

EXPANDING A COUNSELING INTAKE FORM AND  
EXAMINING PSYCHOSOCIAL PROBLEMS OF UNIVERSITY STUDENTS

AKIN CİHAN

BOĞAZİÇİ UNIVERSITY

2019

EXPANDING A COUNSELING INTAKE FORM AND  
EXAMINING PSYCHOSOCIAL PROBLEMS OF UNIVERSITY STUDENTS

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

Master of Arts  
in  
Guidance and Psychological Counseling

by  
Akın Cihan

Boğaziçi University

2019

## DECLARATION OF ORIGINALITY

I, Akın Cihan, 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.....

Date .....07.08.2019.....

## ABSTRACT

### Expanding a Counseling Intake Form and Examining Psychosocial Problems of University Students

This survey study attempted to determine the psychosocial problems of university students while updating an existing university counseling intake form. The updated form was expanded by adding some problem items and questions on student characteristics and prepared to be filled as an electronic form. The accessible population was students of a public university in İstanbul who were around 18-25 ages. The link to the survey form was shared to via e-mails and social media groups. The data were collected anonymously and analyzed cumulatively. Participants were 741 students, about two thirds being female. The problem areas that emerged as eight factors were career/future concerns, problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences, in order of prevalence. Females reported more problems in career/future, affect, culture, and health, while males reported more problems in addiction. English Preparatory students had less concerns about their career/future than undergraduate and graduate students. Involvement in extracurricular activities seemed to be protective factor for students' future/career, academic problems, and relational issues. Students who were interested to live abroad reported more problems with culture and addiction. Students with history of receiving psychological help, and suicidal thoughts and attempts reported more problems in most areas. The practical implication of the study was that university students had serious career/future, academic and counseling needs that await being addressed by university administrations and policy makers.

## ÖZET

### Bir Danışmanlık Ön-Görüşme Formunun Genişletilmesi ve Üniversite Öğrencilerinin Psiko-Sosyal Sorunlarının İncelenmesi

Bu tarama çalışması var olan bir üniversite danışmanlığı ön-görüşme formunu güncellerken üniversite öğrencilerinin psiko-sosyal sorunlarını belirlemeyi amaçlamıştır. Bazı sorun maddeleri ve öğrenci özelliklerine ilişkin sorular eklenerek güncellenen form elektronik ortamda doldurulacak şekilde hazırlanmıştır. Erişilebilen evren İstanbul'daki bir devlet üniversitesinin 18-25 yaşları arasındaki öğrencileri olmuştur. Tarama formuna olan bağlantı e-posta ve sosyal medya grupları aracılığıyla paylaşılmıştır. Veriler anonim olarak toplanmış ve bütünsel olarak çözümlenmiştir. Katılımcılar, yaklaşık üçte ikisi kadın olan 741 öğrenciden oluşmuştur. Sekiz etmen olarak ortaya çıkan sorun alanları, yaygınlık sırasıyla, meslek/gelecek kaygısı, duygu durum sorunları, akademik sorunlar, ilişkisel konular, kültürle ilgili sorunlar, sağlık sorunları, bağımlılık ve travmatik yaşantılar olmuştur. Kadınlar meslek/gelecek, duygu durum, kültür ve sağlıkta, erkekler ise bağımlılıkta daha fazla sorun işaretlemişlerdir. İngilizce Hazırlık öğrencileri, lisans ve lisans-sonrası öğrencilerden daha az meslek/gelecek kaygısı göstermişlerdir. Ders-dışı etkinliklere katılım öğrencilerin meslek/gelecek kaygısı, akademik sorun ve ilişkisel konularında koruyucu etken olarak görünmüştür. Yurtdışında yaşama tercihi olanlar kültür ve bağımlılıkla ilgili daha fazla sorun işaretlemişlerdir. Psikolojik yardım alma geçmişine, intihar düşüncesi ve girişime sahip olan öğrenciler çoğu alanda daha fazla sorun işaretlemişlerdir. Araştırma uygulama açısından öğrencilerin üniversite yönetimleri ve siyasetçilerin ele almasını bekleyen ciddi meslek/gelecek, akademik ve danışmanlık gereksinimleri olduğunu göstermiştir.

## ACKNOWLEDGMENTS

Understanding and helping people is an important goal of my life and I hope my thesis serves this goal of mine. I hope that the findings could benefit self-understanding of university students going through the emerging adulthood stage, as I recently did. I also hope that this study contributes to counselors' understanding of problems of university students towards establishment and improvement of counseling services in higher education. I for one, greatly benefited from simply trying to understand the existing needs and profiles of students. And last, I hope the policy makers and administrators in higher education examine the findings to allocate urgently needed resources and support the existing university counseling services.

I am deeply indebted to my thesis committee members. First, I would like to express my sincere gratitude to my thesis advisor, Deniz Albayrak-Kaymak not only for her invaluable contribution to my thesis work, but also for her continuous support to my professional development, for the humane values she transferred, and for making me feel valuable for the past 10 years. I am grateful to Zeynep Hande Sart for helping me broaden my horizons with her assistance and constructive criticism all through my undergraduate and graduate education. I would also like to thank Zeynep Aydın-Sünbül for her valuable comments and contribution to my thesis.

Finally, I would like to thank my family and my dear friends who were always supportive of me and my studies. Their support was very valuable and accomplishment of writing this thesis would not have been possible without their presence. Thank you all.

## TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION.....	1
1.1 Rationale of the study.....	1
1.2 Background of the study.....	6
1.3 Purpose of the study .....	15
1.4 Significance of the study .....	16
CHAPTER 2: LITERATURE REVIEW .....	17
2.1 Theoretical framework .....	17
2.2 Problem areas for university students.....	20
2.3 Suicidal thoughts and attempts among university students .....	24
2.4 Increased migration rates from Turkey to abroad among university students .....	28
2.5 Extracurricular activity involvement of university students.....	30
2.6 Research questions .....	32
CHAPTER 3: METHODOLOGY .....	34
3.1 Participants.....	34
3.2 Instrument.....	41
3.3 Procedures.....	45
3.4 Data analyses.....	46
CHAPTER 4: RESULTS .....	50

4.1 Factorial structure and reliability of the EBIF .....	50
4.2 Sex differences in psychosocial problems.....	57
4.3 Academic level differences in psychosocial problems.....	59
4.4 Extracurricular activity involvement differences in psychosocial problems .....	63
4.5 Living abroad preference differences in psychosocial problems.....	67
4.6 History of psychological help in psychosocial problems .....	71
4.7 Suicidal thought and attempt differences in psychosocial problems .....	73
4.8 Summary of the results .....	77
CHAPTER 5: DISCUSSION.....	81
5.1 General discussion.....	81
5.2 Conclusions.....	102
5.3 Implications of the study .....	104
5.4 Limitations of the method and recommendations for further research ..	106
REFERENCES.....	112
APPENDIX A: DIRECTIONS OF THE SURVEY.....	121
APPENDIX B: BÜREM EXTENDED INTAKE FORM SAMPLE ITEMS.....	123
APPENDIX C: PERMISSION GIVEN BY INSTITUTION REVIEW BOARD FOR RESEARCH WITH HUMAN SUBJECTS AT BOĞAZİÇİ UNIVERSITY.....	125
APPENDIX D: FREQUENCIES AND PERCENTAGES FOR THE ACADEMIC UNITS OF THE PARTICIPANTS .....	126



APPENDIX E: EXPLORATORY FACTOR ANALYSIS LOADINGS OF THE EBIF .....	128
APPENDIX F: FACTORIAL STRUCTURE OF THE EBIF THROUGH CONFIRMATORY FACTOR ANALYSIS .....	131
APPENDIX G: ITEM BASED RELIABILITIES .....	133

## LIST OF TABLES

Table 1. Frequencies and Percentages of the Participants' Sex.....	34
Table 2. Mean, Standard Deviation, Range, Minimum, and Maximum Values for the Age and Grade Point Average (GPA) of the Participants .....	35
Table 3. Frequencies and Percentages for the Academic Level and Term, Residential Status, Financial Aid Status and Work Status of the Participants.....	37
Table 4. Frequencies and Percentages for the Kind and Level of Involvement in Extracurricular Activities of the Participants.....	38
Table 5. Frequencies and Percentages of Family-Related Information of the Participants.....	39
Table 6. Frequencies and Percentages for Experiences and Preferences of Living Abroad .....	40
Table 7. Frequencies and Percentages of History of Receiving Psychological Help Among Their Family Members and Taking Psychiatric Medication of the Participants.....	40
Table 8. Means and Standard Deviations for the Items Eliminated After the Factor Analysis of the Expanded BÜREM Intake Form.....	51
Table 9. Eigenvalue Results After Monte Carlo PCA for Parallel Analysis.....	53
Table 10. Reliability Statistics of the EBIF .....	56
Table 11. Means and Standard Deviations in Problem Areas by Participants' Sex ....	58
Table 12. MANOVA Test Results in Problem Areas by Participants' Sex .....	59

Table 13. Means and Standard Deviations in Problem Areas of Participants’ Academic Level.....	60
Table 14. MANOVA Test Results in Problem Areas by Academic Level Differences .....	62
Table 15. Means and Standard Deviations in Problem Areas of Participants’ Level of Involvement in Extracurricular Activities .....	64
Table 16. MANOVA Test Results in Problem Areas by Level of Interest in Extracurricular Activities Differences .....	66
Table 17. Means and Standard Deviations in Problem Areas of Participants’ Preferences about Living Abroad.....	68
Table 18. MANOVA Test Results in Problem Areas by Preferences about Living Abroad .....	70
Table 19. Means and Standard Deviations in Problem Areas of Participants With and Without History of Receiving Psychological Help .....	72
Table 20. MANOVA Test Results in Problem Areas by With and Without History of Receiving Psychological Help of the Participants .....	73
Table 21. Means and Standard Deviations in Problem Areas of Participants With and Without Suicidal Thought.....	74
Table 22. MANOVA Test Results in Problem Areas by the Students Had Suicidal Thought in the Past or Having Currently.....	75
Table 23. Means and Standard Deviations in Problem Areas of Participants With and Without Suicidal Attempt .....	76

Table 24. MANOVA Test Results in Problem Areas by the Students With and	
Without Suicidal Attempt .....	77

## CHAPTER 1

### INTRODUCTION

#### 1.1 Rationale of the study

The population of Turkey is almost 80 million (Eurostat, 2018) and 10% (over seven million) of the population consists of university students<sup>1</sup> (Yüksek Öğretim Yönetim Bilgi Sistemi [YÖKSİS, Higher Education Management Information System], 2018). Despite the significant number of university students, studies revealing student well-being, psychological problems and the prevalence of suicidal thoughts or attempts are rare in the Turkish literature. The Turkish Statistical Institute (Turkstat) has not published statistics on suicidal conditions since 2016; therefore, we do not have the actual numbers of citizens who had thought of, attempted or completed suicide. Based on the Turkstat's last report (2016) on suicides, almost 3,000 Turkish citizens committed suicide and the highest number of people who committed suicide (13% of the total number of suicides) were in the 20-24 age group. This was followed by the 25-29 (11%), the 15-19 (10.5%), and the 30-34 (9%) age groups, respectively.

In the United States, the Centers for Disease Control and Prevention (CDC) is an organization that is responsible for the protection of citizens from health, safety and security issues. They collect data on a fatal and nonfatal injury, violent death, and cost of injury. In the last report published by the CDC in 2017, suicide is the second cause of death among the 15-24 and 25-34 age groups. Unintentional injury and homicide were other common causes of death among these age groups.

In the Turkish education system, students normally graduate from high school at age 18. Therefore, even though, we do not have any official information on

---

<sup>1</sup> In Turkey, we use the term “university” rather than “college” to refer to the age group of students who are at higher education institutions.

the number of committed suicides among university students in 2015, we can expect that a significant number of suicides occur around undergraduate/university years. Alemdaroğlu (2005) asserts that university students have a higher quality of life expectations, have more social sensitivity and responsibility and therefore they may be more prone to question the meaning of life and they readily fall into hopelessness. International data support this assertion. De Girolamo, McGorry and Sartorius (2019) claimed that first signs of most mental disorders occur in early adulthood (as cited in Cuijpers, 2019). Therefore, World Health Organization (WHO) launched a new initiative on the mental health of international university students in 2012. The purpose of the WHO World Mental Health International College Student (WHM-ICS) Initiative is to produce exact epidemiological information on the prevalence of suicidal thoughts and attempts, neglected for treatment of mental, substance, and social disorders among university students around the world via annual WHM-ICS surveys; to take online precautions and to suggest appropriate treatment of the disorders; and to keep precautions effective and to improve the quality of them (Cuijpers et al., 2019). For instance, as a part of the initiative, Auerbach and colleagues (2018) conducted a survey on the mental disorders among university students. The purposes of the survey were to find out the prevalence of mental health disorders among university students and to reveal whether college students had onsets on mental disorders before entering university. One thousand five hundred seventy-five university students who were between the age of 18 to 22 in 21 different countries from 6 continents participated in the survey. The Diagnostic and Statistical Manual of Mental Disorders – IV (DSM-IV) and the Composite International Diagnostic Interview (CIDI) were used to figure out the prevalence of mental health disorders in the last 12 months and to identify the age when university students

showed signs of mental health disorders. The results showed that 20% of university students were diagnosed with one of DSM-IV and CIDI disorder during the last 12 months and 83% of those university students had onsets prior to university entry. One out of five university students had more than one mental health disorders, the initiative launched by the WHO showed the importance of dealing with their mental health issues even before entering universities.

According to the Office for National Statistics (ONS, 2017) in the United Kingdom, while suicide rates (per 1,000 people) in the general population increased from 10% to 10.4% in ten years, suicide rates among students increased from around 6.5% to 10.3%. The ONS figures showed that the increase in suicide rates was higher than that in the general population.

It is not rare to see university student suicides in the news in Turkey (Doğan Haber Ajansı [DHA, News Agency], 2015, 2016, 2018; Karabulut, 2012; Özdemir, 2014). University entrance in Turkey occurs through competitive nationwide exams and entering prestigious universities is quite difficult. Although they are valued as high achievers, the reasons behind these students' suicide remain unclear (Demirören Haber Ajansı [DHA, News Agency], 2019, 2019). This may emphasize the significance of systematic studies examining students' mental health problems and the prevalence of suicide throughout Turkish universities and across Turkey.

Van Orden and colleagues (2010) attempted to understand the underlying causes of suicide and to put forward a theory called the Interpersonal Theory of Suicide. According to the theory, people are prone to suicide because of two essential factors. Van Orden and colleagues (2010) named them as “thwarted, belongingness defined as social isolation (p. 581) and perceived burdensomeness defined as negative life events such as unemployment and family conflict (p. 583).”

Bauer, Capron, Ward-Ciesielski, Gustafsson, and Doyle (2018) claimed that extracurricular activities could help reduce the negative effects of these two factors and could function as protective factors against suicidal thoughts and attempts. To support their hypothesis, they examined the relations between involvement in extracurricular activities and suicidality. The sample consisted of 121 people who were between the age of 18-24. Participants were asked about their assessment of involvement in extracurricular activities, their perception of thwarted belongingness and burdensomeness and some demographic information via an online survey. The results showed that involvement in extracurricular activities were negatively associated with burdensomeness and thwarted belongingness. This meant that higher levels of involvement in extracurricular activities were correlated with lower levels of suicidality in young adults.

The research of Shiah, Huang, Chang, Chang, and Yeh (2013) also supported reverse relations. Shiah and the colleagues conducted a study to examine the relationship between involvement in extracurricular activities and university students' perception of themselves and the cognitive skills related to career. Two hundred eighty-one students participated in the research. Data were collected via the Lai Personality Inventory, Tennessee Self-Concept Scale, the Adult Career Cognition Scale, and School-Based Extracurricular Activities. The university students who were much more involved in extracurricular activities were found to be more extraverted, to be capable of regulating their emotions, to have better social and career-related skills and to be psychologically healthier.

