

THE ROLE OF ANXIETY, DEPRESSION, AND MINDFULNESS
IN PREDICTING COLLEGE ADJUSTMENT

FUAT CAN ÇALIŞKAN

BOĞAZIÇI UNIVERSITY

2019

THE ROLE OF ANXIETY, DEPRESSION, AND MINDFULNESS
IN PREDICTING COLLEGE ADJUSTMENT

Thesis submitted to the
Institute for Graduate Studies in Social Sciences
in partial fulfillment of the requirements for the degree of

Master of Arts
in
Guidance and Psychological Counseling

by
Fuat Can Çalışkan

Boğaziçi University

2019

DECLARATION OF ORIGINALITY

I, Fuat Can Çalışkan, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including final revisions required by them.

Signature.....

Date09.07.2019.....

ABSTRACT

The Role of Anxiety, Depression, and Mindfulness in Predicting College Adjustment

The aim of this study was to investigate the relationship between anxiety, depression, mindfulness, and college adjustment. A quantitative research methodology was utilized as the design of this study. The sample consisted of 358 university students and the data were collected using a Demographic Information Form, the Depression Anxiety Stress Scale, the Mindful Attention Awareness Scale, and the University Life Scale. A multiple linear regression model was used that included college adjustment levels as the criterion variable and depression, anxiety, and mindfulness levels as predictor variables. As a result of the analyses, significant correlational relationships were found. College adjustment was positively correlated with mindfulness and negatively correlated with anxiety and depression. According to the regression model, depression was the best predictor of the college adjustment levels, followed by anxiety and mindfulness, respectively. The regression model explained 53% of the variance in college adjustment.

ÖZET

Üniversiteye Uyumda Kaygı, Depresyon ve Bilinçli Farkındalığın Rolü

Bu çalışmanın amacı kaygı, depresyon, bilinçli farkındalık (kendinelik) ve üniversite uyumu arasındaki ilişkiyi incelemektir. Bu araştırmanın tasarımı olarak nicel araştırma metodu kullanılmıştır. Örneklem 358 üniversite öğrencisinden oluşmuş ve Demografik Bilgi Formu, Depresyon Anksiyete Stres Ölçeği, Bilinçli Farkındalık Ölçeği ve Üniversite Yaşamı Ölçeği kullanılarak veriler toplanmıştır. Ölçüt değişkeni olarak üniversite uyum düzeyini ve yordayıcı değişkenler olarak depresyon, anksiyete, bilinçli farkındalık düzeylerini içeren çoklu regresyon modeli kullanılmıştır. Analizler sonucunda istatistiksel olarak anlamlı korelasyon ilişkileri bulunmuştur. Üniversite uyumunun, bilinçli farkındalık ile pozitif, kaygı ve depresyon ile ise negatif olarak ilişkili olduğu gözlemlenmiştir. Regresyon modeline göre, depresyon üniversite uyum düzeyinin en iyi yordayıcısı olmaktadır; bunu sırasıyla kaygı ve bilinçli farkındalık izlemektedir. Bu regresyon modeli üniversiteye uyumdaki varyansın %53'sini açıklayabilmiştir.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my thesis advisor, Assist. Prof. Sibel Akmehmet Şekerler, for her productive feedback, academic knowledge, patience, and encouragement throughout my thesis process.

I wish to thank the other members of my thesis committee, Prof. Zeynep Kızıltepe and Assist. Prof. Zeynep Aydın Sünbül for their valuable suggestions, support, contributions, and willingness to be a part of my committee. I would like to thank Assist. Prof. Bengü Börkan for her feedback in my thesis process. Also, I wish to thank Prof. A. Kadir Özer for his pioneering ideas about human nature and psychotherapy. I learned a lot from him and he changed my life drastically.

I am truly grateful for the unyielding support and encouragement given by my family. I am so lucky to have them. None of this would have happened without the unconditional love and support of my dear parents, Gülser and Bernfried. It was with their faith in me that I gained the ability to welcome new challenges. They are wonderful role models. I also would like to thank my amazing sister and her husband, Funda and Timur, for bringing joy to my life! Finally, I also want to express my love for my little nephew, Tuna Büte. Seeing you smile at me is everything!

I feel grateful to have my dear friends, İlke Elif Yavuz, Elif Çolakoğlu, Serkan Çalışır, Işık Yılmaz, Ilgın Kaya, Berfu İrem Uçar, Merve Dökmeci, Elif Kaya, Burcu Oğuzdoğan, Ayşenur Coşkun and Burak Koç for their unlimited support and encouragement. I know they are always there for me whatever happens.

To my beloved parents and sis...

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
1.1 Purpose of the study.....	4
1.2 Significance of the study	5
CHAPTER 2: LITERATURE REVIEW	7
2.1 College adjustment	7
2.2 Mindfulness	18
2.3 Anxiety	26
2.4 Depression	29
CHAPTER 3: METHODOLOGY	33
3.1 Participants	33
3.2 Instruments	36
3.3 Procedure	40
3.4 Design and data analysis.....	41
CHAPTER 4: RESULTS	43
4.1 Descriptive statistics and correlations among variables of interest	43
4.2 Results according to research questions	46
CHAPTER 5: DISCUSSION.....	48
5.1 Purpose of the study.....	48
5.2 General discussion	48
5.3 Discussion of the results according to the research question	51
5.4 Strengths of the study	53
5.5 Limitations of the study, future directions, and recommendations	54

5.6 Conclusion	54
APPENDIX A: ETHICS COMMITTEE APPROVAL	56
APPENDIX B: INFORMED CONSENT FORM.....	57
APPENDIX C: INFORMED CONSENT FORM (TURKISH).....	58
APPENDIX D: DEMOGRAPHIC INFORMATION SHEET	59
APPENDIX E: DEMOGRAPHIC INFORMATION SHEET (TURKISH).....	60
APPENDIX F: DEPRESSION ANXIETY STRESS SCALE.....	61
APPENDIX G: DEPRESSION ANXIETY STRESS SCALE (TURKISH)	64
APPENDIX H: UNIVERSITY LIFE SCALE	67
APPENDIX I: UNIVERSITY LIFE SCALE (TURKISH)	69
APPENDIX J: MINDFUL ATTENTION AWARENESS SCALE	71
APPENDIX K: MINDFUL ATTENTION AWARENESS SCALE (TURKISH)....	73
REFERENCES.....	74

ABBREVIATIONS

ACT: Acceptance and Commitment Therapy

BÜREM: Boğaziçi University Guidance and Psychological Counseling Center

DASS: Depression Anxiety Stress Scale

DBT: Dialectic Behavioral Therapy

DSM-5: The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

GRE: The Graduate Record Examination

MAAS: Mindful Attention Awareness Scale

MBCT: Mindfulness-based Cognitive Therapy

MBSR: Mindfulness-based Stress Reduction

SPSS: Statistical Package for the Social Sciences

ULS: University Life Scale

WHO: World Health Organization

CHAPTER 1

INTRODUCTION

Anxiety and depression are wide-spread among the world population. According to the World Health Organization (WHO), it is estimated that 4.4% of the world population can be diagnosed with depression, whereas 3.6% can be diagnosed with anxiety disorders (WHO, 2017). Although many suffer from anxiety, nearly 20% of people with anxiety receive adequate interventions (Wang, Demler, & Kessler, 2002). According to the Turkish National Mental Health Action Plan 2011-2023, for every 100,000 people in Turkey there are only 1.85 mental health professionals (Alataş, Kahiloğulları, & Yanık, 2011). When these numbers are considered, it can be stated that mental health practitioners are not high in number. Because of the lack of resources, people that are in need of mental health services cannot be served adequately. Thus, there is an increasing need for preventive and supportive functions of mental health in Turkey.

Apart from the challenges of inadequate mental health services, the stigma around getting mental care also creates problems. It hinders the progress of interventions and puts more burden on the people with mental health problems (Casados, 2017). Many lay people see individuals with mental disorders as threatening to others (Morgan, Reavley, Ross, Too, & Jorm, 2018). This belief diminishes the willingness to seek mental health care. Individuals deny or ignore their mental health problems because of the stigmatization of people with mental health issues (Lundberg, Hansson, Wentz, & Bjorkman, 2007). Another presumption is related to controllability. Many people believe that mental health problems can be controlled by effort. People are inclined to think that if an individual with mental

health problems does not get better with time, it must be because the individual is not trying hard enough (Corrigan et al., 2001). In fact, they can even be regarded as having low levels of willpower (Corrigan et al., 2001). Both the stigmas and the inadequate number of mental health practitioners may hinder getting adequate mental health care. Hence, preventive and supportive mental health care is essential.

Depression and anxiety are found to be the most common mental health problems among undergraduate students (American College Health Association, 2018). In fact, they are more widespread among college students (Ibrahim, Kelly, Adams, & Glazebrook, 2013) than it is the case for the general population. In various studies across Turkey, similar findings are found regarding the prevalence of depression among college students. Bostancı et al. (2005) found that 26.2% ($n = 504$) of college students have depression. Similar studies found similar results: Aylaz, Kaya, Dere, Karaca, and Bal (2007) found 25.4% ($n = 236$); Kaya, Genç, Kaya, and Pehlivan (2007) found 31.8% ($n = 754$); Bayram and Bilgel (2008) found 27.1% ($n = 1617$); Çelikel and Erkorkmaz (2008) found 35.2% ($n = 1971$); Yücel et al. (2009) found 48% ($n = 479$); and Akça, Selen, Demir, and Demir, (2018) found that 77% ($n = 917$) of college students have depression. Considering anxiety among college students, one study found 21.7% of 700 college students to have social anxiety disorder (Gültekin & Dereboy, 2011) and another study reached the percentage of 9.6% out of 1003 college students for the same condition (Izgiç, Akyüz, Doğan, & Kuğu, 2004). Furthermore, Yoldaşcan, Özenli, Kutlu, Topal, and Bozkurt (2009) found that 4.2% of 804 college students have obsessive compulsive disorder which also involves anxiety to some extent.

Past research suggests that anxiety and depression levels can be related to college adjustment (Kumaraswamy, 2013). Higher levels of depression and anxiety

interfere with college adjustment (Conley, Travers, & Bryant, 2013). Adjustment problems frequently are related to students' depression levels (Erkan, Özbay, Çankaya, & Terzi, 2012). It is important to support college students with their adjustment to university, since this period of their life is critical due to the many changes they experience during this period (Arnett, 2015).

Apart from depression and anxiety, mindfulness is another concept assumed to be effective in college adjustment of university students (Bergin & Pakenham, 2016; Ramler, Tennison, Lynch, & Murphy, 2016; Sheehy & Horan, 2004). In fact, the concept of mindfulness has gained much popularity in the recent years and is mentioned to have benefits on other psychological constructs (Davis, 2018). Mindfulness involves an individual's capacity to purposefully pay attention to the present moment. It includes the individual's internal and external environments with some virtues and qualities such as compassion, curiosity, and/or acceptance (Siegel, 2009). Mindfulness levels can be related to college adjustment (Hofmann, Sawyer, Witt, & Oh, 2010). Regarding the relationship between mindfulness and college adjustment, one recent study showed that increased mindfulness levels as a result of an eight-week program led to increased levels of college adjustment and decreased physiological stress (Ramler, Tennison, Lynch, & Murphy, 2016). Other researchers also asserted that increased levels of mindfulness levels are associated with higher levels of college adjustment (Cole et al., 2015). Based on these findings, the role of mindfulness on college adjustment should continue to be examined. However, there is still limited local and international research on the relationship between mindfulness and college adjustment.

College adjustment is an important concept for success and well-being in higher education (Aspelmeier, Love, McGill, Elliott, & Pierce, 2012). College

adjustment problems are defined as any adjustment issues experienced by university students during their education. Students who have college adjustment problems may also have difficulties in other parts of their lives. They may have social and academic problems such as having problems related to peer relations, romantic relationships, and low GPA levels (Capstick, Harrell-Williams, Cockrum, & West, 2019; Gerdes & Mallinckrodt, 1994).

Substance abuse is a risk for students with adjustment problems. Substance abuse may lead to physical harm, physical and psychological violence on loved ones, unsafe sexual behaviors, and sexual abuse (Martinez, Klanecky, & McChargue, 2018). Severe depression leading to suicidality is another risk for university students (Li, Dorstyn, & Jarmon, 2019). Overall, adjustment problems in college are harmful to students and worsen their well-being. In order to explore this relationship and contribute to the literature on college adjustment, the current study investigates the relationship between anxiety, depression, mindfulness, and college adjustment.

1.1 Purpose of the study

Through the examination of the role of anxiety, depression, and mindfulness on college adjustment levels, the current study aims to contribute to the literature on students' well-being and distress. This study was designed to answer the following research question: Do anxiety, depression, and mindfulness levels of students predict their college adjustment levels? Which one is a better predictor (anxiety, depression, and mindfulness as predictors) of college adjustment levels?

1.2 Significance of the study

Jeffrey Arnett proposes the term “emerging adulthood” specifically for the college years of life (Arnett, 2000). Arnett suggests that this new period of life that is between the ages 18 and 25, emerged with the changing demands of the society. In this distinct developmental stage, college students experience some transformations in their lives. Especially those who move to another city in order to receive undergraduate education experience drastic changes in their socio-cultural environment. In their new environment, they continue to develop their identity and search for new opportunities to find themselves (Arnett, 2015). New social circles, greater academic demands compared to earlier levels of education, the new culture, homesickness, financial changes and burdens (Gair & Baglow, 2018), and new rules and regulations deeply affect the lives of college students (Arnett, 2015). With these immense changes in their socio-cultural lives, college students may experience psychological problems (Conley, Kirsch, Dickson, & Byrant, 2014). Regarding their developmental stage, they also may require additional resources to support their well-being. Neff and McGehee (2010) states that college students show increased levels of anxiety and depression during their studies. In the current study, it is assumed that understanding the constructs related to college adjustment and developing related interventions may help college students who experience immense changes and demands in their lives.

A large number of individuals who need mental health support lack these resources. One third of the college counseling centers in the U.S. report that they cannot respond to the students’ needs in their respective colleges (Brunner et al., 2014). This case also applies to Boğaziçi University. In Boğaziçi University, it is reported that the Guidance and Psychological Counseling Center (BÜREM) can offer

sufficient resources only for a limited number of students (BÜREM, 2016). The university has around 12 thousand students registered in 2016 (Boğaziçi University, 2019). According to the BÜREM report (2016), only 335 students received some kind of mental health services and 247 of students have been referred to resources out of the university. (BÜREM, 2016). Hence, developing some preventive groups may ease the burden of the psychological counseling centers, since preventive programs are more cost-effective for the society and individuals.

As parallel to the aim of this research, findings including a meaningful relationship between anxiety, depression, and mindfulness, and college adjustment levels of the students from Boğaziçi University, will have implications as to enlighten professionals in order to understand the dynamics of college adjustment more comprehensively.

CHAPTER 2

LITERATURE REVIEW

The following section will first offer a part on college adjustment where the construct, its developmental significance, and its relationship with other variables will be reviewed. Then, there will be an examination on some of the literature on the concept of mindfulness and its relationship with other variables including its benefits. Finally, the last parts will cover the concepts of anxiety and depression, their symptoms, and their etiology.

2.1 College adjustment

2.1.1 Definition of college adjustment

College life brings about various social, emotional, and academic changes to young people's lives, especially to those who have just started college and/or changed their hometown in order to start college. College adjustment refers to the adjustment of an individual to the different domains of college life (Martin, 2000). In other words, college adjustment levels refer to the individual's level of adjustment in his/her college environment including academic life, social life, and interpersonal relations.

A sound college adjustment level is important for persistent college success (Katz & Somers, 2017). Especially the first year of college life puts too much stress on young people (Bland, Melton, Welle, & Bigham, 2012). Some people view the transitional period as an event that leads to other opportunities, whereas for others, the new phase in their lives can be troublesome and hard to cope with. Students who do not experience this new start as a positive change may have cognitive and

emotional problems (Cutrona, as cited in Nguyen, Werner, & Soenens, 2019). Such possible problems may hinder individuals' adjustment to college life, academically, socially, and emotionally.

Problems in adjustment might have short and long-term costs for students. A possible outcome of problematic adjustment is substance abuse. While students try to cope with additional challenges in their college lives, they may turn to substances as a coping method (Tountas & Dimitrakaki, 2006). Even before starting college, students experience pressure and try to cope with that stress. In a survey, it was found that students are faced with high levels of anxiety and stress in college applications, so they try to cope with those through using substances (Leonard, 2015). Since substance abuse is an important health concern, it is essential to support students' adjustment to university by promoting healthy coping methods.

Another risk for university students is poor sleep. According to Lee, Wuertz, Rogers, and Chen (2013), students who cannot cope with the stress they experience in college, sleep poorer compared to their well-adjusted counterparts. Anxiety and stress related to college adjustment may also lead to poor diet choices and emotional eating. Students with anxiety were found to consume meals that are unhealthier (Papier, Ahmed, Lee, & Wiseman, 2015). Compared to non-anxious students, moderately anxious male students were found to be two to three times more likely to pick processed food and protein powder. Moreover, moderately anxious female students had twice more risk to consume processed food (Papier, Ahmed, Lee, & Wiseman, 2015).

