NEAR EAST UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

GENERAL PSYCHOLOGY

MASTER'S PROGRAMME

MASTER'S THESIS

THE RELATIONSHIP BETWEEN DEPRESSION, HOPELESSNESS AND SENSE OF
CONTROL AMONG UNIVERSITY STUDENTS

UCHE STANLEY EZE

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NICOSIA

2018

ABSTRACT

The relationship between depression, hopelessness and sense of control among university students

Uche Stanley Eze

Janaury 2018, 46 pages.

This study investigates the relationship between depression, hopelessness and sense of control among university students in Turkish Republic of Northern Cyprus. The study sample consists of 150 volunteer students from different departments of Near East University. It is a survey study. The participants completed a questionnaire form consisting of questions on socio-demographic factors, the University Students Depression Inventory (USDI), Beck Hopelessness Scale (BHS) and Sense of Control (SOC).

The results of the study shows that, male students had higher depression levels and female students had higher sense of control. Students staying at school dormitory had lower sense of control scores and hopelessness than the students living at apartments. The students whose parents never attended school had significantly lower sense of control and those whose father graduated from primary school had higher depression levels. The age of the participants and whether they left home for the first time did not affect the results. A weak negative significant correlation between depression and hopelessness scores was found, the correlation between depression and sense of control was not significant. The results indicated a weak positive significant correlation between sense of control and hopelessness. Age of participants did not show any relationship with sense of control, depression and hopelessness scores from the results.

Depression manifests in a high number of students, and further studies are required to understand risk factors for depression and to take precautions.

Key Words: Depression, hopelessness, Sense of Control, University students

ÖZ

Üniversite öğrencileri arasında depresyon, umutsuzluk ve kontrol duygusu arasındaki ilişki

Uche Stanley Eze

Ocak 2018, 46 Sayfa.

Bu çalışma, Kuzey Kıbrıs Türk Cumhuriyeti'ndeki üniversite öğrencileri arasındaki depresyon, umutsuzluk ve kontrol hissi arasındaki ilişkiyi incelemektedir. Çalışma örneği, Yakın Doğu Üniversitesi'nin farklı bölümlerinden 150 gönüllü öğrenciden oluşmaktadır. Bu bir anket çalışmasıdır. Katılımcılar, sosyodemografik faktörler, Üniversite Öğrencileri Depresyon Envanteri (USDI), Beck Umutsuzluk Ölçeği (BUÖ) ve Kontrol duygusu üzerine sorular içeren bir anket formunu doldurmuştur.

Araştırma sonuçları, erkek öğrencilerin depresyon düzeylerinin daha yüksek olduğunu ve kız öğrencilerin daha fazla kontrol duygusu olduğunu göstermektedir. Okul yurdunda kalan öğrencilerin, dairede yaşayan öğrencilere göre daha düşük kontrol ve umutsuzluk duygusu vardı. Ebeveynleri hiç okula gitmeyen öğrencilerin kontrol duygusu daha düşük, babası ilkokul mezunu olanların depresyon düzeyleri daha yüksekti. Katılımcıların yaşı ve ilk kez mi evden ayrıldıkları sonuçları etkilemedi. Depresyon ve umutsuzluk puanları arasında zayıf negatif anlamlı ilişki bulunmuştur; depresyon ile kontrol hissi arasındaki ilişki anlamlı değildir. Sonuçlar, kontrol hissi ile umutsuzluk arasında zayıf pozitif anlamlı ilişki olduğunu gösterdi. Katılımcıların yaşı, kontrol hissi, depresyon ve umutsuzluk puanları ile herhangi bir ilişki göstermedi.

Depresyon, çok sayıda üniversite öğrencisinde görülmektedir ve depresyonla ilgili risk faktörlerini anlamak ve önlem almak için daha ileri çalışmalara ihtiyaç duyulmaktadır.

Anahtar Kelimeler: Depresyon, umutsuzluk, kontrol duygusu, üniversite öğrencileri

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ABBREVIATIONS

USDI : University Students Depression Inventory

SOC : Sense Of Control

BHS : Beck Hopelessness Scale

NTU : National Taiwan University

QOL : Quality Of Life

WHO : World Health Organization

TRNC : Turkish Republic Of Northern Cyprus

SPSS : Statistical Program For Social Sciences

1. INTRODUCTION

Depression is not a new pathology or disorder in the society. It has become so common especially among the young population in the world today, and the prevalence has occasioned different surveys by researchers around the globe

Depression manifests differently in diverse countries or cultures, results from previous surveys suggest that first world countries have a higher rate of depression that the third world or developing countries Kessler et al. (2013). Based on thorough appraisal of past studies on depression among students of various universities in the world, the widespread presence of depression varies from 10% - 85% according to the reports and also, students show higher levels of depression than others in the society Ibrahim et al. (2013).

Past studies reveal that the females have a higher rate of depression than males. However, certain factors are equally responsible for increased depression symptoms among individuals, some of them are, lower socio-economic status (SES), traumatic and stressed life events, advanced level of study and high rate of tobacco use and alcohol intake Othieno et al. (2014), Peltzer et al. (2013). Different techniques and therapies have been initiated and presented by experts in the field to help reduce the rate of this pathology because of its side results which in most cases leads to suicide Pataki (2000). Nevertheless, engaging in regular exercises or sports has been one of the most effective anti-depression technique or method common to the general population.