In addition to suicidal issues as an adverse condition among young people in Turkey, in recent years there has been an increase in migration from Turkey among young people. Turkstat published 'International Migration Statistics' in 2017. Their



report indicated that the number of people who emigrated from Turkey increased by 42% in 2017 compared to the previous year. When we consider the age groups of the population who migrated from Turkey; the highest number of migrants was in the 25-29 age. This age group was followed by 20-24 and 30-34 age groups. There are no data on the whereabouts of these migrations. We may be able to infer from the news that well-educated and skilled young people including the university students have visions of living in different countries where they can find better employment opportunities and living conditions. Western or European countries seem to be preferred as young refugee generations get tragically drowned in overcrowded boats while sailing towards the southern coasts of Europe (Hernandez & Stylianou, 2016). Though we failed to find a study on examining the recent migration of young people from Turkey, in the news, the reasons behind recent migrations were stated to be due to the attempted coup of July 15, 2016, terrorist attacks and nondemocratic changes (Efe, 2018; Gall, 2019; Özkan, 2019).

In summary, the existing international data indicated that the rate of suicide among university students is higher than other populations and increased over the years (CDC, 2017; ONS, 2017). For this reason, the WHO (2012) aims to protect the mental health of university students. In Turkey, official suicide statistics have not been published by Turkstat since 2015, and the causes and prevalence of suicide among university students are not known. As another challenge and flight reaction of youth besides suicidal mental health status, emigration has increased dramatically in Turkey (Turkstat, 2018) especially among the young people. Research on the causes of migration is urgently needed. According to foreign literature, it has been found that participating in extracurricular activities is important in protection of mental health of university students (Bauer et al., 2018, Shiah et al., 2013). Therefore, in the

current study social involvement is viewed as a protective factor of mental health of youth.

## 1.2 Background of the study

Children are raised with aspirations to study more to have better lives, as they are considered as the hopes of our future. Starting as early as kindergarten, they go through long and competitive nationwide examination processes to study. One might expect that the top achieving students who earned the right to study at the most prestigious universities would feel actualized and happy. And one might have difficulty in understanding why university students who constitute the best-educated groups in the country could ever wish to end their lives. It might be even more puzzling to see why students who study at the most prestigious universities consider suicide at all.

As a student at one of these most prestigious higher education institutions of the country, I wondered how many students needed help, were able to get help and were at suicidal risk. When I became a counseling intern during my master's education, I had a chance to find my answers. I became a co-leader of a student group at the Guidance and Psychological Counseling Center of the University in early 2014. We were to run a semi-structured group about close relationships among students. We posted the group via e-mail sent by the center. More than a thousand students applied to be a member within a few days. I could not have guessed that so many students would apply for a group work of students in training. Later, I learned that this was always the case. When groups were announced through e-mails, students would apply in such great numbers that groups would be filled nearly instantly. The center that had limited number of personnel could not bear the task of

turning down numerous applications, as most of the applying students had to be told that the group is already full and thus they would feel frustrated to be left out.

Therefore, instead of e-mail announcements, the center had to adopt a system where counselors form group membership through intake interviews, as every student who applies for counseling services are given an intake interview.

For the group we intended for at most 15 students, we had to interview fifty students who were among the first applicants. And for the rest of the applicants, we had to send another e-mail explaining the situation and asking for their understanding. During the interviews, we found out that many of the applicants either received or were still receiving psychiatric (mostly regulation of medication) support and needed further professional help.

Academic time limitations dictated that we ended the group after 6 weeks and even after our group work was completed, we observed that most students could benefit from further work. I found myself worrying about the remaining students who could not be part of any group work.

My interest in university counseling continued after my internship ended. I wanted to learn about the well-being and mental health of the general student population at my university and reviewed their annual reports shared at the web site. For a relatively small university like ours (a student body about 13,000), there were around 500 students applied to receive psychological help (Boğaziçi University, Student Counseling Center, BÜREM, 2013). All applying students received an intake interview if they show. Among the interviewed students, 42% were referred to hospitals for psychiatric help because, at the time, there was no psychiatrist working at the University Medico-Social Center.

Through communication with my thesis advisor who has been the administrative head of the student counseling services since 2001, I learned about the service conditions. In the past and through the pressing initiatives of the center, a single psychiatrist position was filled by two consecutive professionals who both had to serve the entire university population, eventually tired and retired. But later regulations no longer allowed hiring any psychiatrist position at all. As student mental health crises became visible, the rectorate decided to reserve limited university resources to hire a psychiatrist. First, a female psychiatrist was hired in 2013 and she still works as I write this thesis. Another psychiatrist who was male started in 2014, but his contract was not renewed as the financial limitations pressured the university and he had to leave in 2018.

One of the earliest student counseling services among Turkish universities has been at our university as services continuously exist since 1993. Our university administrations have been supportive of student counseling and mental health services despite its limited resources as a public university. Not all universities have this tradition. Therefore, it may be fair to conclude that services toward mental health crises among university students are scarce and most cases are to be referred to existing hospitals and clinics if they have psychiatric staff. Since financial resources of most of the student body are limited, public services are to be identified for referral and they are even more limited in number.

When the number of applications and problem areas are examined, it can be said that universities need more resources to meet the psychological service needs of students and support their well-being. As mentioned in the Council of Higher Education (Yükseköğretim Kurulu [YÖK, Council of Higher Education], 1984) regulations, YÖK is responsible for protecting university students' mental and

physical health, providing appropriate services and appointing medical staff such as psychiatrists. Despite that regulation, specialist positions that are the best fit for university counselors are not spared. If a university does not have a medical faculty within its own body, like ours, students are to be referred to outside which make following up referrals difficult if not impossible. Moreover, the likelihood that the student would agree to referral is not high, as an outside referral is simply not practical among other factors like geographic distance or social acceptance concerns.

Because of the increase in numbers of students who reported mental health problems as specified in BÜREM report (2013), the rector of the University between 2012 and 2016, formed a commission called “Student Mental Health Task Force<sup>2</sup>” in 2014. One of the consultants to the rector who was a faculty member in counseling was appointed to the leadership of the task force. Members were the head of and a psychologist of BÜREM, one faculty member from the guidance and psychological counseling program and one faculty member from the clinical psychology program and the university psychiatrist.

The task force needed graduate student assistants. Since I wanted to be a part of the team investigating students’ mental health status and I applied. I was one of the two assistants hired. Our job included reviewing relevant literature, translating some survey items, organizing some meetings and keeping notes during task force meetings. This was an additional volunteer responsibility for the task force members as they were already occupied with their own primary full-time responsibilities. The University could afford only a small budget that was to be spent for paper expenses, printing, focus group leader and graduate student assistants.

---

<sup>2</sup> The task force consisted of eight people including Prof. Erkman (coordinator), Assoc. Prof. Albayrak-Kaymak, Assoc. Prof. Sart, Assoc. Prof. Müderrisoğlu, BÜREM Psychologist Karaçengel, Psychiatrist Çakıcı-Alparıslan, graduate student assistants Ms. Karagöz and Mr. Cihan. Focus groups were led by Clinical Psychologist Sinem Şahin.

The task force met regularly and the team decided to collect data from the general student population at the University to see the types, prevalence and seriousness of the problems students had. The first step of the task force was to conduct “focus groups.” Focus groups were carried out by a clinical psychologist who was experienced in leading focus groups. Academic and administrative personnel, as well students who were from different campuses<sup>3</sup>, faculties<sup>4</sup>, departments<sup>5</sup>, institutes<sup>6</sup> and semesters were selected as members of the focus groups. The purpose was to obtain information on the problems experienced by the students on a large scale.

While focus groups were being conducted, the task force started reviewing the Turkish and foreign literature on mental health issues of university students and to identify the precautions that can be taken to protect and support student mental health. It was seen that some pioneering universities such as Stanford University (2008) and Massachusetts Institute of Technology Mental Health Task Force (2001) in the United States used a survey to get information on students’ changing demands and mental health status. Unfortunately, we failed to find a systematic and comprehensive survey investigating university students’ problems in Turkey. This

---

<sup>3</sup> Campuses: Sarıtepe, Hisar, North and South.

<sup>4</sup> Faculties: The Faculty of Arts and Sciences, The Faculty of Education, The Faculty of Economics and Administrative Sciences, The Faculty of Engineering, The School of Applied Disciplines and The School of Foreign Languages.

<sup>5</sup> Departments: Chemistry, History, Mathematics, Molecular Biology and Genetics, Philosophy, Physics, Psychology, Sociology, Translations and Interpreting Studies, Turkish Language and Literature, Western Languages and Literature, Economics, Management, Political Science and International Relations, Computer Education and Educational Technology, Educational Sciences, Foreign Language Education, Primary Education, Mathematics and Science Education, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical and Electronic Engineering, Industrial Engineering, Mechanical Engineering, International Trade, Tourism Administration, Management Information Systems, Advanced English Unit, English Preparatory Division and Modern Languages Unit.

<sup>6</sup> Institutes: The Atatürk Institute for Modern Turkish History, The Institute of Biomedical Engineering, The Institute of Environmental Sciences, The Kandilli Observatory and Earthquake Research Institute, Institute of Graduate Studies in Science and Engineering and The Institute for Graduate Studies in Social Sciences

was the third step of the task force. Development of a new instrument would have exceeded the scope of the task force, as the major focus was a more practical one, responding to acute needs, particularly suicidal conditions. Existing instruments, including annual intake forms used at different universities were examined and adopted to form a survey. Our basic resource was the American College Health Association (ACHA) – National College Health Assessment (NCHA) Survey applied at the time period of 2008 to 2011.

The ACHA-NCHA Survey is a nationally recognized research study that gathers accurate data on the health habits, behaviors and perceptions of college students in the United States. This survey is biennially applied across the US to examine tobacco, alcohol and drug use; sexual, physical and mental health problems; and psychological well-being of students. The goal has been to assist universities to improve their prevention services and health promotion (ACHA, 2019).

A survey was composed by the task force in 2014 (Erkman, et. al., 2014). It was prepared to be sent in electronic form by use of Survey Monkey. All registered Boğaziçi University students (around fifteen thousand) were asked to volunteer in responding to the survey through two e-mails (a week apart) sent in May 2014. A total of two thousand and six hundred and sixty-one students (18% of the general student population) responded to the survey, and two thousands and two hundred and seven responses (82% of total response) were valid.

The survey had three sections with seventy-three items. The sections were about problem areas, mood status and suicidal thoughts/attempts. Student responses

were examined by factors, including sex, academic level<sup>7</sup>, geographic origin<sup>8</sup>, residential status<sup>9</sup> and financial aid status<sup>10</sup>.

Although the findings of the task force report were not published, the report was submitted to the University administration and the task force coordinator regularly informed the rector about the major findings of the survey. Potential indications of significant findings were verbally discussed in administrative meetings with the rector. The most observable action taken has been hiring of a second psychiatrist and a previous BÜREM plan to form a new student counseling unit (BÜSÖD) at another (Saritepe, Kilyos) campus of the university was initiated.

The data collected through the task force survey were intended to be used as research thesis data of the assisting two graduate students. Survey included qualitative (open ended statements of the participating students) and quantitative (student responses to structured questions) data. The results of the study were to be examined by both methods. I was responsible for the quantitative part. I tabulated the findings and wrote their explanations. However, as both assistants had career courses with full time work, the timetable of the theses lapsed. This data collection procedure ended in 2014. Today, most of the students who participated in our study already graduated from university. Social changes experienced in our society changed the lives of current students and the data would no longer be valid for a current functional argument. Therefore, we decided to collect new data with a more comprehensive survey. Even so, the previous data might shed light for the current

---

<sup>7</sup> I used the term ‘class’ to refer to the students who study English at preparatory school, the undergraduate students who are in the first, second, third or fourth year of the university, the graduate students who study in a master or doctoral program.

<sup>8</sup> ‘Geographic origin’ is used to classify the students who came from metropolitan areas, provinces, districts, villages or foreign countries.

<sup>9</sup> Residential status stand for classifying students who live in dormitory, with their family or friends.

<sup>10</sup> Financial aid status refer to whether the students are awarded scholarships or not.



study. We collected information from students, instructors and university staff. We listened to their problems and tried to reveal the current situation in 2014. It is important to have a written report of the major findings. Both for understanding of student needs and as a source of pilot data. Therefore, I am going to share important results in my thesis.

The survey findings were analyzed by simple descriptive statistics. According to these results (Erkman, et. al., 2014), more than 50% of the participants had academic problems, time management issues, career-related issues, concern for the future, psychological problems, attention deficit/learning difficulties, problems with identification and life goals, and intimate relationship problems. Besides, more than 57% of the participants stated that they felt lonely, sad, angry, depressed, exhausted, helpless and anxious (Erkman, et. al., 2014).

Female students reported more difficulty in all problem areas<sup>11</sup> except internet/computer use (Erkman, et. al., 2014) and stated a higher percentage of negative feelings than male students.

The students who lived with their families stated less problems and less percentage of negative feelings compared to the ones who lived in dormitory or with friends. It seemed that living with the family served as a protective factor for university students.

According to geographic origin, the students who came from small settlements such as villages and towns faced more problems and stated higher

---

<sup>11</sup> Problem areas are listed as academic issues, career-related issues, concern for the future, loss of family members or friends, family issues, housing issues, internet/computer use, periodic health issues, relationships with friends, attention deficit/learning difficulties, loneliness, setting life goals/identification issues, psychological problems, intimate relationships, financial status, working due to financial problems, roommate issues, recurrent health problems, peer pressure, health problems of a family member or close friends, experiencing discrimination, problems related to instructors, adaptation problems to campus life, homesickness, problems related to the academic advisor, alcohol/drug use, problems related to university staff, and harassment issues.

percentage of negative feelings than those who came from foreign countries and large residential areas such as metropolitan settlements and cities.

Senior students who would graduate soon and remedial students who could not pass the English proficiency exam had a higher percentage of problems and negative feelings. In regard to problem areas and mood status, there was no significant differences among the students who studied in different departments except that students studying at one institute reported a higher percentage of negative feelings in comparison with others (Erkman, et. al., 2014).

Students who received financial aid (scholarship) did not report more problems or negative feelings than students who received no financial aid.

Finally, 16% of students had thoughts of suicide within the last 12 months and 13% of students had thoughts of suicide at some point in their lives (Erkman, et. al., 2014). When the suicidal attempt results were examined, 5% of the students stated that they attempted suicide at some point in their lives and 1% of them did in the last 12 months. Analyses conducted to see whether there was any differentiating factor based on demographics (class, faculties, gender and scholarship status) yielded no statistically significant difference among the students who had suicidal ideation and, suicidal attempt.

In sum, the task force initiative data indicated that most students had difficulties in several problem areas that affected their quality of life. Students had various relational, financial and existential problems as well as academic problems. A significant number of participants stated that they were highly anxious, exhausted and sad when dealing with these problems. Female students stated a higher percentage of negative emotions, suicidal thoughts and attempts. Living with family seemed to be a protective factor for students. Remedial students and students who are

near to their graduation had more problems and concerns about their future. Students seemed to have more needs for support than the resources available to them. The current study is intended to bring more light to the concerns of our students.

### 1.3 Purpose of the study

This thesis is a screening study aiming to determine the psychosocial problems of university students or to draw their psychosocial profile, university students constitute a unique population with certain health risks and needs. In the Turkish education system, most students are enrolled in university when they are about eighteen years old. They are in a transitional period because they are not yet adults who are fully responsible for important life decisions nor they are children who need close parental supervision and protection. Their needs, feelings, thoughts, concerns and mental health-related factors should be carefully understood to provide adequate support.

Student counseling centers tend to be understaffed with limited resources and can barely meet the service demands of applying students. Student profiles observed at counseling centers might be different than the general student population. For a large scale preventive planning, we need data from the general student population. With a comprehensive survey on the general population, we can analyze university students' profile to see whether they are any different than the intake counseling data of the service applicants. If student concerns of both groups are understood, we can derive implications regarding service needs. These may serve to identify administrative policies can be developed to support and protect the well-being and mental health of students.

#### 1.4 Significance of the study

University students are in a transitional age period between adolescence to adulthood, and they go through significant and rapid changes during their education. A fresh high school graduate ends education as a young adult who is expected to build a new life. Therefore, it is important to monitor their changing demands, mental health status, and problems (ACHA, 2019). We intend to provide a research tool that can be a resource that is periodically applicable, so the changes through generations of students can be observable.

