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COMPARISON OF TURKISH AND AZERBAIJANI UNIVERSITY STUDENTS IN TERMS OF PERCEIVED STRESS, STRESS SYMPTOMS AND STRESS COPING STRATEGIES

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ABSTRACT

This study aims to determine and compare the perceived stress levels, stress symptoms and stress coping strategies of Turkish and Azerbaijani university students. The study group consists of 521 people between the ages of 18-30, including 266 Turkish and 255 Azerbaijani students. The mean age of the sample was calculated as 21.62 years. The data were collected online with personal information form, Perceived Stress Scale, Stress Symptoms Scale and Stress Coping Styles Scale. For the study, the age group range and the purpose of the research were indicated in social media and university groups, volunteers were asked to fill out the questionnaire and relational screening model, which is one of the quantitative research designs, was used. In the research, the suitability of the data to the normal distribution between the groups was checked by "Shapiro-Wilk Test". "Independent Sample T Test" was used to compare two independent groups with normal distribution, and "Mann-Whitney U Test" was used to compare two independent groups without normal distribution. According to the results, it was found that there was no significant difference when the perceived stress scale scores of Turkish and Azerbaijani university students were compared. Reviewing the stress symptoms scale and sub-scale scores, it was seen that the stress symptoms were moderate, and the difference was not significant. Examining the sub-scale scores of stress coping styles, it was found that the average scores of Azerbaijani university students were higher in self-confident approach, helpless approach, submission approach, optimistic approach and social support seeking approach. In the results of the analysis, while there was no significant difference between the mean scores of the desperate approach and the social support seeking approach, it was found that there was a significant difference between the mean scores of the self-confident approach, optimistic approach, and submissive approach in favor of the Azerbaijani students.

Keywords: Perceived stress, signs of stress, stress-coping.

INTRODUCTION

Stress is a situation that people often encounter in their lives. On television screens, websites, and magazines, individual increasingly encounter words such as “stress”, “depression”, “neurosis” and “fatigue”. This term was first used in the 17th century in the sense of “difficulty, suffering, hardship”, and in the 18th and 19th centuries in the sense of “oppression and tension”. Today, stress is firstly defined as an alarm state in which natural resistance decreases and bodily defenses move as stated in the General Adjustment Syndrome model by Selye (1956). Although the concept of stress is known by everyone, it remains scientifically unclear. Because stress can have different meanings for each person in relation to lifestyle, personality, and situation (Hussien & Hussien, 2006). From the point of view of medicine and biological sciences, stress in general is understood as the body’s response to negative stimuli, and the first definitions of stress were predominantly explained in terms of physical and biological elements. In psychology, stress is defined as changes that are perceived as unwanted, unplanned, uncontrolled, or unpredictable (Bartley, et al., 1998).

The concept of stress can be evaluated from many angles. Stress, which is a complex phenomenon, is inherent in all living things, from the simplest unicellular to Homo Sapiens, and is an integral part of life. This is because life is complex and dynamic. An indispensable condition for the normal vital functions of an organism is the preservation of the internal environment or homeostasis. Stress is a state of disrupted homeostasis and leads to stressors. Stressors are any physical, psychological, or environmental event or condition that initiates stress responses (Anspaugh et al., 2003). Any event, experience, or environmental problem in life causes stress. The person perceives the situation they are experiencing as a threat or difficulty for themselves, which causes physical and psychological effects.

As in all periods of life, the university years have always been challenging. In this period, the adaptation process to the university, educational activities, examination, and evaluation issues can cause stress in students. During the integration process, negative experiences related to starting university, trying to find the most appropriate way of working, especially when moving from home and dormitory conditions, lack of independent working skills, inability to take notes, etc. may be encountered. In addition, teachers, administration, friends, and daily problems are also among the sources of stress in university students. The university period is a responsible, joyful, and interesting period, but also a period in which some difficult situations are experienced (Abouserie, 1994; Kohn & Frazer, 1986). Starting university can be a traumatic experience for young students in the context of the characteristics of the developmental period and the change in the needs of the individual in the process of adaptation to student life. The initiation of higher education by the individual during this period coincides with the transition crisis to early adulthood (Perry & Szalavitz, 2017). For many students, going to university for the first time can also lead to stress (Dyson & Renk, 2006).