Hopelessness, just like depression is a negative emotional state, and the stage in-between depression and suicide behaviour Beck et al. (1985). From a past study in the United States, the widespread presence of hopelessness was approximated to be 50% among adolescents living in the inner city of Alabama State, Bolland (2003). All the same, increases in the level of hopelessness among individuals in related with increased depression in individuals Abrainson et al. (1989). Hopelessness has proven to be a viable index of suicide attempts that have been successful than depression Zhang & Li (2013). However, hopelessness is related with other mental disorder that makes individuals vulnerable to suicidal behavior, such as psychopathy Beck et al. (1985) Chang et al. (2014). Because of this similarities between depression and hopelessness, this study aimed at revealing the relationship between depression and hopelessness among university students.

Sense of control as an idea, is a cognitive feature that is explored within the social sciences in different guises like, helplessness, personal control, personal autonomy, locus

of control, orientation, mastery, instrumentalism, self-directedness, sense of control, and self-efficacy Ross & Sastry (1999). However, these words are most times mixed up by researchers in spite of having well defined attributes as stated by Skinner (1996). A sense ofcontrol is the established assumption that an individual can do anything at all to determine changes in his or her life without external influence whatsoever, while on the contrary it is perceived weakness and the assumption that an individual's life is conditioned by other external factors or determinants Mirowsky & Ross(1991). A deficiency of control is related with depression, anxiety and stress disorders according to Abramson et al.(1989) Chorpita & Barlow(1998).

1.1 Objectives of the study

1. The objective of the study is to examine the relationship between depression and perceived sense of control among university students.

2. Also, the study seeks to examine the relationship between depression and hopelessness among university students.

1.2 Significance of the study

This study has several importance which are;

1. This study reveals some risk factors for depression and hopelessness.

2. This study will help the students' population to be able to distinguish between depression and hopelessness symptoms when manifested.

3. This study reveals how perceived sense of control can contribute to depression among university students.

1.3 Scope and limitation

The research was limited to Near East University (NEU), Northern Cyprus. This will make the objectives of the research to be achieved well and also, an easy means for the researcher to acquire information from the student sample in the university.

1.4 Definition of terms

1.4.1. Depression

It is a psychological disorder in which individuals experience different symptoms ranging lack of interest in frequent activities, drastic weight loss or gain, excessive sleeping

or lack of sleep, lack of energy, inability to concentrate, feelings of worthlessness or and repeated thoughts of suicide or death. (APA)

Depression is also defined as an emotional state manifesting itself with loss of pleasure in normal activities and interests, high level of sadness, feelings of guilt and worthlessness, loss of appetite, sexual desire and sleep Davison & Neale, (1994).

1.4.2. Hopelessness

It can be defined as a way of feeling and thinking which shapes individuals life with negative thoughts about the present and dark expectancy about the future Barker, (2009).

A person experiencing feelings of hopelessness generally anticipates that there is no way for life to improve, upholding the belief that he or she is powerless in effecting any positive change. (Barker, 2009, p. 184).

Hopelessness implies total loss of hope, when an individual accepts that hope have been obliterated or that predicaments cannot be resolved or worked out. It is an intuitive emotion which has a pessimistic point of view for the future, like losing direction, determination and the momentum to achieve a set goal or aim. (Pan HHand Chiou CP 2004)

1.4.3. Sense of control

A sense of control is the established assumption that an individual can do anything at all to determine changes in his or her life without external influence whatsoever, while on the contrary it is perceived weakness and the assumption that an individual's life is conditioned by other external factors or determinants Mirowsky & Ross (1991).

Sense of control as an idea, is a cognitive feature that is explored within the social sciences in different guises like, helplessness, personal control, personal autonomy, locus of control, orientation, mastery, instrumentalism, self-directedness, sense of control, and self-efficacy Ross & Sastry (1999).

2. REVIEW OF RELATED LITERATURE

2.1. Beck's cognitive theory of depression

The effective and mood symptoms of depression comes before the cognitive symptoms, but for Beck it is the other way round. Many theorist's postulates that low levels of reinforcement and biological changes are responsible for depression, however, Beck believed that negative thoughts are central to depression. Beck's core position was that depression is initiated by how an individual sees his or her self rather than an individual having a negative perspective about his or her life because of depression. Nonetheless, this has massive social significance of how individuals as a class see each other and associate their discontentment with one another. A good example of this phenomena is a study done by Abela & D'Alessandro's (2002) on college admissions, the results of their study revealed the student pessimistic view about the future to a great extent, increased depression level and dysfunctional behaviours. The research supports Beck's position that students who did not get into the college of their choice and therefore questioned their futures are at a high risk for depression mainly because of dysfunctional behaviour.

Nevertheless, Moilanen (1995) conducted a survey on adolescent depression and the survey tried to prove Beck's theory right in a different way, because Beck did not work with adolescent rather he worked with adults. Moilanen found that the level of depression among students is mostly related with pessimistic future behaviours and weak beliefs. For her, cognitive theory has fair validity for explaining the symptoms of depression for adolescent that are not referred, and also, that the individual's depression is highly related with his or her capability to handle belief, dysfunctional behaviours, and uncertainty about the future. Another study by Molianen (1993), revealed concrete results when assessing college students, from the study, student's negative comprehension of personal information was associated with their present depression levels, and also results revealed that the cognitive thoughts of the students affected them and due to this, depressive symptoms manifested.

The major contention of Beck's theory is that individuals will feel negative inherent beliefs and these beliefs falls into a precise are which differentiates them from other mental disorders like anxiety and panic disorders.