Another possible consequence of lack of college adjustment is dropping out. In the first year of college one fourth of the students drop out (Arnett, 2015). According to the annual report on college completion in the U.S., it was found that

only 42.1% of students finish their university education in six years (without changing their university). Within six years after starting college, 13% of the students complete their undergraduate education in another institution. Thirty percent of the students cancel their college enrolment and do not enroll in another one (Shapiro, Dundar, Yuan, & Harrell, 2014).

In the Turkish university population, 581,613 students graduated in 2012 from various higher education programs (pre-undergraduate and undergraduate programs, both formal and distance educational programs), whereas around 700,000 of them are placed in such programs every year (Çetinsaya, 2014). If the difference between the number of people that are placed in a higher education institution each year and the number of people that graduated from such higher education institutions is analyzed, it seems that a difference of nearly 300,000 people can be observed each year. Therefore, it can be stated that there are lots of students who are not completing their educational program in the higher education institution that they are enrolled in; Instead, they drop out. It is important to intervene in problems such as dropout, before they become unsolvable.

2.1.2 Importance of the college period from a developmental perspective

University education is an important transitional period in individuals' lives. Depending on their personal history, people experience some level of difficulty during transitions. Every encounter matters in individuals' lives and this particular transitional period enables an increased chance for social encounters. During this period, young adults may experience increased levels of anxiety because of the rapid changes that occur in their lives. Some may successfully get over with the adaptation period; whereas, some may not (Arnett, 2015).

Human developmental sequence and stages have been an interest area for counseling, education, developmental psychology, and clinical psychology since they provide them with the information to assess individuals. Erik Erikson explains human development from a psychosocial perspective. His developmental theory is valued because it offers an alternative to Freud's psychosexual developmental stages which ignore social factors (Brown, 2008). Erik Erikson discusses human development through eight different (nine, for some) developmental stages. He describes each developmental stage with a task to accomplish and a crisis that occurs in each particular stage. Each developmental stage (Erikson, 1950) takes its name from the relevant crisis that takes place during that stage.

Students in the university are mostly in their late adolescence and early adulthood stages. Erikson talked about two stages related to those periods of life: the "identity versus role confusion" stage and the "intimacy versus isolation" stage (Erikson, 1950). Those stages are critical in one's life according to various other perspectives, too. First of all, adolescence is described as a stage in which the person's identity is developed. An individual tries different roles and identities in the search for the most compatible one/ones to himself/herself (Sigelman & Rider, 2012). At this point, modifying one's environment (from high school to university) may both be troubling and empowering in developing one's identity. An individual may have trouble in adapting to the new environment and developing an identity at the same time.

Early adulthood overlaps with the college period. According to Erikson, individuals find a sense of identity and proceed to early adulthood in search for intimacy (Erikson, 1950). Individuals may also not have found an appropriate identity or they may have formed their identity without any conflicts. These kinds of

situations may create trouble in early adulthood. People who have unresolved conflict in the early stages may have crises in later stages (Bjorklund & Blasi, 2012).

In fact, Erikson states that individuals who could not successfully establish their identity may get lost in the intimate relationship (Erikson, 1950). He says it is hard to express intimacy and commitment without a good sense of identity. It is hard to make a commitment before the development of identity. Even though Erikson believed that one's identity development comes before one's search for intimacy, there are also opposing ideas.

Harry Stack Sullivan who was a Neo-Freudian psychoanalyst suggests that intimacy comes before identity development (Branden, 2008). Sullivan states the important effects of fulfilling the need for intimacy on the development of identity. Sullivan says that people experience an emergence of intimacy need and they try to fulfil this need first with same sex friends (in the preadolescent) and later in life, with opposite sex starting with puberty (in the early adolescent). He stresses the importance of interpersonal relationships throughout the developmental stages. He claims that people establish their sense of identity through their interpersonal relationships (Branden, 2008).

Recent studies indicate that the adolescent age interval is changing and the end of adolescence is extending (Adams, 2003). Jeffrey Arnett proposes the term emerging adulthood specifically for this period of life (Arnett, 2015). Emerging adulthood refers to the ages between 18 and 25. Arnett suggests that this new period of life emerged with the changing demands of the society. People and the culture are changing incessantly; hence, the expectations are also changing. During the medieval eras, people were expected to work and build their lives (especially in terms of

vocation and family) in earlier periods of their lives compared to the expectations of the contemporary society (especially in developed countries) (Arnett, 2015).

Arnett (2015) offers some explanations for this new term. Firstly, he stresses that emerging adulthood is different from early adulthood in terms of people's perspectives. People in this period state that they are not adults; they are in transition to adulthood. Hence, they should not be called adults. At this point, another point by Arnett becomes important. Young people see themselves in transition especially when they compare themselves to other adults who have a family, a home, and a relatively stable income. Hence, those who are still in education and do not have a stable job do not view themselves as adults, even though they are above age eighteen (Arnett, 2015). The sample of the current study, namely university students, might be experiencing exactly what Arnett describes.

2.1.3 Dimensions of college adjustment

College adjustment has some components in it; hence it is a multi-dimensional concept. According to Baker and Siryk (as cited in Trevisan & Birmingham, 2016), college adjustment is composed of four different dimensions. They can be listed as academic adjustment, social adjustment, personal/emotional adjustment, and general adjustment.

Academic adjustment relates to the skills to adapt to the academic difficulties and expectations of college and feeling a part of the academic environment. It also includes individuals' academic goals, desires, and plans (Baker & Siryk as cited in Trevisan & Birmingham, 2016). Personal and institutional factors play a great role in academic adjustment. For instance, it was found that being able to conduct a department-relevant study together with a professor positively impacted the

academic adjustment of students (Townsend & Wilson, 2009). In another study, it was suggested that stress and anxiety are the main cause of reduced academic performance (American College Health Association, 2018).

Social adjustment refers to the effectiveness of the individuals in developing new interpersonal relationships and maintaining them in a supportive and caring fashion (Baker & Siryk as cited in Trevisan & Birmingham, 2016). As a matter of fact, social support has a positive influence on students. It helps alleviate the stress and anxiety they experience in their new environment (Friedlander et al., 2007). College students with high perceived social support demonstrate high personal/emotional adjustment and social adjustment (Friedlander et al., 2007).

Personal/emotional adjustment refers to both the emotional and physical wellness of individuals (Baker & Siryk as cited in Trevisan & Birmingham, 2016). First year in college is especially stressful for students because college and high school have different structures and individuals have difficulties in adjusting. Daily life in college is far less structured compared to the way it is in high school. Hence, students have trouble with effective time-management (Aselton, 2012). Familial relationships have a supportive role in the emotional adjustment period. College students who do not have a supportive family experience more isolation (Cheng, Ickes, & Verhofstadt, 2012). Moreover, Kamen et al. (2011) stated that family support was negatively in correlation with depression levels of college students.

General adjustment includes enjoying the college environment and education (Baker & Siryk as cited in Trevisan & Birmingham, 2016). This process is closely related to the personal expectations from and perceptions about college life and the college environment. Freeman et al. (2007) asserted that accepting the college environment was the most important variable in terms of attachment to college.

Support from peers and academic personnel were also found to be good predictors of general adjustment (Hausmann, Schofield, & Woods, 2007).

2.1.4 Relationship between college adjustment and other variables

College adjustment of students is related with many different factors. These factors may be internal or external, constant or changing with time, social, emotional, and/or environmental.

Halamandaris (1995), in a longitudinal study with university students in Scotland, demonstrated a group difference between college students who live in their home while attending university and students who live in another place (non-home as he stated) in terms of their adjustment levels to college. He pointed out that students who live in a non-home residence (e.g. dormitory, hostel, etc.) have additional problems besides solely academic environmental adjustment. He stated that these students have also problems with adjustment to the new city and the new environment combined with the challenges of new cultural encounters in their lives. Therefore, they have a greater number of conditions to adjust to in comparison to their counterparts who reside in the city that the university is. He also discovered that there is a significant positive correlation between the perceived social support system and college adjustment for all students.

In another study, Al-Khatib, Awamleh, and Samawi (2012) stated no group differences between genders based on their adjustment level. They also found no relationship between grade level and adjustment scores. Their research was conducted with 334 students from a top technical university in Jordan. It could be argued that this sample might be relatively similar to the Boğaziçi University sample since both universities are among the top universities in their respective countries.

According to a research conducted with 490 students from two different universities, it was found that people with higher social anxiety have lower self-esteem. They also had difficulties in college adjustment compared to students with low social anxiety (Nordstrom, Goguen, & Hiester, 2014). There were no social anxiety differences and college adaptation level differences between groups based on gender and residential status. Yet, the regression analysis revealed that self-esteem is significant at predicting college adjustment levels (Nordstrom, Goguen, & Hiester, 2014). Two different studies found no significant differences in college adjustment between groups based on gender (Al-Khatib et al., 2012; Nordstrom et al., 2014). Hence, it could be stated that there was some evidence that showed gender and college adjustment were not related.

Another research indicated that people with high anxiety levels demonstrated low levels of social skills, inadequate leadership skills, and more attention problems (Bernstein, Bernat, Davis, & Layne, 2008).

A quasi-experimentally designed research claimed that a psychosocial wellness seminar can increase psychosocial adjustment levels of students. The same research also states that college-related anxiety and college adaptation levels are negatively correlated with each other (Conley, Travers, & Bryant, 2013).

Buddington (2002) inspected the relationship between psychological adjustment and academic success with 150 students. The study found that students with lower levels of stress and a smaller number of depressive symptoms showed higher levels of academic success and adjustment. Wintre and Yaffe (2000) also found that lower levels of depressive symptoms were related with higher levels of overall college adjustment. They also added that higher levels of psychological well-being also were positively correlated with college adjustment. Their sample

consisted of 408 college students. Moreover, they concluded that better parent and child relationships were linked to better adjustment to college (Wintre & Yaffe, 2000).

A quantitative study with 481 law students investigated the protector role of mindfulness in relation to stress and adjustment (Bergin & Pakenham, 2016). According to their results, mindfulness levels of participants had moderate positive correlation with their adjustment levels. Mindfulness levels of participants also acted as a moderator role on stress in relation to anxiety and depression.

2.1.5 College adjustment studies in Turkey

The topic of college adjustment has been examined in a number of studies in Turkey. Alperden (1993) investigated the relationship between personal and social variables and college adjustment. It was found that individuals with stronger spiritual beliefs better adapt to college life.

Another study examined the relationship between coping styles, optimism levels, gender, and college adjustment. College students' level of optimism was positively correlated with their adjustment (Yalım, 2007). When the the two concepts of acceptance and commitment therapy (ACT), psychological flexibility and self-compassion, were studied, they were found to be positively correlated with college adjustment (Aydın, 2016).

On the other hand, several Turkish studies explored some variables that were negatively correlated with college adjustment. Problematic internet use in college students was negatively correlated with college adjustment and it was found that individuals in their first year of college have higher levels of problematic internet use (İkiz, Savcı & Yörük, 2015).

According to another study by Duru (2008), it was found that adjustment to university and social support are positively correlated. It was also found that adjustment difficulties and social connectedness are predictors of loneliness individuals. It appeared that people who are having problems in adjustment to college also suffer from loneliness.

In a study conducted in Turkey, it was found that relations with academic personnel are also significantly related to college adjustment. Adjustment was related with social relations and the way of spending leisure time. Other personal qualities; shyness, sense of belonging to a university, and fear of failure were also discovered to be related to college adjustment levels (Sevinç & Gizir, 2014).

When perceived stress, anxiety, and avoidance levels and their relationships with college adjustment were explored, perceived stress, anxiety, and avoidance levels were found to be negatively correlated with college adjustment (Kural, 2017).

Based on previous research, anxiety, depression, mindfulness, social relationships, and adjustment to college seem to be closely related with each other. However, in the literature there are a limited number of studies in Turkey related to these variables. The existing literature on the subject investigates the roles of variables such as social support, social relations, and social anxiety in adaptation to college. There is a gap in the literature examining the relationship between trait anxiety levels (a more general anxiety feature) and college adaptation levels. To the author's knowledge, no studies have particularly investigated the role of anxiety, depression, and mindfulness on college adjustment. The current research is an attempt to inquire that relationship.

2.2 Mindfulness

2.2.1 Concept of mindfulness

Despite the point that mindfulness is a very popular concept in Western psychology, there are many different definitions for it (Awasthi, 2013; Grossman, 2008).

Originated in the Eastern Culture, specifically in Buddhism, mindfulness is an ancient concept that has re-gained popularity in the mental health area with the development of Mindfulness-Based Stress Reduction (MBSR) training at the University of Massachusetts. Jon Kabat-Zinn created this method (MBSR) in 1979 (Baer, 2015). It is a concept that is utilized for stress reduction. It also has a great variety of benefits such as increasing creativity, attention level, and emotional regulation levels.

According to one popular definition, being mindful refers to the state in which an individual purposefully pays attention to the present moment. It includes the individual's focus on both internal and external environments through some virtues and qualities such as compassion, curiosity, and/or acceptance (Siegel, 2009).

With a mindful attitude, one lives in the present moment. The past has already gone and the future is about to show itself in time. There is no point in wasting the majority of our present time with worrying for the future and/or the past. At this point, it is vital to point out that being mindful is not rejecting or neglecting the past and/or future. It is merely the acceptance and living with the past or the future, without getting into a fight with them. Rejecting, denying, or ruminating are not feasible behaviors in this sense (Alidina, 2014).

The word "mindfulness" comes from the Indian word "sati" which means awareness, attention, and remembering. These three concepts lie in the core of

mindfulness. The awareness part of mindfulness signifies being conscious of our internal and external experiences through acknowledging their existence. On the other hand, attention refers to paying sustained attention to present stimulus (again, both internal and external), such as watching stimuli as they emerge and change or just fade away. Lastly, remembering refers to remembering being in the present and being mindful of current experiences (Alidina, 2014).

People tend to forget being mindful in their daily lives, hence, practicing formal and informal mindfulness exercises have great importance in developing a sustained mindful perspective in life (Alidina, 2014). Kabat-Zinn emphasizes that “Mindfulness can be cultivated by paying attention in a specific way, that is, in the present moment, and as non-reactively, non-judgmentally and openheartedly as possible” (Kabat-Zinn, 2005, p. 108). Mindful attitude can be further developed and deepened by daily formal and informal exercises. Formal meditation exercises are mind trainings. Individuals take time and practice meditation in a specific time of the day. Informal exercises involve individuals to try to be mindful in their daily activities such as driving, brushing teeth, walking, and preparing the table for dinner. Overall, in mindfulness meditation, individuals typically focus on the feeling of their own breathing, senses, body, thoughts, emotions, and the things that are predominant in one’s awareness at a given time (Siegel, 2009).

Mindfulness is frequently utilized in some psychotherapies. Some of these therapy methods can be referred to as third wave psychotherapies. Third wave psychotherapies are the cluster of successors to CBT (second wave behavioral therapy) and behavioral therapy (first wave behavioral therapy) (Baer, 2015). MBSR (mindfulness-based stress reduction), MBCT (mindfulness-based cognitive therapy), DBT (dialectical behavior therapy), and ACT (acceptance and commitment therapy)

are the third wave behavioral psychotherapies which utilize a variety of mindfulness practices and homework in their applications of therapy. In addition, mindfulness-based practices are also preferred by non-clinical populations in order to reduce stress and develop further coping mechanisms (Baer, 2015).

2.2.2 Relations of mindfulness with other psychological constructs

It is denoted in the literature that increased mindfulness levels have a number of relationships with other constructs. These relationships have a surprisingly great range including attention levels enhancement and perceived pain reduction. For instance, mindfulness levels of individuals show positive correlations with emotion regulation (Modinos, Ormel, & Aleman, 2010); better emotional processing (Tomlinson, Yousaf, Vittersø, & Jones, 2018); adaptive coping (Xu, Ding, Goh, & An, 2018); and self-esteem and acceptance (Thompson & Waltz, 2008). On the other hand, mindfulness levels display negative correlations with pain intensity and pain unpleasantness (Zeidan et al., 2018); stress, negative affect, rumination (Tarraf, McLarnon, & Finegan, 2019); and academic burnout (Xu et al., 2017).

There has also been extensive research in the area of mindfulness practice. Those studies have shown that practicing mindfulness has comprehensive benefits for individuals. Mindfulness-based interventions with both clinical and non-clinical populations result in improvements in the participants' lives. In the general population, it is found that practicing mindfulness in daily life reduces rumination levels of individuals (Jain et al., 2007) and alleviates depression and anxiety symptoms (Hawley et al., 2014; Oman, Shapiro, Thoresen, Plante, & Flinders, 2008). Moreover, it improves overall psychological well-being (Urry et al., 2004), cognitive performance, and resilience (Zenner, Herrnleben-Kurz, & Walachi, 2014).

Various studies also show that mindfulness improves college students' lives. For instance, mind-wandering which can be defined as having distracting thoughts unrelated to on-task behavior can be reduced in time with practicing mindfulness (Mrazek, Smallwood, & Schooler, 2012). Different studies found parallel findings (Mrazek et al., 2013; Tang et al., 2007). According to Mrazek et al.'s research (2013), only two weeks of mindfulness practice focused on decreasing mind-wandering can improve performance in the GRE (Graduate Record Examination) reading-comprehension scores of participants. In the same study, it was concluded that participants showed improvements in their working memory compared to their pre-training states. Lakey, Berry, and Sellers (2011) also found that people who took mindfulness training performed significantly better on a computer-based task that required sustained attention, than those who did not take the training. The particular task was adversely affected by mind-wandering. The interesting part of this experiment was that participants only received six minutes of mindful meditation practice before they did the task and none of them had prior meditation practice experience. This study is a striking example for the short-term effects of mindfulness practice.