Lazarus & Folkman (1984) stated that stress can be evaluated in 3 processes. The first of these is to perceive stress, the second is to use resources correctly, and the third is to determine the coping style. These three processes are closely related to each other. First, the way individuals perceive it determines how they can deal

with the stressful situation. Because stress is a stimulant that is perceived in different ways among individuals. Just as everyone has a different coping style, the way they perceive stress can also determine our coping style. Perceived stress is defined as the individual's interpretation and response to a stressful situation (Cohen et al., 1983). It can be stated that the perceived stress is higher when the stressors encountered cause the increase of negative feelings and thoughts for the individual, and the perceived stress is lower when the stressors encountered do not cause the negative feelings and thoughts to increase. McEwen & Stellar (1993) have indicated that the physical and psychological effects of high perceived stress are negative and reduce the quality of life of individuals. Low and Moderate levels of perceived stress can be considered as a driving force in the development of the individual. For this reason, individuals need healthy information sources to evaluate stressful situations correctly. Because the perceived source of stress is also the determinant of our stress response.

Excessive stress responses are closely related to both reduced subjective well-being levels of students and inefficiency in lessons (Misra & Castillo, 2004; Watson & Watson, 2016). In other words, every decision made to cope with stress affects both mental health and academic life (Zaleskiet, 2010). The strategy of coping with stress is the cognitive or behavioral efforts of the individual in stressful situations (Doğan, 2020). Strategies for coping with stress are known to affect the individual in many contexts. Students' inability to effectively cope with stressful situations has been linked to excessive alcohol use, smoking, eating disorders, or other mental health issues (Bland et al. 2012). For most students, managing stress can be extremely difficult during the college process. However, learning how to cope with stress can help students cope with this process (Campbell & Svenson, 1992).

Stress usually manifests itself by the following basic symptoms such as memory impairment, difficulty focusing on anything, frequent mistakes at work, a feeling of constant fatigue, talking too quickly, difficulties expressing ideas, unexplained pain in the head, back and stomach, loss of sense of humor, increase in the manifestation of bad habits, a feeling of constant hunger or loss of appetite. In addition, symptoms such as irritability, low mood, alteration of the normal functioning of organs and systems are also among the symptoms of stress (Norfolk, 1989). Zivin et al. (2009) found in their research that students experienced the most stress symptoms such as eating disorders and sleep problems.

Stress coping styles have an important role in managing stress and its symptoms. Lazarus & Folkman (1984) argue that there are two different strategies for coping with stress: problem-oriented coping strategy and emotion-oriented coping strategy. In a problem-oriented coping strategy, the individual experiencing stress perceives stress and can change and control a stressful situation within his/her abilities. In the emotion-oriented coping strategy, the individual who experiences stress focuses on coping with problems by regulating their emotions. As a result, these strategies focus on managing or changing the situation that causes stress (Snyder, 1999). As stressors accumulate, an individual's strategies for coping with stress and his/her physical or psychological resources may become depleted. As a result, the likelihood of physical illness or psychological distress increases (Lazarus & Folkman, 1994; Pearlin, 1999).

Stress is also a major problem for university students (Oman et al., 2008). Intense course load, long exam processes and exam anxiety are the most important sources of stress (Hashmat et al., 2008). Some studies reveal high levels of perceived stress in university students (Sohail, 2013). While the symptoms of stress can sometimes be the same, stressful situations can differ. Some of the common stressors during college are excessive homework, inability to manage time, and problems with social skills (Fairbrother & Warn, 2003). Although students perform as desired at certain stress levels, undesirable consequences may occur for students who apply coping strategies with negative stress (Uchil, 2017).

As in the general population, many studies have been conducted in university students based on understanding stress and stress-related factors. The transition from high school to college can be stressful for any student. In particular, the tasks of new students such as achieving emotional success, living independently of the family, fulfilling new responsibilities, and developing interpersonal relationships and values increase this stress (Pritchard et al., 2004). University students face different stressful situations and, as a result, stress negatively affects students' health status or academic performance (Hitches et al., 2021; Pascoe et al., 2020). College students' achievements, pressure to succeed, and anxiety about income level have been linked to stress, anxiety, and depression (Beiter et al., 2015). This intense stress experienced by students can adversely affect their physical and mental health as well as their learning and performance (Pascoe et al., 2020; Powell et al., 2018).

The importance of this research is to determine the perceived stress level and stress symptoms in university students who are exposed to intense stressors and to reveal the existing situation regarding these psychological characteristics in both Turkish and Azerbaijani students. In addition, the importance of the study is also seen as revealing the strategies for coping with stress in students from both cultures and supporting especially efficient coping strategies in these students by experts. In this context, this study aims to determine and compare the perceived stress levels, stress symptoms and stress coping strategies of Turkish and Azerbaijani university students. In line with this purpose, the answer to the following questions were sought:

- Do the perceived stress levels of Turkish and Azerbaijani university students differ significantly?
- Do the stress symptoms of Turkish and Azerbaijani university students differ significantly?
- Do Turkish and Azerbaijani university students' stress coping strategies differ significantly?

