that only the sub-dimension of the economic income variable of the self-confident approach was a significant indicator on the WCSI (Table 3). Likewise, the results of some studies [56, 4] concurred with our findings. As stressors of students, other studies revealed academic problems, such as absenteeism and academic failure, economic problems, problems with the opposite sex, problems with housemates and roommates, relational problems with family and peers, fear of exams and fear of unemployment in the future [59].

In our study, a significant difference existed between income level and depression scores ($X^2=15.029$, $p=0.01$) and this difference originated from perceptions of low income and moderate income ($U=13182.500$, $p=.000$). According to the results of the Mann-Whitney U Test, the differences between the perceptions of low income and moderate income were statistically significant ($U=1359.500$, $p=.039$). It may be argued that students with perceptions of low income had a higher level of depression compared with those with perceptions of high income. Many studies [2, 60] pointed out a significant correlation between income status and depression and many others [61, 62, 63] showed that students who had low socioeconomic status had higher depressive symptoms and hopelessness levels. The findings obtained supported the literature.

When the correlation between the scores of depression and stress coping styles was analyzed, there was a negative correlation for the self-confident approach, the optimistic approach and the social support approach, while there was a statistically positive correlation between the hopeless approach and the submissive approach. It was observed that students with high self-confident, optimistic and social support approaches had lower depression levels, while the students with high hopeless and submissive approaches had higher depression levels. Many studies conducted [56, 32, 30] indicated similar results to ours and concluded that stress coping styles of the students affected their depression levels in particular. Those who possessed high social support, used self-confident and optimistic approaches and showed fewer depressive symptoms, but those who used seeking social support, hopeless and submissive approaches had higher depressive symptoms.

This study was conducted in Aydin Province in the western part of Turkey. Sociodemographic characteristics in Turkey may differ according to geographical regions. Therefore, our sample group represented only one geographical region, which was a limitation of our study.

CONCLUSION

In conclusion, our study found that the Beck's Depression scores were higher among female university students than male university students, among those who did not play sports compared to those who played sports and among those who had low-income status in contrast to those with high-income status. Gender, years of study of the students, voluntary selection of the academic department and economic income variables played an effective role upon Beck's Depression Levels. Female university students did not use stress coping styles effectively. Students who were self-confident, optimistic and had social support presented lower depression levels, whereas, students who had higher hopeless and submissive approaches had higher depression levels. In light of the results of our study, we are of the opinion that it will be helpful for the students to voluntarily select the academic department for attaining the future objectives in their lives and for decreasing depression levels when faced with difficulties, thanks to the effective use of stress coping strategies.

Difficult and complex life conditions of today make it necessary for the adult individuals to develop coping strategies against stressful situations. Accordingly, it is vital to develop stress coping strategies after recognizing stressors and to determine priorities for the solution of depression by defining depressive symptoms in particular. We are of the opinion that providing students with psychological counseling services will contribute to their effective coping with stress and psychiatric problems. Yet; we are of the opinion that the young people should receive skill-training programs to develop their stress coping strategies and by improving emotional intelligence of the young people (self-confident, self-expressive, able to share emotions easily, having empathy and self-criticizing), they will be more successful in managing stressful events. On the other hand, opinions and beliefs, interpretation types, nutritional habits and nutrition types that may lead to stress should be examined. It is essential to encourage socio-cultural activities, physical, sportive and also outdoor activities.

We think prospective studies to be conducted in different regions would contribute to the literature.

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