We failed to find a systematic and comprehensive survey investigating university students' psychosocial problems in Turkey. Only current and relevant data on the health of college students can help improve university health promotion and prevention services (ACHA, 2019). Therefore, the survey that we develop can be a tool to identify university students' needs, factors related to their vulnerabilities and protective elements.

Although our target and the accessible population is the students of a public university in Istanbul that accepts top high school graduates, the tool can be utilized for other students at other Turkish universities and comparative data can be established. Data based profiles might serve to convince policymakers and university administrations in designing new and supportive services available campus-wide. Effectiveness of services might be tested to further improvement. A tool could be of use in such assessment process.

## CHAPTER 2

### LITERATURE REVIEW

This chapter starts with the theoretical framework of the study. Then, a review existing research on problem areas among university students, suicidal thoughts and attempts, factors underlying migration decisions was made, respectively. The chapter ends with a review of research on effects of involvement in extracurricular activities.

#### 2.1 Theoretical framework

In his theory of development (Miller, 2002), Erikson divided the adulthood period into two parts: young and middle adulthood. People who are between the age of 20-40 years are called as young adults. He named the issue of this age period as “resolution of intimacy against isolation.”

According to Erikson and Erikson (1998), young adulthood is a period in which young adults test their identity in their intimate relationships. Young adults must commit themselves to certain affiliations and partnerships to establish intimacy with themselves and other people. Intimate relationships help young adults enhance their own identity and personality. As cited in Ellison (2011), Erikson claimed that “only young adults who had well-integrated identity could experience intimacy because they could make sacrifices and compromises in some certain areas including working, sexuality, socializing with other sex, getting married and having children (p. 833).”

When young adults fail to experience intimacy in their relationships, their social relationships will be cold and empty. Intimacy requires a devoted commitment to others (Miller, 2002). Lack of such devotion causes the ego to lose its flexible capacity to be careless about others’ feelings. Also, people with weak egos who

attempt intimate relationships are in danger of coalescence that may result in loss of identity. Over time, unsuccessful failures in intimacy may lead to isolation and avoidance to make sacrifice and compromise in close relationship with others (Ellison, 2011).

On the other hand, Arnett (2007) described emerging adulthood as a transition from the age of 18 to 25 years. According to the developmental theory of Erikson (as cited in Arnett, 2007, p. 68), after adolescence period young adulthood period starts and lasts until age 40. Arnett claimed that this developmental theory needs an update for industrialized societies because, after adolescence period, most of the young people feel under pressure due to some responsibilities imposed by the society such as getting married or having children. Therefore, redefining this period and their responsibilities provides a better understanding of the age group.

Arnett (2000) proposed the theory of emerging adulthood as a separate developmental stage because “taking responsibility of one’s self, making decisions freely, and gaining economic independence were the main signs of reaching adulthood (p. 69).” Since an important number of students have started to participate in postsecondary education, society has shown tolerance about premarital sex and cohabitation, and later age of marriage and parenthood since emerging adults do not make radical decisions.

Arnett (2004) explained the emerging adulthood period with 5 core features: “the age of identity explorations, the age of instability, self-focused age of life, the age of feeling in-between and the age of possibilities (p. 8).” Briefly, emerging adults have opportunities for exploring themselves in the field of work and love. Since this exploration process makes them unstable about their future targets, they constantly find themselves revising their future plans. So, they are self-focused. They make

their own decisions during emerging adulthood period to establish intimate relationships and survive on their own in the future. They enjoy the freedom of decision making and taking care of themselves and keep on believing in dreams will come true.

The roles and responsibilities expected from an adult are difficult for emerging adults because they see these roles and responsibilities as boring, restrictive of free decision making, and ending the possibilities in their lives. If emerging adulthood is recognized as a different period from young adulthood, youth would not be put under the pressures of society (Arnett, 2004). For example, Galambos, Barker, and Krahn (2006) conducted a survey to track changes in depression, self-confidence and expressed anger during emerging adulthood period. The Center for Epidemiological Studies Depression Scale and Self-Esteem Scale were applied to 983 high school students who were 18 years old in Canada. These scales were applied four more times until they were 25 years old. In years, the number of participants decreased from 983 students to 384 students. Results were analyzed cumulatively. The total score of psychological well-being and self-esteem increased and the total score of depressive symptoms and expressed anger decreased in years. According to Galambos and colleagues (2006) stated that emerging adulthood was a period in which young people start to handle with themselves and their living conditions. They felt good about themselves and experienced less emotional problems during this time of period.

Miller (2002) defined the young adulthood period as strengthening identity, fitting into adult roles and responsibilities, and searching for intimate relationships, job opportunities, and self-sufficiency. However, especially for industrialized societies, the needs and the problems of people between the age of 18-25 have

changed. Emerging adults want to make decisions freely, try to find their soulmates, try many different jobs and do the work they would be happiest with. Therefore, they do not want to take the burden of responsibilities that society expects from them. Almost until the end of their 20's they want to know themselves through changes in the field of work and love, and then they feel ready to take responsibility for young adulthood (Arnett, 2007). In the protection of mental health, it is crucial that the unique problems of emerging adults are fully understood.

## 2.2 Problem areas for university students

World Health Organization (WHO) defines mental health:

A state of well-being in which each person is aware of his or her own potential; he or she can handle the normal stresses of life, work productively and fruitfully and contribute to his or her community. Health does not only mean the absence of illness or disease, it also contains physical, mental and social well-being. (WHO, 2014, para. 1)

Students at colleges constitute a distinct population with particular health risks and needs. In this context, 26,181 university students participated in NCHA conducted by ACHA. Around 84% of the participants were in the age group of 18-25. According to the results, more than 50% of participants were overwhelmed by what they had to do; they were highly anxious, exhausted, and they felt very lonely, desperate and very sad in the last 12 months (ACHA, 2019). Besides, 22% of the participants stated they were diagnosed with depression and 18% of them stated they were diagnosed with anxiety by a professional. Additionally, participants had difficulties in coping with academic demands (48%), financial management (31%), sleep problems (30%), close relationships (29%), personal outlook (29%) and family and other social relationships (28%) during the last year.



The period of emerging adulthood is seen as full of possibilities. It has been found that most of the students who are between the ages of 18-25 generally show growth in psychological well-being. However, many students face great challenges during this time of period. Procrastination, social anxiety, drinking, and eating disorders are specified as risk factors for students' mental health (as cited in Lisznyi, Vida, Nemeth, & Benczur, 2014, p. 54). Lisznyi et al. (2014) investigated the risk factors for depression among emerging adults, aiming to draw the profile of university students who applied to the psychological counseling center at the Corvinus University of Budapest in Hungary. University students were asked questions about depression, socioeconomic status, identity status, social capital factors, bullying, substance abuse, life skills, and mental health. According to the results, male sex and poor financial status were found as the important factors for depression while life skills (healthy lifestyles such as nonsmoking and good nutrition), identity status (identity achievement, identity moratorium, identity foreclosure, and identity diffusion), and social capital factors (romantic relationships, relationship with close friends, extracurricular activities such as student organizations and quality of relationships) were the significant indicators for lower depression.

Şahin and Şahin-Firat (2009) conducted a research on university students' problems, aiming to reveal their most important problems. Participants were 1,512 students from 13 public universities. The data were collected through the open-ended questions by use of an instrument called Expectation and Problems of University Students. In the survey, participants were asked to rank the 3 subjects in which they experienced problems at most. Results indicated that 44% of the students stated they had economic problems and failed to meet their basic requirements including

housing, transportation, nutrition in the first place. Problems with the curriculum including lack of interest in study, insufficient professional development were experienced at most by 16% of the students. Other problem areas that the students ranked in the first place were sorted as problems with instructors (7%), concern for the future (7%), dissatisfaction with life (6%), problem of adaptation to the environment that the university was located (4.5%), insufficiency of social, cultural, artistic and sporting activities (3.5%), personal and family problems (3%), lack of physical facilities (2%), non-democratic environment (2%), absence of life goal (2%), lack of intellectual development (0.5%), administrative problems (0.5%), and lack of interest in politics and interest in politics (0.5%), respectively.

Gülerce (1990) said that the purpose of educational organizations such as universities was not only academic achievement since academic achievement required multidimensional definitions including emotional processes. Therefore, she conducted a study to reveal the psychosocial problems of Boğaziçi University students. A questionnaire including social, emotional, educational and health issues was applied to 404 students at Boğaziçi University. The results showed that students had intense problems of Turkey's general situation (56%), time management (38%), administrative issues in the university (34%), financial issues (29%), and lack of motivation to study (25%). The students from outside of İstanbul had more difficulty in separation from family, self-management, and academics. Male students experienced more relational and sexual problems. Ninety-one percent of the students believed a psychological center based in the university was necessary. From this survey that was conducted 24 years ago until the "Student Mental Health Task Force Survey" in 2014, student need for psychological support within the university still remains as an important issue.

Albayrak-Kaymak and Yücel (2004) as the BÜREM chair and the clinical psychologist, respectively, investigated the demographic characteristics and profiles of 1,236 Boğaziçi University students who applied for psychological help between 1994 and 2001. The data were collected by the use of the BÜREM Intake Form (BIF). The factors of the form were listed as depression, difficulties in regulating emotions and behaviors, academic problems, relational issues, adaptation problems, loss, and identity/sexuality issues. Demographic variable based analyses showed that there were statistically significant differences in terms of academic problems, depression and identity/sexuality issues. Female students reported more academic problems and depression, and students from rural areas had more difficulty in dealing with depression and identity/sexuality issues.

A further profile analyses of BÜREM data was conducted by Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman in 2009. They aimed to understand what common problems were observed among Boğaziçi University students. They compared the identified problem areas of students with and without applications to receive help at the center. The tool was again the BIF which included questions on demographic characteristics and checklist and ratings of problem areas. Problem areas were identified through exploratory factor analyses that resulted in 6 factors: adaptation to the university life, academic problems, relational problems, mood states/depression, externalization/somatization, and traumatic experiences. When students who applied for help were compared with students who had no service application, students who asked for help listed more problems in traumatic experiences, relational concerns, mood status/depression, and externalization/somatization. No demographic characteristic was found to be making a statistically significant difference between the two groups, but males significantly experienced

more academic problems compared to females. In addition, students living with their family experienced fewer problems in relation to academics and adaptation to the university life compared to the students living in the dormitories and living with their friends. The most problematic areas experienced by the students were an adaptation to the university life, academic problems, and mood states/depression.

In short, university students are subjected to struggle mainly with depression, academic issues, financial issues, and relational problems. In addition, adaptation to the university life, lack of extracurricular activities including cultural, political, physical and art-related activities, non-democratic environment, absence of life goal, dissatisfaction with life and lack of confidence are among the issues that negatively affect student well-being. A recent and more comprehensive view of the problem areas of students may help us understand their needs and could shed light on what changes might be made to support positive student development.

### 2.3 Suicidal thoughts and attempts among university students

Suicidal attempts are seen in every phase of human life. In recent years, especially among young people, suicide frequencies are on the rapid rise (CDC, 2015).

According to the results of ACHA conducted by NCHA, more than 12% of university students in the US stated that they seriously thought of suicide, while about 2% of participants stated that they attempted suicide in the last 12 months (ACHA, 2019). Hess, Becker, Pituch, and Saathoff (2011) examined the relationship between mood states as predictors of characteristics and precipitants of suicidality among college students. Students who had feelings of anger and helplessness were found more prone to suicide, those with anxiety and those who were in despair had less suicidal thoughts, and those who felt guilt were less likely to attempt suicide. As

mentioned before, more than 50% of university students felt overwhelmed, angry, depressed, exhausted, helpless, anxious, lonely, desperate and sad according to the results of NCHA (2019), Mental Health Task Force Survey (2014).

Annual BÜREM reports (2013, 2014, 2015, 2016, and 2017) provided additional data about student problems that were reported on intake forms. Reports identified that students mostly had difficulty in mood status (depression), anxiety, academic/career issues, and relational problems. An alarming problem has been suicidal thought. Students reported such thoughts (suicidal ideation) were ranging from 2% to 5%. The items of the intake form that were checked out are used to identify the priorities in giving an appointment to student applicants. Those who indicated suicidal condition are interviewed at a soonest session and not held in the waiting list. If the intake indicates current risk for life, referral to a psychiatrist is made right away. The average numbers between the years of 2012 to 2016, indicated that among the appointments made to the psychiatrist at the university infirmary constituted 40% of the students who were seen by BÜREM professionals (counseling or clinical psychologists).

Alarming findings were also found by Lamis, Ballard, May, and Dvorak (2016). They examined the inter-correlations between depression, hopelessness, social support, alcohol problems and suicidal ideation among undergraduate university students studying psychology. Around 2,000 university students, between the ages of 18-26, participated in the survey. Instruments used included Rutgers Alcohol Index, the Multidimensional Scale of Perceived Social Support, Beck Hopelessness Scale, Beck Depression Inventory and the Modified Scale for Suicide Ideation. The results showed that suicidal ideation was positively correlated with depression, hopelessness, alcohol-related problems except for social support. There

were statistically significant differences for all variables except suicidal ideation between males and females. While males reported that they experienced more alcohol-related issues and higher levels of hopelessness, females had more social support but higher levels of depression.

A similar study was conducted by Batıgün-Durak (2005). She aimed to determine the reasons for survival and suicidality among people between the ages of 15-65. She considered differences by demographic variables such as age and sex, in relation to hopelessness and loneliness. The young people who were between the ages of 15-25 stated fewer reasons for survival and a higher probability of suicide and, they felt more hopelessness and loneliness than other age groups. Besides, males had more loneliness and hopelessness, and higher suicidal risk than females. Gürkan and Dirik (2009) also focused on feelings and factors predicting suicidal thoughts and attempts among university students. They collected data from 385 students who were between the ages of 17-25 in Bursa, Turkey. Even though there was no statistically significant relationship between suicidal ideation and gender, males had fewer reasons for survival. As a higher percentage of helplessness predicted a higher probability of suicide, getting social support decreased suicide probability.

Toprak, Çetin, Güven, Can and Demircan (2011) found that apart from mood status, there were other significant factors leading to suicide. They investigated the prevalence and causes of suicidal ideation, suicidal attempts and self-harm behaviors among 636 university students who were studying at Gaziosmanpaşa University located in a rural area, Tokat and İstanbul University located in a metropolitan area, İstanbul, Turkey. Data were collected by use of two surveys. The first survey included items about demographic information such as age and sex, the second

survey gathered information about residential status, relational issues, self-harm behaviors. The results showed that there were significant correlations between self-harm and low financial status, difficulties in family relationships, use of alcohol, smoking habits, tranquilizer abuse. Self-harm and suicidal attempts were more common among females and students who lived in the rural area, and among students who had difficulties in financial status and family relationships.

Similarly, Uğurlu and Ona (2016) found that university students who scored higher in stress-coping, who were female, who were living with their families, whose mothers were alive stated lower probabilities of suicide. On the contrary, having a family member with suicidal history predicted a higher probability of suicide.

To summarize, suicide rates among university students are seen as a major problem (CDC, 2015). Although university students experience problems in several areas, some factors highly predicted suicide. Students who felt depressed, angry, helpless, hopeless, lonely, guilty, anxious have higher probabilities of suicidal ideation or attempt. Living with families helps university students to handle stress because they need social support. Especially, female students and the students who come from a rural area were more prone to commit suicide. Addictive behaviors such as alcohol consumption and smoking habits increased suicidal thoughts and commitment to suicide. Finally, academic, relational problems and future concerns have a vital impact on suicidal ideation and attempt. Findings of the current study may help update the suicidal risk rates among our general university student population.

#### 2.4 Increased migration rates from Turkey to abroad among university students

Even though migration among emerging adults increased, studies on this problem are rare. Emerging adults might have particular reasons for migration. First, they want to have a better quality of life. Economic factors including higher wages, better working conditions, further professional development, and self-care opportunities such as health insurance are important justifications to migrate elsewhere. The emerging adults want to seek their partners, to know new cultures, to develop themselves, to escape from prejudices and discriminations such as homophobia, political violence existing in their community. Because they are young, they can more readily adapt to new cultures and learn new languages compared to people from other developmental periods. Therefore, emerging adults are more likely to migrate (Pedilla-Walker & Nelson, 2017).