In addition, a research conducted with forty college students in China found that five days of meditation practice (twenty minutes per day) improved both attentiveness and self-regulation levels of participants (Tang et al., 2007). In the same study, participants' cortisol (stress hormone) levels also showed significant decrease with meditation practice at the end of the study (Tang et al., 2007). Increased self-regulation and decreased stress levels are valuable because they are regarded as important components of sustained personal well-being. In the long run,

they may also contribute to the prevention of burnout of individuals (Elliot, Thrash, & Murayama, 2011).

Regarding the long-term effects, Valentine and Sweet (1999) also found that people who practiced meditation for more than 25 months performed better on the same task than people who practiced meditation for less than 25 months. The task was the Wilkins' Counting Test which requires sustained attention. Increased levels of sustained attention and decreased levels of off-task thoughts can benefit college students in their academic life.

A similar study applied the mindfulness practice as a part of a mindfulness-based stress reduction (MBSR) program and investigated its effect on college adjustment (Ramler, Tennison, Lynch, & Murphy, 2016). Thirty participants attended an eight-week MBSR program. At the end of the eight weeks, the experimental group showed increased levels of college adaptation and decreased physiological stress levels compared to their control group counterparts. These findings support the utilization of mindfulness-based groups in helping college students adjust to their university environment.

Mindfulness also deepens learning and increases the capacity for moral reasoning (Shapiro, Jazaieri, & Goldin, 2012). It makes individuals more resilient (Christopher et al., 2016). According to Pearson, McMahon, and O'Donovan (2018), these factors would help students in building their career and future.

Another experimental study demonstrated that people who practiced eight weeks of mindfulness meditation exercises showed greater levels of activity in their pre-frontal cortex and insular cortex according to their fMRI results (Farb et al., 2007). Those parts of the brain are responsible for executive functions, observation of stimuli, motor control, higher levels of cognitive functioning, and interpersonal

skills. Researchers also stressed that empathy levels of participants were higher in the group that practiced mindfulness for eight weeks compared to the control group that did not practice any exercises (Farb et al., 2007).

Past research shows that practicing mindfulness may even decrease anxiety and depression. This decrease lasted for a long term in Miller, Fletcher, and Kabat-Zinn's (1995) study. They found that eight weeks of mindfulness meditation led to a significant decrease in anxiety and depression levels of participants who were diagnosed with various anxiety disorders (Miller, Fletcher, & Kabat-Zinn, 1995). Also, in the same study, two follow-up tests were conducted, three months later and three years later. It was found that 18 out of 22 initial participants still showed long-term effects of the eight weeks of mindfulness meditation. It should be noticed that the number of participants for this research was low and generalization to the whole population would be inappropriate. Nonetheless, these long term and sustainable results are important qualities of mindfulness practices in dealing with anxiety and depression. Existence of such positive effects instigates continued focus on mindfulness research.

Even though there is no related research, an interesting theoretical proposition was asserted by Gantman, Gollwitzer, and Oettingen (2014). They suggested that goal-oriented behaviors are also related to being mindful. They formulated this idea upon the relationship between self-regulation and mindfulness. They assert that since mindfulness increases self-regulation, it would also increase possible goal-directed behaviors (Gantman, Gollwitzer, & Oettingen, 2014). Both self-regulation and goal-directed behaviors are frequently named under the umbrella term executive functioning; hence, such an interaction might be possible.

Baas, Nevicka, and Ten Velden (2014) investigated the relationship between variables of creativity and mindfulness by examining their correlations. They conducted four different studies in their research and concluded that some aspects of mindfulness (carefully observing, attending, and noticing external and internal worlds of oneself) were positively correlated with the creativity levels of participants. They also stated that being in the present moment was not correlated with creativity by itself. The correlation was present only when the elements such as carefully observing, attending, and noticing present stimulus were present.

Fredrickson et al. (2008) conducted a research with 139 participants half of which were assigned to the experimental group and instructed to practice loving-kindness meditation for a duration of nine weeks. At the end of the experiment, participants who had practiced meditation reported higher levels of positive feelings and increased levels of life-satisfaction. Their feelings of isolation and alienation had decreased (Fredrickson et al., 2008). Parallel to these findings, Shroever and Brandsma (2010) also found that after eight weeks of mindful meditation practice, participants showed higher levels of positive affect, whereas they showed lower levels of negative affect.

There are also several studies that focus on the professional effects of mindfulness. One meta-analysis that analyzed twenty studies found that mental health practitioners benefited from mindfulness meditation practice with no negative outcome (Escuriex & Labbé 2011). These benefits included increase in self-awareness, acceptance of oneself, and compassion towards themselves. Also, the study showed decline in exhaustion in an emotional sense, negative feelings (anger and tension), depressive symptoms, and physical exhaustion.

Another study was conducted with counseling students who are in the first or second year of their graduate Master's program. After eight weeks of mindfulness practice, participants indicated higher levels of awareness of self and clients and also a higher ability of dealing with stress (Christopher, Christopher, Dunnagan, & Schure, as cited in Escuriex & Labbé 2011). Collecting data from 58 mental health practitioners, O'Donovan and May (2007) found a positive relationship between mindfulness and both life and job satisfaction. They also found a negative correlation between mindfulness and burnout.

In another study conducted with 179 counseling interns and doctoral level students, it was concluded that mindfulness can significantly predict attention and empathy (Greason & Cashwell, 2009). Additionally, McCollum and Gehart (2010) reported strong compassionate feelings and acceptance toward self and clients in their qualitative study with 13 Master's students who practiced mindfulness weekly.

In contrast to the numerous benefits expressed in past research, some young adults experienced adverse results from practicing mindfulness. They reported that they were feeling disconnected and emotionally overloaded while practicing mindfulness (Britton & Sydnor 2015). Since some of the participants in that study had recent trauma history, they might have experienced reversing effects related to their past traumas. In order to prevent such incidents, mindfulness exercises should be modified according to the particular needs of the individual (Follette, Palm, & Hall, 2004).

Overall, it can be seen that mindfulness has benefits both for the general population and college students. Furthermore, it was emphasized that mindfulness showed no adverse effects on the population except for those subjects that have

recently experienced severe traumas. It can be concluded that the college student population may benefit widely from increased mindfulness in their lives.

2.3 Anxiety

2.3.1 Definition of anxiety

The term trait anxiety refers to an individual's relatively consistent anxiety level across situations and times (Weiner & Craighead, 2010). Anxiety is characterized by tension, worry, and arousal. It is an emotional state in which the sympathetic system is activated. On the other hand, there is another type of anxiety called state anxiety. State anxiety is not constant and is dependent on the situations that the individual is in; for example, being in a dentist office or just before making a presentation (Weiner & Craighead, 2010). In this study, trait anxiety is focused on.

Trait anxiety has a high positive correlation with neuroticism that is a trait of individuals who experience trouble in emotional regulation and emotional stability. Similarly, neuroticism is also positively correlated with maladaptive behaviors and depressive mood (Ormel et al., 2013). These in turn may affect adjustment levels of an individual to a new environment.

Based on the above conceptualizations, having anxiety and having an anxiety disorder are two different concepts. Individuals may have anxiety from time to time. In order to have an anxiety disorder (from the clinical psychology perspective), one should meet particular criteria. In this study, only anxiety levels were measured regardless of whether the individuals have an anxiety disorder or not.

2.3.2 General symptoms of anxiety disorders

It is important to be able to discriminate fear and anxiety because they may be confused with each other. Fear is a response and reaction to an existing hazard and danger, whereas anxiety is a response to an impending threat. Both of them display increased arousal at the physiological level. People may experience increased heartbeat, sweating, and reactivity during both fear and anxiety. Even though they may seem problematic and create discomfort, they are both adaptive for individuals to some extent. Fear and anxiety help people survive a threat and/or danger. However, excessive levels of both fear and anxiety become maladaptive for individuals. Thus, there are certain pathological levels of fear and anxiety (Kring et al., 2012).

Some physiological, cognitive, emotional, and behavioral changes can be observed in individuals due to anxiety. Increased heartbeat, changes in breath, feeling weak, sweating, feeling sick, and stomachaches can be observed at the physiological level. Cognitively; overall decreased cognitive abilities can be seen, such as a foggy mind, difficulty in concentration and remembering, and feeling confused. Also, disturbing thoughts, unrealistic beliefs, and feeling out of control are experienced; whereas emotionally; increased fear, anger, and confusion can be spotted. Lastly, avoidant behaviors, trying to escape, troubles in speech, and disoriented movements occur at the behavioral level (Clark & Beck, 2011).

2.3.3 Etiology of anxiety

Behavioral conditioning may play a role in developing some anxieties, especially social anxiety. The two-factor conditioning model on anxiety development as described by Kring et al. (2012) is as follows: First, the individual encounters a

situation which results in discomfort (bodily reactions such as sweating, increased heartbeat, or increased arousal, etc.) and becomes classically conditioned to the stimuli. Then, the individual invests in avoidant behaviors in order to escape discomfort. This, in turn, is regarded as the operant conditioning part of the anxiety-inducing stimuli. With operant conditioning, the individual feels anxiety, avoids stimuli or escapes from the stimuli. Consequently his/her anxiety decreases. With time and the contributions of operant conditioning the avoidance behavior and the feeling of anxiety become consistent parts of the individual's life (Kring et al., 2012).

Cognitive factors also play a role in developing anxieties. People who have more negative expectancies from future events may experience more anxiety than their counterparts do. Also, people who self-criticize heavily are more prone to develop anxiety, especially social anxiety (Stein, Hollander, & Rothbaum, 2009).

2.3.4 Anxiety and college adjustment

According to a research conducted with 490 students from two different universities, it was found that people with higher social anxiety have lower self-esteem. They also had difficulties in college adjustment compared to students with low social anxiety (Nordstrom, Goguen, & Hiester, 2014).

Anxiety and avoidance levels were found to be negatively correlated with college adjustment (Kural, 2017). In fact, adjustment and anxiety levels were found to be negatively correlated in various studies. The possible mediator in this equation could be neuroticism which is a maladaptive trait in which the individual is negatively affected especially during the transitions in life (Macleod, 2011). Changing a town, changing schools, getting married, or having a new job may be regarded as examples of such transitional states. Likewise, DSM-5 also states that

adaptation-related disorders are linked to the neuroticism levels of individuals (American Psychiatric Association, 2013).

2.4 Depression

2.4.1 Definition of depression

The most fundamental aspect of depression is the feeling of unhappiness and/or not being able to get pleasure in general (Kring et al., 2012). Depression is used both as a mood and disorder by lay people. However, it is essential to understand that in order to be diagnosed with depression, there are some criteria that need to be met. For instance, intensity and duration are important parts of the diagnosis of major depressive disorder (Kring et al., 2012). Furthermore, developmental stages are important in the diagnosis of the depression. For instance, children and adults present depressive symptoms in different ways (Wicks-Nelson & Israel, 2015).

2.4.2 General symptoms of depressive disorders

DSM-5 proposes that five of the symptoms of depression should be present at least for two weeks and nearly every day in order to be diagnosed with major depressive disorder. These symptoms include; sleep deprivation or sleeping too much, agitated psychomotor activity or retarded psychomotor activity, appetite change (increase or decrease), low levels of energy, feeling worthless or guilty, difficulty in some of the cognitive abilities (concentrating, thinking, or decision making), and recurrent thoughts of death or suicide (American Psychiatric Association, 2013).

2.4.3 Etiology of depression

From the neurobiological point of view, genetic factors play a moderate role in major depression, whereas in bipolar disorder the genetic effect is relatively stronger. Low serotonin levels, dopamine receptor dysfunction and disordered cortisol levels lead to depression, as well. Brain imaging studies demonstrate that people that are experiencing depression display higher levels of amygdala activities. Amygdala is the part of the brain that is responsible for reacting to emotional stimuli. Moreover, these people show lower levels of activation in the hippocampus (a part of the brain that is responsible for emotion regulation) (Kring et al., 2012). All these factors come together in creating a dysfunctional situation in which the individual feels excessive sensitive reactions to emotional stimuli and shows an inability to regulate his/her emotions healthily.

Life events and interpersonal relationships also affect the development of depression. Losing a job, a harsh break-up, domestic violence, economic and/or financial crisis, or a major disaster may be regarded as examples of stressors. These stressors may affect individuals differently but if the person is inclined to have a depressive episode (because of biological or psychological factors), these stressors may quickly trigger a depressive episode (Flessner & Piacentini, 2017). Hence, the diathesis–stress models are common in explaining depression. These models suggest that preexisting tendencies and stressors should be considered altogether. In fact, some living conditions can also act as preexisting tendencies. An individual who has been in adverse living conditions (i.e. financial struggles) may experience a new stressor that may trigger a depressive episode. Hence, the preexisting tendencies are not only the biological or psychological factors (Thakkar, 2006).

Cognitive factors can also have a role in depression. Some people are genetically vulnerable to have pessimistic cognitions (Hammen, Rudolph, & Abaied, 2014). A widely known cognitive theory for depression is Beck's Depression theory which proposes that depression is related with a negative triad. This negative triad is composed of three different segments in perception, which are a negative perception of self, world, and the future. These negative perceptions are developed at some point in life in the individual's attempt to understand and explain different external stimuli. Through time, these negative perceptions may result in cognitive biases. These biases result in the reinforcement of the existing negative triad through neglecting positive stimuli (or not paying enough attention to them) and an over-emphasis of negative stimuli. Hence, this negative triad leads to depressive episodes in individuals (Goldstein & DeVries, 2017).

2.4.4 Depression and college adjustment

Buddington (2002) examined the relationship between psychological adjustment and academic success with 150 students. The study found that students with lower levels of stress and a smaller number of depressive symptoms showed higher levels of academic success and adjustment. Wintre and Yaffe (2000) also linked lower levels of depressive symptoms with higher levels of overall college adjustment. In another research, it was found that symptoms of anxiety and depression were negatively related to college adjustment (Holliday et al., 2016).

Past studies showed that depression and college adjustment were negatively related with each other (Buddington, 2002; Holliday et al., 2016; Wintre & Yaffe, 2000). Depressive symptoms reduce individuals' psychological flexibility (Baer,

2015). Hence, college students suffer from depressive symptoms and their college adjustment levels are affected by their depression levels, as expected.

CHAPTER 3

METHODOLOGY

3.1 Participants

The sample of this study consisted of 358 participants. Data were collected between March 14, 2019 and May 24, 2019 in a 71-day period. Data collection started after the written approval of the Boğaziçi University's Ethics Committee for Master and PhD Theses in Social Sciences and Humanities (SOBETIK) was received (see Appendix A). Data were collected using an online data collecting tool, namely Google Forms. Participation for this study was voluntary and this was explained in detail on the informed consent form prepared by the researcher (see Appendix B for the English form; Appendix C for the Turkish form). In the explanations, the participants were informed clearly that they could leave the study whenever they wanted to.

The female participants made up 70.9% ($n = 254$) of all participants; 25.7% ($n = 92$) of the participants were male; and 3.4% ($n = 12$) of the participants stated that their gender was "other/does not want to state" (Table 1).

All participants who volunteered for the study were between the ages 19 to 25 ($M = 22.20$, $SD = 1.84$). The participants consisted of Boğaziçi University students who are either from the English preparatory school, are remedial students, or from various undergraduate programs across the university. The distribution of the ages of the participants can be also reviewed in Table 1.

Regarding the perceived SES level, most participants stated that they are from the middle SES level, 81.28% ($n = 291$). Low SES, 10.34% ($n = 37$) and high SES, 8.38% ($n = 30$) participants were relatively close in numbers.

Table 1. Demographic Characteristics of the Sample

Characteristics	<i>f</i>	%
GENDER		
Male	92	25.7
Female	254	70.9
Does not want to state or Other	12	3.4
Total	358	100
AGE		
19 years old	17	4.7
20 years old	65	18.2
21 years old	60	16.8
22 years old	61	17
23 years old	58	16.2
24 years old	36	10.1
25 years old	61	17
Total	358	100
RESIDENTIAL STATUS		
Home with family/relatives	107	29.9
Home with friends	111	31
Dormitory	124	34.6
Home by themselves	16	4.5
Total	358	100
YEAR SPENT IN UNIVERSITY		
<1 (Preparatory Classes)	73	20.4
1	59	16.5
2	67	18.7
3	77	21.5
4	62	17.3
5	16	4.5
Missing Data	4	1.1
Total	358	100

Regarding the class level, most participants stated that they had started their departmental programs ($n = 285$). The rest of the participants stated that they were studying in the English preparatory classes ($n = 73$) before they are ready to begin their actual studies. Participants studying in their actual departments ($n = 281$) were asked which year of their studies they were at. First year students made up 16.5% of the participants ($n = 59$); second year students were 18.7% ($n = 67$); third year students made up 21.5% ($n = 77$), fourth year students were 17.3% ($n = 62$), and fifth

year students were 4.5% of all the participants ($n = 16$). A small percentage of students, 1.1%, did not specify their year ($n = 4$).