METHOD

Research Model

In this study, relational screening model, which is one of the quantitative research designs, was used to compare Turkish and Azerbaijani university students in terms of perceived stress, stress symptoms and stress coping strategies. The relational screening model is a research model that aims to determine whether there is any change between two or more variables together and the degree of this change (Karasar, 2010).

Universe and Sample

The sample of the study consists of a total of 521 Turkish and Azerbaijani university students between the ages of 18-30. The mean age of the sample was calculated as 21.62 years. The data was collected online. For the study, the age group range and the purpose of the research were indicated in social media and university groups and volunteers were asked to fill out the questionnaire. A total of 521 people took part in the sample, of which 51.1% (266 people) were Turkish university students and 48.9% (255 people) were Azerbaijani university students.

Research Process

The scales used in the research were created through online forms. In the introduction section of the form, the purpose of the research, which scales were used in the study, information about the scales, voluntary consent form and finally the full e-mail address information were given. The data were collected by the researcher between October 15, 2021, and December 17, 2021. To apply the scales used in the study to the participants, the responsible authors in the Turkish adaptation study of the scales were contacted via e-mail, and the scale usage permissions and the necessary ethics committee permissions were obtained. The participants of the study were reached through social media channels and university message groups. A total of 524 university students filled out a personal information form and scales.

Data Collection Tools

In the study, "Personal Information Form" prepared by the researcher to determine the socio-demographic characteristics of Turkish and Azerbaijani university students; "Perceived Stress Scale" was used to determine the perceived stress level; "Stress Symptoms Scale" was used to measure stress symptoms; "Stress Coping Styles Scale" was used to measure stress coping styles.

Personal Information Form (PIF)

The Personal Information Form developed by the researchers aimed to collect personal information about the participants. The form contains statements containing information such as age, gender, marital status, and country of the students.

Perceived Stress Scale (PSS)

The scale developed by Cohen et al. (1983) was adapted into Turkish by Eskin et al. (2013). It is designed to measure the level of stress that the person perceives from the problems he/she encounters in his/her daily life, namely the stressors. The scale consists of 14 items. Participants evaluated each item on a 5-item Likert-type scale ranging from "Never (0), Almost Never (1), Sometimes (2), Fairly Often (3), Very Often (4)". There are three versions of this scale consisting of 4, 10 and 14 items. In this study, PSS-14 form consisting of fourteen questions was used. The scale consists of 2 sub-factors: insufficient self-efficacy perception and stress/discomfort

perception. These two factors explain 53.81% of the total variance. Internal Consistency coefficient of the Turkish form was found to be 0.84; test-retest reliability was found as .0.87. In scoring the scale, Items no. 4, 5, 6, 7, 9, 10, and 13 were rated inversely. The lowest score that can be obtained from the scale is 0, the highest score is 56, and the high scores on the scale indicate that the stress level is also increasing. As a result of the reliability analysis of this study, Cronbach's Alpha value was found to be 0.84 for the whole scale.

Stress Self-Assessment Checklist (SSAC)

The Stress Symptoms Scale was developed by DasGupta (1992) to detect the symptoms experienced in stressful situations. The Turkish validity and reliability study of the scale was conducted by Hovardaoğlu (1997). SSAC is a measurement instrument consisting of 38 items. The scale is answered in the 4-item Likert type. All items found on the scale are scored as "None (1), Occasionally (2), Frequently (3), and Continuous (4)", and there are no inversely scored items. Scores on the scale range from 38-152, and high scores indicate increased signs of stress. As a result of the factor analysis conducted to examine the construct validity of the scale, it was found that stress has three factors called cognitive-affective, physiological and pain-complaint. Cronbach's Alpha of the adapted form of the scale was found to be 0.92, and it was concluded that the scale was reliable. As a result of the reliability analysis of this study, Cronbach's Alpha value was found to be 0.93.

Ways of Coping Questionnaire (WCQ)

WCQ is a scale developed by Lazarus & Folkman (1984). The original form of the scale consists of 66 items. WCQ, which was adapted to Turkish culture by Şahin & Durak (1995), was transformed into a 30-item form. The scale has five sub-dimensions. These include self-confident, optimistic, appealing to social support, helpless and submissive approaches. The scale is answered in the 4-item Likert type. Items 1 and 9 were scored inversely on the scale. The high scores from each sub-dimension indicate that the person is using that coping style more. In addition, the total scores from the scale vary between 30-120. According to the results of the reliability analysis, Cronbach's Alpha values were found as .68 for the "Self-Confident Approach" score; as .80 for the "Helpless Approach" score; as .73 for the "Submissive Approach" score; as .70 for the "Optimistic Approach" score; as .47 for the "Social Support Search" score, and the scale was concluded to be reliable. As a result of the reliability analysis of this study, Cronbach's Alpha values were found as .85 for "Self-Confident Approach" score; as .81 for "Helpless Approach" score; as .60 for "Submissive Approach" score; as .78 for "Optimistic Approach" score; as .49 for "Social Support Search" score.