Güngör (2003) investigated the determinants of “the brain drain” or skilled migration and non-return students utilizing the alumni associations of the Turkish universities to reach participants. The sample ( $N = 1,100$ ) consisted of people from the US, Canada, and the United Kingdom. The results showed that one of the most important driving factors behind students’ motive to study abroad was economic and political instability in Turkey. Other factors influencing the migration of students included opportunities to have a better social life, higher level of living standards, organized living space, higher salaries, postponing compulsory military service and malpractices in Turkey.

A study conducted by Pazarcık (2010) investigated the causes leading to migration and brain drain. The sample consisted of 50 Turkish social scientists working at the universities in the US. Participants listed the most important reasons for not returning to Turkey as lack of academic merit, dissatisfaction with working



conditions, inadequate opportunities for professional development, academic autonomy, low salaries, and lack of academic and scientific improvement and resource in Turkey. Besides, 80% of the participants believed that Turkish government policies led to migration.

Akman (2014) conducted a survey based on face to face interviews with 210 students studying at Kocaeli University in Turkey. The purpose of the study was to examine university students' tendency to international migration and to identify the underlying causes of migration. The results showed that more opportunities for professional progress, higher standards of living, proximity to great science and innovation centers in foreign countries, insufficient opportunities for professional development and economic instability in Turkey were the factors behind the migration decision. Even though political instability, corruption, bureaucratic barriers, and ill-functioning government agencies were not found to be statistically significant factors of migration, more than 20% of the participants specified them as the causes of migration.

To sum up, migration is a trending topic especially among emerging adults who want to explore themselves through new experiences regardless of expectations from their community and responsibilities that the society imposes. Turkish studies conducted before 2016 generally showed that economic and political instability, poor living standards, inadequate working conditions and insufficient opportunities for professional development were the key factors for deciding to live abroad. In the news (Efe, 2018; Gall, 2019; Hernandez & Stylianou; 2016; Özkan, 2019), the attempted coup of July 15 in 2016 terrorist attack and nondemocratic rise were stated to be among the factors behind migration. But we failed to locate studies examining the causes of excessively increased recent migration from Turkey (Turkstat, 2017).

Therefore, we decided to include a question on students' attitudes to living abroad to see whether that could relate to any of the problems they may report.

## 2.5 Extracurricular activity involvement of university students

All young people have the potential for self-development if they have a supportive environment and relationships. Campus life at universities is best if they are enriched to provide supportive opportunities for social development of students.

Extracurricular activities add to interpersonal and intrapersonal strengths including organization skills, improvement in competency and autonomy, building relationships, taking and giving feedback, setting short-term and long-term targets, and developing a sense of morality and respect for others (National Research Council, 2002).

Fares and colleagues (2016) conducted a study examining the relationship between involvement in extracurricular activities and stress and burnout, and the prevalence of stress and burnout experienced by university students in Beirut, Lebanon. Physical exercise, music, reading, and social activities were specified as four types of extracurricular activities. The questionnaire included three sections including demographic information and involvement in extracurricular activities, the General Health Questionnaire and the Maslach Burnout Inventory-Student Survey. Their findings indicated that 62% of students experienced stress whereas 75% of them experienced burnout. Unlike what one might expect, social activities were found to be adding to levels of stress and burnout, and academic problems. Fares and colleagues (2016) claimed that social activities such as voluntary jobs for the sake of the community consumed time and energy and thus was related to low academic achievement. Music-related activities were found to be associated with a lower level

of burnout and physical activities were found to be associated with a lower level of stress. A similar study by Bland, Melton, Bigham, and Welle (2014), however, had findings in the expected direction. They investigated the resources that may help university students cope with stress and add to their tolerance against stress. Findings indicated that physical activities had a positive effect on university students' stress tolerance.

Wang and Shiveley (2009) believed that extracurricular activities have a positive impact on university students' academic success. Therefore, they investigated the relationship between involvement in extracurricular activities like becoming a board member of a student club, and academic issues such as the rates of retention and graduation at California State University in the US. The data were provided by the Division of Students Affairs and the Office of Institutional Research. Analyses indicated that academic performance was positively correlated with involvement in extracurricular activities. Students who participated in at least one extracurricular activity had higher GPA, a higher percentage of retention and graduation. They argued that extracurricular activities were among the motivational factors for graduation and regular student life. Additionally, around 65% of the university students in the US stated that involvement in extracurricular activities did not affect their academic performance and 25% of them stated that they experienced problems but it did not have a negative impact on academics (ACHA, 2019).

On a similar line of design, Çivitçi (2015) investigated the association between involvement in extracurricular activities, sense of belonging to the university, students' major, experiences of stress and life satisfaction among students at Pamukkale University in Denizli, Turkey. Their data were collected by the use of The Perceived Stress Scale, The Satisfaction with Life Scale and a demographic

question form. Çivitçi found that involvement in extracurricular activities as a single factor did not have an impact on stress level and life satisfaction of the students. Nevertheless, students who felt belonging to their university and their major had lower percentages of stress and higher percentages of life satisfaction.

Even though involvement in extracurricular activities may be considered time-consuming and negatively influencing academic performance, they provide natural environments where university students develop interpersonal and intrapersonal skills. Besides, some studies (Bauer et al., 2018; Shiah et al., 2013) showed that involvement in extracurricular activities helped to reduce suicide probability and led to better psychological health. Since this study is conducted at a university that is popular with its highly resourceful student activities (44 student clubs listed at the university website), we wanted to see how the level of involvement in extracurricular activities was related to the reported problems of students.

## 2.6 Research questions

The first research question focuses on the development of a tool to be used in understanding students' psychosocial problems. The second and third questions aim to understand the experiences of students and to draw a demographic profile. The fourth question may shed light on the impact of social activity engagement of students on their mental health. The fifth question deals with current existential concerns of young and educated people in regards to where they want to live and may also raise an interest among social psychologists and policymakers. The last two questions are likely to have more indications for student counseling centers and mental health services as they plan the prevention of mental health problems and crises.

1. What is the factorial structure of the expanded version of BÜREM problem areas form and what are the reliabilities of this form?
2. Do the degree of problems and the problem areas vary by students' sex?
3. Do the degree of problems and the problem areas vary by students' academic level?
4. Do the degree of problems and the problem areas vary by the students' level of involvement in extracurricular activities?
5. Do the degree of problems and the problem areas vary by the students' preferences about living abroad?
6. Which problem areas are common among students with and without history of receiving psychological help?
7. Which problem areas are common among the students with and without suicidal thoughts and attempts?

## CHAPTER 3

### METHODOLOGY

#### 3.1 Participants

The population of this survey is university students who are in 18-25 age range, representing emerging adulthood. We targeted university students who study at Boğaziçi University in İstanbul, Turkey. Our accessible population was registered students of Boğaziçi University. The registration office of the university provided information that there were 16,706 students registered in 2018-2019 Academic Year. As explained in the procedures section below, the survey was sent to 16,083 students by BÜREM. A total of 721 students (around 4%) responded to the form. To increase the sample size, the link to the survey including the same information in the e-mails were published by the researcher as a post in social media groups in Facebook that consisted of only Boğaziçi University students, but very limited participation ( $f = 20$ , less than 1%) was achieved through this means. In the end, 741 students (response rate: 4.6%) constituted the sample of the study.

According to the information provided by the Registration Office of the University, 45% of the general student population were females ( $f = 7,517$ ) while 55% of them were males ( $f = 9,189$ ). In contrast to the student distribution to sex in the general population, however, most of the participants were female ( $f = 510$ ; 68.8%), 223 of them were male (30.1%) and eight of them (around 1%) refused to answer the sex question in the current study (see Table 1).

Table 1. Frequencies and Percentages of the Participants' Sex ( $N = 741$ )

Sex	$f$	%
Female	510	68.8
Males	223	30.1
Did not specify	8	1.1

To be included in the sample there was an age range (18-25) restriction, but no other characteristics constituted a reason for exclusion from the sample. All students, including English preparatory, undergraduate and graduate students were invited to take part in the survey.

Participation was on voluntary basis. There was no payment or any other incentive for participation.

Tables 2-3 provide some descriptive information on sample characteristics as collected from the demographic information part of the survey. Table 2 indicates that the participants were 21 years old on the average and had an average of 2.83 (out of 4.00) grade point averages (GPA).

Table 2. Mean, Standard Deviation, Range, Minimum, and Maximum Values for the Age and Grade Point Average (GPA) of the Participants ( $N = 741$ )

	<i>M</i>	<i>SD</i>	Range	Minimum	Maximum
Age	21.01	2.05	7	18	25
GPA	2.83	0.78	4.00	.00	4.00

Again as the Registration Office of the university informed, the largest student body at the university were enrolled at the Faculty of Arts and Sciences ( $f = 3,990$ ; 23%), the School of Foreign Languages or the English Preparatory School ( $f = 3,147$ ; 18%), the Faculty of Engineering ( $f = 2,805$ ; 16%), the Faculty of Education ( $f = 2,560$ ; 15%) and the Faculty of Economics and Administrative Sciences ( $f = 1,983$ ; 11%). Students who were studying English were kept as a group instead of being grouped by their respective faculties they are to be part of when they successfully complete the English Preparatory School. Similar to the student distribution to academic units in the population, most of the participants were from the Faculty of Arts and Sciences ( $f = 227$ ; 30.8%) and the School of Foreign Languages ( $f = 161$ ; 21.7%). The rest of our students were mostly from the Faculty

of Education ( $f = 119$ ; 16%), and the Faculty of Engineering ( $f = 79$ ; 10.6%).

Students of engineering were somewhat underrepresented compared to the population. All the existing academic units in undergraduate departments were represented in our sample. Departments of Psychology (36 undergraduates, 4 graduate students; around 5%), Educational Sciences (32 undergraduate students, 3 graduate students; almost 5%) and Foreign Languages Education (35 undergraduate students; almost 5%) had the largest representation in our sample (see Appendix D).

Table 3 describes student characteristics in terms of academic level and term, residence, financial aid and work status. Majority of our participants were studying at an undergraduate program ( $f = 516$ ; 69.6%) or at English preparatory school ( $f = 161$ ; 21.7%). The rest of the participants were graduate students ( $f = 64$ ; around 9%). Academic terms ranged between one to 12, but most of the students were registered into their second ( $f = 221$ ; 29.8%), fourth ( $f = 130$ ; 17.5%), sixth ( $f = 90$ ; 12.1%) and eighth ( $f = 84$ ; 11.3%) terms, respectively. According to the residential status, 41% of the students ( $f = 305$ ) were living in dormitory, 25.6% of them were living with their nuclear families ( $f = 190$ ), and 21.2% of them were living with their friends ( $f = 157$ ). Only 5% of the students were living on their own ( $f = 37$ ).

Almost the half of the participants were receiving some form of financial aid ( $f = 349$ ; 47.1%). According to work status, 13.5% of the students were working in a part-time job ( $f = 100$ ), 11.2% of them ( $f = 83$ ) were working irregularly, and around 3% of them were working only on holidays ( $f = 25$ ), around 3% of the students ( $f = 24$ ) were working in a full-time job.



Table 3. Frequencies and Percentages for the Academic Level and Term, Residential Status, Financial Aid Status and Work Status of the Participants ( $N = 741$ )

Categories		<i>f</i>	%
Academic level	Undergraduate students	516	69.6
	English preparatory school	161	21.7
	Graduate students	64	8.6
Academic term	2	221	29.8
	4	130	17.5
	6	90	12.1
	8	84	11.3
	1	35	4.7
	3	25	3.4
	10	23	3.1
	5	17	2.3
	7	14	1.9
	9	11	1.5
	12	3	0.4
	Missing	88	11.9
Residential Status	In dormitory	305	41.2
	Nuclear family	190	25.6
	Living with friends	157	21.2
	Living with partners	39	5.3
	Living on my own	37	5.0
	Living with relatives	7	.9
	Living with extended family	6	.8
Receiving financial aid	No	392	52.9
	Yes	349	47.1
Work status	Do not work	509	68.7
	Work part-time	100	13.5
	Work irregularly	83	11.2
	Only work on holidays	25	3.4
	Work full-time	24	3.2

Table 4 describes the kind and the level of involvement in extracurricular activities of the participants. The students who were actively participating and organizing student activities including art, music and hobbies ( $f = 622$ ; 84%), university student clubs ( $f = 455$ ; 43.2%), in training, professional development or internship programs ( $f = 356$ ; 48%), social services for the benefit of disadvantaged groups ( $f = 258$ ; 34.9%), student university managerial tasks ( $f = 60$ ; around 8%), and political engagements ( $f = 46$ ; around 6%), respectively. Majority of the students were not interested in student university managerial tasks ( $f = 506$ ; 68.3%) and political engagements ( $f = 490$ ; 66.1%).

Table 4. Frequencies and Percentages for the Kind and Level of Involvement in Extracurricular Activities of the Participants ( $N = 741$ )

Kind of involvement	Level of involvement	<i>f</i>	%
University student clubs	Only as spectator	238	32.1
	Actively participating	217	29.3
	Not interested	183	24.7
	Actively organizing	103	13.9
Student activities outside the university	Actively participating	426	57.5
	Only as spectator	196	26.5
	Not interested	63	8.5
	Actively organizing	56	7.6
Student university managerial task	Not interested	506	68.3
	Only as spectator	175	23.6
	Actively participating	45	6.1
	Actively organizing	15	2.0
Political engagements	Not interested	490	66.1
	Only as spectator	205	27.7
	Actively participating	37	5.0
	Actively organizing	9	1.2
Training, professional development, or internship programs	Actively participating	310	41.8
	Not interested	207	27.9
	Only as spectator	178	24.0
	Actively organizing	46	6.2
Social services benefitting disadvantaged groups	Only as spectator	270	36.4
	Not interested	213	28.7
	Actively participating	202	27.3
	Actively organizing	56	7.6

Table 5 shows some family-related descriptive characteristics of the participants. Majority of mothers and fathers were alive (98.1% and 95.5%, respectively), while around 6% of the participants ( $f = 47$ ) lost their mother (almost 2%) or father (4.5%). Most families were intact ( $f = 620$ ; 83.7%) and 16.3% ( $f = 121$ ) of the parents were either divorced or separated. Most of the participants had siblings ( $f = 607$ ; 81.8%). Number of siblings our participants had varied between zero to 21. Most of the students had two ( $f = 331$ ; 44.7%) or three ( $f = 161$ ; 21.7%) siblings. Single children constituted almost 5% of ( $f = 38$ ) of the sample.

Table 5. Frequencies and Percentages of Family-Related Information of the Participants ( $N = 741$ )

Categories		$f$	%
Mother alive	Yes	727	98.1
	No	14	1.9
Father alive	Yes	708	95.5
	No	33	4.5
Parent's marital status	Married	620	83.7
	Divorced/Separated	121	16.3
Number of siblings*	2	331	44.7
	3	161	21.7
	None	134	18
	4	51	6.9
	1	38	5.1
	5	12	1.6
	7	3	.4
	6	2	.3
	8	1	.1
	9	1	.1
	10	1	.1
	12	1	.1
	14	1	.1
	18	1	.1
	21	1	.1
	Missing	2	0.2

\*Not a required question

Table 6 displays the student characteristics in related to experiences and preferences of living abroad. Majority of the students ( $f = 403$ ; 54.4%) had some experiences in abroad, i.e., traveling ( $f = 283$ ; 38.2%), studying ( $f = 104$ ; 14%), living ( $f = 34$ ; around 5%) or working ( $f = 16$ ; around 2%) while 41% of them did not have any such experiences. Only a minority of the students had no interest in living abroad ( $f = 66$ ; almost 9%). A large group of them ( $f = 350$ ; 47.2%) were interested in living abroad to study or to work only temporarily. The remaining majority ( $f = 325$ ; 43.9%) were interested in settling abroad.