Regarding their faculty (asked to non- preparatory class students), 12.6% of the participants ($n = 45$) were studying in the Faculty of Engineering, 18.7% of them ($n = 67$) were studying in the Faculty of Education, 11.7% of the participants ($n = 42$) were studying in the Faculty of Economics and Administrative Sciences, 29.3% of them ($n = 105$) were studying in the Faculty of Arts and Sciences, and 7.3% of the participants ($n = 26$) were studying in the School of Applied Disciplines.

Participants who stated that they were studying in the English preparatory class ($n = 73$) were asked which campus they were in and their preparatory class levels. Results showed that 9.5% of them ($n = 34$) were studying in the North Campus of Boğaziçi University, whereas 10.9% ($n = 39$) were studying in the Kilyos Sarıtepe Campus of Boğaziçi University. Regarding preparatory English class levels, 8 students were in the beginner class, 19 were in the pre-intermediate class, 27 of them were in the intermediate class, and 19 students were advanced level students.

When residential status of participants was examined, it seems that most of the participants lived in a dormitory, 34.54% ($n = 124$). This was followed by living at home with friends, 30.92% ($n = 111$). Third most common of residential status was home with family, 29.81% ($n = 107$). The least common residential status was home alone, 4.46% ($n = 16$).

Participants were also asked which city they lived in the most. It was found that for 37.7% of the participants, Istanbul was the city that they lived the longest ($n = 135$). 62.3 % of the participants stated that they mostly lived outside of Istanbul ($n = 223$).

3.2 Instruments

In this research, one demographic information sheet and three different scales were used. In the demographic information sheet (see Appendix D for the English form; Appendix E for the Turkish form), participants' residence status, hometown, gender, preparation year class level (beginner, pre-intermediate, intermediate, or advanced), departmental class year, age, and gender were asked. In order to measure the anxiety and depression levels of participants, Depression Anxiety Stress Scale was used (see Appendix F for English form; Appendix G for Turkish form). For measuring the participants' college adaptation level, University Life Scale was used (see Appendix H for English form; Appendix I for Turkish form). Lastly, for assessing the mindfulness level of the participants, Mindful Attention Awareness Scale (see Appendix J for the English form; Appendix K for the Turkish form) was used. Detailed information about each scale was given in the following sections.

3.2.1 University Life Scale (ULS)

University Life Scale (ULS) was developed in Turkey for assessing individuals' adjustment levels to college (Aladağ, Kağnıcı, Tuna, & Tezer, 2003). It contains 48 different items and six subscales. ULS has a seven-point Likert scale (ranging from "1 – completely disagree to 7 – completely agree"). Higher scores indicate higher levels of adjustment whereas lower scores indicate lower levels of adjustment (Aladağ et al., 2003). Some examples of items are "I love myself", "I am not happy with being a university student", "I feel distant to this university's culture", "I find education in this university difficult", "I do not participate in social and cultural events in the university" and "I could not adjust to university life" (Aladağ et al., 2003).

In the factor analysis, six factors were found. These were adjustment to university, emotional adjustment, personal adjustment, relationships with opposite sex, academic adjustment, and social adjustment. These subscales were found to be inter-correlated and their correlational values changed from $r = .33$ to $r = .48$. All subscales were relatively highly correlated with the total score and their correlational values changed from $r = .64$ to $r = .77$. The internal reliability value was found as $\alpha = .91$ (Aladağ et al., 2003).

This scale was developed with a population similar to the population of the current study. It was developed in a Turkish university. Hence, this scale is more suitable for this study compared to other adapted scales.

3.2.2 Mindful Attention Awareness Scale (MAAS)

Mindful Attention Awareness Scale (MAAS) was originally developed by Brown and Ryan in 2003 (Brown & Ryan, 2003). MAAS assesses the level of individual's awareness of momentary experiences and frequency of mindfulness moments in their lives. The scale is composed of 15 different questions. In analyzing the construct validity of the scale, it was found that the scale had only one factor according to the exploratory factor analysis results. In addition, confirmatory factor analysis results were also parallel to these and revealed one factor in the results (Brown & Ryan, 2003).

The questions were designed with a six-point Likert scale (from 1 – almost always to 6 – almost never). High scores indicate higher levels of mindfulness in participants, whereas low scores indicate lower levels of mindfulness. The internal reliability of the original scale was found as $\alpha = .82$. Also, test-retest reliability of the original scale was found as $r = .81$ with a four-week interval. The original scale was

translated and adapted into Turkish by Özyeşil, Arslan, Kesici, and Deniz (2011). In the Turkish form, the internal reliability was found to be $\alpha = .82$, too. Also, test-retest reliability was found as $r = .86$ with a three-week interval.

This scale is widely used with various populations for assessing mindful attention levels. Compared to other mindfulness scales, this scale is both brief and more suitable for the general population. Other mindfulness scales usually include questions aimed to assess people who are familiar with practicing mindfulness. Therefore, this questionnaire is found to be suitable for this study. The participant students are not expected to have practiced mindfulness before.

3.2.3 Depression Anxiety Stress Scale (DASS)

In this research, the Depression Anxiety Stress Scale (DASS) was utilized in order to measure depression and anxiety levels of participants. The scale was originally developed by Lovibond and Lovibond (1995). The scale contains 42 items. Fourteen questions that are related to depression focus on the individuals' hopelessness ("I felt that I had nothing to look forward to"), worthlessness ("I felt I was pretty worthless"), devaluation of life ("I felt that life was meaningless"), loss of interest ("I was unable to become enthusiastic about anything"), and low levels of energy ("I just couldn't seem to get going"). Fourteen questions that are related to anxiety focus on the individuals' autonomic arousal ("I experienced breathing difficulty, e.g. excessively rapid breathing, breathlessness in the absence of physical exertion"), muscular effects ("I had a feeling of shakiness, e.g. legs going to give way"), situational anxiety ("I was worried about situations in which I might panic and make a fool of myself"), and personal experience of anxiety ("I felt I was close to panic"). Rest of the questions are related to stress and focus on the individuals' difficulty in

relaxation (“I found it hard to wind down”), nervous arousal (“I was in a state of nervous tension”), getting easily upset (“I found myself upset by quite trivial things”), and impatience (“I was intolerant of anything that kept me from getting on with what I was doing”) (Lovibond & Lovibond, 1995, p. 339). The questions related to stress were not used since stress is not one of the variables in the proposed study.

In the instructions of the DASS, participants are asked to answer questions according to their past 15 days. The answers are in the form of 4-point Likert scale (“0 = did not apply to me at all, 1 = applied to me to some degree, 2 = applied to me to a considerable degree, 3 = applied to me very much”) (Lovibond & Lovibond, 1995).

In the development of DASS, two things were particularly emphasized: Creating a scale that is able to differentiate anxiety and depression effectively and eliminating items that make this differentiation less effective. In the factorial analysis, factor loadings were found to be between .36 and .80 for the depression subscale, .31 and .64 for the anxiety subscale, and .40 and .76 for the stress subscale. The relationships between factors were found as follows: $r = .38$ for the relationship between depression and anxiety, $r = .46$ for the relationship between anxiety and stress, and $r = .54$ for the relationship between depression and stress (Lovibond & Lovibond, 1995). For the scale, internal consistency values were found as $\alpha = .96$ for depression, $\alpha = .89$ for anxiety, and $\alpha = .93$ for stress subscales (Brown, Chorpita, Korotitsch, & Barlow, 1997). Test-retest reliability was found to be $r = .48$ with an eight-week interval between testings (Lovibond, 1998). Beck Depression Inventory and Beck Anxiety Inventory were utilized for the analysis of concurrent validity and $r = .74$ and $r = .81$ were found, respectively (Lovibond & Lovibond, 1995).

Adaptation of DASS to Turkish was conducted in 2007 (Akın & Çetin, 2007). In assessing the correlation between the Turkish and the English forms, English teachers were selected as participants. The correlation between DASS Turkish and English forms was found to be $r = .99$. Also, $r = .97$ was found for the depression subscale, $r = .98$ was found for the anxiety subscale, and $r = .97$ was found for the stress subscale when the Turkish form and the English form were compared. Construct validity was also tested with factor analysis and three factors that are consistent with the English form were found (Akın & Çetin, 2007).

In the Turkish form, correlations between subscales were found to be $r = .83$ between the depression and the anxiety subscales, $r = .79$ between the anxiety and the stress subscales, and $r = .76$ between the anxiety and the stress subscales. Item total correlations of the scale changed from $r = .51$ to $r = .75$. Internal consistency was found as $\alpha = .89$ for the whole scale, $\alpha = .90$ for the depression subscale, $\alpha = .92$ for the anxiety subscale, and $\alpha = .92$ for the stress subscale. Test-retest reliability was found as $r = .99$ with a three-week interval (Akın & Çetin, 2007).

Anxiety and depression questionnaires may contain some overlapping questions and statements. Measuring these two concepts with two different scales might result in overlapping measurements of the two variables. This scale aims to assess both anxiety levels and depression levels. In the development of this scale these possible overlaps were reviewed and overlaps were excluded. Hence, this scale was preferred to be used in the current study.

3.3 Procedure

Before the data collection had begun, permission was granted from the Boğaziçi University Ethics Committee for Master and PhD Theses in Social Sciences and

Humanities (SOBETIK). A web-based survey system was utilized and the link was shared to a social media group that is consisted of only Boğaziçi University students. Link to this survey was also broadcasted through some other social media groups and e-mail groups. Participants were blocked from filling out the form a second time with the help of cookie technology. Filling out every form takes approximately 10 to 15 minutes. All answers were kept confidential and this was stated in the consent form. The answering of each item on the scales was compulsory and transition to the next stage of survey was forbidden until all items were filled out. With this function of the survey, the possibility of missing data was prevented to a great extent.

In the online survey, participants firstly saw the consent form. After that, some demographic questions were asked to the participants. In the second part, participants answered the DASS, MAAS, and finally they answered ULS. Using an online survey is cost-effective and environment-friendly considering limited natural resources.

3.4 Design and data analysis

A quantitative design and methods were used in this study. SPSS 24.0 (Statistical Package for the Social Sciences) computer program was used for the data analysis. The primary aim of this correlational study was finding out whether anxiety, depression, and mindfulness significantly predict college adjustment levels of participants. Therefore, multiple linear regression analysis was utilized in order to see any possible relationships. Before the multiple linear regression analysis, Pearson Product-Moment Correlation Coefficient was used to examine the properties and nature of the relationships among the variables of interest. In a correlation study, two or more variables are measured and their relationship is sought (Hayes, 2000).

Firstly, the demographic characteristics of the sample, such as, gender, age, class level, residential status, the city they lived the longest, perceived SES, and year in the program were analyzed. The results related to the demographic characteristics are presented in the section named “Participants” and are also in the “Results”.

Then, a correlational analysis of the variables was employed. Multiple linear regression analysis was used to develop a model for predicting college adjustment scores from anxiety, depression, and mindfulness levels. Preliminary analyses were conducted to ensure no violation of the assumption of normality, linearity, multicollinearity and homoscedasticity. There were not any violations.

CHAPTER 4

RESULTS

In this chapter, the results of the data analysis of the study variables (anxiety, depression, mindfulness, and college adjustment) will be presented. Then, the results will be reviewed in accordance with the research questions. As mentioned earlier, Pearson Product-Moment Correlation Coefficient and multiple linear regression were utilized for the analyses.

4.1 Descriptive statistics and correlations among variables of interest

Table 2 shows the means, standard deviations, and number of cases for the depression subscale of DASS, the anxiety subscale of DASS, Mindful Attention Awareness Scale (MAAS), and the University Life Scale. The ULS has six different subscales; namely, adjustment to university, emotional adjustment, personal adjustment, relationships with opposite sex, academic adjustment, and social adjustment (See Table 2).

For the responses to the depression subscale of DASS, the mean score was 16.50 ($SD = 11$). For the anxiety subscale of DASS, the mean score was 13.66 ($SD = 8.77$). In MAAS, the mean score was 56.68 ($SD = 13.03$).

As for the total ULS score, the mean was 221.41 ($SD = 41.49$). For the adjustment to university subscale, the mean score was 57.59 ($SD = 12.11$) and in the emotional adjustment subscale, it was 35.06 ($SD = 11.18$). The mean score was 34.45 ($SD = 7.88$) for the adjustment subscale, 33.80 ($SD = 8.66$) for the relationships with opposite sex subscale, 31.12 ($SD = 8.98$) for the academic adjustment subscale.

Finally, for the social adjustment subscale, the mean was 29.37 ($SD = 6.65$) (see Table 2).

Table 2. Descriptive Statistics of the Study Variables

Measures	<i>M</i>	<i>SD</i>
Depression Subscale (DASS)	16.50	11
Anxiety Subscale (DASS)	13.66	8.77
Mindful Attention Awareness Scale (MAAS)	56.68	13.03
University Life Scale (ULS Total)	221.41	41.49
Adjustment to University	57.59	12.11
Emotional Adjustment	35.06	11.18
Personal Adjustment	34.45	7.88
Relations with Opposite Sex	33.80	8.66
Academic Adjustment	31.12	8.98
Social Adjustment	29.37	6.65
Years Spent in Istanbul	10.06	8.30
Age	22.20	1.84

$N = 358$

After the descriptive statistics for the variables were determined, correlations among all of the variables were analyzed by the Pearson Product Moment correlation to assess the relationship between depression, anxiety, mindfulness, and college adjustment levels including its subscales, namely, adjustment to university, emotional adjustment, personal adjustment, relations with opposite sex, academic adjustment, and social adjustment.

All variables were normally distributed, as assessed by the Shapiro-Wilk test ($p > .05$). There were no outliers. Hence, no assumption was violated. The results showed that each score obtained from each scale and each subscale were correlated significantly with each other ($p < .01$). Age of the participants showed a positive significant correlation with overall college adjustment ($r = .13, p < .01$), adjustment to university ($r = .12, p < .01$), emotional adjustment ($r = .10, p < .01$), and relations with the opposite sex ($r = .12, p < .01$). However, years spent in Istanbul showed no significant correlation with any other variable. (see Table 3).

Table 3. Pearson Correlations for Research Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Depression Subscale (DASS)	1											
2. Anxiety Subscale (DASS)	.66**	1										
3. MAAS	-.28**	-.27**	1									
4. ULS Total	-.71**	-.58**	.30**	1								
5. Adjustment to University	-.47**	-.34**	.19**	.74**	1							
6. Emotional Adjustment	-.63**	-.56**	.24**	.82**	.43**	1						
7. Personal Adjustment	-.63**	-.47**	.31**	.76**	.49**	.64**	1					
8. Relations with Opposite Sex	-.47**	-.39**	.21**	.71**	.39**	.53**	.41**	1				
9. Academic Adjustment	-.39**	-.40**	.19**	.68**	.40**	.52**	.39**	.36**	1			
10. Social Adjustment	-.59**	-.45**	.22**	.72**	.46**	.52**	.52**	.55**	.33**	1		
11. Years Spent in Istanbul	-.07	-.08	.05	.04	.08	-.01	-.04	.05	.08	.03	1	
12. Age	-.04	-.03	.06	.13*	.12*	.10*	.06	.12*	.07	.05	.19**	1

* $p < .05$, ** $p < .01$

ULS (University Life Scale), MAAS (Mindful Attention Awareness Scale), DASS (Depression Anxiety Stress Scale).

4.2 Results according to research questions

Before multiple regression analyses took place, multiple linear regression assumptions were checked. Sample size should be adequate to run multiple regression analysis. For the required sample size, $N \geq 50 + 8m$ (m is the number of IVs) was suggested as a rule (Tabachnick & Fidell, 2007). Hence, the sample size was found adequate ($n = 358$, in this study) for the multiple linear regression analyses. There was independence of residuals, as assessed by a Durbin-Watson statistic of 2.08. Linear relationships were found between the predictor variables (depression, anxiety, and mindfulness levels) and the dependent variable (college adjustment level). No multicollinearity was found, as assessed by VIF and Tolerance values (VIF values were lower than 10 and Tolerance values were higher than .1) (Field, 2013). Since outliers may affect the results, they were checked. No significant outliers were found as assessed by scatterplots. Also, Cook's Distance values and DFBeta values were all under 1, suggesting there were no outliers. Moreover, histogram and normal p-p plot of residuals were checked for the normality of residuals. The assumptions of linearity, independence of errors, and homoscedasticity were met. There were no outliers and normality of residuals was as expected (Field, 2013; Tabachnick & Fidell, 2007).

The research question in this study was “Do anxiety, depression, and mindfulness levels of students predict college adjustment levels? Which one is a better predictor of college adjustment levels?” In order to answer this research question, multiple linear regression was utilized.

The results revealed that anxiety, depression, and mindfulness levels of participants significantly predicted college adjustment levels, $F(3, 354) = 136.27, p < .0005$, adj. $R^2 = .53$. This model was able to explain 53% of the variance in college

adjustment. All three variables were significant in the prediction ($p < .05$).

Regression coefficients and standard errors can be found in Table 4. According to these results, depression ($\beta = -.56, p < .001$) was the most powerful predictor of college adjustment. Then, it was followed by anxiety ($\beta = -.19, p < .001$). In the end, mindfulness ($\beta = .09, p < .05$) was found to be the least powerful indicator among the three variables.