Data Analysis

In the study, the suitability of the data to the normal distribution between the groups was checked by "Shapiro-Wilk Test". "Independent Sample T Test" was used to compare two independent groups with normal distribution, and "Mann-Whitbey U Test" was used to compare two independent groups without normal distribution. "Cronbach's Alpha Coefficient" was calculated to determine the reliability level of the studied scales.

In addition, the level of statistical significance in all calculations and interpretations was considered as “ $\alpha < 0.05$, $\alpha < 0.01$, $\alpha < 0.001$,” and hypotheses were established bi-directionally. Statistical analysis of the data was performed in SPSS 22 (IBM Inc., Chicago, IL, USA) statistical package software.

FINDINGS

The “Shapiro-Wilk Test” was used to examine whether the PSS total scores and sub-scale scores of Turkish and Azerbaijani university students showed a normal distribution, and it was found that “perception of insufficient self-efficacy” and “stress/discomfort perception” sub-scale scores were not normally distributed ($p < 0.05$), PSS total scores distributed normally. For this reason, Mann-Whitney U Test and Independent Sample T Test analysis were performed to determine whether the total PSS scores and sub-scale scores of Turkish and Azerbaijani university students differed or not, and the results were given in Table 1.

Table 1. Comparison of PSS and Sub-Scale Scores of Turkish and Azerbaijani University Students

PSS and Sub-Scales	Country	$\bar{X} \pm SS$	Median (Min-Max)	t	U	p
Perception of Inadequate Self-Sufficiency	Türkiye	19.28±5.03	19 (8-34)	-	33518.5	0.817
	Azerbaijan	19.40±5.86	20 (7-35)			
Perception of Stress/Discomfort	Türkiye	24.22±5.87	25 (7-35)	-	30700	0.061
	Azerbaijan	23.07±6.35	24 (7-35)			
PSS Total	Türkiye	43.50±8.94	44 (18-67)	-1.321	-	0.187
	Azerbaijan	42.47±8.84	42 (18-67)			

As seen in Table 1, it was found that there was no significant difference between “perception of insufficient self-efficacy” ($U=33518.5$, $p > .05$), “stress/discomfort perception” ($U=30700$, $p > .05$) sub-scale scores and PSS total scores ($t=-1.321$, $p > .05$) of Turkish and Azerbaijani university students.

The “Shapiro-Wilk Test” was used to examine whether the SSAC total scores and sub-scale scores of Turkish and Azerbaijani university students showed a normal distribution, and it was found that scale and sub sub-scale scores were not normally distributed ($p < 0.05$). For this reason, Mann-Whitney U Test analysis was performed to determine whether the SBI total scores and sub-scale scores of Turkish and Azerbaijani university students differed and the results were given in Table 2.

Table 2. Comparison of SSAC and Sub-Scale Scores of Turkish and Azerbaijani University Students

PSS and Sub-Scales	Country	$\bar{X} \pm SS$	Median (Min-Max)	U	p
Cognitive/Affective	Türkiye	34.46±10.56	33.5 (16-61)	30983	0.088
	Azerbaijan	35.56±9.72	35 (16-59)		
Physiological	Türkiye	18.60±5.71	17 (12-45)	31567.5	0.170
	Azerbaijan	18.76±5.10	17 (12-42)		
Pain/Complaints	Türkiye	16.03±5.71	15 (8-32)	31958.5	0.254
	Azerbaijan	15.35±5.19	15 (8-32)		
SSAC Total	Türkiye	73.19±20.79	70 (38-143)	32429.5	0.387
	Azerbaijan	73.42±18.47	70 (38-129)		

As seen in Table 2, it was found that there was no significant difference between “cognitive/affective” (U=30983, p>.05), “physiological symptom” (U=30700, p>.05), “pain symptoms” (U=31958.5, p>.05), sub-scale scores and PSS total scores (U=32429.5, p>.05) of Turkish and Azerbaijani university students.

It was examined with “Shapiro-Wilk Test” whether the WCQ sub-scale scores of Turkish and Azerbaijani university students showed a normal distribution or not, and it was determined that the sub-scale scores were not normally distributed (p<0.05). For this reason, Mann-Whitney U Test analysis was performed to determine whether the WCQ sub-scale scores of Turkish and Azerbaijani university students differed or not, and the results were given in Table 3.