Table 6. Frequencies and Percentages for Experiences and Preferences of Living Abroad ( $N = 741$ )

Categories		<i>f</i>	%
Experience of living abroad	Never	304	41
	As a tourist	283	38.2
	As a student	104	14
	Living/lived abroad	34	4.6
	As a worker	16	2.2
Preferences of living abroad	Temporary interest (studying/working)	350	47.2
	Settlement interest	325	43.9
	No interest	66	8.9

Table 7 describes history of receiving psychological help and psychiatric medication, history of suicidal thought and attempt among the students and their family members. Around 46% of the students ( $f = 343$ ) received or were receiving psychological help. Around 29% of the students took ( $f = 143$ ) or were taking ( $f = 73$ ) psychiatric medication. More than one third of students ( $f = 244$ ; 32.9%) thought of suicide while around 8% of them ( $f = 61$ ) had a previous suicide attempt. Almost 42% of the students ( $f = 312$ ) had a family member who received psychological help while nearly one third of the sample had someone in their family or knew somebody ( $f = 200$ ; 27%) that they felt close, had suicide attempt.

Table 7. Frequencies and Percentages of History of Receiving Psychological Help Among Their Family Members and Taking Psychiatric Medication of the Participants ( $N = 741$ )

		<i>f</i>	%
History of receiving psychological help in the past or currently	No	398	53.7
	Yes	343	46.3
History of taking psychiatric medication in the past or currently	No	525	70.9
	Yes	216	29.1
Suicidal thought	No	497	67.1
	Yes	244	32.9
Previous suicide attempt	No	680	91.8
	Yes	61	8.2
Family history in use of psychological help	No	429	57.9
	Yes	312	42.1
Family history of suicide attempt	No	541	73
	Yes	200	27

In summary, our student sample was in the age of emerging adulthood as defined by Arnett (2007). The sample constituted the 4.6% of the student population of the University and was similar to the population in terms of academic unit distribution. Majority of the participants had parents who were alive and together, and had two or three siblings. Most of the participants did not work and were living in dormitory or with their families. Although 41% of the students had no experience abroad, almost all of them (91%) were either interested in living abroad temporarily or settling abroad. Around the half of the students received or were receiving psychological help while one-third of the students had thoughts of suicide. Again, more than 40 % of the students had family members who received psychological help in the past while 27% of the students had someone in their family or knew somebody that they felt close had suicide attempt.

### 3.2 Instrument

There was a single instrument in the study; the extended version of BÜREM intake form (EBIF). Below the original version of the BIF and the steps followed in development of the expanded version are described. The findings (psychometric characteristics) regarding the expanded version was the first research question of the study. Therefore, they are reported in the Results.

#### 3.2.1 BÜREM Intake Form (BIF)

Over the years BÜREM was serving for the counseling needs of the students and through cumulative efforts of the past and present counselors and clinical psychologists of the center, an intake form was evolved through the guidance and leadership of the thesis advisor who has been on the managerial board or the director

of the student counseling center since 1993. This form that has been used since 1993 provided a foundation to the current study. It has been given to all students who apply to receive counseling. Information provided on the form has been used by the counselors and clinical psychologists before and during the first meeting with students to identify the service needs of the applicants. Currently, due to limited resources and despite increases in service needs of students, briefer interventions are used and accordingly, a more concise intake is in active use at BÜREM. However, the regular version of the intake form provided the basis of the instrument of the current study.

The BIF has two sections including demographic information and a list of problem areas. The first section is on demographic characteristics with 28 questions that provide identifying information on students including their residential status, academic level, working status, familial characteristics, etc. The second section has a list of 54 problem area items that are to be rated on a four scale basis (0: none, 1: some, 2: much, and 3: very much). These items concern academic, physical, psychological, social, and emotional issues that students might experience.

As mentioned in the earlier section, Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman (2009) conducted a profile analysis to understand what common problems were observed among the students. They used the BIF and compared the problem areas of students with and without an application to BÜREM. The sample consisted of 607 students including 294 students who applied to receive counseling help at BÜREM, and 313 students who had no application. Exploratory factor analyses were conducted to identify problem areas. Six factors emerged, explaining 42% total variance. They were named as mood states/depression (15 item, 19.6% variance explained), adaptation to university life (10 items, around 8% variance

explained), relational problems (eight items, around 5% variance explained), academic problems (eight items, around 5% variance explained), externalization/somatization (six items, around 4% variance explained), and traumatic experiences (seven items, around 3% variance explained).

The reliability of the form was .91 for the total score and these values ranged between .61 and .90 for the six factors of the BIF.

As a source of concurrent validity, the correlation between the problem areas list and the Brief Symptom Inventory (BSI) was calculated to be .85. Their results further showed that no demographic characteristic was found to be making a statistically significant difference between applicants and non-applicants. Males experienced more academic problems. Students living with their family experienced fewer problems in relation to academics and adaptation to the university life compared to students living in the dormitories and living with their friends. Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman concluded that the list of problem areas was a valid scale that could help identify the problems of university students.

### 3.2.2 Expanded BÜREM Intake Form (EBIF)

To be able to answer the following research questions, the first goal of this study had to be forming a descriptive and quantitative screening tool for problem areas of students. The BIF had to be updated to reflect current changes that might have occurred in student lives. In addition, the scope of the BIF was more service oriented, while the scope of the current study included research concerns. Therefore, the survey was intended to be more comprehensive than an intake. Nevertheless, the updated version of the intake form is still called the Expanded Intake Form of BÜREM, as the main body of the original form was maintained.

Items in the previous survey that was used by the task force in 2014, annual intake forms used at various universities and the BIF were examined. All problem areas in the previous survey in 2014 and the BIF were covered but the redundancies were eliminated.

The EBIF includes all the demographic items in the original BIF. An option of 'I do not want to specify' was added to the item of sex. Some new items including issues specific to our country such as problems with compulsory military service and the university such as difficulty in passing the English Proficiency Exam were added as problem area items.

Based on our observations and the indications of the TurkStat (2017), a question about living abroad was added to the survey. And again, based on our observations and indications of the literature (Bauer et al, 2018, Shiah et al., 2013), involvement in extracurricular activities was viewed as a potential protective factor. Therefore, some items were added to capture students' political, artistic, and social club activities to find out the kind and level of their involvement.

This study had questions that may have service implications, therefore, some items on family history of getting psychological help, of suicidal thoughts and attempts were added into the demographic information section.

The second section was extended with 21 new problems areas such as anti-democratic environments, self-neglect, concerns over safety, competitive environment to reflect the observed social changes even if they may have no direct implications for counseling services.

This comprehensive new form was reviewed by the full time professionals (counselors and clinical psychologists) who work at BÜREM as it is intended to be regularly used to monitor mental health status of the university students. Their



recommendations were taken into consideration in finalizing the form. The final form of the EBIF was not shared in its entirety for ethical reasons, but the direction of the survey in Appendix A and sample items can be viewed in Appendix B.

This survey is composed of two main sections including demographic information and problem areas. The first section is on demographic characteristics with 21 questions. Participants are asked about their sex, living conditions (residential status and geographic origin), family information (number of siblings, living status of parents, marital status of parents, history of receiving psychological help, suicide attempts of relatives), work and financial aid status, experience of and motivation for living abroad, history of receiving psychological help, and taking psychiatric medication, suicidal thoughts and attempts.

The second section is a list of problems consisting of 75 items that are to be rated on a five scale basis (0: none, 1: some, 2: much, and 3: very much, and missing: I do not want to answer), high scores indicate experiences of higher levels of the problem. Total scores range between 0-225. The list has items concerning academic, physical, psychological, social, and emotional issues that students might experience as in the previous one. It takes about 10-15 minutes to complete the entire survey.

### 3.3 Procedures

After the survey was ready to be used, application for ethical approval of the study was made to the INAREK (Institutional Review Board for Research with Human Subjects at Boğaziçi University). The permission was granted in April, 2018 (see Appendix C).

The research proposal was made to the jury committee in an open meeting to the department in April 19, 2019. After the approval of the committee, data collection was started.

The survey was prepared to be filled as an electronic form by use of the Google Forms program. The link was sent to the total of 16,083 university students via two consecutive (two weeks apart) e-mails by BÜREM. The e-mail included the names of the researcher and the thesis advisor, the department of the study program, the information that ethical permission of İNAREK was granted, brief information on purposes and significance of the study, an explanation that participation is voluntary and they may quit answering if they wish to do so and the e-mail addresses of the researcher and the thesis advisor.

Data collection was ended in three weeks (May 10, 2019), as very few new forms were being added to the existing data pool and the end of the academic year was approaching.

### 3.4 Data analyses

The data were collected anonymously and cumulatively. Analyses were conducted by use of the Statistical Package for the Social Sciences program (SPSS version 24). Unless otherwise is indicated, statistical significance level was  $p < .05$ . In the text, exact  $p$  values were reported (i.e.,  $p = .017$ ),  $p$  values less than .001 were reported as  $p < .001$  and  $p$  values that are not statistically significant nor approaching significance were shortened as “ns.”

Demographic characteristics of the participants were presented in tables of descriptive statistics i.e., frequencies, percentages, means, standard deviations. These tables precede the tables of further analyses of group differences.

The first research question (What is the factorial structure of the expanded version of BÜREM problem areas form and what are the reliabilities of this form?) were answered through exploratory and confirmatory factor analyses, and reliability analyses. After the factorial structure of the EBIF was established, the factorial scores were accepted to be representing the problem areas and are used as dependent variables (DV). Missing data for each item were checked and removed list-wise from the related analyses.

The rest of the questions mainly utilized Multivariate Analysis of Variance (MANOVA), as there was more than one dependent variable (DV, factorial scores). If there were more than two levels in the independent variables (IV), group differences were followed up by Tukey tests. Group differences in total problem scores were investigated by conducting *t*-test if there were two groups (different levels of the same IV), and analysis of variances (ANOVA) if there were more than two groups.

Before conducting MANOVAs, the assumptions for normality, outliers, homogeneity, linearity, multi-collinearity and singularity, and equality of covariance matrices were checked to test the suitability of the data. All of the scores on the current study variables were found to be normally distributed except traumatic experiences, addiction and health concerns. The participants who did not answer every single item were excluded from the analyses. Finally, no significant violation was detected to perform MANOVA.

To answer the second question (Do the degree of problems and the problem areas vary by students' sex), a MANOVA was performed to investigate whether problem areas differ by sex (IV). Participants ( $f = 8$ ) who refused to answer this question were eliminated from the analyses.

The third question (Do the degree of problems and the problem areas vary by students' academic level?) was analyzed by a MANOVA, using students' academic level (including the students at English Preparatory School, undergraduate students, students who were studying in a master program, and PhD students) as independent variables. Since only four PhD students participated in our survey, we combined them with the master's students and named as the "graduate students." Likewise, since there were only 14 repeating students (students who failed to pass or retake the English Proficiency Exam or who were on leave from the English Preparatory School), they were combined with the remaining regular students at English Preparatory School.

The fourth research question (Do the degree of problems and the problem areas vary by the students' level of involvement in extracurricular activities?) was analyzed by a MANOVA utilizing the level of involvement in extracurricular activities as IV. The participants were asked to rate their interest in extracurricular activities from zero to 10. Zero means 'I have no interest' and 10 means 'involvement in extracurricular activities takes an important place in my life.' We constituted three groups by dividing these ratings (not interested, somewhat interested, and highly interested) and that was our three levels of the IV.

The fifth research question (Do the degree of problems and problem areas vary by the preferences about living abroad?) was analyzed by performing another MANOVA. The independent variable in this analysis was preferences of living abroad. It had of four subcategories: not interested in living abroad, interested as a tourist, temporary interest in studying/working abroad, and interested in settling abroad. The subcategories of not interested in living abroad and interested as a tourist were combined since only 12 participants stated they were not interested in living

abroad and these two subgroups did not want to live abroad. Thus, three levels were used in this analysis.

The sixth research question (Which problem areas are common among the students with and without history of receiving psychological help?) again utilized MANOVA. This time, the independent variable (students with and without use of psychological help) had two levels.

The seventh or the final research question (Which problem areas are common among the students who have suicidal thoughts and attempts?) used a MANOVA and suicidal thoughts and suicidal attempts as independent variable. We also compared the results according to the three levels in the IV; students with no suicidal attempt or thought, students with suicidal thought, and students with suicidal thought and attempt. The participants who attempted suicide without suicidal thought were very few ( $f=3$ ) and thus were eliminated from the analyses.

## CHAPTER 4

### RESULTS

This thesis study attempted to achieve two main goals. The first goal was to update the existing BIF and to examine its psychometric characteristics. To achieve the first goal was necessary to achieve the second one. The second goal was to understand the student profile as their problem areas relate to a series of student characteristics. Our findings are reported below under the subtitles of each research question.

#### 4.1 Factorial structure and reliability of the EBIF

##### 4.1.1 Factorial structure of the EBIF

The BIF was not a new instrument and we knew its factorial structure. But as 21 new items were added to update the form, an exploratory factor analysis was conducted to view the potential changes. We aimed to compare the factorial findings with the earlier ones (Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman, 2009). List wise deletion was used in data analyses.

To conduct an exploratory factor analysis, two conditions were checked: the numbers of the respondents and the strength of correlations between the items.

According to Tabachnick and Fidell (2013), numbers of participants should be more than 300, Kaiser-Meyer-Olkin's (KMO) measure of sampling adequacy value should be higher than .6, and Bartlett's Test of Sphericity (BTS) value should be .05 or smaller. Since 741 students participated in our survey, we could obtain reliable results, our KMO value was found as .895, and the value of BTS is .00. Therefore, we decided that our data set was convenient for factor analysis. Nineteen factors

emerged as a result of our exploratory factor analysis. The items that had loadings lower than .3 on any of the factors were extracted (see Table 8).

Table 8. Means and Standard Deviations for the Items Eliminated After the Factor Analysis of the Expanded BÜREM Intake Form

Items eliminated *	Females			Males			Total		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Test anxiety	1.58	1.055	509	1.10	.954	222	1.44	1.051	739
Relation difficulties with staff	.44	.717	509	.39	.662	222	.42	.701	739
Competitive environment	1.59	1.112	507	1.10	1.066	222	1.45	1.120	737
Familial/social expectations	1.43	1.049	508	1.02	1.037	222	1.30	1.060	738
Financial difficulties	1.30	1.036	509	1.10	.987	223	1.25	1.031	740
Having to work	.83	1.041	508	.71	.906	222	.80	1.006	738
Lack of self-knowledge/development	1.64	1.041	510	1.34	1.025	222	1.55	1.047	740
Self-neglect	1.64	1.049	507	1.35	1.048	222	1.55	1.060	737
Social discomfort	1.21	1.025	509	1.26	1.042	223	1.23	1.029	740
Conflicts with friends	.66	.782	510	.55	.763	222	.63	.775	740
Peer pressure	.51	.777	510	.32	.634	221	.46	.739	739
Family problems	.91	.955	507	.66	.851	221	.84	.933	736
Separation from loved ones	.99	.972	509	.78	.898	221	.93	.958	738
Illness of someone close	.50	.852	509	.50	.877	221	.50	.856	738
Problems with one's partners	.89	.974	508	.81	.940	222	.86	.962	738
Sexual problems	.37	.724	505	.52	.834	221	.41	.759	734
Problems with military service	.01	.187	507	.40	.734	223	.14	.484	738
Sexual orientation /identity problems	.18	.541	510	.26	.674	223	.21	.603	741
Lack of self-confidence	1.57	1.013	510	1.06	.946	222	1.41	1.019	740
Lack of meaning/ emptiness	1.73	1.109	508	1.39	1.088	221	1.63	1.116	737
Suicidal ideation	.45	.801	509	.46	.814	223	.46	.811	740
Concerns over physical disability	.10	.407	508	.11	.361	223	.10	.393	739
Dissatisfaction with one's body-look	1.27	1.081	507	.90	.926	222	1.15	1.049	737
Gaining/losing too much weight	.72	1.017	509	.47	.873	223	.64	.983	740
Fatigue	1.83	.955	510	1.38	.973	223	1.69	.986	741
Eating disorders	.97	1.035	509	.89	.968	222	.94	1.015	739
Sleep difficulties	1.25	1.077	510	1.31	1.054	222	1.27	1.072	740

\* The number of items were eliminated is 27.

Since the minimum number of factors should represent the maximum number of items (Pallant, 2013), elimination of some factors was needed. With the help of

the scree plot examination (see Figure 1), we assumed that around eight factors would best represent the maximum number of items in accordance with eigenvalues.