Table 4. Summary of Multiple Linear Regression Analysis

Variable	<i>B</i>	<i>SE B</i>	β
Depression	-2.11	.18	-.56**
Anxiety	-.88	.23	-.19**
Mindfulness	.29	.12	.09*

* $p < .05$, ** $p < .001$

CHAPTER 5

DISCUSSION

In this section, findings of the current study are discussed. The section is presented under six different headings. Firstly, the purpose of this study was restated. Secondly, a general discussion took place regarding the features of the sample of the current study. Thirdly, findings were discussed in regard to the related literature and the research questions of the current study. Then, strengths of the current study, limitations, and recommendations were discussed. Lastly, the conclusion of the study was presented.

5.1 Purpose of the study

The primary purpose of this study was to investigate the relationship between anxiety, depression, mindfulness, and college adjustment levels of the participants. With the results acquired from this examination, this study also aimed to provide information for preventive interventions in Turkish universities.

5.2 General discussion

In the general discussion section, the general features and characteristics of the sample and the results from the preliminary analysis of the data were discussed. Main headlines for these discussions are as follows; (1) the relationship between anxiety and college adjustment, (2) the relationship between depression and college adjustment, and (3) the relationship between mindfulness and college adjustment.

5.2.1 Relationship between anxiety and college adjustment

According to the norms of DASS (Bilgel & Bayram, 2010), the anxiety levels of participants showed that they were mildly anxious on the average. The anxiety levels of participants were significantly correlated with college adjustment and the correlation was highly negative. This meant that as anxiety level increased, the college adjustment level decreased. The anxiety levels of participants had also a significant negative correlation with the subscales of ULS. Regarding the six dimensions of college adjustment separately, significant negative correlations were found between anxiety level and adjustment to university, emotional adjustment, personal adjustment, relations with opposite sex, academic adjustment, and social adjustment. These findings were parallel to previous research. According to two different studies, people with a high anxiety level showed low levels of college adjustment (Nordstrom et al., 2014; Conley et al., 2013). Another study showed that people with high levels of social anxiety exhibited low levels of social skills, more attention problems, and more learning problems (Bernstein et al., 2008).

Arnett (2015) defines emerging adulthood as a period of many changes. These changes put burden on individuals and they try to adapt to them. In the process, these changes may result with developing anxieties. The findings in this study also support this idea of Arnett (2015).

5.2.2 Relationship between depression and college adjustment

When the norms of DASS (Bilgel & Bayram, 2010) are considered, the depression levels of all the participants showed that they were mildly depressed on the average. The depression levels of participants were significantly correlated with college adjustment and the correlation was strongly negative; meaning that as the depression

level increased, the college adjustment level decreased highly. Considering the six dimensions of the college adjustment variable separately, significant negative correlations were found between adjustment to university and depression levels, emotional adjustment and depression levels, personal adjustment and depression levels, relations with opposite sex and depression levels, academic adjustment and depression levels, and social adjustment and depression levels. These relationships between variables were similar to previous research findings in the related literature.

Past research showed that higher levels of psychological well-being and lower levels of depressive symptoms were related with higher levels of overall college adjustment (Wintre & Yaffe, 2000). Buddington (2002) found that less stress and depressive symptoms were related to higher levels of academic success and adjustment. Arnett (2015) defines emerging adulthood as a critical period. Hence, he states that people experience anxieties during this time as a response to transitions. They also might experience depressive symptoms. The findings of the current study also reflected ideas of Arnett (2015) regarding emerging adulthood. People in this stage feel in-between adulthood and teenage years. The changes in their lives put increasing burdens and responsibilities on them. Hence, it might be realistic to expect future anxiety and depression symptoms to some extent.

5.2.3 Relationship between mindfulness and college adjustment

The mindfulness levels of participants were significantly correlated with college adjustment. The correlation was positive and moderate meaning that as mindfulness levels increased, the college adjustment levels also increased. Analyzing the six dimensions of college adjustment separately, significant positive correlations were found between adjustment to university and mindfulness levels, emotional

adjustment and mindfulness levels, personal adjustment and mindfulness levels, relations with opposite sex and mindfulness levels, academic adjustment and mindfulness levels, and social adjustment and mindfulness levels. According to these results, it seemed that mindfulness is weakly or moderately correlated with college adjustment and its subcategories. These results were pretty similar to the results of previous related studies. Bergin and Pakenham (2016) found a moderate correlation between college adjustment and mindfulness levels of participants. In addition, increased mindfulness levels with mindful meditation practice resulted with significantly increased levels of college adjustment (Ramler et al., 2016).

5.3 Discussion of the results according to the research question

The research question was “Do anxiety, depression, and mindfulness levels of students predict college adjustment levels? Which one is a better predictor (anxiety, depression, and mindfulness as predictors) of college adjustment levels?”

Multiple linear regression analysis was utilized in order to answer the research question. According to results of the analysis, it was found that depression, anxiety, and mindfulness levels of participants were able to predict college adjustment, significantly. If we were to look the nature of the relationship, college adjustment was negatively correlated with both anxiety and depression; whereas, college adjustment was positively correlated with mindfulness. When further investigations were made, depression was the best predictor among these variables, followed by anxiety, and the least powerful predictor was mindfulness. In addition to these, this regression model was able to explain 53% of variance in the scores. Therefore, the independent variables together (anxiety, depression, and mindfulness) were pretty good at predicting the dependent variable (college adjustment).

These results showed that the best predictor of college adjustment was depression, whereas the least powerful predictor was mindfulness. Although mindfulness was able to significantly predict some changes in college adjustment, it was very low in uniqueness. In the literature, there were some studies which asserted that mindfulness had no role in predicting college adjustment (Duncan, 2015). On the other hand, Chase (2009) had concluded that mindfulness was related to college adjustment. Hence, it was important to observe the unique contribution of mindfulness since, there were varying results regarding this relationship.

College adjustment and mindfulness showed a positive correlation with each other, varying from low levels to moderate levels in different studies (Bergin & Pakenham, 2016; Ramler et al., 2016; Sheehy & Horan, 2004). Hence, it could be stated that the correlational findings of the current study were similar to the findings in the related literature. Mindfulness has usually been studied as a moderator variable in different studies (Bergin & Pakenham, 2016; Cole et al., 2015; Yang, et al., 2017). Therefore, it has been mostly regarded as a protector variable against risks and adverse effects. This study aimed to find a direct positive effect of mindfulness on college adjustment. In fact, a positive effect was found, but it was relatively small. Mindfulness-based interventions have been demonstrated to be effective with young people in many studies (Lakey et al., 2011; Mrazek et al., 2013; Stefan et al., 2018). Thus, researchers may choose to continue looking into the moderation role of mindfulness and effects of mindfulness-based interventions.

In the nature of depression, there are feelings of isolation and low levels of energy (American Psychiatric Association, 2013). These might be the primary reasons why depression affects college adjustment as the strongest predictor. By definition, people who exclude themselves from daily life and activities would be

much more likely to have adjustment problems. On the other hand, people probably handle daily life and activities better with anxiety because anxiety is more situation-specific and usually affects particular areas of individuals' lives (American Psychiatric Association, 2013). Hence, it is not as pervasive as depression. For the case of mindfulness, it might have a weaker role when there are moderate levels of depression and anxiety as the sample of this study have. Mindfulness might have a bigger role in the cases in which individuals have low levels of anxiety and depression. High-functioning individuals might be more able to benefit from mindfulness.

5.4 Strengths of the study

One of the strengths of this study was its sample size. The sample size was 358 which is not small. This in turn contributed to achieving more accurate results.

The current study also pointed out that depression and anxiety were powerful at predicting college adjustment. This was also parallel to other findings in the related literature (Bernstein et al., 2008; Buddington, 2002; Conley, et al., 2013; Nordstrom et al., 2014; Wintre & Yaffe, 2000).

A final strength of this study was related to its purpose. The developmental phase of emerging adulthood is an important era for individuals. The elevated fluctuations and changes bring burden to young people (Arnett, 2015). As one might expect, with great changes come great risks for these individuals. They face many different challenges. Hence, it is important for mental health practitioners to know their situation in detail and support them with various methods. This study focused on overall college adjustment and it aimed to contribute to the preventive and supportive functions of counseling in colleges.

5.5 Limitations of the study, future directions, and recommendations

One possible limitation of this study was related to the representativeness of the sample. The sample did not have its gender distribution, similarly. It had 25.7% male, 70.9% female and 3.4% other (or does not want to state).

Another limitation was related to the generalizability of the data. This study was conducted with voluntary students in a public university. This particular public university only accepts high achieving students through the university entrance exam. Also, convenience sampling method was used for this study. These might affect the generalizability of the results to the overall college student population in Turkey.

As a future direction and recommendation, this study suggests that additional research might look at the relationship between mindfulness and college adjustment from a different angle. When similar mindfulness studies were looked at, results showed that examining mindfulness as a moderator variable gave significant results (Bergin & Pakenham, 2016; Cole et al., 2015; Yang, et al., 2017). For instance, Bergin and Pakenham's study showed that mindfulness had a buffer role in college adjustment. Hence, future studies may further analyze the effects of mindfulness on college adjustment as a moderator variable.

5.6 Conclusion

The findings from this research were mostly parallel to the findings in the related literature. College adjustment levels of participants were found to be negatively correlated with anxiety and depression levels of participants. Whereas, mindfulness levels of participants were positively correlated with college adjustment levels. In

addition to these findings, when the domains of college adjustment were analyzed individually, similar results were observed.

As the main point of this study, it was found that anxiety, depression, and mindfulness levels explained 53% of the variance in college adjustment levels. Specifically, depression levels were the largest contributor, followed by anxiety levels. In addition, mindfulness levels showed a significantly unique contribution in explaining college adjustment, but this effect was rather small.

This research aimed to contribute to the understanding of the predictors of college adjustment. When the correlational relationships between these variables were taken into account, it could be stated that mindfulness may have an indirect effect on college adjustment through the mediating roles of anxiety and depression.

APPENDIX A

ETHICS COMMITTEE APPROVAL

T.C.
BOĞAZIÇI ÜNİVERSİTESİ
Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu

Sayı: 2019-20

7 Mart 2019

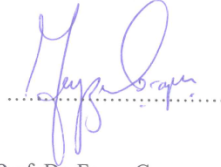
Fuat Can Çalışkan
Eğitim Bilimleri

Sayın Araştırmacı,

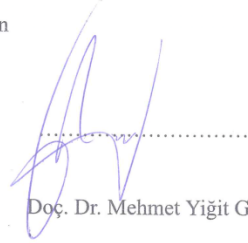
"Üniversiteye uyumda kaygı, depresyon ve bilinçli farkındalığın rolü" başlıklı projeniz ile ilgili olarak yaptığımız SBB-EAK 2019/24 sayılı başvuru komisyonumuz tarafından 7 Mart 2019 tarihli toplantıda incelenmiş ve uygun bulunmuştur.




Dr. Öğr. Üyesi İnci Ayhan



Prof. Dr. Feyza Çorapçı



Doç. Dr. Mehmet Yiğit Gürdal



Doç. Dr. Ebru Kaya



Dr. Öğr. Üyesi Şebnem Yalçın

APPENDIX B

INFORMED CONSENT FORM

Supporting Research Institution: Boğaziçi University

Name of the Research: The role of anxiety, depression, and mindfulness in predicting college adjustment

Project Director: Assist. Prof. Sibel Akmehmet Şekerler (Thesis Advisor)

Address: Boğaziçi University, North Campus Faculty of Education, 2nd-3rd Floors 34342 Bebek / İstanbul

E-mail address: akmehmet@boun.edu.tr **Phone:** 0212 359 4616

Name of the Researcher: Fuat Can Çalışkan

E-mail address: fuat.caliskan@boun.edu.tr **Phone:** 0232 421 80 21

Fuat Can Çalışkan, a graduate student in the Department of Educational Sciences at Boğaziçi University, conducts a scientific research project titled "The role of anxiety, depression, and mindfulness in predicting college adjustment". The aim of this study is to investigate the relationship between depression, anxiety, mindfulness, and university adjustment among university students. Approximately 200 participants are needed for the project. Participants consist of students enrolled at Boğaziçi University. All scales will be filled in under the control of the researcher and project director with the approval of the ethics committee of Boğaziçi University.

If you agree to participate in this research, we expect you to fill out the demographic form that includes questions of age, gender, department, class, place of birth, most lived city, income level, and place of residence, and then fill out 3 separate scales of 105 questions. It takes approximately 20 minutes to complete the demographic information form and scales. The data obtained in the research will be evaluated collectively and all the information of the participants will remain anonymous. When the research is completed, the collected paper or digital forms will be destroyed and deleted. Participation in the study is voluntary and no prizes or fees will be given to the participants.

This research is carried out for scientific purposes and the confidentiality of the participant information is protected. The scales you fill out will not be matched with your names. Participation in this research is entirely voluntary. If you participate, you have the right to withdraw your consent at any stage of the study without giving any reason. For further information about the research project, please contact Boğaziçi University Educational Sciences master student Fuat Can Çalışkan (0232 421 80 21) or Assist. Prof. Sibel Akmehmet Şekerler (0212 359 46 16). If you have any questions about your rights related to research, you can consult Boğaziçi University Ethics Committee for Master and PhD Theses in Social Sciences and Humanities.

I have read the text above and fully understood the scope and purpose of the study I was asked to participate and my responsibilities as a participant. I had the opportunity to ask questions about the study. I understood that I could quit this study at any time and without giving any reason, and that I would not encounter any negativity.

In these circumstances, I voluntarily agree to participate in the research without any pressure or coercion.

Name and Surname of the Participant:.....

Signature:.....

Date (day/month/year):...../...../.....

APPENDIX C

INFORMED CONSENT FORM (TURKISH)

Araştırmayı destekleyen kurum: Boğaziçi Üniversitesi

Araştırmacının adı: Üniversiteye uyumda depresyon, kaygı ve bilinçli farkındalığın rolü

Proje Yürütücüsü/Araştırmacının adı: Dr. Öğr. Üyesi Sibel Akmehmet Şekerler (Tez Danışmanı)

Adresi: Eğitim Bilimleri Bölümü, Boğaziçi Üniversitesi, Kuzey Kampus Eğitim Fakültesi, Kat: 2-3 34342 Bebek / İstanbul

E-mail adresi: akmehmet@boun.edu.tr

Telefonu: 0212 359 4616

Araştırmacının adı: Fuat Can Çalışkan

E-mail adresi: fuat.caliskan@boun.edu.tr

Telefonu: 0232 421 80 21

Boğaziçi Üniversitesi Eğitim Bilimleri Bölümü yüksek lisans öğrencisi Fuat Can Çalışkan “Üniversiteye uyumda depresyon, kaygı ve bilinçli farkındalığın rolü” adı altında bilimsel bir araştırma projesi yürütmektedir. Bu çalışmanın amacı üniversite öğrencilerinde depresyon, kaygı, bilinçli farkındalık ve üniversiteye uyum arasındaki ilişkiyi incelemektir. Projenin gerçekleşmesi için yaklaşık 200 kişiye ihtiyaç vardır. Katılımcılar Boğaziçi Üniversitesinde kayıtlı öğrencilerden oluşmaktadır. Tüm ölçekler Boğaziçi Üniversitesi etik kurulu onayı ile araştırmacı ve proje yürütücüsü kontrolünde doldurulacaktır.

Bu araştırmaya katılmayı kabul ettiğiniz takdirde sizden öncelikle yaş, cinsiyet, bölüm, sınıf, doğum yeri, en çok yaşanan şehir, gelir düzeyi, kaldığınız yer ile ilgili demografik formu doldurmanızı ve sonrasında toplam 105 sorudan oluşan 3 ayrı ölçeği doldurmanızı bekliyoruz. Demografik bilgi formu ve ölçeklerin doldurulması yaklaşık 20 dakika sürmektedir. Araştırmada elde edilen veriler topluca değerlendirilecek ve katılımcıların tüm bilgileri anonim kalacaktır. Araştırma tamamlandığında toplanan kağıt veya dijital formlar yok edilecek ve silinecektir. Çalışmaya katılım gönüllülük esasına dayalı olup katılımcılara herhangi bir ödül veya ücret verilmeyecektir.

Bu araştırma bilimsel bir amaçla yapılmaktadır ve katılımcı bilgilerinin gizliliği esas tutulmaktadır. Doldurduğunuz ölçekler ile isimleriniz eşleştirilmeyecektir. Bu araştırmaya katılmak tamamen isteğe bağlıdır. Katıldığınız takdirde çalışmanın herhangi bir aşamasında sebep göstermeden onayınızı çekme hakkına sahipsiniz. Araştırma projesi hakkında ek bilgi almak istediğinizde lütfen Boğaziçi Üniversitesi Eğitim Bilimleri Bölümü yüksek lisans öğrencisi Fuat Can Çalışkan (0232 421 80 21) veya Dr. Öğr. Üyesi Sibel Akmehmet Şekerler (Telefon: 0 212 359 4616) ile temasa geçiniz. Araştırmayla ilgili haklarınız konusunda ve herhangi bir sorunuz olduğunda Boğaziçi Üniversitesi Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonuna danışabilirsiniz.