Table 3. Comparison of WCQ Sub-Scale Scores of Turkish and Azerbaijani University Students

PSS and Sub-Scales	Country	$\bar{X} \pm SS$	Median (Min-Max)	U	p
Self-Confidence Approach	Türkiye	19.53±4.36	20 (7-28)	28677.5	0.002**
	Azerbaijan	20.62±5.21	21 (7-28)		
Desperate Approach	Türkiye	19.70±5.58	19 (8-32)	32837	0.530
	Azerbaijan	19.97±5.84	20 (8-32)		
Submissive Approach	Türkiye	11.76±3.22	11 (6-24)	24116.5	0.000***
	Azerbaijan	13.41±3.48	13 (8-24)		
Optimistic Approach	Türkiye	12.64±3.58	12.5 (5-20)	30331.5	0.036*
	Azerbaijan	13.29±3.60	13 (5-20)		
Social Support Search	Türkiye	11.00±1.98	11 (4-16)	33115	0.638
	Azerbaijan	10.80±2.50	11 (4-16)		

As seen in Table 3, it was found that there was a statistically significant difference between students’ scores from WCQ, “self-confident approach” (U=28677.5; p.05) and “submissive approach” (U=24116.5; p<0.001) and “optimistic approach” (U=30331.5; p<0.05), and there was no significant difference between “desperate approach” (U=32837, p>.05) and “social support seeking approach” (U=33115, p>.05) sub-scale scores. Based on these results, it was seen that the average of “self-confident approach”, “submissive approach”, “optimistic approach” sub-scale scores were higher in Azerbaijani university students compared to Turkish university students.

CONCLUSION and DISCUSSION

In this study, which was conducted to determine and compare the perceived stress levels, stress symptoms and stress coping strategies of Turkish and Azerbaijani university students, it was determined that there was no significant difference between perceived stress, stress symptoms, “helpless approach” and “seeking social support” and that there was a significant difference between “self-confident approach”, “submissive approach” and “optimistic approach” in coping with stress in favor of Azerbaijani university students.

When the perceived stress level scale and sub-scale scores were examined, it was seen that Turkish and Azerbaijani university students had high stress levels and the difference was not significant. College years can often be stressful. These years include the transition from adolescence to adulthood and involve a variety of challenges. In this period, students are faced with a wide range of stressors such as adaptation to university life,

independent living, academic success, self-finance, and friendship relationships. People who have difficulty coping with these stressors are also likely to have high stress levels. Lazarus & Folkman (1984) also refer to stress as a psychological condition in which individuals perceive that their personal or environmental demands strain or exceed coping resources. Perceived stress can be defined as the feelings and thoughts a person has about the level of stress they are currently experiencing or over a period of time (Phillips, 2013). In this context, the fact that Turkish and Azerbaijani university students experience high levels of stress in today's conditions shows that they have difficulty coping with these tasks. Ross et al. (1999) also states that conditions such as estrangement from family, social economic problems, problems in adapting to the university environment, and low academic achievement can cause high levels of stress in university students. Studies in the UK, Sweden, the USA, Canada, and Australia have also found that university students experience high levels of stress (Adlaf et al., 2005; Blanco et al., 2008; Stallman, 2010; Turner, et al., 2015; Vaez et al., 2004). Similarly, Cheema et al. (2020) in a study of university students from 44 different countries in Qatar found that students experienced high levels of stress. The fact that university students experienced high stress in different countries in studies with university students shows that the countries are similar in terms of stress level, and it is thought that this finding supports the lack of significant difference between the stress levels of Turkish and Azerbaijani university students discussed in this study. In addition, individuals who experience long-term high stress are likely to experience unwanted behaviors such as school leaving, depression, anxiety, etc. mental disorders due to the depletion of coping resources (Andersson et al., 2009; Cheema et al., 2020; Korte et al., 2005; Lilleholt et al., 2019; Romo-Nava et al., 2016). Studies show that university students experience these disorders (Bewick et al., 2010; Campbell et al., 1992; Juster et al., 2010).