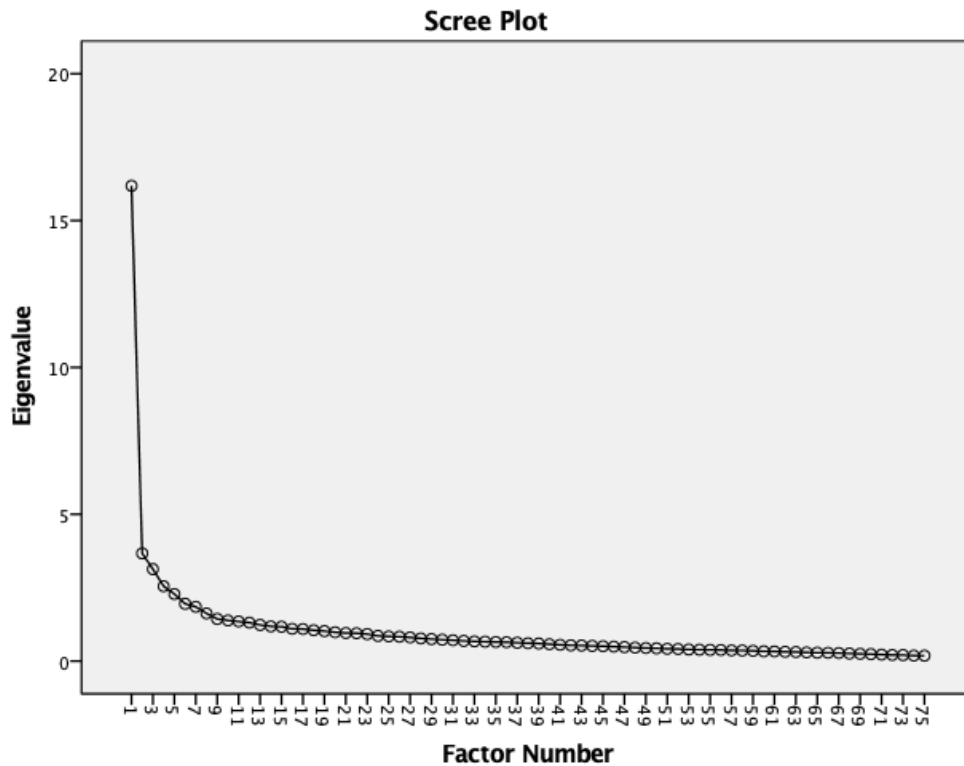


Fig. 1 Scree plot graph after exploratory factor analysis

To ensure the number of factors to be retained, eigenvalues were analyzed by performing Monte Carlo simulation program. This program helps to produce random data sets according to the actual number of respondent surveys and variables in our study. After this calculation, the eigenvalues of our factors that were obtained from our survey as produced by Monte Carlo program were compared (see Table 9). As a result of the comparison with factor values in parallel analysis, eight factors were decided to be retained. This was similar to the six factorial structure of the BIF, as we figured that additional items that had different themes might require additional number of factors.



Table 9. Eigenvalue Results After Monte Carlo PCA for Parallel Analysis

Factors	Random eigenvalues	<i>SD</i>
1	1.73	.03
2	1.68	.02
3	1.64	.02
4	1.60	.01
5	1.57	.01
6	1.54	.01
7	1.51	.01
8	1.48	.01
9	1.46	.01

After parallel analyses, confirmatory factor analysis was conducted to force all items into eight factors. The items that did not load on any factor (Q5, Q34, Q38, Q40, Q41 and, Q63) were eliminated from the form since the loading scores were below .3. These were items such as compulsory military service and sickness of someone close that related to experiences that do not commonly occur. The items that loaded on several factors (Q4 and Q29) were excluded as they did not necessarily relate to a single problem area but could be viewed as items that add more to the definition of that problem areas are (see Appendix E). For example, social discomfort (Q29) loaded on factor 1, 2 and, 4 between the range of .323 to .555 while test anxiety (Q4) loaded on factor 1 and 7 between the range of .361 to .435.

In the end, 48 items remained in our problem area list as they clearly loaded on one factor through the confirmatory factor analysis with forced number of eight (see Appendix F). The factors were named to reflect the nature of their respective items.

These eight factors explained a total of 42.8 of the variance with Factor 1 contributing 18.6%, Factor 2 contributing around 5.5%, Factor 3 contributing 4.5%, Factor 4 contributing around 4%, Factor 5 contributing 3.5%, Factor 6 contributing 2.5%, Factor 7 contributing 2%, and Factor 8 contributing around 2%.

Our factors were rotated to see which variables could be grouped. Factor 1 (18.6% of the variance explained) that consisted of 13 items including mood swings, stressed and some emotions, was called ‘problems with affect.’ In the previous factor analysis conducted by Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman (2009), the factor of mood states/depression had identical eight items such as mistrust, sadness/hopelessness. Three new items including obsessions, mood swings, burn-out loaded on the factor of problems with affect. The item, jealousy, loaded on problems with affect in our survey, formerly it loaded on relational problems, and orderliness that was associated with externalization/somatization (no such factor emerged this time) in the previous survey was found to relate to problems with affect.

Factor 2 (around five of the variance explained) that was called ‘academic problems’ as the same in the previous survey had eight items such as academic failure, learning difficulties. Internet/social media overuse that was added to new version of the form loaded on this factor. Only the item, test anxiety, did not load significantly with any factor unlike the previous factor analysis.

Problems with culture, Factor 3, (around 4% of the variance explained) that did not exist before but had two identical items with the factor of adaptation to the university life in the previous survey conducted by Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman (2009). Three new items including discrimination experiences, concerns over safety and antidemocratic environments significantly loaded on the same factor. In contrast to the previous survey, the item on residential concerns was significantly related to the factor in our survey.

Traumatic experiences (Factor 4, around 4% of the variance explained) included eight items and five of them such as sexual harassment, unwanted pregnancy/abortion/miscarriage fell under the same factor in both survey. The item,

self-injurious/risky behavior, that was listed in both survey was found to be correlated with this factor in our analysis. The item, persisting injuries that was added to the new version of the form, had significant loading on this factor.

Factor 5 (3.5% of the variance explained) was called 'relational issues' that was similar to the factor of relational problems in the previous survey. Relational issues had four items including difficulty in forming intimate relationships, loneliness, shyness and difficulty in adapting the university life. In the past survey, loneliness and shyness associated with mood status/depression and, difficulty in adapting the university life associated with the factor called adaptation to the university life. Family problems, sexual problems, conflicts with friends, sexual orientation/identity problems and problems with one's partners that were correlated with relational problems in the past survey, did not have significant loadings in the current one.

Addiction (Factor 6, 2.5% of the variance explained) that included four items was a new category in comparison with the previous survey. In the past survey, alcohol use and smoking associated with adaptation to the university life and, drug use associated with the traumatic experiences. Gambling that was newly added to the EBIF was found to be loading with addiction.

Career/future concerns that did not exist before was another new factor (Factor 7, 2% of the variance explained) including three items. Future concerns was a new item added to the current survey. Career concerns and career path choice were previously loading with adaptation to the university life.

Factor 8 (2% of the variance explained) that did not exist before consisted of two items including periodic and chronic health problems. Both of those two items were new to the instrument and added another value to the EBIF.

#### 4.1.2 Reliability of the EBIF

Since 21 new items were added to update the form, it was needed to check the total reliability score and the reliability scores for each factor. According to Cronbach alpha values, the total reliability value of the EBIF was .91 and the reliability value of the eight factors varied between .68 and .89. In the previous survey, the reliability of the form was .91 and the reliabilities of the six factors varied between .61 and .90. The results showed that the reliabilities of the BIF and the EBIF were similar and satisfactory (see Table 10).

Table 10. Reliability Statistics of the EBIF \*

Factor (Problem area)	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
Problems with affect	.895	.894	13
Academic problems	.815	.816	8
Problems with culture	.786	.787	6
Traumatic experiences	.680	.705	8
Relational issues	.762	.761	4
Addiction	.680	.708	4
Career/future concerns	.760	.761	3
Health concerns	.797	.799	2
Total problem score	.918	.912	48

\* For total problem score, the remaining 48 items were used in reliability analysis.

These 48 items that loaded on a single factor were investigated in terms of item rest correlations, item factor correlations and item total correlations (see Appendix G). Item-rest correlation is a reliability measure that gives the total score without that item being included. The lowest correlation between the item (Q45) and the total score of the rest items was .259. The range for item rest correlations was between .259 and .706 (Q65 and Q66, respectively), the range for item factor correlation was between .387 (Q45), and .930 (Q65), and the range for item total correlations was between .205 (Q74) and .664 (Q55).

By performing split-half reliability analysis, 48 items were divided into two parts (First 24 and the last 24) first. The correlation between two parts was found .674. After this analysis, split-half reliability was performed by splitting data according to odd and even number items. The correlation was found .900. There were differences among split-half reliability scores since were generally all items loading on the same factor were listed together in the problem areas list.

In summary, our factor analyses yielded eight factors, each indicating problem areas of the participants. In order of magnitude they were career/future concerns, problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences, respectively. This eight factor structure explained 42.8% of variance in total. Internal consistencies were satisfactory. The total reliability value of the EBIF (Cronbach alpha .91) was similar to the original form (the BIF). Split-half and odd-even item reliabilities were .674 and .900, respectively. Finally, item based reliabilities indicated that item rest correlations were higher than .259 (ranging between .259 and .706), item factor correlation was higher than .387 (ranging between .387 and .930) and item total correlations were higher than .205 (ranging between .205 and .664).

#### 4.2 Sex differences in psychosocial problems

This question aimed to capture whether sex mattered in the problem areas students reported. Table 11 below provides the descriptive statistics for each sex and the entire sample, while Table 12 reports tests of significance by sex.

Majority of the participants (355, 70.2%) were females while number of male students were 152 (29.8%). Except for addiction, females had higher mean scores in all problem areas compared to males (see Table 11). The highest score was in female

group ( $M = 1.46$ ) in related to career/future concerns while the lowest score was in male group ( $M = .21$ ) in related to traumatic experiences.

Table 11. Means and Standard Deviations in Problem Areas by Participants' Sex \*

Problem area	Females ( $n = 355$ )		Males ( $n = 152$ )		Total ( $N = 509$ )	
	$M$	$SD$	$M$	$SD$	$M$	$SD$
Career/future concerns	1.46	.751	1.05	.695	1.34	.758
Problems with affect	1.32	.649	1.03	.642	1.23	.660
Academic problems	1.23	.644	1.11	.629	1.19	.641
Relational issues	1.11	.688	1.09	.743	1.10	.704
Problems with culture	1.03	.690	.80	.604	.96	.673
Health concerns	.65	.781	.38	.629	.57	.749
Addiction	.25	.414	.35	.581	.28	.472
Traumatic experiences	.26	.313	.21	.353	.24	.326
Total problem score	7.34	2.905	6.04	2.929	6.95	2.979

\* Averages of the problem area (factor) scores were used so that comparison can be visible.

Table 12 shows where the significant differences lied in related to problem areas in accordance with the sex of the participants. Significant differences between females and males were found in career/future concerns, problems with affect, problems with culture, health concerns, and addiction. Females had significantly higher scores for career/future concerns ( $MD = .411, p < .001$ ), problems with affect ( $MD = .292, p < .001$ ), health concerns ( $MD = .272, p < .001$ ), and culture ( $MD = .226, p < .001$ ) in comparison with males, respectively. Only for addiction, males had a significantly higher score average, but sex difference was smaller than the other significant differences ( $MD = .096, p = .035$ ). There was no sex difference in relational issues ( $MD = .024, p = ns$ ) and smallest sex difference existed was in that problem area. Also, when their total problem scores were compared, group differences as indicated by  $t$ -test, were significantly different [ $t(505) = -4.579, p < .001$ , two-tailed] favoring males.

Table 12. MANOVA Test Results in Problem Areas by Participants' Sex

Problem area	Sex	Sex	<i>MD</i>	<i>SE</i>	<i>p</i>
Career/future concerns	Female	Male	.411*	.071	.000
Problems with affect	Female	Male	.292*	.063	.000
Academic problems	Female	Male	.122	.062	.050
Relational issues	Female	Male	.024	.068	.730
Problems with culture	Female	Male	.226*	.065	.000
Health concerns	Female	Male	.272*	.072	.000
Addiction	Female	Male	-.096*	.046	.035
Traumatic experiences	Female	Male	.046	.032	.142

MD = Mean differences

SE = Standard error of measurement

Based on observed means.

The error term is Mean Square (Error) = 356.672.

In short, the answer to the second question was that females had significantly higher mean scores in career/future concerns, problems with affect, problems with culture, and health concerns favoring males, and while mean differences favoring females was found only for addiction. And there was no difference in relational issues and academic problems. Also, statistically significant difference in total problem scores between sex groups favored males.

#### 4.3 Academic level differences in psychosocial problems

This question aimed to examine whether students' academic level mattered in the problem areas. Table 13 below provides the descriptive statistics for each academic level and the entire sample, while Table 14 reports tests of significance by academic level.

As seen Table 13, majority of the participants (354; 69.1%) were undergraduate students. Students at English preparatory school were the second prevalent group (115; 22.4%) while number of graduate students (43; around 8%) were smaller compared to others. Most of the students had the highest mean scores in career/future concerns ( $N = 512$ ;  $M = 1.34$ ) but the graduate students had the highest mean score ( $M = 1.47$ ). They also had higher mean scores in three problem areas

including problems with affect ( $M = 1.27$ ), health concerns ( $M = .58$ ), and traumatic experiences ( $M = .25$ ). In addition to that, the graduate students had the lowest mean score for addiction ( $M = .22$ ). Relational problems ( $M = 1.11$ ) were more common among the students at English preparatory schools, and the graduate students. The highest mean scores for addiction ( $M = .29$ ) were among the students at English preparatory school. Academic problems were more common among students at English preparatory schools had them as well as the undergraduate students ( $M = 1.21$ ). Nevertheless, except for the career/future related concerns none of the mean differences were statistically significant (see Table 14).

Table 13. Means and Standard Deviations in Problem Areas of Participants' Academic Level \*

Problem area	Prep. School ( $n = 115$ )		Undergraduate ( $n = 354$ )		Graduate ( $n = 43$ )		Total ( $N = 512$ )	
	$M$	$SD$	$M$	$SD$	$M$	$SD$	$M$	$SD$
Career/future concerns	1.10	.784	1.40	.747	1.47	.655	1.34	.758
Problems with affect	1.20	.705	1.24	.645	1.27	.663	1.23	.659
Academic problems	1.21	.677	1.21	.637	1.01	.591	1.19	.643
Relational issues	1.11	.718	1.11	.716	.96	.549	1.10	.704
Problems with culture	.88	.635	.98	.673	.98	.756	.96	.672
Health concerns	.56	.706	.57	.765	.58	.778	.57	.752
Addiction	.29	.453	.28	.493	.22	.312	.28	.471
Traumatic experiences	.23	.375	.24	.316	.25	.261	.24	.326
Total problem score	6.62	2.819	7.08	3.064	6.76	2.809	6.95	2.991

\* Averages of the problem area (factor) scores were used so that comparison can be visible.

Table 14 shows the relationship between the academic level of the students and the problem areas. Only for career/future concerns, there were significant differences among academic level subgroups. The undergraduate students ( $p = .001$ ) and the graduate students ( $p = .018$ ) had significantly higher mean differences in career/future concerns compared to the students at English preparatory school, respectively. Significant difference between the undergraduate and graduate students in career/future concerns was not found ( $MD = .121$ ,  $p = ns$ ). There was no difference among the three groups in problems with affect, academic problems,



relational issues, problems with culture, health concerns, addiction, and traumatic issues. The smallest differences that existed between the undergraduate and graduate students ( $MD = .001$ ) in traumatic experiences, and the students at preparatory school and the undergraduate students ( $MD = .003$ ) were in relational issues, respectively. Besides, ANOVA was conducted to compare the total problem scores for participants' academic level, showed no statistically significant difference among the three groups [ $F(2, 509) = 1.082, p = ns$ ].