Yukarıdaki metni okudum ve katılmam istenen çalışmanın kapsamını ve amacını, gönüllü olarak üzerime düşen sorumlulukları tamamen anladım. Çalışma hakkında soru sorma imkanı buldum. Bu çalışmayı istediğim zaman ve herhangi bir neden belirtmeksizin bırakabileceğimi ve bıraktığım takdirde herhangi bir olumsuzluk ile karşılaşmayacağımı anladım.

Bu koşullarda söz konusu araştırmaya kendi isteğimle, hiçbir baskı ve zorlama olmaksızın katılmayı kabul ediyorum.

Katılımcı Adı-Soyadı:.....

İmzası:

Tarih (gün/ay/yıl):...../...../.....

APPENDIX D

DEMOGRAPHIC INFORMATION SHEET

Demographic Information Sheet

Date of Birth:

Gender:

Department/Faculty:

If Preparatory Student, Class Level:

If Preparatory Student, Campus:

If Department Student, Class Level:

Birth Place:

Most Lived City:

Perceived SES: Low _____

Middle _____

High _____

Years Spent in Istanbul:

Residency Status: Home with Family/Relatives _____

Dormitory _____

Home with Friends _____

Other (Please State) _____

APPENDIX E

DEMOGRAPHIC INFORMATION SHEET (TURKISH)

Demografik Bilgi Formu

Doğum yılı:

Cinsiyet:

Bölüm/Fakülte:

Hazırlık ise Sınıf Seviyesi:

Hazırlık ise Kampüsü:

Bölümde ise Kaçınıcı Sınıf:

Doğum Yeri:

En Uzun Süre Yaşanan Şehir:

Algılanan Gelir Düzeyi: Düşük _____

Orta _____

Yüksek _____

Kaç yıldır İstanbul'da yaşıyorsunuz:

Nerede kalıyorsunuz: Ailele Ev _____

Yurt _____

Arkadaşlarımla Ev _____

Diğer (Lütfen Belirtiniz) _____

APPENDIX F

DEPRESSION ANXIETY STRESS SCALE

Depression, Anxiety and Stress Scale (DASS)

This scale is developed for assessing depression, anxiety, and stress levels of participants. Please answer questions considering your last week and pick the most suitable answer.

	YOUR CASE IN THE LAST WEEK	Never	Rarely and sometimes	Frequently	Always
1	I found myself getting upset by quite trivial things	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I just couldn't seem to get going	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I had a feeling of shakiness (eg, legs going to give way)	0	1	2	3
8	I found it difficult to relax	0	1	2	3
9	I found myself in situations that made me so anxious I was most relieved when they ended	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting upset rather easily	0	1	2	3
12	I felt that I was using a lot of nervous energy	0	1	2	3
13	I felt sad and depressed	0	1	2	3
14	I found myself getting impatient when I was delayed in any way (eg, lifts, traffic lights, being kept waiting)	0	1	2	3
15	I had a feeling of faintness	0	1	2	3
16	I felt that I had lost interest in just about everything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3

19	I perspired noticeably (eg, hands sweaty) in the absence of high temperatures or physical exertion	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life wasn't worthwhile	0	1	2	3
22	I found it hard to wind down	0	1	2	3
23	I had difficulty in swallowing	0	1	2	3
24	I couldn't seem to get any enjoyment out of the things I did	0	1	2	3
25	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
26	I felt down-hearted and blue	0	1	2	3
27	I found that I was very irritable	0	1	2	3
28	I felt I was close to panic	0	1	2	3
29	I found it hard to calm down after something upset me	0	1	2	3
30	I feared that I would be "thrown" by some trivial but unfamiliar task	0	1	2	3
31	I was unable to become enthusiastic about anything	0	1	2	3
32	I found it difficult to tolerate interruptions to what I was doing	0	1	2	3
33	I was in a state of nervous tension	0	1	2	3
34	I felt I was pretty worthless	0	1	2	3
35	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
36	I felt terrified	0	1	2	3
37	I could see nothing in the future to be hopeful about	0	1	2	3
38	I felt that life was meaningless	0	1	2	3
39	I found myself getting agitated	0	1	2	3

40	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
41	I experienced trembling (eg, in the hands)	0	1	2	3
42	I found it difficult to work up the initiative to do things	0	1	2	3

APPENDIX G

DEPRESSION ANXIETY STRESS SCALE (TURKISH)

Depresyon Anksiyete Stres Ölçeği (DASÖ)

Bu ölçek kişilerin depresyon, anksiyete ve stres belirti düzeylerini belirlemek amacıyla oluşturulmuştur. Lütfen aşağıdaki maddeleri son 1 haftadaki durumunuza göre değerlendirerek size uygun olan cevap seçeneğini işaretleyin.

SON 1 HAFTADAKİ DURUMUNUZ	Bana hiç uygun değil	Bazen bana uygun	Bana genellikle uygun	Bana tamamen uygun
1. Oldukça önemsiz şeyler için üzüldüğümü fark ettim.				
2. Ağzımda kuruluk olduğunu fark ettim.				
3. Hiç olumlu duygu yaşamadığımı fark ettim.				
4. Soluk almada zorluk çektim (örneğin fizik egzersiz yapmadığım halde aşırı hızlı nefes alma, nefessiz kalma gibi).				
5. Hiçbir şey yapamaz oldum.				
6. Olaylara aşırı tepki vermeye meyilliyim.				
7. Bir sarsaklık duygusu vardı (sanki bacaklarım beni taşıyamayacakmış gibi).				
8. Kendimi gevşetip salıvermek zor geldi.				
9. Kendimi, beni çok tedirgin ettiği için sona erdiğinde çok rahatladığım durumların içinde buldum.				
10. Hiçbir beklentimin olmadığı hissine kapıldım.				
11. Keyfimin pek kolay kaçırılabilirdi hissine kapıldım.				
12. Sinirsel enerjimi çok fazla kullandığımı hissettim.				
13. Kendimi üzgün ve depresif hissettim.				
14. Herhangi bir şekilde geciktirildiğimde (asansörde, trafik ışıklarında,				

<i>bekletildiğimde)</i> sabırsızlandığımı hissettim.				
15. Baygınlık hissine kapıldım.				
16. Neredeyse her şeye karşı olan ilgimi kaybettiğimi hissettim.				
17. Birey olarak rahatsız olduğumu hissettim				
18. Alınan olduğumu hissettim.				
19. Fizik egzersiz veya aşırı sıcak hava olmasa bile belirgin biçimde terlediğimi gözledim (<i>örneğin ellerim terliyordu</i>).				
20. Geçerli bir neden olmadığı halde korktuğumu hissettim.				
21. Hayatın değersiz olduğunu hissettim.				
22. Gevşeyip rahatlamakta zorluk çektim.				
23. Yutma güçlüğü çektim.				
24. Yaptığım işlerden zevk almadığımı fark ettim.				
25. Fizik egzersiz söz konusu olmadığı halde kalbimin hareketlerini hissettim (<i>kalp atışlarımın hızlandığını veya düzensizleştiğini hissettim</i>).				
26. Kendimi perişan ve hüzünlü hissettim.				
27. Kolay sinirlendirilebildiğimi fark ettim.				
28. Panik haline yakın olduğumu hissettim.				
29. Bir şey canımı sıktığında kolay sakinleşemediğimi fark ettim.				
30. Önemsiz fakat alışkın olmadığım bir işin altından kalkamayacağım korkusuna kapıldım.				
31. Hiçbir şey bende heyecan uyandırmıyordu.				
32. Bir şey yaparken ikide bir rahatsız edilmeyi hoş göremediğimi fark ettim.				
33. Sinirlerimin gergin olduğunu hissettim.				

34. Oldukça değersiz olduğumu hissettim.				
35. Beni yaptığım işten alıkoyan şeylere dayanamıyordum.				
36. Dehşete düştüğümü hissettim.				
37. Gelecekte ümit veren bir şey göremedim.				
38. Hayatın anlamsız olduğu hissine kapıldım.				
39. Kışkırtılmakta olduğumu hissettim.				
40. Panikleyip kendimi aptal durumuna düşüreceğim durumlar konusunda endişelendim.				
41. Vücudumda (<i>örneğin ellerimde</i>) titremeler oldu.				
42. Bir iş yapmak için gerekli olan ilk adımı atmada zorlandım.				

APPENDIX H

UNIVERSITY LIFE SCALE

UNIVERSITY LIFE SCALE

There are 48 statements regarding emotions, thoughts and expectations related to university life. After reading each statement, think how much that statement suits you considering your experiences for the last a few days, then pick a choice varying from "Completely Disagree (1)" to "Completely Agree (7)".

	Completely Disagree				Completely Agree		
1. I feel anxious about getting into student clubs.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2. I usually feel tense.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
3. I love myself.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
4. I cannot get close with my friends.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
5. I have trouble in understanding the topics covered in class.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
6. I feel lonely.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
7. I am not happy with being a university student.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
8. I always think that events will go bad.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
9. I lead my life as I please.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
10. Sexuality scares me.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
11. I am afraid in speaking in class.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
12. I get along with people in which I stay with.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
13. I feel distant to this university's culture.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
14. I usually blame myself in the face of events.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
15. I bear the consequences of my decisions.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
16. I think nobody would like to go out with me.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
17. I could not adapt to where I stay.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
18. I believe university will fulfil my expectations.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
19. I have trouble with understanding my emotions.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
20. I feel comfortable in places in which I am with opposite sex.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
21. I am not happy with my relationships with my teachers.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
22. I often experience conflicts with my family.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
23. I am familiar with university support services (Cultural Services, Sport Department, Student Affairs).	(1)	(2)	(3)	(4)	(5)	(6)	(7)
24. I have trouble with saying no.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
25. I find education in this university hard.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

	Completely Disagree				Completely Agree		
26. My values are compatible with others' values in this university.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
27. I have troubles with ending a relationship that I do not please to continue.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
28. I spare myself free time.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
29. I could not adjust the university life.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
30. I am content with my sexual life.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
31. I have troubles with getting new friends.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
32. Customs of my friends from university are stranger to me.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
33. I feel uneasy getting into a conflict in my relations.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
34. I trust myself.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
35. I have troubles with following lectures in English.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
36. I communicate easily in my family.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
37. I feel comfortable in the campus.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
38. I often feel down.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
39. I accept myself both with my negative and positive qualities.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
40. I do not participate in social and cultural events in university.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
41. I have troubles with maintaining a romantic relationship	(1)	(2)	(3)	(4)	(5)	(6)	(7)
42. I cannot be successful in exams although I study.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
43. I feel like a part of this university.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
44. I have troubles with making decision.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
45. I am worthy at least as much as others.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
46. I have trouble with getting emotional relationship.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
47. I am not sure that I can be successful or not in classes.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
48. I know the city in which the university is located.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

APPENDIX I

UNIVERSITY LIFE SCALE (TURKISH)

ÜNİVERSİTE YAŞAMI ÖLÇEĞİ

Aşağıda üniversite yaşantısıyla ilişkili olabilecek duygu, düşünce ve beklentileri ifade eden 48 cümle bulunmaktadır. Her bir ifadeyi okuduktan sonra *son birkaç gündür* yaşadıklarınızı göz önünde bulundurarak her cümledeki ifadenin size ne derece uygun olduğunu cümlelerin karşısında verilen “Bana hiç uygun değil (1)” - “Bana tamamen uygun (7)” seçeneklerinden birini işaretleyerek belirtiniz.

	Bana Hiç Uygun Değil					Bana Tamamen Uygun	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Üniversitedeki topluluklara girmeye çekinirim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2. Kendimi genellikle gergin hissederim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
3. Kendimi severim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
4. Arkadaşlarımla yakınlaşmam	(1)	(2)	(3)	(4)	(5)	(6)	(7)
5. Derslerde işlenen konuları anlamakta zorluk çekiyorum	(1)	(2)	(3)	(4)	(5)	(6)	(7)
6. Kendimi yalnız hissederim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
7. Üniversite öğrencisi olmaktan memnun değilim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
8. Olayların hep kötü gideceğini düşünürüm.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
9. Hayatımı istediğim gibi yönlendiririm.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
10. Cinsellik beni korkutur.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
11. Sınıf içinde konuşmaktan çekinirim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
12. Kaldığım yerdeki kişilerle anlaşırım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
13. Kendimi bu üniversitenin kültürüne uzak hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
14. Genellikle olaylar karşısında kendimi suçlarım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
15. Kararlarımın sonuçlarına katlanırım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
16. Benimle kimsenin çıkmak istemeyeceğini düşünüyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
17. Kaldığım yere uyum sağlayamadım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
18. Üniversitenin beklentilerine cevap vereceğini düşünüyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
19. Duygularımı anlamakta zorlanırım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
20. Karşı cinsle birlikte bulunduğum ortamlarda kendimi rahat hissederim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
21. Öğretmenlerimle ilişkilerimden memnun değilim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
22. Aile içinde sık sık çatışmalar yaşarım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
23. Üniversitedeki destek birimlerini (Kültür İşleri, Spor Müdürlüğü, Öğrenci İşleri gibi) tanıyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
24. Hayır demekte güçlük yaşarım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
25. Bu üniversitenin eğitimini zor buluyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

	Bana Hiç Uygun Değil					Bana Tamamen Uygun	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
26. Değerlerim bu üniversitedeki kişilerin değerleri ile uyuyor.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
27. Devam etmesini istemediğim ilişkilerimi bitirmekte zorlanırım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
28. Kendime zaman ayırırım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
29. Üniversite yaşamına uyum sağlayamadım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
30. Cinsel yaşamımdan memnunum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
31. Arkadaş edinmekte güçlük yaşıyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
32. Üniversitedeki arkadaşlarımdan örf ve adetleri bana yabancı gelir.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
33. İlişkilerimde çatışmaya girmekten çekinirim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
34. Kendime güvenirim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
35. Dersleri İngilizce takip etmekte zorluk çekiyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
36. Aile içinde rahat iletişim kurarım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
37. Kampüste (yerleşke) kendimi rahat hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
38. Sık sık moralim bozulur.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
39. Kendimi olumlu ve olumsuz yönlerimle kabul ederim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
40. Üniversitedeki sosyal/kültürel etkinliklere katılmıyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
41. Çıktığım kişi ile ilişkiyi sürdürmekte sıkıntı çekerim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
42. Çalıştığım halde sınavlarda başarılı olamam.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
43. Kendimi üniversitenin bir parçası gibi hissediyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
44. Karar vermekte güçlük çekerim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
45. Bende en az diğer insanlar kadar değerliyim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
46. Birisiyle duygusal ilişkiye girmekte zorlanırım.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
47. Derslerde başarılı olup olamayacağımdan emin değilim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
48. Üniversitenin bulunduğu şehri tanıyorum.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

APPENDIX J

MINDFUL ATTENTION AWARENESS SCALE

Day-to-Day Experiences

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what *really reflects* your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I could be experiencing some emotion and not be conscious of it until some time later.	1	2	3	4	5	6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5	6
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	1	2	3	4	5	6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1	2	3	4	5	6
I forget a person's name almost as soon as I've been told it for the first time.	1	2	3	4	5	6
It seems I am "running on automatic," without much awareness of what I'm doing.	1	2	3	4	5	6
I rush through activities without being really attentive to them.	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I'm doing.	1	2	3	4	5	6
I find myself listening to someone with one ear, doing something else at the same time.	1	2	3	4	5	6

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I drive places on 'automatic pilot' and then wonder why I went there.	1	2	3	4	5	6
I find myself preoccupied with the future or the past.	1	2	3	4	5	6
I find myself doing things without paying attention.	1	2	3	4	5	6
I snack without being aware that I'm eating.	1	2	3	4	5	6

APPENDIX K

MINDFUL ATTENTION AWARENESS SCALE (TURKISH)

BİFÖ

Açıklama: Aşağıda sizin günlük deneyimlerinize ilgili bir dizi durum verilmiştir. Lütfen her bir maddenin sağında yer alan 1 ile 6 arasındaki ölçeği kullanarak her bir deneyimi ne kadar sık veya nadiren yaşadığınızı belirtiniz. Lütfen deneyiminiz **ne olması gerektiğini değil, sizin deneyiminizi gerçekten neyin etkilediğini** göz önünde bulundurarak cevaplayınız. Lütfen her bir maddeyi diğerlerinden ayrı tutunuz.