When the Stress Symptoms Scale and sub-scale scores were examined, it was seen that the stress symptoms of Turkish and Azerbaijani university students were moderate, and the difference was not significant. According to Braham (2004), the symptoms of stress can be addressed in four categories. These include physical, emotional, cognitive and social symptoms. Physical symptoms include headaches, constipation, diarrhea, high blood pressure and sweating a lot; Emotional symptoms include anxiety, depression, decreased self-esteem, constant tension, or anxiety; Mental symptoms include forgetfulness, poor memory, and confusion; Social symptoms include looking for fault in others and defensive attitudes. Zainora et al. (2020) examined the perceived stress and signs of stress of undergraduates. A total of 404 students between the ages of 18 and 29 participated in the study. It was found that most students had moderate levels of stress, some had high levels of stress, and very few students had low levels of stress. The symptoms of stress highly rated by the students were found to be cognitive, then emotional, physical, and behavioral, respectively. Bland et al. (2010) examined the types of stressors and signs of stress in 173 undergraduate students. As a result, it was found that the symptoms of stress were more psychological and appeared as pessimism, irritability, anxiety, and sleep problems. The main stressors were found to be schoolwork, money, time management, relationships with parents and friends. Kazımzade (2022) found that there was no significant difference in the study comparing the post-traumatic stress symptoms of Turkish and Azerbaijani university students. In this study, it was found that the students showed moderate

signs of stress. Depending on the fact that students have high perceived stress levels, stress symptoms can also be expected to be high. However, considering that the students are in the period when they are at their strongest physically, cognitively, and physiologically, it is thought that it is normal for the symptoms to be moderate and for there to be no difference between Turkish and Azerbaijani university students.

When the sub-scale scores of stress coping styles were examined, it was found that there was no significant difference between “desperate approach” and “seeking social support”, and there was a significant difference between “self-confident approach”, “optimistic approach” and “submissive approach” in coping with stress in favor of Azerbaijani university students. According to Lazarus (1983), coping with stress is divided into direct (problem-oriented) and indirect (emotion-oriented) coping. Self-confident, optimistic, and seeking social support is evaluated as problem-oriented coping, while the helpless and submissive approach is evaluated as emotion-oriented coping. In the direct coping strategy, the action of the individual in relation to the environment is at the forefront, while in the indirect coping strategy, it remains at the level of interpretation of the individual. Problem-oriented coping usually results in a change in the environment, while emotion-oriented coping results in an internal change. Both coping strategies have advantages and disadvantages for the individual. For this reason, it is correct to use the most appropriate coping strategies according to the characteristics of the situation. Lazarus (1966) stated that stress and coping with stress are related to cultural values, motivation, and belief levels. One of the reasons why Azerbaijani university students use the self-confident approach, optimistic approach, and submissive approach to cope with stress more than Turkish university students is that since most universities in Azerbaijan are in the center, namely Baku, the majority of students are not in the process of moving from home, getting used to the dormitory and the environment. At the same time, if we compare the two countries from a socio-economic point of view, public transportation, food products, house bills are cheaper in Azerbaijan, and the stress factors of Azerbaijani students may be less than Turkish students. This may explain why students use problem-oriented coping strategies more. In addition, it is seen that Azerbaijani students use the “Submissive Approach”, one of the emotional coping strategies, more often. One of the possible reasons for this is that the most of the sample is female students, and it is thought that Azerbaijani women may have both a more emotional upbringing and the social roles assigned to them.

Consequently, in this study, it was determined that there was no significant difference between the perceived stress, stress symptoms of Turkish and Azerbaijani university students, “helpless approach” and “seeking social support” in coping with stress, and that there was a significant difference between “self-confident approach”, “submissive approach” and “optimistic approach” in coping with stress in favor of Azerbaijani university students.

RECOMMENDATIONS

As far as we know, there is no extensive study that compares stress, stress symptoms and stress coping strategies of Turkish and Azerbaijani university students. We recommend further studies to work on stress and related

factors with more extensive samples and in different developmental groups. In addition, qualitative analyses may be implemented to compare these groups in terms of stress, stress sources and related processes.

The results of this study may also draw the attention of professionals to work on any stress related factors such as the curriculum, exam periods, adaptation problems, friendship issues in university students. In the same direction, education or information focused programs or group work with an emphasis on stress coping strategies may be presented to diminish stress and promote coping strategies in the same developmental group.

ETHICAL TEXT

"In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed. The responsibility belongs to the author (s) for any violations that may arise regarding the article. Ethics committee approval certificate was obtained by Kocaeli University Rectorate Social and Human Sciences Ethics Committee, with the decision dated 14.06.2021 and numbered E-10017888-100-74057. "