2.2. Depression among university students

In a study conducted by kwaku et al.(2014), toassess the rate and determinants of depression among 270 students which consists of 132 males and 138 females in a Ghanaian university, using the short depression scale of the center for Epidemiological Studies to measure depression,the following results were found. 39.2% of the students had depression scores higher than the standard 10 points on the scale, students having extreme depressive symptoms were 8.1% while those with mild symptoms constitute 31.1%, male students reported higher levels of depression than females, although the difference was not significant from the analysis. Also, first year and third year students had higher depressive symptoms. Students who have been abused physically at a very tender age had high depression levels than others.In further analysis, physical abuse, traumatic or stressful life event, high intake of alcohol, and absense of social support were all related to higher levels of depression.

Deb et al.(2015) conducted a study on Indian university students. The study's objective was to ascertain the rate of depression among university students across multiple factors. The study was carried out in Pondicherry University located in Puducherry, 402 males and 315 females participanted in the survey making it a total of 717 participants, different schools of Pondicherry University participanted in the survey. The intensity of depression was assessed and statistics showed that 2.4% suffered extremely severe depression, 13.0% had severe symptoms, while 37.7% had moderate symptomsof depression. Male and female students had similar rates of depressive symptoms. However, there was a significance diiference between semester one and two students depression scores. Semester two students were reported to suffer from a severe degree of depression. Students staying close to their families had very low levelsof depression than others staying far away from their families.From further analysis,students from humanities and social sciences reported significantly higher depressive symptoms compared to students from science and management faculties. Students who were okay with the living arrangements on campus had lower depressive symptom compared to students who were not comfortable with the arrangements on campus andstudents in their early period of education, Social Sciences and Humanities, having a bad academic performance and from poor socio-economic backgroundshad more depressive symptoms.

In a study conducted by Mergen et al.(2006) at Celal Bayar University in the faculty of education, Turkey, to investigate the prevalence of depressive symptoms among students

in their first, by using the BDI, the prevalence was 8.4 %, 237 new students participated in the survey, 107 male and 103 female students. Most depressed students were less than 20 years of age comprising 90% of the entire sample, 5.9% had mild depression, 1.7% had moderate depression and 0.8% of the sample had severe depression levels. However, worthlessness feelings, punishment and crying as well were all prevalent among gender. A strong relationship was found between depression scores and the Beck depression inventory questions that were answered by participants all values were($p<0.00$). Further analysis showed a strong relationship between depression scores, gender and age.

Vukomanovic et al.(2016) conducted a study among Serbian university students, it was a cross-sectional study to examine the socio-demographic and economic factors related to university students anxiety and depression levels. 1940 students were involved in the survey, the BDI was used to measure depression, BAI for anxiety and a questionnaire for the socio-demograhic factors. From the results, 15.4% of the participants had mild depression level, 4.2% had moderate level of depression while 1.1% had severe symptoms of depression.Also, about 22.7% of the respondents had mild anxiety level, 7.4% had moderate anxiety symptoms and 3.4% of the participants had severe anxiety symptoms.Also, depressive levels were significantly associated with, satisfaction with the college major choice, faculty type, satisfaction with results and thestudy year of students.

There was no significant association of depressive symptoms with father's and mother's educational level and employment, residence,marital status or having children, college residence and parent's high expectations of academic acheivements. However, further analysis reveals that famale students, older participants, students from a family with a low SES, students that dislike gradaute education and those who did not have there room, had severe levels of depression.High rates of depressive and anxiety symptoms among university students are also associated with academic, nonacademic and cultural backgrounds of students.

Yunmiao Yu et al. (2015) conducted a study in China to assess the correlation between family environment and depressive symptoms, and secondly, to evaluate the influence of hard and soft family environmental factors on depression levels in a sample of university students with a total of 6,000 participants. 52.6% participants had mild depression,8.4% had moderate levels of depressionand 3.4% had severe level of depression.depression. Soft family envornment had a significant relationship with depression while hard family environment was only associated with depression.

2.3. Hopelessness

In a cross-sectional study done by Ergin et al. (2011), investigating the relationship between the level of hopelessness, socio-demographic factors and working environment among medical students staying in Turkey. The results showed that SES of the participants was not a significant factor in predicting the level of hopelessness as measured by the BHS. Medical students in the 1st, 3rd and 6th grade all reported low scores signifying lower levels of hopelessness. Again, the results revealed that resident students who worked less hours per week (e.g. 40 hrs and below) had significantly lower level of hopelessness as compared to those students working more hours (e.g. over 100 hrs). Further analysis of the research findings concluded that the working hours performed by the students had a significant effect on the level of hopelessness experienced by the students.

Oyekcin et al. (2016), conducted a study at Çanakkale Onsekiz Mart University, which hosted 28,582 students in 9 faculties, 4 colleges and 11 vocational colleges during the 2011–12 educational year with the aim of investigating the association among hopelessness, suicidal thoughts, perceptions of physical and mental health in university students. The study used a 71-question survey which consists of different categories with questions ranging from demographic, psychological symptoms, drug use, violent behavior, and physical health. The results reveals that when the answers of neverand once/very rarelywere excluded from the hopelessness question, only 24.2% of the students stated they saw a dark future. There was no statistically significant difference between gender of the participants when the students' level of hopelessness was assessed. While there was no difference to answers to the question on hopelessness between genders, there were high rates of hopelessness among faculty students and those who had repeated years.

Hopelessness also had strong correlation with age and improvements in physical health, mental health, socio-economic status and academic success.