	1	2	3	4	5	6
	Hemen hemen her zaman	Çoğu zaman	Bazen	Nadiren	Oldukça Seyrek	Hemen hemen hiçbir zaman
1. Belli bir süre farkında olmadan bazı duyguları yaşayabilirim.						1 2 3 4 5 6
2. Eşyaları özensizlik, dikkat etmeme veya başka bir şeyleri düşündüğüm için kırırım veya dökerim.						1 2 3 4 5 6
3. Şu anda olana odaklanmakta zorlanırım.						1 2 3 4 5 6
4. Gideceğim yere, yolda olup bitenlere dikkat etmeksizin hızlıca yürüyerek gitmeyi tercih ederim.						1 2 3 4 5 6
5. Fiziksel gerginlik ya da rahatsızlık içeren duyguları, gerçekten dikkatimi çekene kadar fark etmeme eğilimim vardır.						1 2 3 4 5 6
6. Bir kişinin ismini, bana söylendikten hemen sonra unuturum.						1 2 3 4 5 6
7. Yaptığım şeyin farkında olmaksızın otomatik bağlanmış gibi yapıyorum.						1 2 3 4 5 6
8. Aktiviteleri gerçekte ne olduklarına dikkat etmeden acele ile yerine getiririm.						1 2 3 4 5 6
9. Başarmak istediğim hedeflere öyle çok odaklanırım ki o hedeflere ulaşmak için şuan ne yapıyor olduğumun farkında olmam.						1 2 3 4 5 6
10. İşleri veya görevleri ne yaptığımın farkında olmaksızın otomatik olarak yaparım.						1 2 3 4 5 6
11. Kendimi bir kulağımla birini dinlerken; aynı zamanda başka bir şeyi de yaparken bulurum.						1 2 3 4 5 6
12. Gideceğim yerlere farkında olmadan gidiyor, sonra da oraya neden gittiğime şaşırıyorum.						1 2 3 4 5 6
13. Kendimi gelecek veya geçmişle meşgul bulurum.						1 2 3 4 5 6
14. Kendimi yaptığım işlere dikkatimi vermemiş bulurum.						1 2 3 4 5 6
15. Ne yediğimin farkında olmaksızın atıştırıyorum.						1 2 3 4 5 6

REFERENCES

- Adams, G. R., & Berzonsky, M. D. (2008). *Blackwell handbook of adolescence*. Malden, MA: Blackwell. doi:10.1002/9780470756607
- Aiken, G. A. (2006). *The potential effect of mindfulness meditation on the cultivation of empathy in psychotherapy: A qualitative inquiry* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global. (UMI No. 3217528)
- Akça, S. Ö., Selen, F., Demir, E., & Demir, T. (2018). Cinsiyet ve yaş farklılıklarının ergenlerin depresyon, anksiyete bozukluğu, kendine zarar verme, psikoz, travma sonrası stres bozukluğu, alkol-uyuşturucu bağımlılığı ve dikkat eksikliği hiperaktivite bozukluğu ile ilişkili sorunlara etkisi. *Dicle Tıp Dergisi*, 45(3), 255-264. doi:10.5798/dicletip.457235
- Akın, A., & Çetin, B. (2007). The depression anxiety and stress scale (DASS): The study of validity and reliability. *Educational Sciences: Theory & Practice*, 7(1), 241-268.
- Al-Khatib, B. A., Awamleh, H. S., & Samawi, F. S. (2012). Student's adjustment to college life at Albalqa Applied University. *American International Journal of Contemporary Research*, 11(2), 8-16.
- Aladağ, M., Kağnıcı, D. Y., Tuna, M. E., & Tezer, E. (2003). Üniversite yaşamı ölçeği: Ölçek geliştirme ve yapı geçerliliği üzerine bir çalışma. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 2, 20-41.
- Alataş, G., Kahiloğulları, A.K., & Yanık, M. (2011). Ulusal ruh sağlığı eylem planı (2011-2023). *Ankara, TC Sağlık Bakanlığı*.
- Alidina, S. (2014). *Mindfulness for dummies*. West Sussex, England: John Wiley & Sons.
- Alidina, S., & Marshall, J. J. (2013). *Mindfulness workbook for dummies*. West Sussex, England: John Wiley & Sons.
- Alperden, I. N. (1993). *Some personal, social and familial factors that influence the adjustment levels of METU students*. (Unpublished master's thesis). Hacettepe University, Ankara, Turkey.
- American College Health Association. (2018). American college health association national college health assessment ii: Reference group executive summary spring 2018. Silver Spring, MD: American College Health Association;
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. Washington, DC: Author.

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469.
- Arnett, J. J. (2015). *Emerging adulthood: The winding road from the late teens through the twenties*. New York, NY: Oxford University Press.
- Aselton, P. (2012). Sources of stress and coping in American college students who have been diagnosed with depression. *Journal of Child and Adolescent Psychiatric Nursing*, 25(3), 119-123. doi:10.1111/j.1744-6171.2012.00341.x
- Aspelmeier, J. E., Love, M. M., McGill, L. A., Elliott, A. N., & Pierce, T. W. (2012). Self-esteem, locus of control, college adjustment, and GPA among first-and continuing-generation students: A moderator model of generational status. *Research in Higher Education*, 53(7), 755-781.
- Awasthi, B. (2013). Issues and perspectives in meditation research: In search for a definition. *Frontiers in Psychology*, 3, 613. doi: 10.3389/fpsyg.2012.00613
- Aydın, Y. (2016). *Testing a model of psychological inflexibility, ruminative thinking, worry, and self-compassion in relation to college adjustment* (Doctoral dissertation, Middle East Technical University, Ankara, Turkey). Retrieved from <http://etd.lib.metu.edu.tr/upload/12620101/index.pdf>
- Aylaz, R., Kaya, B., Dere, N., Karaca, Z., & Bal, Y. (2007). Sağlık yüksekokulu öğrencileri arasındaki depresyon sıklığı ve ilişkili etkenler/Depressive symptom frequency among health high school students and the associated factors. *Anadolu Psikiyatri Dergisi*, 8(1), 46.
- Baas, M., Nevicka, B., & Ten Velden, F. S. (2014). Specific mindfulness skills differentially predict creative performance. *Personality and Social Psychology Bulletin*, 40(9), 1092-1106.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10, 125-143. doi:10.1093/clipsy.bpg015
- Baer, R. A. (2015). *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications*. Burlington, MA: Academic Press.
- Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, 31(2), 179-189. doi:10.1037/0022-0167.31.2.179
- Baker, R. W., & Siryk, B. (1999). *SACQ: Student adaptation to college questionnaire*. Los Angeles, CA: Western Psychological Services.
- Bayram, N., & Bilgel, N. (2008). The prevalence and socio-demographic correlations of depression, anxiety and stress among a group of university students. *Social Psychiatry and Psychiatric Epidemiology*, 43(8), 667-672.

- Bergin, A. J., & Pakenham, K. I. (2016). The stress-buffering role of mindfulness in the relationship between perceived stress and psychological adjustment. *Mindfulness*, 7(4), 928-939. doi:10.1007/s12671-016-0532-x
- Bernstein, G.A., Bernat, D.H., Davis, A.A. & Layne, A.E. (2008). Symptom presentation and classroom functioning in a nonclinical sample of children with social phobia. *Depression and Anxiety*, 25(9), 752-760.
- Bjorklund, D., & Blasi, C. (2012). *Child & adolescent development: An integrated approach*. Belmont, CA: Wadsworth Cengage Learning.
- Bilgel, N., & Bayram, N. (2010). Turkish Version of the Depression Anxiety Stress Scale (DASS- 42): Psychometric Properties. *Archives of Neuropsychiatry*, 47(2), 118-126. doi:10.4274/npa.5344
- Bland, H. W., Melton, B. F., Welle, P., & Bigham, L. (2012). Stress tolerance: New challenges for millennial college students. *College Student Journal*, 46(2), 362-376.
- Boğaziçi Üniversitesi. (2019). *Boğaziçi Üniversitesi İstatistikleri*. Retrieved from <https://arastirma.boun.edu.tr/tr/arastirma-planlama-koordinasyon-subemudurlugu-0/istatistikler>
- BÜREM. (2016). *Boğaziçi Üniversitesi Öğrenci Rehberlik ve Psikolojik Danışmanlık Merkezi Çalışma Raporu*. Retrieved from https://burem.boun.edu.tr/sites/burem.boun.edu.tr/files/burem_2016_calisma_raporu%20%281%29%20%285%29.docx
- Bostancı, M., Özdel, O., Oğuzhanoğlu, N. K., Özdel, L., Ergin, A., Ergin, N., Ateşçi, F., & Karadağ, F. (2005). Depressive symptomatology among university students in Denizli, Turkey: Prevalence and sociodemographic correlates. *Croatian Medical Journal*, 46(1), 96-100.
- Branden, N. (2008). *The psychology of romantic love: Romantic love in an anti-romantic age*. Los Angeles, CA: Tarcher.
- Britton, W. B., & Sydnor, A. (2015). Neurobiological models of meditation: Implications for training young people. In C. Willard & A. Salzman (Eds.), *Teaching mindfulness skills to kids and teens* (pp. 402-426). New York, NY: Guilford Press.
- Brown, C. (2008). *Developmental psychology*. Los Angeles, CA: SAGE.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822-848. doi:10.1037/0022-3514.84.4.822
- Brown, T. A., Chorpita, B. F., Korotitsch, W., & Barlow, D. H. (1997). Psychometric properties of the depression anxiety stress scales (DASS) in clinical samples. *Behaviour Research and Therapy*, 35(1), 79-89.

- Brunner, J. L., Wallace, D. L., Reymann, L. S., Sellers, J., & McCabe A. G. (2014). College counseling today: Contemporary students and how counseling centers meet their needs. *Journal of College Student Psychotherapy, 28*(4), 257-324. doi: 10.1080/87568225.2014.948770.
- Buddington, S. A. (2002). Acculturation, psychological adjustment (stress, depression, self-esteem) and the academic achievement of Jamaican immigrant college students. *International Social Work, 45*(4), 447-464. doi:10.1177/00208728020450040401
- Capstick, M. K., Harrell-Williams, L. M., Cockrum, C. D., & West, S. L. (2019). Exploring the effectiveness of academic coaching for academically at-risk college students. *Innovative Higher Education, 44*(3), 219-231. doi:10.1007/s10755-019-9459-1
- Casados, A. T. (2017). Reducing the stigma of mental illness: Current approaches and future directions. *Clinical Psychology: Science and Practice, 24*(3), 306-323.
- Chase, W. S. II. (2009). *Trait mindfulness, overall adjustment, and physical wellbeing perceptions of college students* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global. (UMI No. 3394772)
- Cheng, W., Ickes, W., & Verhofstadt, L. (2012). How is family support related to students' GPA scores? A longitudinal study. *Higher Education, 64*(3), 399. doi:10.1007/s10734-011-9501-4
- Christopher, J. C., Christopher, S. E., Dunnagan, T., & Schure, M. (2006). Teaching self-care through mindfulness practices: The application of yoga, meditation, and qigong to counselor training. *Journal of Humanistic Psychology, 46*(4), 494-509.
- Christopher, M. S., Goerling, R. J., Rogers, B. S., Hunsinger, M., Baron, G., Bergman, A. L., & Zava, D. T. (2016). A pilot study evaluating the effectiveness of a mindfulness-based intervention on cortisol awakening response and health outcomes among law enforcement officers. *Journal of Police and Criminal Psychology, 31*(1), 15-28. doi:10.1007/s11896-015-9161-x
- Clark, D. A., & Beck, A. T. (2011). *Cognitive therapy of anxiety disorders: Science and practice*. New York, NY: Guilford Press.
- Cole, N. N., Nonterah, C. W., Utsey, S. O., Hook, J. N., Hubbard, R. R., Opare-Henaku, A., & Fischer, N. L. (2015). Predictor and moderator effects of ego resilience and mindfulness on the relationship between academic stress and psychological well-being in a sample of Ghanaian college students. *Journal of Black Psychology, 41*(4), 340-357.

- Conley, C. S., Kirsch, A. C., Dickson, D. A., & Bryant, F. B. (2014). Negotiating the transition to college: Developmental trajectories and gender differences in psychological functioning, cognitive-affective strategies, and social well-being. *Emerging Adulthood, 2*(3), 195-210.
- Conley, C. S., Travers, L. V., & Bryant, F. B. (2013). Promoting psychosocial adjustment and stress management in first-year college students: The benefits of engagement in a psychosocial wellness seminar. *Journal of American College Health, 61*(2), 75-86.
- Corrigan, P. W., River, L. P., Lundin, R. K., Penn, D. L., Uphoff-Wasowski, K., Champion, J., ... & Kubiak, M. A. (2001). Three strategies for changing attributions about severe mental illness. *Schizophrenia bulletin, 27*(2), 187-195.
- Crawford, J., Cayley, C., Lovibond, P. F., Wilson, P. H., & Hartley, C. (2011). Percentile norms and accompanying interval estimates from an Australian general adult population sample for self-report mood scales (BAI, BDI, CRS-D, CES-D, DASS, DASS-21, STAI-X, STAI-Y, SRDS, and SRAS). *Australian Psychologist, 46*(1), 3-14.
- Cutrona, C. E. (1982). Transition to college: Loneliness and the process of social adjustment. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 291-309). New York, NY: Wiley- Interscience.
- Celikel, F. C., & Erkorkmaz, U. (2008). Factors related to depressive symptoms and hopelessness among university students/Universite ogrencilerinde depresif belirtiler ve umutsuzluk duzeyleri ile iliskili etmenler. *Archives of Neuropsychiatry, 45*(4), 122-129.
- Çetinsaya, G. (2014). *Büyüme, Kalite, Uluslararasılaşma: Türkiye yükseköğretimi için bir yol haritası*. Eskişehir, Turkey: Yükseköğretim Kurulu.
- Davis, T. (2018). *Validation of experimental methodology for state mindfulness induction in a controlled laboratory setting* (Unpublished doctoral dissertation). Cleveland State University, Cleveland, OH.
- Duncan, J. M. (2015). *Factors impacting adjustment in emerging adulthood: Mindfulness, self-esteem and coping* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global. (UMI No. 3662407)
- Duru, E. (2008). Üniversiteye uyum sürecinde yalnızlığı yordamada sosyal destek ve sosyal bağlılığın doğrudan ve dolaylı rolleri. *Türk Psikolojik Danışma ve Rehberlik Dergisi, 3*(29), 13-24.
- Elliot, A. J., Thrash, T. M., & Murayama, K. (2011). A longitudinal analysis of self-regulation and well-being: Avoidance personal goals, avoidance coping, stress generation, and subjective well-being. *Journal of Personality, 79*(3), 643-674. doi:10.1111/j.1467-6494.2011.00694.x

- Escuriex, B. F., & Labbé, E. E. (2011). Health care providers' mindfulness and treatment outcomes: A critical review of the research literature. *Mindfulness, 2*(4), 242-253.
- Erikson, E. H. (1950). *Childhood and society*. New York: Norton.
- Erkan, S., Özbay, Y., Çankaya, Z. C., & Terzi, Ş. (2012). Üniversite öğrencilerinin yaşadıkları problemler ve psikolojik yardım arama gönüllükleri. *Eğitim ve Bilim, 37*(164), 94-107.
- Farb, N. A., Segal, Z. V., Mayberg, H., Bean, J., McKeon, D., Fatima, Z., & Anderson, A. K. (2007). Attending to the present: Mindfulness meditation reveals distinct neural modes of self-reference. *Social Cognitive and Affective Neuroscience, 2*(4), 313-322.
- Field, A. P. (2013). *Discovering statistics using IBM SPSS statistics*. Los Angeles, CA: SAGE.
- Flessner, C. A., & Piacentini, J. C. (Eds.). (2017). *Clinical handbook of psychological disorders in children and adolescents: A step-by-step treatment manual*. New York, NY: Guilford Publications.
- Franfort-Nachmias, C., & Nachmias, D. (1992). *Research methods in the social sciences*. New York, NY: St. Martin's Press.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology, 95*(5), 1045.
- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education, 75*(3), 203-220. doi:10.3200/JEXE.75.3.203-220
- Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development, 48*(3), 259-274.
- Follette, V. M., Palm, K. M., & Hall, M. L. R. (2004). Acceptance, mindfulness, and trauma. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and acceptance: Expanding the cognitive-behavioral tradition* (pp. 192-208). New York, NY: Guilford Press.
- Gair, S., & Baglow, L. (2018). Social justice in a tertiary education context: Do we practice what we preach?. *Education, Citizenship and Social Justice, 13*(3), 207-216.
- Gantman, A. P., Gollwitzer, P. M., & Oettingen, G. (2014). Mindful mindlessness in goal pursuit. In A. Le, C. T. Ngnoumen, & E. J. Langer (Eds.), *The wiley blackwell handbook of mindfulness*, (pp. 236-257). New York, NY: John Wiley & Sons.

- Garfinkel, S. N., Nagai, Y., Seth, A. K., & Critchley, H. D. (2013). Neuroimaging studies of interoception and self-awareness. In A. E. Cavanna, A. Nani, H. Blumenfeld, & S. Laureys (Eds.), *Neuroimaging of consciousness*, (pp. 207-224). New York, NY: Springer.
- Gerdes, H., & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: A longitudinal study of retention. *Journal of Counseling & Development*, 72(3), 281-288.
- Goldstein, S., & DeVries, M. (Eds.). (2017). *Handbook of DSM-5 disorders in children and adolescents*. Cham, Switzerland: Springer International Publishing.
- Greason, P. B., & Cashwell, C. S. (2009). Mindfulness and counseling self-efficacy: The mediating role of attention and empathy. *Counselor Education and Supervision*, 49(1), 2-19.
- Grossman, P. (2008). On measuring mindfulness in psychosomatic and psychological research. *Journal of Psychosomatic Research*, 64(4), 405-408.
- Gültekin, B. K., & Dereboy, I. F. (2011). Üniversite öğrencilerinde sosyal fobinin yaygınlığı ve sosyal fobinin yaşam kalitesi, akademik başarı ve kimlik oluşumu üzerine etkileri. *Türk Psikiyatri Dergisi*, 22(3), 150-158.
- Halamandaris, K. F. (1995). *Correlates of adjustment to university life among students* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global. (UMI No. U082176)
- Hammen, C. L., Rudolph, K. D., & Abaied, J. (2014). Child and adolescent depression. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (pp. 225–265). New York, NY: The Guilford Press.
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among african american and white first-year college students. *Research in Higher Education*, 48(7), 803-839. doi:10.1007/s11162-007-9052-9
- Hawley, L. L., Schwartz, D., Bieling, P. J., Irving, J., Corcoran, K., Farb, N. A. S., ..., Segal, Z. V. (2014). Mindfulness practice, rumination and clinical outcome in mindfulness-based treatment. *Cognitive Therapy and Research*, 38(1), 1-9. doi:10.1007/s10608-013-9586-4
- Hayes, N. (2000). *Doing psychological research*. Philadelphia, PA: Taylor & Francis Group.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78(2), 169-183.