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REFERENCES

- Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self-esteem in university students. *Educational Psychology, 14*(3), 323-330. <https://doi.org/10.1080/0144341940140306>
- Adlaf, E. M., Demers, A., & Gliksman, L. (2005). *Canadian Campus Survey 2004*. Centre for Addiction and Mental Health.
- Andersson, C., Johnsson, K. O., Berglund, M., & Öjehagen, A. (2009). Stress and hazardous alcohol use: Associations with early dropout from university. *Scandinavian Journal of Public Health, 37*(7), 713-719. <https://doi.org/10.1177/1403494809344359>
- Anspaugh, D. J., Hamrick, M. H., & Rosato, F. D. (2003). *Wellness: Concepts and applications* (5th ed.). McGraw-Hill.
- Bland, H. W., Melton, B. F., & Gonzalez, S. P. (2010). A qualitative study of stressors, stress symptoms, and coping mechanisms among college students using nominal group process. *Journal of Georgia Public Health Association, 5*(1), 24-37. <https://doi:10.1001/archpsyc.65.12.1429>
- Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S. M., & Olfson, M. (2008). Mental health of college students and their non-college-attending peers: results from the national epidemiologic study on alcohol and related conditions. *Archives of General Psychiatry, 65*(12), 1429-1437.
- Bartley, M., Blane, D., & Smith, G. D. (1998). *The sociology of health inequalities*. Blackwell Publishing Ltd.
- Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders, 173*, 90-96. <https://doi.org/10.1016/j.jad.2014.10.054>

- Bewick, B., Koutsopoulou, G., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education, 35*(6), 633-645. <https://doi.org/10.1080/03075070903216643>
- Braham, B. J. (2004). Stres yönetimi: Ateş altında sakin kalabilmek (V. G. Diker, Çev.). Hayat Yayınları.
- Campbell, R. L., Svenson, L. W., & Jarvis, G. K. (1992). Perceived level of stress among university undergraduate students in Edmonton, Canada. *Perceptual and Motor Skills, 75*(2), 552-554.
- Cheema, S., Maisonneuve, P., Abraham, A., Chaabna, K., Tom, A., Ibrahim, H., ... & Mamtani, R. (2020). Factors associated with perceived stress in Middle Eastern university students. *Journal of American College Health, 70*(8), 2462-2469. <https://doi.org/10.1080/07448481.2020.1865979>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396.
- DasGupta, B. (1992). Perceived control and examination stress. *Psychology: A Journal of Human Behavior, 29*(1), 31-34.
- Doğan, T. (2020). Işık, Ş. (Ed), Psikolojiye giriş (pp. 413-440). Pegem Akademi.
- Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology, 62*(10), 1231-1244. <https://doi.org/10.1002/jclp.20295>
- Eskin, M., Harlak, H., Demirkıran, F., & Dereboy, Ç. (2013). Algılanan stres ölçeğinin Türkçe'ye uyarlanması: Güvenirlik ve geçerlik analizi. In *New/Yeni Symposium Journal, 51*(3), 132-140.
- Fairbrother, K., & Warn, J. (2003). Workplace dimensions, stress, and job satisfaction. *Journal of Managerial Psychology, 18*(1), 8-21. <https://doi.org/10.1108/02683940310459565>
- Hashmat, S., Hashmat, M., Amanullah, F., & Aziz, S. (2008). Factors causing exam anxiety in medical students. *Journal-Pakistan Medical Association, 58*(4), 167-170.
- Hitches, E., Woodcock, S., & Ehrich, J. (2023). Shedding light on students with support needs: Comparisons of stress, self-efficacy, and disclosure. *Journal of Diversity in Higher Education, 16*(2), 205-214. <https://doi.org/10.1037/dhe0000328>
- Hovardaoğlu, S. (1997). Stres belirtileri ile durumsal ve sürekli kaygının yordanması. *Kriz Dergisi, 5*(2), 127-134.
- Hussien, T., Hussien, S. (2006). *Strategies for Coping Educational and Psychological Stress*. Dar Alfiker.
- Juster, R. P., McEwen, B. S., & Lupien, S. J. (2010). Allostatic load biomarkers of chronic stress and impact on health and cognition. *Neuroscience & Biobehavioral Reviews, 35*(1), 2-16. <https://doi.org/10.1016/j.neubiorev.2009.10.002>
- Karasar, N. (2010). *Bilimsel Araştırma Yöntemleri* (21. Baskı). Nobel Yayın Dağıtım.
- Kazımzade, M. (2022). Azerbaycan'da ve Türkiye'de öğrenim gören üniversite öğrencilerinin travma sonrası stres belirtileri ile iyimserlik düzeylerinin karşılaştırılması [Yayımlanmamış yüksek lisans tezi]. Kocaeli Üniversitesi.
- Kohn, J. P., & Frazer, G. H. (1986). An academic stress scale: Identification and rated importance of academic stressors. *Psychological Reports, 59*(2), 415-426.