In a cross-sectional study conducted by Joaquim et al. (2008), in Sweden among 517 men randomly selected from the general population, to examine overall hopelessness and explored differences in various variables, for example burnouts. The results revealed that 11.8% of the men had moderate/severe hopelessness rates, older men reported moderate/severe hopelessness, they hadlower educational level, and were more often divorced/widowed. There were no other significant demographic/socioeconomic

differences between the groups. Men with moderate/severe hopelessness were less likely to use alcohol than men with no/ mild hopelessness. There were no significant differences in terms of diseases, use of cigarettes, and BMI. Compared with men with no/mild hopelessness, those with moderate/severe hopelessness showed a greater mean score for depression, posttraumatic symptoms and burnout.

Lindsay A. et al. (2009) conducted a study toexplore the relationship between depression, hopelessness, kinds of physical activity and suicidal behavior in a sample of United States college students ,.America College Health Association, hopelessness was assessed with 1 item: "Within the last school year, how many times have you felt things were hopeless?" The study results reveals that, most of the students reported feelings of hopelessness, and a large number of participants reported feeling so depressed that it became so hard for them to fuction in school the previous year. Approximately 11% had seriously considered suicide,three quarters of these students engaged in aerobic activity and 64.2% engaged in toning exercises at least once every week. However, only younger female students reported significantly lower rates of depression and suicidal behavior.

Findings from the study, demonstrated that physically active men experienced lower rates of depression, hopelesness and suicidal attitudes than their dormant colleagues. More than half (57%) of physically active men experienced hopelessness, compared to 61% of inactive men. About 39% of active men and 45% of inactive men reported feeling so depressed that they had difficulty functioning. Almost 9% of physically active men and 12% of inactive men had thought about suicide or attempted suicide. In the study, similar patterns was found among women. More than half (69%) of active women experienced feelings of hopelessness, compared with 72% of inactive women. Male and female participants who took part in some aerobic or toning exercise every week showed decreased chance of feeling hopeless or depressed compared with their counterparts who did not engage in each activity. Men who performed aerobic activity also demonstrated reduced suicide risk. Therefore, the research findings shows that physical health and fitness, age and gender are predictive factors of the level of hopelessness in college students.

2.4. Sense of control

Possessing a sense of control is associated to active actions and definite psychological results. The competence to take deterrent action and to feel hearty is related to control, Mirowsky & Ross(1991),a deficiency of control is related with depression,

anxiety and stress disorders according to Abramson et al. (1989) Chorpita & Barlow (1998).

However, cognitive thinkers and general practitioners connects mental health with feeling in control of an individual's internal psychological surroundings especially, thoughts, beliefs, cognitions, and sensations, Beck (2002).

Sense of control is a constant personality characteristic, despite the fact that there is proove of progressive changes in control, such as those changes that come with age or in reaction to natural life events like transition to parenthood,Ross & Mirowsky(2002). Outside the field of psychology, sociological approach pin piont that factors external to the personality likeeducation, marriage, race etc. build's individual's sense of control (Ross & Sastry, 1999).

Lechman and Weaver (1998) conducted a study to examine social class differences in two aspects of the sense of control which are mastery and perceived constraints in three different surveys in the US. The researchers measured sense of control with several items asking questions on personal mastery and perceived constraints. It was found that there was a significant difference in mastery and perceived constraints by income of the participants. Further analysis revealed no significant difference in the comparison of mastery and perceived constraints among the participants in all the studies. Married and old participants all reported being very satisfied with life in the three studies.Also, there was a positive relationship between life satisfaction and income in all studies except in study 2, and participants with higher mastery and lower perceived constraints were more satisfied with their lives in all studies.

Abdul Raffie Naik (2015), carried out a study on locus of control among college students of Gulbarga city and its relationship with various demographic variables. Rotter's locus of control scale which was used to measure perceived control of participants. The samples were taken from different colleges of Gulbarga city which are affiliated to Gulbarga University. Thetotal number of participants was 171 which consisted of 52% male and 48% females, in course of study in science there were 46.8% participantsand under arts it was 53.2%. Examining the Locus of control of college students, it was found that male and female participants had similar locus of controland from further analysis, there was no significant difference between science and arts students from the comparison

in the study, also, the comparison of rural and urban students mean scores revealed no significant difference.

In another study done by Ross et al. (1995), on the gender desparity in sense of control and age. The study's objective was to examinethe level of sense of control across gender and age in a US sample. The sense of control was measured by the Mirowsky-Ross scale, among adults older than 55years, women reported significantly lower levels of personal control than men, women and men do not differ significantly in their perceptions of

Control, in younger age groups, men and women perceptions of personal control were similar there wasn't any difference. From the results, older participants had a lower sense of control than younger ones, and because the gender gap is most noticable among older persons, older women have the lowest sense of personal control.

Chia-huei Wu and Grace Yao (2007), conducted a study to investigate the effect of the sense of control on the relationship between self-certainty and quality of life at the National Taiwan University, Taipei. The sense of control was evaluated with the Spheres of Control Scale revised version,121 NTU students completed a self-certainty rating scale, a control scale measuring sense of control, and the WHOQOL-BREF Taiwan version assessing QOL. İt was found that self-certainty on personality traits has a positive relationship with QOL. Further analysis revealed that, sense of control had a significant relationship with quality of life and self-certainty scores of participants (r=.25,r=.48)

However, in advanced analysis, the three self-certainty variables were all influenced by the certainty factor, the four quality of life domains were influenced by the QOL factor and the five items for personal control were influenced by the control factor. Lastly, the study showed that people with higher self-certainty had a higher sense of control which led to a better life.