- Holliday, R., Anderson, E., Williams, R., Bird, J., Matlock, A., Ali, S., Surís, A. (2016). A pilot examination of differences in college adjustment stressors and depression and anxiety symptoms between white, Hispanic and white, non-Hispanic female college students. *Journal of Hispanic Higher Education, 15*(3), 277-288. doi:10.1177/1538192715607331
- Ibrahim, A. K., Kelly, S. J., Adams, C. E., & Glazebrook, C. (2013). A systematic review of studies of depression prevalence in university students. *Journal of Psychiatric Research, 47*(3), 391-400.
- Ikiz, F. E., Savcı, M., & Yörük, C. (2015). Problemlı internet kullanımını ile üniversite yaşamına uyum ilişkisi. *Bartın Üniversitesi Eğitim Fakültesi Dergisi, 4*(1), 34-50. doi: 10.14686/BUEFAD.2015111013
- Izgiç, F., Akyüz, G., Doğan, O., & Kuğu, N. (2004). Social phobia among university students and its relation to self-esteem and body image. *The Canadian Journal of Psychiatry, 49*(9), 630-634.
- Jain, S., Shapiro, S. L., Swanick, S., Roesch, S. C., Mills, P. J., Bell, I., & Schwartz, G. E. (2007). A randomized controlled trial of mindfulness meditation versus relaxation training: Effects on distress, positive states of mind, rumination, and distraction. *Annals of Behavioral Medicine, 33*(1), 11-21. doi:10.1207/s15324796abm3301_2
- Jorm, A. F., Christensen, H., Henderson, A. S., Jacomb, P. A., Korten, A. E., & Rodgers, B. (2000). Predicting anxiety and depression from personality: Is there a synergistic effect of neuroticism and extraversion? *Journal of Abnormal Psychology, 109*(1), 145.
- Kabat-Zinn, J. (2005). *Coming to our senses: Healing ourselves and the world through mindfulness*. New York, NY: Hyperion.
- Kacerguis, M. A., & Adams, G. R. (1980). Erikson stage resolution: The relationship between identity and intimacy. *Journal of Youth and Adolescence, 9*(2), 117-126.
- Kamen, C., Cosgrove, V., McKellar, J., Cronkite, R., & Moos, R. (2011). Family support and depressive symptoms: A 23-year follow-up. *Journal of Clinical Psychology, 67*(3), 215-223. doi:10.1002/jclp.20765
- Katz, S., & Somers, C. L. (2017). Individual and environmental predictors of college adjustment: Prevention and intervention. *Current Psychology, 36*(1), 56-65. doi:10.1007/s12144-015-9384-0
- Kaya, M., Genç, M., Kaya, B., & Pehlivan, E. (2007). Tıp fakültesi ve sağlık yüksekokulu öğrencilerinde depresif belirti yaygınlığı, stresle başa çıkma tarzları ve etkileyen faktörler. *Türk Psikiyatri Dergisi 2007, 18*(2), 137-146.
- Kring, A. M., Davison, G. C., Neale, J. M., & Johnson, S. (2012). *Abnormal Psychology*. New York, NY: John Wiley & Sons.

- Kroger, J. (2006). *Identity development: Adolescence through adulthood*. Los Angeles, CA: SAGE.
- Kumaraswamy, N. (2013). Academic stress, anxiety and depression among college students-a brief review. *International Review of Social Sciences and Humanities*, 5(1), 135-143.
- Kural, A.I. (2017). *The relationship between, university adjustment, attachment style, personality and perceived stress*. (Master's thesis, Yaşar University, İzmir, Turkey). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=7lOJX8w_8PRQU1mSHU6-jgtAfEid61bkN1TVPWE0XKgHbw3W-gu1d8EP1V9RVw9o
- Lakey, C. E., Berry, D. R., & Sellers, E. W. (2011). Manipulating attention via mindfulness induction improves P300-based brain-computer interface performance. *Journal of Neural Engineering*, 8(2), 025019. doi:10.1088/1741-2560/8/2/025019
- Lee, S., Wuertz, C., Rogers, R., & Chen, Y. (2013). Stress and sleep disturbances in female college students. *American Journal of Health Behavior*, 37(6), 851-858. doi:10.5993/AJHB.37.6.14
- Leonard, N. R., Gwadz, M. V., Ritchie, A., Linick, J. L., Cleland, C. M., Elliott, L., & Grethel, M. (2015). A multi-method exploratory study of stress, coping, and substance use among high school youth in private schools. *Frontiers in Psychology*, 6, 1028. <http://doi.org/10.3389/fpsyg.2015.01028>
- Li, W., Dorstyn, D. S., & Jarmon, E. (2019). Identifying suicide risk among college students: A systematic review. *Death Studies*, 5, 1-9. doi:10.1080/07481187.2019.1578305
- Lovibond, P. F. (1998). Long-term stability of depression, anxiety, and stress syndromes. *Journal of Abnormal Psychology*, 107(3), 520.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335-343.
- Lundberg, B., Hansson, L., Wentz, E., & Björkman, T. (2007). Sociodemographic and clinical factors related to devaluation/discrimination and rejection experiences among users of mental health services. *Social Psychiatry and Psychiatric Epidemiology*, 42(4), 295-300.
- Macleod, A. S. (2011). *The psychiatry of palliative medicine: The dying mind*. New York, NY: Radcliff Publishing.
- Martin, L. M. (2000). The relationship of college experiences to psychosocial outcomes in students. *Journal of College Student Development*, 41(3), 292-301.

- Martinez, H. S., Klanecky, A. K., & McChargue, D. E. (2018). Problem drinking among at-risk college students: The examination of Greek involvement, freshman status, and history of mental health problems. *Journal of American College Health, 66*(7), 579-587. doi:10.1080/07448481.2018.1432625
- McCullum, E. E., & Gehart, D. R. (2010). Using mindfulness meditation to teach beginning therapists therapeutic presence: A qualitative study. *Journal of Marital and Family Therapy, 36*(3), 347-360.
- Miller, J. J., Fletcher, K., & Kabat-Zinn, J. (1995). Three-year follow-up and clinical implications of a mindfulness meditation-based stress reduction intervention in the treatment of anxiety disorders. *General Hospital Psychiatry, 17*(3), 192-200.
- Modinos, G., Ormel, J., & Aleman, A. (2010). Individual differences in dispositional mindfulness and brain activity involved in reappraisal of emotion. *Social Cognitive and Affective Neuroscience, 5*(4), 369-377. doi:10.1093/scan/nsq006
- Morgan, A. J., Reavley, N. J., Ross, A., Too, L. S., & Jorm, A. F. (2018). Interventions to reduce stigma towards people with severe mental illness: Systematic review and meta-analysis. *Journal of Psychiatric Research, 103*, 120-133. doi:10.1016/j.jpsychires.2018.05.017
- Mrazek, M. D., Franklin, M. S., Phillips, D. T., Baird, B., & Schooler, J. W. (2013). Mindfulness training improves working memory capacity and GRE performance while reducing mind wandering. *Psychological Science, 24*(5), 776-781. doi:10.1177/0956797612459659
- Mrazek, M. D., Smallwood, J., & Schooler, J. W. (2012). Mindfulness and mind-wandering: finding convergence through opposing constructs. *Emotion, 12*(3), 442.
- Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity, 9*(3), 225-240.
- Nguyen, T. T., Werner, K. M., & Soenens, B. (2019). Embracing me-time: Motivation for solitude during transition to college. *Motivation and Emotion, 43*(1), 1-21.
- Nordstrom, A. H., Goguen, L. M. S., & Hiester, M. (2014). The effect of social anxiety and self-esteem on college adjustment, academics, and retention. *Journal of College Counseling, 17*(1), 48-63.
- O'Donovan, A., & May, S. (2007). The advantages of the mindful therapist. *Psychotherapy in Australia, 13*(4), 46.
- 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. doi:10.3200/JACH.56.5.569-578

- Ormel, J., Jeronimus, B. F., Kotov, R., Riese, H., Bos, E.H., Hankin, B., Rosmalen, J.G. & Oldehinkel, A.J. (2013). Neuroticism and common mental disorders: Meaning and utility of a complex relationship. *Clinical Psychology Review*, 33(5), 686-697.
- Özyeşil, Z., Arslan, C., Kesici, Ş., & Deniz, M. E. (2011). Bilinçli farkındalık ölçeği'ni Türkçeye uyarlama çalışması. *Eğitim ve Bilim*, 36(160), 224-235.
- Papier, K., Ahmed, F., Lee, P., & Wiseman, J. (2015). Stress and dietary behaviour among first-year university students in Australia: Sex differences. *Nutrition*, 31(2), 324-330. doi:10.1016/j.nut.2014.08.004
- Pearson, M., McMahon, C., & O'Donovan, A. (2018). Potential benefits of teaching mindfulness to journalism students. *Asia Pacific Media Educator*, 28(2), 186-204. doi:10.1177/1326365X18800080
- Pollak, S. M., Pollak, S., Pedulla, T., & Siegel, R. D. (2013). *Sitting together: Essential skills for mindfulness-based psychotherapy*. New York, NY: Guilford Press.
- Ramler, T. R., Tennison, L. R., Lynch, J., & Murphy, P. (2016). Mindfulness and the college transition: The efficacy of an adapted mindfulness-based stress reduction intervention in fostering adjustment among first-year students. *Mindfulness*, 7(1), 179-188.
- Schroevers, M. J., & Brandsma, R. (2010). Is learning mindfulness associated with improved affect after mindfulness-based cognitive therapy?. *British Journal of Psychology*, 101(1), 95-107.
- Sevinç, S., & Gizir, C. A. (2014). Factors negatively affecting university adjustment from the views of first-year university students: The case of Mersin University. *Educational Sciences: Theory & Practice*, 14(4), 1301-1308.
- Shapiro, D., Dundar, A., Yuan, X., Harrell, A. T., & Wakhungu, P. K. (2014). *Completing college: A national view of student attainment rates--fall 2008 cohort (Signature Report No. 8)*. Herndon, VA: National Student Clearinghouse Research Center.
- Sheehy, R., & Horan, J. J. (2004). Effects of stress inoculation training for 1st-year law students. *International Journal of Stress Management*, 11(1), 41-55. doi: 10.1037/1072-5245.11.1.41.
- Siegel, R. D. (2009). *The mindfulness solution: Everyday practices for everyday problems*. New York, NY: Guilford Press.
- Sigelman, C., & Rider, E. (2012). *Life-span human development (7th ed.)*. Belmont, CA: Wadsworth Cengage Learning.

- Ştefan, C. A., Capraru, C., & Szilagyi, M. (2018). Investigating effects and mechanisms of a mindfulness-based stress reduction intervention in a sample of college students at risk for social anxiety. *Mindfulness*, *9*(5), 1509-1521. doi:10.1007/s12671-018-0899-y
- Stein, D. J., Hollander, E., & Rothbaum, B. O. (Eds.). (2009). *Textbook of anxiety disorders*. Washington, DC: American Psychiatric Pub.
- Tang, Y. Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., Yu, Q., Sui, D., Rothbart, M. K., Fan, M., & Posner, M. I. (2007). Short-term meditation training improves attention and self-regulation. *Proceedings of the National Academy of Sciences*, *104*(43), 17152-17156.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (6th ed.). Needham Heights, MA: Allyn and Bacon.
- Tarraf, R. C., McLarnon, M. J. W., & Finegan, J. E. (2019). Dispositional mindfulness buffers against incivility outcomes: A moderated mediation model. *Personality and Individual Differences*, *138*, 140-146. doi:10.1016/j.paid.2018.09.035
- Terry, M. L., Leary, M. R., & Mehta, S. (2013). Self-compassion as a buffer against homesickness, depression, and dissatisfaction in the transition to college. *Self and Identity*, *12*(3), 278-290.
- Thakkar, V. (2006). *Depression and bipolar disorder*. New York, NY: Chelsea House.
- Thompson, B. L., & Waltz, J. A. (2008). Mindfulness, self-esteem, and unconditional self-acceptance. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *26*(2), 119-126. doi:10.1007/s10942-007-0059-0
- Tomlinson, E. R., Yousaf, O., Vittersø, A. D., & Jones, L. (2018). Dispositional mindfulness and psychological health: A systematic review. *Mindfulness*, *9*(1), 23-43. doi:10.1007/s12671-017-0762-6
- Tountas Y., & Dimitrakaki C. (2006). Health education for youth. *Pediatric Endocrinology Reviews*, *3*(1), 222-225.
- Townsend, B. K., & Wilson, K. B. (2009). The academic and social integration of persisting community college transfer students. *Journal of College Student Retention: Research, Theory and Practice*, *10*(4), 405-423. doi:10.2190/CS.10.4.a
- Trevisan, D., & Birmingham, E. (2016). Examining the relationship between autistic traits and college adjustment. *Autism*, *20*(6), 719-729. https://doi.org/10.1177/1362361315604530

- Urry, H. L., Nitschke, J. B., Dolski, I., Jackson, D. C., Dalton, K. M., Mueller, C. J., Rosenkranz, M. A., Ryff, C. D., Singer, B. H., & Davidson, R. J. (2004). Making a life worth living neural correlates of well-being. *Psychological Science, 15*(6), 367-372. doi:10.1111/j.0956-7976.2004.00686.x
- Valentine, E. R., & Sweet, P. L. (1999). Meditation and attention: A comparison of the effects of concentrative and mindfulness meditation on sustained attention. *Mental Health, Religion & Culture, 2*(1), 59-70.
- Wang, P. S., Demler, O., & Kessler, R. C. (2002). Adequacy of treatment for serious mental illness in the United States. *American Journal of Public Health, 92*(1), 92-98.
- Weiner, I. B., & Craighead, W. E. (2010). *The Corsini encyclopedia of psychology*. New York, NY: John Wiley & Sons.
- Wicks-Nelson, R. & Israel, A. C. (2015). *Abnormal child and adolescent psychology with DSM-V updates*. New York, NY: Routledge.
- Wintre, M. G., & Yaffe, M. (2000). First-year students' adjustment to university life as a function of relationships with parents. *Journal of Adolescent Research, 15*(1), 9–37. <https://doi.org/10.1177/0743558400151002>
- World Health Organization. (2017). *Depression and other common mental disorders: Global health estimates*. Geneva, Switzerland: WHO Document Production Services
- Xu, W., An, Y., Ding, X., Yuan, G., Zhuang, Y., & Goh, P. H. (2017). Dispositional mindfulness, negative posttraumatic beliefs, and academic burnout among adolescents following the 2016 yancheng tornado. *Personality and Individual Differences, 116*, 405-409. doi:10.1016/j.paid.2017.05.029
- Xu, W., Ding, X., Goh, P. H., & An, Y. (2018). Dispositional mindfulness moderates the relationship between depression and posttraumatic growth in chinese adolescents following a tornado. *Personality and Individual Differences, 127*, 15-21. doi:10.1016/j.paid.2018.01.032
- Yalim, D. (2007). *First year college adjustment: The role of coping, egoresiliency, optimism and gender*. (Master's thesis, Middle East Technical University, Ankara, Turkey). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=wBmNpkQC9Nhi90NLW7E7-dbF95JfIBjHlBg4RpIq2PvGckYnwbINNDsiecE__iT3
- Yang, C. C., Holden, S. M., & Carter, M. D. (2017). Emerging adults' social media self-presentation and identity development at college transition: Mindfulness as a moderator. *Journal of Applied Developmental Psychology, 52*, 212-221. doi:10.1016/j.appdev.2017.08.006

- Ying, Y. W., Lee, P. A., & Tsai, J. L. (2007). Predictors of depressive symptoms in Chinese American college students: Parent and peer attachment, college challenges and sense of coherence. *American Journal of Orthopsychiatry*, 77(2), 316-323.
- Yoldaşcan, E., Özenli, Y., Kutlu, O., Topal, K., & Bozkurt, A. I. (2009). Prevalence of obsessive-compulsive disorder in Turkish university students and assessment of associated factors. *BMC Psychiatry*, 9(1), 40.
- Yücel, U., Bilge, A., Oran, N., Ersoy, M. A., Gençdoğan, B., & Özveren, Ö. (2009). Adolesanlarda premenstruel sendrom yaygınlığı ve depresyon riski arasındaki ilişki. *Anadolu Psikiyatri Dergisi*, 10(1), 55-61.
- Zeidan, F., Salomons, T., Farris, S. R., Emerson, N. M., Adler-Neal, A., Jung, Y., & Coghill, R. C. (2018). Neural mechanisms supporting the relationship between dispositional mindfulness and pain. *Pain*, 159(12), 2477-2485. doi:10.1097/j.pain.0000000000001344
- Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools: A systematic review and meta-analysis. *Frontiers in Psychology*, 5, 603. doi:10.3389/fpsyg.2014.00603