- Korte, S. M., Koolhaas, J. M., Wingfield, J. C., & McEwen, B. S. (2005). The Darwinian concept of stress: benefits of allostasis and costs of allostatic load and the trade-offs in health and disease. *Neuroscience & Biobehavioral Reviews*, 29(1), 3-38. <https://doi.org/10.1016/j.neubiorev.2004.08.009>
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. McGraw-Hill.
- Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44(1), 1-22.
- Lilleholt, L., Aaby, A., & Makransky, G. (2019). Students admitted to university based on a cognitive test and MMI are less stressed than students admitted based on GPA. *Studies in Educational Evaluation*, 61, 170-175. <https://doi.org/10.1016/j.stueduc.2019.03.005>
- McEwen, B. S., & Stellar, E. (1993). Stress and the individual: Mechanisms leading to disease. *Archives of Internal Medicine*, 153(18), 2093-2101.
- Misra, R., & Castillo, L. G. (2004). Academic stress among college students: Comparison of American and international students. *International Journal of Stress Management*, 11(2), 132-148. <https://doi.org/10.1037/1072-5245.11.2.132>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, And Coping*. Springer Publishing Company.
- Oman, D., Shapiro, S. L., Thoresen, C. E., Plante, T. G., & Flinders, T. (2008). Meditation lowers stress and supports forgiveness among college students: A randomized controlled trial. *Journal of American College Health*, 56(5), 569-578. <https://doi.org/10.3200/JACH.56.5.569-578>
- Pearlin, L. I. (1999). Stress and mental health: A conceptual overview. In A. V. Horwitz & T. L. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 161–175). Cambridge University Press.
- Perry, B. D., & Szalavitz, M. (2017). *The boy who was raised as a dog: And other stories from a child psychiatrist's notebook--What traumatized children can teach us about loss, love, and healing*. Hachette UK.
- Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 25(1), 104-112. <https://doi.org/10.1080/02673843.2019.1596823>
- Powell, H. A., Stinson, R. D., & Erbes, C. (2022). Transgender and gender diverse veterans' access to gender-related health care services: The role of minority stress. *Psychological Services*, 19(3), 455–462. <https://doi.org/10.1037/ser0000556>
- Pritchard, M. E., Wilson, G. S., & Yamnitz, B. (2007). What predicts adjustment among college students? A longitudinal panel study. *Journal of American College Health*, 56(1), 15-22. <https://doi.org/10.3200/JACH.56.1.15-22>
- Romo-Nava, F., Tafoya, S. A., Gutiérrez-Soriano, J., Osorio, Y., Carriedo, P., Ocampo, B., ... & Heinze, G. (2016). The association between chronotype and perceived academic stress to depression in medical students. *Chronobiology International*, 33(10), 1359-1368. <https://doi.org/10.1080/07420528.2016.1217230>

- Ross, S. E., Niebling, B. C., & Heckert, T. M. (1999). Sources of stress among college students. *College Student Journal*, 33(2), 312-312.
- Snyder, C. R. (Ed.). (1999). *Coping: The psychology of what works*. Oxford University Press.
- Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 249-257. <https://doi.org/10.1080/00050067.2010.482109>
- Şahin, N. H., & Durak, A. (1995). Stresle Başa Çıkma Tarzları Ölçeği: Üniversite öğrencileri için uyarlanması. *Türk Psikoloji Dergisi*, 10(34), 56-73.
- Turner, J., Bartlett, D., Andiappan, M., & Cabot, L. (2015). Students' perceived stress and perception of barriers to effective study: impact on academic performance in examinations. *British Dental Journal*, 219(9), 453-458. <https://doi.org/10.1038/sj.bdj.2015.850>
- Uchil, H. B. (2017). The effect of stress on students' performance. *Stress Management Professional International Journal*, 5(1), 17-21.
- Vaez, M., Kristenson, M., & Laflamme, L. (2004). Perceived quality of life and self-rated health among first-year university students. *Social Indicators Research*, 68, 221-234.
- Watson, J. C., & Watson, A. A. (2016). Coping self-efficacy and academic stress among Hispanic first-year college students: The moderating role of emotional intelligence. *Journal of College Counseling*, 19(3), 218-230. <https://doi.org/10.1002/jocc.12045>
- Zainora D., Anuar H., Norazman A., & Norhasnira I. (2020, October). Simptom stres dalam kalangan pelajar era COVID-19 [Oral presentation]. *3rd International Seminar on Islam and Science*, Malaysia.
- Zivin, K., Eisenberg, D., Gollust, S. E., & Golberstein, E. (2009). Persistence of mental health problems and needs in a college student population. *Journal of Affective Disorders*, 117(3), 180-185. <https://doi.org/10.1016/j.jad.2009.01.001>