3. METHODOLOGY

İn thischapter, the research hypotheses, design, sample, procedure, measures and data analysis that were used in this study will be dicussed.

3.1. Hypotheses of the study

1. There is a significant relationship between depression and perceived sense of control among university students.

2. There is a significant relationship between depression and hopelessness among university students.

3.2. Research design

In this study, the descriptive research design was adopted. Itis designed to give a detailed information about an event or situation as it occurs by nature according to Burns and Grove (2003). However, this design can be used to validate present occurances and also propound theories.Descriptive research design is also defined as a survey designed to characterize the respondents in a correct way form, Devin Kowalczyk (2013). Since the study was all about the relationship between depression, hopelessness and sense of control among university students, the descriptive research design was appropriate for the study.

3.3. Sampling

The convinient sampling technique was used in the study, it is a specific type of non-probability sampling method that depends on data collection from a sample who are freely available for participation in a research.

The present study consists of 150 volunteer students, 77(51.3%) participants were male while 73(48.7%) were female. The age range of participants was between 17-31 years, among the participants, 15(10.0%) were Turkish, 5(3.3%) of the participants were from TRNC, 72(48.0%) of the participants were from Nigeria, participants from Zimbabwe were 33(22.0%) and participants from other countries are 25(16.7%).

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3.4. Data collection and procedure

Permission was taken from directors of departments and the teacher of the class, questionnaires were administered to students from different departments at their classes at Near East University in Northern Cyprus. The questionnaire form was in English and data were collected between the 27th of November and 9th of December. Approval was taken from the university ethical committee before the collection of data.

3.5 Research Instruments

3.5.1. University Students Depression Inventory (USDI)

The USDI developed by Khawaja and Bryden in 2006, will be used to measure students depression, it is a 30-item self-report rated on a 5-point scale ,1:Not at - 5: All the Time. The instrument has three subscale which are lethargy, emotional/cognitive and the academic motivation, the internal consistencies of these subscales are 0.89, 0.92 and 0.84 respectively, from the analysis of the developers of this scale, the Cronbach's alpha was α = 0.95.The correlation coefficient for its test-retest reliability with a 1-week interval was 0.86. In scoring researcher simply adds up scores from each item and low scores signifies low level of depression while high scores signifies high level of depression, possible minimum score is 30 while the maximum score is 150.

3.5.2. Beck Hopelessness Scale (BHS)

The Beck hopelessness scale will be used to measure hopelessness amongst students, it is a 20-item self-report scale developed by Dr. Aaron T. Beck in 1974 the aim was toassess and measure three main areas of hopelessness which areloss of motivation, expectations and feelings about the future. The scale can be used for both young and old individuals(age 17-80). The BHS measures individuals pessimistic attitudes about the future. The total possible score for the scale is 20, the individual either selects true/false, the scores are interpreted as follows:below 3 minimal hopelessness,4-8 Mild hopelessness,9-14 Moderate hopelessness meaning that the indivdual might not be in danger presently but needs constant observation and 15+ Severe rate of hopeless which leads to suicidal behaviors among individuals. Beck et al. (1974) found the internal consistency for total BHS scores to be .93, in student populations, internal consistency of the scale has been approximated at .85. Test-retest reliability coefficients of the scale is good from past survey of the developers with .69 after one week and .66 after six weeks.

Also Beck examined the relationship between clinical ratings of hopelessness and BHS scores in two samples from the results, there was a strong positive significant

correlation between BHS scores and the clinical ratings of hopelessness, also in the second sample the correlation Was still similar.

3.5.3. Sense of Control

Sense of control will be assessed using 6 items taken from the survey conducted by Lachman & Weaver in 1998. They items are (1) I can do just about anything I really set my mind to. (2) When I really want to do something, I usually find a way to succeed at it. (3) Other people determine most of what I can do and cannot do. (4) There is little I can do to change many of the important things in my life. (5) I often feel helpless in dealing with the problems of life. (6) What happens in my life is often beyond my control. Each item will be rated on a five point scale (1=strongly agree 5=strongly disagree), with high points indicating high sense of control. The Cronbach Alpha for sense of control was .64 from the survey of Lachman & Weaver (1998).

3.6. Statistical analysis

The analysis of data received from participants were done using SPSS version 20. Descriptive statistics were used to get means, standard deviations and frequencies for the socio-demographic variables. Advanced analysis were used in the comparison of USDI total score, BHS total scores and SOC total scores according to different variables in the study. The relationship between the USDI total scores, BHS total scores, SOC total scores and age were confirmed by using the Pearson's correlation coefficient.

4. RESULTS

The present study consists of 150 participants, 77(51.3%) participants were male while 73(48.7%) were female. The mean age of participants is 22.63±3.50 and the age range was 17-31 years, among the participants, 15(10.0%) were Turkish, 5(3.3%) of the participants were from TRNC, 72(48.0%) of the participants were from Nigeria, participants from Zimbabwe were 33(22.0%) and participants from other countries are 25(16.7%). Participants staying in the school dormitory were 65(43.3%), 81(51.0%) of the participants stayed in apartments/houses, only 1(0.7%) stayed with the family and 3(2.0%) of the participants stayed with others.

Table 1.

The comparison of mean scores of USDI total according to gender

Gender	USDI total (n)	t df p
male	70.83±19.81 (n=65)	2.375 116 0.019*
female	62.23±19.28 (n=53)	

* p≤0.05   ** p<0.001

From the comparison of USDI total mean scores according to gender of participants, by using the independent t-test, significant difference was found (p=0.019). It was found that the mean score of male students (70.83±19.81) is significantly higher than that of female students (62.23±19.28).