Table 14. MANOVA Test Results in Problem Areas by Academic Level Differences

Problem area	Academic Level	Academic Level	<i>MD</i>	<i>SE</i>	<i>p</i>
Career/future concerns	Prep. School	Undergraduate	-.301*	.080	.001
		Graduate	-.369*	.134	.018
	Undergraduate	Prep. School	.301*	.080	.001
		Graduate	-.067	.121	1.000
	Graduate	Prep. School	.369*	.134	.018
		Undergraduate	.067	.121	1.000
Problems with affect	Prep. School	Undergraduate	-.034	.071	1.000
		Graduate	-.065	.118	1.000
	Undergraduate	Prep. School	.034	.071	1.000
		Graduate	-.031	.107	1.000
	Graduate	Prep. School	.065	.118	1.000
		Undergraduate	.031	.107	1.000
Academic problems	Prep. School	Undergraduate	.004	.069	1.000
		Graduate	.205	.115	.226
	Undergraduate	Prep. School	-.004	.069	1.000
		Graduate	.201	.104	.160
	Graduate	Prep. School	-.205	.115	.226
		Undergraduate	-.201	.104	.160
Relational issues	Prep. School	Undergraduate	-.003	.076	1.000
		Graduate	.148	.126	.722
	Undergraduate	Prep. School	.003	.076	1.000
		Graduate	.151	.114	.552
	Graduate	Prep. School	-.148	.126	.722
		Undergraduate	-.151	.114	.552
Problems with culture	Prep. School	Undergraduate	-.107	.072	.416
		Graduate	-.099	.120	1.000
	Undergraduate	Prep. School	.107	.072	.416
		Graduate	.008	.109	1.000
	Graduate	Prep. School	.099	.120	1.000
		Undergraduate	-.008	.109	1.000
Health concerns	Prep. School	Undergraduate	-.008	.081	1.000
		Graduate	-.012	.135	1.000
	Undergraduate	Prep. School	.008	.081	1.000
		Graduate	-.004	.122	1.000
	Graduate	Prep. School	.012	.135	1.000
		Undergraduate	.004	.122	1.000
Addiction	Prep. School	Undergraduate	.010	.051	1.000
		Graduate	.071	.084	1.000
	Undergraduate	Prep. School	-.010	.051	1.000
		Graduate	.061	.076	1.000
	Graduate	Prep. School	-.071	.084	1.000
		Undergraduate	-.061	.076	1.000
Traumatic experiences	Prep. School	Undergraduate	-.011	.035	1.000
		Graduate	-.012	.058	1.000
	Undergraduate	Prep. School	.011	.035	1.000
		Graduate	-.001	.053	1.000
	Graduate	Prep. School	.012	.058	1.000
		Undergraduate	.001	.053	1.000

MD = Mean differences

SE = Standard error of measurement

Based on estimated marginal means

The error term is Mean Square (Error) = .569.

In short, the answer to the third research question was that there was a statistically significant difference only for career/future related concerns among the English preparatory school students, undergraduate and graduate students. There was no difference in problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences. Likewise, there was no statistically significant difference in total problem scores among these three groups.

#### 4.4 Extracurricular activity involvement differences in psychosocial problems

This question aimed to investigate whether students' level of involvement in extracurricular activities mattered in the problem areas. Table 15 below provides the descriptive statistics for each level of involvement and the whole sample, while Table 16 reports tests of significance by level of involvement in extracurricular activities.

Descriptive characteristics regarding problem areas and, mean and standard deviation scores from the measures of level of involvement in extracurricular activities including not interested (none), somewhat interested and highly interested were shown in Table 15. Most of the participants (432; 84.4%) were interested in involvement in extracurricular activities (somewhat interested or highly interested), while the number of students who were not interested (80; 15.6%) was smaller compared to others. Students who were not interested in extracurricular activities had the highest mean score for each problem area except health concerns, traumatic experiences and addiction. Addiction was more common among the students who had some interest ( $M = .30$ ) while traumatic experience ( $M = .28$ ) was more common among the students who were highly interested in extracurricular activities. The

highest mean score for relational issues ( $M = 1.42$ ) was found among the students who were not interested. Despite that, there were statistically significant mean differences among the three groups in career/future related concerns, academic problems and, relational issues (see Table 16).

Table 15. Means and Standard Deviations in Problem Areas of Participants' Level of Involvement in Extracurricular Activities \*

Problem area	None ( $n = 80$ )		Some ( $n = 295$ )		High ( $n = 137$ )		Total ( $N = 512$ )	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Career/future concerns	1.55	.791	1.36	.745	1.18	.737	1.34	.758
Problems with affect	1.30	.704	1.23	.661	1.19	.628	1.23	.659
Academic problems	1.37	.709	1.18	.642	1.12	.590	1.19	.643
Relational issues	1.42	.832	1.13	.673	.85	.598	1.10	.704
Problems with culture	1.02	.738	.94	.651	.96	.682	.96	.672
Health concerns	.55	.718	.55	.748	.63	.782	.57	.752
Addiction	.20	.330	.30	.506	.29	.461	.28	.471
Traumatic experiences	.25	.313	.22	.274	.28	.421	.24	.326
Total problem score	7.68	3.284	6.94	2.954	6.53	2.826	6.95	2.991

\* Averages of the problem area (factor) scores were used so that comparison can be visible.

Table 16 displays where existing group differences lied in problems areas. Significant differences among subgroups were found for career/future concerns, academic problems, and relational issues. The results showed that students who had high interest in extracurricular activities reported significantly lower mean scores for career/future concerns ( $p = .001$ ) and academic problems ( $p = .017$ ) than students who had no interest, respectively. The difference among the other groups in these problem areas was only approaching to statistical significance level, students who had no interest tended to have higher mean scores in academic problems than students who had some interest ( $MD = .080$ ;  $p = ns$ ). Besides, there was a significant difference among all three interest level groups in relational issues. The highest mean differences were among students who had no interest and students who had high interest ( $MD = .56$ ). Students who had high interest reported lower mean scores ( $p <$

.001) than students who had some and no interest in extracurricular activities in relational issues, and students who were not interested in extracurricular activities reported higher scores ( $p = .002$ ) than students who had some interest, respectively. There was no significant difference among the three groups in problems with affect, problems with culture, health concerns, addiction, and traumatic issues. Students who had no interest and some interest had similar mean scores in health concerns ( $MD = .00$ ).

And last, by performing ANOVA, group differences in total problem scores were examined. There was statistically significant difference among groups [ $F(2, 509) = 3.791; p = .023$ ].  $F$ -test results showed that students who were not interested in extracurricular activities had significantly higher mean differences ( $MD = .024$ ) for total problem scores ( $p = .017$ ) compared to students who were highly interested. There was no significant difference between students who had no interest and some interest ( $MD = .015; p = ns$ ), and between students who had some interest and high interest ( $MD = .008; p = ns$ ).

Table 16. MANOVA Test Results in Problem Areas by Level of Interest in Extracurricular Activities Differences

Problem area	Level of interest	Level of interest	<i>MD</i>	<i>SE</i>	<i>p</i>
Career/future concerns	None	Some	.19	.094	.102
		High	.36*	.105	.001
	Some	None	-.19	.094	.102
		High	.17	.077	.062
	High	None	-.36*	.105	.001
		Some	-.17	.077	.062
Problems with affect	None	Some	.06	.083	.688
		High	.11	.092	.445
	Some	None	-.06	.083	.688
		High	.04	.068	.793
	High	None	-.11	.092	.445
		Some	-.04	.068	.793
Academic problems	None	Some	.18	.080	.050
		High	.24*	.090	.017
	Some	None	-.18	.080	.050
		High	.05	.066	.663
	High	None	-.24*	.090	.017
		Some	-.05	.066	.663
Relational issues	None	Some	.28*	.085	.002
		High	.56*	.095	.000
	Some	None	-.28*	.085	.002
		High	.27*	.070	.000
	High	None	-.56*	.095	.000
		Some	-.27*	.070	.000
Problems with culture	None	Some	.07	.084	.672
		High	.05	.094	.811
	Some	None	-.07	.084	.672
		High	-.01	.069	.979
	High	None	-.05	.094	.811
		Some	.01	.069	.979
Health concerns	None	Some	-.00	.094	.999
		High	-.08	.105	.680
	Some	None	.00	.094	.999
		High	-.08	.077	.524
	High	None	.08	.105	.680
		Some	.08	.077	.524
Addiction	None	Some	-.09	.059	.222
		High	-.09	.066	.344
	Some	None	.09	.059	.222
		High	.00	.048	.991
	High	None	.09	.066	.344
		Some	-.00	.048	.991
Traumatic experiences	None	Some	.03	.041	.706
		High	-.02	.045	.885
	Some	None	-.03	.041	.706
		High	-.05	.033	.241
	High	None	.02	.045	.885
		Some	.05	.033	.241

MD = Mean differences

SE = Standard error of measurement

Based on observed means.

The error term is Mean Square (Error) = 365.986.

In sum, the results for this question showed that there were statistically significant differences among groups in career/future concerns, academic problems, and relational issues. And there was no difference in problems with affect and culture, health concerns, addiction, and traumatic issues. In addition, as indicated by *F*-test, statistically significant difference in total problem scores among groups favoring students who had high interest was found.

#### 4.5 Living abroad preference differences in psychosocial problems

The purpose of the question was to investigate whether students' preferences of living abroad mattered in the problem areas. Table 17 below provides the descriptive statistics for each preference of living abroad and the entire sample, while Table 18 reports tests of significance by preferences of living abroad.

Means and standard deviation scores from the measures of the preferences of living abroad in related to problems areas were shown in Table 17. Three subcategories were listed as the students who had no interest in living abroad, who had interest in studying/working abroad (temporary) and who had interest in settling abroad (settlement). Most of the participants were interested in living abroad temporarily (244, 47.6%) or permanently (220, 42.9%) while number of the students who were not interested (48, around 9%) smaller compared to others. Students who were interested in settling abroad had the highest mean score for each of the problem areas except academic problems and relational issues. The highest mean score was in the group of interest in settling abroad in regard to career/future concerns ( $M = 1.38$ ) while the lowest score was in the group of no interest in living abroad in regard to addiction ( $M = .10$ ). Students who had no interest had higher scores in academic problems ( $M = 1.24$ ) and relational issues ( $M = 1.16$ ) compared to the other two

groups. However, only for problems with culture and addiction the mean differences among groups were statistically significant (see Table 18).

Table 17. Means and Standard Deviations in Problem Areas of Participants' Preferences about Living Abroad \*

Problem area	No interest ( <i>n</i> = 48)		Temporary interest ( <i>n</i> = 244)		Settlement interest ( <i>n</i> = 220)		Total ( <i>N</i> = 512)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Career/future concerns	1.30	.733	1.31	.767	1.38	.754	1.34	.758
Problems with affect	1.26	.692	1.19	.637	1.27	.676	1.23	.659
Academic problems	1.24	.694	1.18	.645	1.19	.633	1.19	.643
Relational issues	1.16	.707	1.08	.698	1.11	.712	1.10	.704
Problems with culture	.86	.662	.88	.624	1.07	.713	.96	.672
Health concerns	.56	.789	.52	.716	.64	.781	.57	.752
Addiction	.10	.218	.25	.402	.36	.560	.28	.471
Traumatic experiences	.24	.475	.21	.280	.27	.332	.24	.326
Total problem score	6.76	3.041	6.65	2.985	7.32	2.959	6.95	2.991

\* Averages of the problem area (factor) scores were used so that comparison can be visible.

Table 18 shows that where existing group differences lied in the eight problem areas. Significant differences among subgroups were found for problems with culture and addiction. Students who were interested in settling abroad had significantly higher mean differences in problems with culture ( $p = .009$ ) compared to students who were interested in studying/working abroad temporarily. There was no significant difference between students who had settlement interest and no interest in problems with culture ( $MD = .20$ ;  $p = ns$ ), and students who had no interest and temporary interest ( $MD = .02$ ;  $p = ns$ ), respectively. Students who were interested in settling abroad significantly had higher mean scores in addiction than students who were not interested ( $p = .002$ ), and students who were interested in studying/working abroad temporarily ( $p = .028$ ), respectively. There was no significant difference between students who had no interest and temporary interest ( $MD = .14$ ;  $p = ns$ ). Mean differences among groups were not statistically significant in career/future concerns, problems with affect, academic problems, relational issues,



health concerns, and traumatic experiences. The smallest mean difference was in career/future concerns between students who had no interest and temporary interest. In addition, by performing ANOVA, group differences in total problem score were examined. The difference among the groups was significant [ $F(2, 509)=3.001$ ,  $p=.049$ ]. Students who had settlement interest had significantly higher mean differences ( $MD = .066$ ) for total problem scores ( $p = .043$ ) compared to students who were interested temporarily. There was no significant difference between the students who had no interest and temporary interest ( $MD = .011$ ,  $p = ns$ ), and between the students who had no interest and settlement interest ( $MD = .055$ ,  $p = ns$ ).

Table 18. MANOVA Test Results in Problem Areas by Preferences about Living Abroad

Problem area	Preferences of Living Abroad	Preferences of Living Abroad	<i>MD</i>	<i>SE</i>	<i>p</i>
Career/future concerns	No interest	Temporary interest	-.00	.119	.997
		Settlement interest	-.07	.120	.789
	Temporary interest	No interest	.00	.119	.997
		Settlement interest	-.07	.070	.577
	Settlement interest	No interest	.07	.120	.789
Problems with affect	No interest	Temporary interest	.07	.104	.771
		Settlement interest	-.01	.105	.995
	Temporary interest	No interest	-.07	.104	.771
		Settlement interest	-.08	.061	.376
	Settlement interest	No interest	.01	.105	.995
Academic problems	No interest	Temporary interest	.06	.101	.821
		Settlement interest	.05	.102	.874
	Temporary interest	No interest	-.06	.101	.821
		Settlement interest	-.01	.059	.984
	Settlement interest	No interest	-.05	.102	.874
Relational issues	No interest	Temporary interest	.08	.111	.722
		Settlement interest	.05	.112	.885
	Temporary interest	No interest	-.08	.111	.722
		Settlement interest	-.03	.065	.872
	Settlement interest	No interest	-.05	.112	.885
Problems with culture	No interest	Temporary interest	-.02	.105	.967
		Settlement interest	-.20	.106	.121
	Temporary interest	No interest	.02	.105	.967
		Settlement interest	-.18*	.062	.009
	Settlement interest	No interest	.20	.106	.121
Health concerns	No interest	Temporary interest	.04	.118	.933
		Settlement interest	-.07	.119	.790
	Temporary interest	No interest	-.04	.118	.933
		Settlement interest	-.12	.069	.198
	Settlement interest	No interest	.07	.119	.790
Addiction	No interest	Temporary interest	-.14	.073	.136
		Settlement interest	-.25*	.074	.002
	Temporary interest	No interest	.14	.073	.136
		Settlement interest	-.11*	.043	.028
	Settlement interest	No interest	.25*	.074	.002
Traumatic experiences	No interest	Temporary interest	.02	.051	.848
		Settlement interest	-.02	.051	.845
	Temporary interest	No interest	-.02	.051	.848
		Settlement interest	-.05	.030	.146
	Settlement interest	No interest	.02	.051	.845
		Temporary interest	.05	.030	.146

MD = Mean differences

SE = Standard error of measurement

Based on observed means.

The error term is Mean Square (Error) = 366.973.

In sum, the results for fifth question showed that the students who were interested in settling abroad had higher mean scores problems with culture and addiction. And there was no difference in career/future concerns, problems with affect, academic problems, relational issues, health concerns, and traumatic experiences. When total problem scores were compared, group differences as indicated by *F*-test, were significantly different, these differences lied between the two groups only (settlement interest and temporary interest groups) favoring the temporary interest group.

#### 4.6 History of psychological help in psychosocial problems

The aim of this question was to examine whether history of receiving psychological help among students mattered in our eight problem areas. Students who received or were currently receiving psychological help were combined as one group (with history) while students who had never received psychological help were the other group (without history). Table 19 below provides the descriptive statistics for both different groups and the entire sample, while Table 20 reports tests of significance by history of receiving psychological help.

As seen in Table 19, descriptive statistics regarding means and standard deviations for presence or absence of history of receiving psychological help of participants in problem areas were separately shown. The most striking finding was that number of students with history (219; 42.7%) was similar to number of student with no history (293; 57.3%) of receiving psychological help. Students who received psychological help had higher mean scores in all problem areas compared to students who did not get psychological help in the past. Specifically, students with history reported more career/future concerns ( $M = 1.43$ ), problems with affect ( $M = 1.40$ ),

academic problems ( $M = 1.23$ ), relational issues ( $M = 1.17$ ), problems with culture ( $M = 1.08$ ), health concerns ( $M = .75$ ), addiction-related problems ( $M = .34$ ), and traumatic experiences ( $M = .32$ ), respectively. On the other hand, significant differences between the two groups were found in all problem areas except academic problems and relational issues (see Table 20).