Table 2.

The comparison of mean scores of SOC total according to gender

Gender	SOC total (n)	t df p
Male	14.68±3.54 (n=74)	-5.297 132.219 0.000**
Female	17.40±2.53 (n=67)	

 * p≤0.05   ** p<0.001

From the comparison of SOC total mean scores according to gender of participants, by using the independent t-test, significant difference was found (p=0.000). It was found that female students had significant higher SOC total scores (17.40±2.53) than male students (14.68±3.54).

Table 3.

The comparison of mean scores of BHS total according to gender

Gender	BHS total (n)	t df p
Male	28.96±3.66 (n=75)	-1.694 134 0.093
Female	29.89±2.50 (n=62)	

* p≤0.05   ** p<0.001

From the comparison of BHS total mean scores according to gender of the participants, by using the independent t-test, no significant difference was found (p=0.093).

Table 4.

The comparison of mean scores of USDI total according to where do you stay in TRNC

Where do you stay in TRNC	USDI total (n)	t df p
School dormitory	67.41±22.07 (n=51)	.420 112 0.675
An apartment/house	65.83±18.24 (n=63)	

* p≤0.05   ** p<0.001

From the comparison of USDI total mean scores according to where do you stay in TRNC, by using the independent t-test, no significant difference was found (p=0.675).

Table 5.

The comparison of mean scores of SOC total according to where do you stay in TRNC

Where do you stay in TRNC	SOC total (n)	t df p
School dormitory	15.28±3.63 (n=64)	-2.594 122.188 0.011*
An apartment/house	16.77±2.98 (n=73)	

* p≤0.05   ** p<0.001

From the comparison of SOC total mean scores according to where do you stay in TRNC, by using the independent t-test, significant difference was found (p=-0.011). It was found that students staying in an apartment/house had significantly higher SOC total scores (16.77±2.98) than students staying in school dormitory (15.28±3.63).

Table 6.

The comparison of mean scores of BHS total according to where do you stay in TRNC

Where do you stay in TRNC	BHS total (n)	t df p
School dormitory	28.84±2.85 (n=61)	-2.102 131 0.037*
An apartment/house	29.99±3.37 (n=72)	

* p≤0.05   ** p<0.001

From the comparison of BHS total mean scores according to where do you stay in TRNC, by using the independent t- test, significant difference was found (p=0.037).It was found that students staying in an apartment/house had significantly higher BHS total scores(29.99±3.37) than students staying in school dormitory (28.84±2.85)

Table 7.

The comparison of mean scores of USDI total according to is this your first time of leaving home for studies

Is this your first time of leaving Home for studies	USDI total (n)	t df P
Yes	68.53±22.07 (n=49)	.716 116 0.475
No	65.86±18.40 (n=69)	

* p≤0.05   ** p<0.001

From the comparison of USDI total mean according to is this your first time of leaving home for studies, by using the independent t-test, no significant difference was found (p=0.475).

Table 8.

The comparison of mean scores of SOC total according to is this your first time of leaving home for studies

Is this your first time of leaving home for studies	SOC total (n)	t df p
Yes	16.08±2.59 (n=52)	.310 134.802 .757
No	15.91±3.82 (n=87)	

* p≤0.05   ** p<0.001

From the comparison of SOC total mean according to is this your first time of leaving home for studies, by using the independent t-test, no significant difference was found (p=0.757).

Table 9.

The comparison of mean scores of BHS total according to is this your first time of leaving home for studies

Is this your first time of leaving home for studies	BHS total (n)	t df p
Yes	29.04±2.62 (n=51)	-.926 133 .356
No	29.57±3.56 (n=84)	

* p≤0.05   ** p<0.001

From the comparison of BHS total mean scores according to is this your first time of leaving home for studies, by using the independent t-test, no significant difference was found (p=0.356).

Table 10.

The comparison of mean scores of USDI total according to nationality

Nationality	USDI total (n)	df f p
Turkey	88.10±18.30 (n=10)	4 5.592 0.000**
TRNC	84.80±4.38 (n=5)	
Nigeria	64.63±18.13 (n=54)	
Zimbabwe	66.23±21.66 (n=32)	
Others	58.12±15.50 (n=17)	

* $p \leq 0.05$ ** $p < 0.001$

From the comparison of USDI total mean scores according to nationality with ANOVA, significant difference was found. In advanced analysis with Tukey, it was found that students from Turkey had significantly higher USDI total scores than students from Nigeria, Zimbabwe and other countries (p=0.003 p=0.013 p=0.001), also students from TRNC had significantly higher USDI total scores than students from other countries (p=0.043).

Table 11.

The comparison of mean scores of SOC total according to nationality

Nationality	SOC total (n)	df f p
Turkey	17.54±2.67 (n=13)	4 3.124 0.017*
TRNC	12.00±0.00 (n=3)	
Nigeria	16.47±3.09 (n=72)	
Zimbabwe	15.14±3.51 (n=29)	
Others	15.31±3.94 (n=24)	

* p≤0.05   ** p<0.001

From the comparison of SOC total mean scores according to nationality with ANOVA, significant difference was found. In advanced analysis with Tukey, it was found that students from Turkey had significantly higher SOC total scores than students from TRNC (p=0.017).

Table 12.

The comparison of mean scores of BHS total according to nationality

Nationality	BHS total (n)	df f p
Turkey	29.79±1.93 (n=14)	4 0.668 0.615
TRNC	27.40±3.29 (n=5)	
Nigeria	29.40±3.88 (n=67)	
Zimbabwe	29.72±2.99 (n=29)	
Others	29.05±1.33 (n=22)	

* p≤0.05   ** p<0.001

From the comparison of BHS total mean scores according to nationality with ANOVA, no significant difference was found (P=0.615).

Table 13.

The comparison of mean scores of USDI total according to father's education

Father's education	USDI total (n)	df f p
Never attended school	73.88±14.00 (n=8)	3 8.392 0.000**
Primary school	93.10±18.72 (n=10)	
High school	66.88±14.35 (n=26)	
University	62.65±19.99 (n=72)	

* p≤0.05   ** p<0.001

From the comparison of USDI total mean scores according to father's education with ANOVA, significant difference was found. In an advanced analysis with Tukey, it was found that students whose father attended primary school had significantly higher USDI total scores than students whose father attended high school and university (p=0.001 p=0.000)

Table 14.

The comparison of mean scores of SOC total according to father's education

Father's education	SOC total (n)	df f p
Never attended school	12.82±3.03 (n=11)	3 4.512 0.005*
Primary school	15.10±2.88 (n=10)	
High school	16.06±4.01 (n=31)	
University	16.55±3.03 (n=83)	

* p≤0.05   ** p<0.001

From the comparison of SOC total mean scores according to father's education with ANOVA, significant difference was found. In advanced analysis with Tukey, it was found that students whose father attended high school had significantly higher SOC total scores than students whose father never attended school (p=0.028), also students whose father attended university had significantly higher SOC total scores than students whose father never attended school (p=0.003).

Table 15.

The comparison of mean scores of BHS total according to father's education

Father's education	BHS total (n)	df f p
Never attended school	28.09±2.21 (n=11)	3 0.806 0.493
Primary school	28.64±1.43 (n=11)	
High school	29.61±1.50 (n=31)	
University	29.45±3.97 (n=78)	

 * p≤0.05   ** p<0.001

     From the comparison of BHS total mean scores according to father's education with ANOVA, no significant difference was found (p=0.493).

Table 16.

The comparison of mean scores of USDI total according to mother's education

Mother's education	USDI total (n)	df f p
Never attended school	78.88±14.00 (n=8)	3 1.300 0.278
Primary school	68.78±21.74 (n=39)	
High school	62.13±9.61 (n=39)	
University	68.98±24.83 (n=60)	

* p≤0.05   ** p<0.001

From the comparison of USDI total mean scores according to mother's education with ANOVA, no significant difference was found (p=0.278).

Table 17.

The comparison of mean scores of SOC total according to mother's education

Mother's education	SOC total	df f p
Never attended school	12.82±3.03 (n=11)	3 4.391 0.006*
Primary school	28.91±1.22 (n=11)	
High school	29.02±2.95 (n=44)	
University	29.78±3.50 (n=67)	

* p≤0.05   ** p<0.001

From the comparison of SOC total mean scores according to mother's education with ANOVA, significant difference was found. In an advanced analysis with Tukey, it was found that students whose mother attended high school and university had significantly higher SOC total scores than students whose mother never attended school (p=0.004 p=0.007).

Table 18.

The comparison of mean scores of BHS total according to mother's education

Mother's education	BHS total (n)	df f p
Never attended school	28.09±2.21 (n=11)	3 1.166 0.325
Primary school	28.91±1.22 (n=11)	
High school	29.02±2.95 (n=44)	
University	29.78±3.70 (n=67)	

* p≤0.05   ** p<0.001

From the comparison of BHS total mean scores according to mother's education with ANOVA, no significant difference was found (p=0.325).

Table 19.

The relationship between mean scores of USDI total, SOC total, BHS total and age

Scale	USDI total	SOC total	BHS total
SOC total	-.154		
	0.104		
BHS total	-.290[**]	.170	
	0.002	0.051	
Age	-.068	-.159	-.134
	0.511	0.087	0.161

* p≤0.05 ** p<0.001

According to table 19 related to the Pearson correlation coefficient between USDI total, SOC total, BHS total and age, there is no statistically significant correlation between USDI total scores and SOC total scores. There is a weak negative statistically significant correlation between USDI total scores and BHS total scores (r=-.290 p=0.002), also there is no statistically significant correlation between USDI total scores and age. There is a weak positive statistically significant correlation between SOC total and BHS total scores (r=.170 p=0.051). There is no statistically significant correlation between SOC total scores and age. There is no statistically significant correlation between BHS total scores and age.

5. DISCUSSION

The goal of this study was to investigate the relationship between depression, hopelessnessand sense of control among university students.

The current study, shows that male students had higher depression scores whereas female students had higher sense of control, and there was no difference for hopelessness scores among gender.

In a study conducted by Kwaku et al. (2014) to suss out the commoness of depression among Ghanaian students, using the CES-D10 scale to measure depression levels of students, it was found that male students (39.3%) had higher scores for depression than female students (33.1%), although the difference was not (p =0.663). Xiao-jun et al. (2016) conducted a cross-sectional study among Chinese students to investigate the specific effects of gender and negative life events on different stages of depression severity, the BDI was used to measure depression, there was a significant gender difference in the prevalence of different levels of depression and female students had higher rates (mild 8.06%, moderate 4.01%, major 1.65% and p < 0.05). Mergen et al. (2009) conducted a survey to access the prevalence of depression among first year university students in Turkey using the Beck Depression Inventory, the results of the survey reveals that female students (59.1%) had high levels of depression than male students (33.8%). In a cross-sectional survey by Safiri et al. (2009) to examine the prevalence of depression and its related factors using the BDI among School of Health and Nutrition students in Iran, the results of the survey reveals that female students had higher rates (80%) of depression than their male counterparts, results of the above mentioned studies are contradictory to this study.

The results of a study conducted by Ergin et al. (2016), in a Turkish university to examine the rate of hopelessness among students of medicine and other residents by using the Beck Hopelessness Scale reveals that, there is no significant difference between men and women mean scores for hopelessness (4.48±3.8 and 4.95±3.5 p=0.4) respectively, this

supports our result. F. Isil et al. (2016) conducted a cross sectional study to examine which values predicted depressive symptoms and hopelessness among university students in Turkey, the BHS was used to measure hopelessness among students, the results reveals that the mean BHS score was 4.87 and 22% scored above 9 on the BHS meaning that they are at a greater risk for suicide and need frequent monitoring.

Steptoe et al. (2007) conducted a study to measure depressive symptoms and sense of control among 17,348 university students from 23 countries cutting across different income levele.g. USA, South Africa, Japan, Korea and some countries in Europe. The results revealed that the average sense of control reported by men and women across countries was highly correlated with depression, and there was no gender difference, this is contrary to our study.

The students staying in school dormitory had significantly lower scores sense of control and hopelessness than the students staying at apartments. Students that stay outside the university dormitory definitely make decisions on how they want to live, since they are not within the confines of the university, the school has a set of regulations that regulates the conduct and activities of students staying in campus, as such they activities of students living inside the university dormitory are limited by rules and regulations. While students staying in their apartments are free to do what they feel is best or good for them.

The current study shows that, the students from Turkey and TRNC had significantly higher depression scores than the students from other countries, and students from Turkey also had higher sense of control than other students. Wardley et al. (2004), undertook a survey to compare depressive symptoms, satisfaction with life and self-determined health in 8,364 male and female students from 10 countries in Europe (Belgium, Germany, England, France, Netherlands, Bulgaria, Poland, Hungary, Romania, and Slovakia), the results reveals that the mean BDI ratings were higher for students from Central-Eastern countries of Europe (M=4.86) than Western European countries (M=3.80). The proportion of students with depression scores of 5 or more was also greater in Central-Eastern than Western European samples (43.4% Vs 30.6%), the difference was present in both men and women. Central-Eastern Europeans showed greater agreement with the statements that there was little they could do to change important things in their lives and that they had little control over what happen to them, this showed a low sense of control among them,

therefore, Western European sample had a higher sense of control than Central-Eastern countries.

Depression scores of participants were not influenced by mother's education level, but the students whose fathers are primary school graduates had significantly higher depression level. In contrast, Sokratis et al. (2014) found that students whose father attended university had significantly higher depressive scores than those students whose father attended primary/secondary.

The results of the study reveals that, educational level of parents did not affect hopelessness level of participants. The aforementioned is supported by Ahmet et al. (2011), they conducted a survey in Pamukkale university Turkey, to examine the level of hopelessness and related factors among medical students and residents, the results of the survey reveals that the mean scores of medical students showed no significant difference when compared with hopelessness scores according to parents education.

The age of the participants did not show any relationship with depression, sense of control and hopelessness among the students. In a study done by Safiri et al. (2009), to estimate the prevalence of depression and its related factors in students of School of Health and Nutrition at Tabriz University of Medical Sciences, Iran, it was found that there was no significant relationship between age of the participants and depression (p 0.761), this is in accordance with the present study result. However, Mergen et al. (2009) carried out a study to assess the prevalence of depression among the first-year university students in Turkey, Advanced test indicates a statistically significant relationship between depression scores, gender, age and all of the inventory questions (R = 1.0, p = 0.000). Ahmet et al. (2011), conducted a survey in Pamukkale university Turkey to examine the level of hopelessness and related factors among medical students and residents, age did not show any statistically significant relationship with the level of hopelessness (P > 0.05), this supports the result our study.

There is a weak negative significant correlation between depression and hopelessness scores, the results of the study shows that students had high level of depression and low level of hopelessness. No significant correlation was found between depression scores and sense of control, this is inconsistent with one of the research hypothesis that there is a significant relationship between depression and sense of control.

A weak positive significant correlation was found between sense of control and hopelessness scores.

About limitations of the study, it should be mentioned that a small sample size was used in this study and could not be generalized. Some students who were interested in the study but understood only Turkish language were unable to fill the questionnaire.

In this study, as questionnaires were given out mostly at the end of classes, most students never took their time read and understand they questions because they were probably tired and in a hurry to leave for their dormitory or apartment. Also, depending on participants self-report of symptoms could have affected the results of this study.

5.1. Conclusion

The study reveals that male students had significant higher depression scores than female students while female students had higher sense of control and there was no significant difference for hopelessness among gender as the scores were similar for both male and female students. Students staying in school dormitory had significantly lower scores of sense of control and hopelessness than students staying at apartments. Students from Turkey and TRNC had significantly higher depression scores than students from other countries and also students from Turkey had higher sense of control than other students.

Father's education influenced the depression level of students, as students whose father's attended primary school only, had higher depression level. Also, students whose parents never attended school had significantly lower sense of control and the educational level of parents did not affect hopelessness level of participants.

The study was conducted on a small sample size and as such could not be generalized to wider population therefore further study is recommended on a larger sample size. Including more socio-demographic factors in future study will help in revealing more significant results among the variables.

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