Table 19. Means and Standard Deviations in Problem Areas of Participants With and Without History of Receiving Psychological Help \*

Problem area	Without history ( $n = 293$ )		With history ( $n = 219$ )		Total ( $N = 512$ )	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Career/future concerns	1.27	.750	1.43	.761	1.34	.758
Problems with affect	1.11	.621	1.40	.672	1.23	.659
Academic problems	1.16	.645	1.23	.641	1.19	.643
Relational issues	1.05	.668	1.17	.746	1.10	.704
Problems with culture	.87	.612	1.08	.730	.96	.672
Health concerns	.44	.658	.75	.831	.57	.752
Addiction	.23	.464	.34	.474	.28	.471
Traumatic experiences	.19	.315	.32	.326	.24	.326
Total problem score	6.29	2.829	7.74	2.997	6.95	2.991

\* Averages of the problem area (factor) scores were used so that comparison can be visible.

Table 20 shows the differences among students with and without history of receiving psychological help in eight problem areas. Statistically significant differences between the two groups were found in health concerns ( $MD = .314$ ;  $p < .001$ ), problems with affect ( $MD = .295$ ;  $p < .001$ ), problems with culture ( $MD = .209$ ;  $p < .001$ ), traumatic experiences ( $MD = .131$ ;  $p < .001$ ), addiction ( $MD = .109$ ;  $p = .010$ ), and career/future concerns ( $MD = .152$ ;  $p = .025$ ) favoring students without receiving psychological help, respectively. Even though, the difference in relational issues, favored students without history of receiving help, this differences were only approaching to statistical significance ( $MD = .117$ ;  $p = ns$ ). The smallest mean difference was between the two groups in academic problems and it was not statistically significant ( $MD = .073$ ;  $p = ns$ ).

In addition, when the total problem scores were compared, the *t*-test results showed significant group differences favoring the students without receiving psychological help [ $t(510) = -5.592$ ;  $p < .001$ , two-tailed].

Table 20. MANOVA Test Results in Problem Areas by With and Without History of Receiving Psychological Help of the Participants

Problem area	History of receiving psychological help	History of receiving psychological help	<i>MD</i>	<i>SE</i>	<i>p</i>
Career/future concerns	Yes	No	.152*	.067	.025
Problems with affect	Yes	No	.295*	.058	.000
Academic problems	Yes	No	.073	.057	.202
Relational issues	Yes	No	.117	.063	.063
Problems with culture	Yes	No	.209*	.059	.000
Health concerns	Yes	No	.314*	.066	.000
Addiction	Yes	No	.109*	.042	.010
Traumatic experiences	Yes	No	.131*	.029	.000
MD = Mean differences					
SE = Standard error of measurement					
Based on observed means.					
The error term is Mean Square					
(Error) = 356.672.					

In short, the results for the sixth question showed students who were receiving currently or received psychological help in the past had significantly higher mean scores in career/future concerns, problems with affect, and culture, health concerns, addiction, and traumatic experiences. There were no significant group differences in relational issues and academic problems. When total problem scores were compared, group difference as indicated by *t*-test, was significantly different favoring the students without history of receiving psychological help.

#### 4.7 Suicidal thought and attempt differences in psychosocial problems

This question aimed to investigate suicidal thoughts and suicidal attempts mattered in the problem areas. Table 21 below provides descriptive statistics for students who had suicidal thoughts, students who had no current or past suicidal thoughts and the entire sample, while Table 23 presents descriptive statistics for these groups.

Likewise, Table 22 reports tests of significance by history of suicidal thoughts while Table 24 reports tests of significance due to history of suicidal attempts.

Table 21 displays the students' descriptive statistics regarding suicidal thought for each problem areas. An eyeball test of the number of students in each group (358 vs 151, absence and presence of suicidal thought, respectively) was alarming in the sense that about one third of students (29.7% to be exact) had suicidal thoughts. And these students had higher mean scores in all problem areas compared to students who had no such thoughts. The highest score was in the group of the students with suicidal thoughts in problems with affect ( $M = 1.53$ ) while the lowest mean score was in the group of students who had no suicidal thought in traumatic experiences ( $M = .17$ ). Test of significance supported this eyeball examination of the data, there were significant differences between the two groups favoring students without suicidal thoughts in all problem areas (see Table 22).

Table 21. Means and Standard Deviations in Problem Areas of Participants With and Without Suicidal Thought \*

Problem area	Absence of suicidal thought ( $n = 358$ )		Presence of suicidal thought ( $n = 151$ )		Total ( $N = 509$ )	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Career/future concerns	1.26	.748	1.51	.758	1.34	.759
Problems with affect	1.10	.634	1.53	.621	1.23	.658
Academic problems	1.12	.616	1.33	.667	1.18	.638
Relational issues	1.02	.646	1.29	.799	1.10	.705
Problems with culture	.87	.614	1.17	.752	.96	.671
Health concerns	.48	.670	.78	.869	.57	.746
Addiction	.21	.434	.43	.513	.28	.469
Traumatic experiences	.17	.280	.41	.361	.24	.325
Total problem score	6.27	2.755	8.48	2.891	6.92	2.970

\* Averages of the problem area (factor) scores were used so that comparison can be visible.

Table 22 shows results for statistical significance of group differences between students who had suicidal thoughts currently or in the past, and students who did not have such thoughts in eight problem areas. Students who had suicidal thoughts had significantly higher mean differences in all problem areas including

problems with affect ( $MD = .422$ ;  $p < .001$ ), problems with culture ( $MD = .298$ ;  $p < .001$ ), health concerns ( $MD = .297$ ;  $p < .001$ ), relational issues ( $MD = .271$ ;  $p < .001$ ), traumatic experiences ( $MD = .244$ ;  $p < .001$ ), addiction ( $MD = .220$ ;  $p < .001$ ), career/future concerns ( $MD = .245$ ;  $p = .001$ ), and academic problems ( $MD = .213$ ;  $p = .001$ ) compared to the students who did not have, respectively. Besides, group differences in total problem scores were compared. According to  $t$ -test results, there was found significant group differences favoring the group who had no suicidal thought [ $t(507) = -8.146$ ,  $p < .001$ , two-tailed].

Table 22. MANOVA Test Results in Problem Areas by the Students Had Suicidal Thought in the Past or Having Currently

Problem area	Suicidal thought	Suicidal thought	$MD$	$SE$	$p$
Career/future concerns	Yes	No	.245*	.073	.001
Problems with affect	Yes	No	.422*	.061	.000
Academic problems	Yes	No	.213*	.061	.001
Relational issues	Yes	No	.271*	.067	.000
Problems with culture	Yes	No	.298*	.064	.000
Health concerns	Yes	No	.297*	.071	.000
Addiction	Yes	No	.220*	.045	.000
Traumatic experiences	Yes	No	.244*	.030	.000
MD = Mean differences					
SE = Standard error of measurement					
Based on observed means.					
The error term is Mean Square (Error) = 356.672.					

Table 23 shows the descriptive statistics regarding presence and absence of suicidal attempt in each of the eight problem areas. Suicidal attempt (37 students; around 7%) was less frequent than suicidal thought (151 students; 29.7 %) but similar to the previous results as displayed in Table 24, students who attempted suicide had higher mean score in all problem areas compared to students who did not have suicidal attempt. highest score was in the group of students who attempted suicide in problems with affect ( $M = 1.62$ ) while the lowest score was in the same group in addiction ( $M = .50$ ). On the other hand, significant group differences were found in all problem areas except academic problems and career/future concerns.

Table 23. Means and Standard Deviations in Problem Areas of Participants With and Without Suicidal Attempt \*

Problem area	Absence of suicidal attempt ( <i>n</i> = 472)		Presence of suicidal attempt ( <i>n</i> = 37)		Total ( <i>N</i> = 509)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Career/future concerns	1.33	.757	1.36	.788	1.34	.759
Problems with affect	1.20	.657	1.62	.560	1.23	.658
Academic problems	1.18	.635	1.28	.680	1.18	.638
Relational issues	1.08	.695	1.33	.793	1.10	.705
Problems with culture	.94	.666	1.19	.695	.96	.671
Health concerns	.53	.715	1.00	.986	.57	.746
Addiction	.26	.467	.50	.446	.28	.469
Traumatic experiences	.22	.310	.51	.388	.24	.325
Total problem score	6.77	2.916	8.83	3.035	6.92	2.970

\* Averages of the problem area (factor) scores were used so that comparison can be visible.

Table 24 shows statistically significant differences between students who had suicidal attempts, and students who did not have such attempts in the eight problem areas. Subgroup sizes were different (472; 92.8% and 37; around 7%) as the group that can be considered as clinical was smaller as expected. Students who had suicidal thoughts had significantly higher mean scores in six problem areas including health concerns ( $MD = 461$ ;  $p < .001$ ), problems with affect ( $MD = 417$ ;  $p < .001$ ), traumatic experiences ( $MD = 292$ ;  $p < .001$ ), addiction ( $MD = 242$ ;  $p = .002$ ), problems with culture ( $MD = 252$ ;  $p = .028$ ), and relational problems ( $MD = 256$ ;  $p = .034$ ), respectively. The smallest mean difference between the two groups were in career/future concerns ( $MD = .030$ ;  $p = ns$ ). Likewise, there was no significant differences in academic problems ( $MD = 105$ ;  $p = ns$ ). In addition, when their total problem scores were compared, the group difference as indicated by *t*-test, was significantly different [ $t(507) = -4.114$ ;  $p < .001$ , two-tailed] favoring the group who had no suicidal attempt.



Table 24. MANOVA Test Results in Problem Areas by the Students With and Without Suicidal Attempt

Problem area	Suicidal thought	Suicidal thought	<i>MD</i>	<i>SE</i>	<i>p</i>
Career/future concerns	Yes	No	.030	.130	.819
Problems with affect	Yes	No	.417*	.111	.000
Academic problems	Yes	No	.105	.109	.336
Relational issues	Yes	No	.256*	.120	.034
Problems with culture	Yes	No	.252*	.114	.028
Health concerns	Yes	No	.461*	.126	.000
Addiction	Yes	No	.242*	.080	.002
Traumatic experiences	Yes	No	.292*	.054	.000
MD = Mean differences					
SE = Standard error of measurement					
Based on observed means.					
The error term is Mean Square (Error) = 356.672.					

In sum, results for the last question indicated that students who had suicidal thoughts and attempts had higher mean scores in most problem areas. Students who had suicidal thoughts had significantly higher mean scores in all problem areas while students who attempted suicide had significantly higher mean scores in health concerns, problems with affect, traumatic experiences, addiction, problems with culture, and relational problems, respectively. According to *t*-test results, group differences favoring the students who had no thought nor attempt of suicide in total problem scores were significantly different.

#### 4.8 Summary of the results

The study indicated that out of a comprehensive list of various problems (EBIF), eight factors emerged to reflect the problem patterns of university students, namely problems with affect, academic problems, problems with culture, traumatic experiences, relational issues, addiction, career/future concerns, and health concerns in order of the explained variance, respectively.

All the eight factors together explained 42.8% of variance. EBIF's total reliability value was .91 while split half reliability value was .674 and, odd-even item reliability value was .900. Item rest correlations ranged between .259 and .706, item

factor correlations ranged between .387 and .930, and item total correlation ranged between .205 and .664.

Prevalence of the eight factors among the participants was listed as career/future concerns, problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction and traumatic experiences, respectively for the entire group as well as for females and males.

Differences due to certain demographic characteristics including sex, academic level, involvement in extracurricular activities, preferences of living abroad, presence or absence of current or past psychological help, and having or not having current or past suicidal thoughts and having or not having suicidal attempt were investigated in each of the eight problem areas.

Sex differences indicated that females had significantly higher mean scores in career/future concerns, problems with affect, health concerns, and culture, respectively while males had significantly higher mean scores for addiction. For academic problems, sex difference approached to significance but there was no such tendency in relational issues. And when sex differences were examined cumulatively by use of total problem scores, the difference significantly favored males.

Differences by academic levels of students were significant only for career/future concerns. English preparatory school students had significantly lower mean scores compared to the undergraduate and graduate students. For problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic issues, no statistically significant group difference was found. And there was no group difference among the total problem scores of the academic level groups, either.

The results related to different levels of involvement in extracurricular activities showed no significant differences in problems with affect and culture, addiction, health concerns, and traumatic experiences. But students who had high interest in extracurricular activities reported significantly less career/future concerns than the students who had no interest. The students who were not interested in extracurricular activities reported significantly more academic problems compared to the students who were highly interested. Besides, there was a significant difference among all subgroups of levels of extracurricular interest in regard to relational issues. The more the students were involved in extracurricular activities the less were the relational issues. When their total problem scores were compared, group difference significantly favored the group who had high interest.

As students with differing levels of interest in abroad experiences were compared, the students who were interested in settling abroad reported significantly more problems with culture and addiction than the students with no abroad interest. Nevertheless, there was no significant group difference in career/future concerns, problems with affect, academic problems, relational issues, health concerns, and traumatic experiences among the groups. Cumulative group differences in the total problem scores showed that although the no interest and temporary interest did not differ from each other, the highest problems were experienced by the students who had settlement interest.

Group differences between the students with history and no history of receiving psychological help, favored the students who had no such history in career/future concerns, problems with affect and culture, health concerns, addiction, and traumatic experiences. No group difference was found in academic problems and relational issues, but group differences in relational issues approached to significance

level. Overall, the total scores of both groups was significantly different and in favor of the group who had no experience of receiving psychological help.

Students who had past or present suicidal thoughts reported significantly more problems in all the areas and students who attempted suicide reported significantly more problems with affect, relational issues, problems with culture, health concerns, addiction, and traumatic experiences. And finally, when the total problem scores were compared, significant group differences again favored the students who had no suicidal thought and attempt.

## CHAPTER 5

### DISCUSSION

The results presented in the previous chapter are examined under three headings in this chapter: discussion of the findings on each research question in line with relevant literature, conclusions based on the findings, implications of the current study, and finally limitations of the method and recommendations for future studies.

#### 5.1 General discussion

The main purpose of this study was to determine the psychosocial problems of university students as an investigation of their psychosocial profile by use of an updated version of an existing problem areas list of an intake form of a university counseling center.

##### 5.1.1 Problem areas of the university students

Factors that are significant in psychological well-being of university students were investigated. Factor analysis results yielded eight different problem areas; problems with affect, academic problems, problems with culture, traumatic experiences, relational issues, addiction, career/future concerns, and health concerns, respectively. On the other hand, the problem areas were listed from the most common to the least as career/future concerns, problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences.

If we start with the top and end with the least common problem areas, the most common problem area of the participating university students was career/future concerns. This area included career, future and career path choice concerns.

Considering that students are in the university so that they can build a career future, this finding is well expected. But it was interesting that career/future concerns were a new factor emerged in the current survey and it explained relatively small variance. In the previous study of Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009), career concerns and career path choices previously loaded with adaptation to university life and their loadings were lower than .3. But in the current study, career concern had the highest loading among the other factors and the loading of career path choice concern was higher than .4. This may indicate that university students recently experience more concerns over future than they did before.

The survey results conducted by the task force (2014) showed that more than half of the participants had problems related to career and future concerns. Also, the previous research of Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009) indicated the same finding. University students are concerned over their future and career and this might be developmentally expected. Indeed, emerging adults are to seek and explore opportunities in domains of work and love. Exploration process is likely to make them feel unstable about their future targets and they may be constantly revising their future plans (Arnett, 2004). In fact, among the academic level groups, students who are to graduate soon, anxieties over future are observed. After all, as one graduates, decisions on field of work are to be made. Individuals are expected to achieve economic autonomy and independence, and to fulfill various responsibilities of young adulthood such as moving into an independent residence, forming couple relations, perhaps getting married and starting a family. For most families in Turkey, families not only expect their adult children to find job but also provide support for their aging parents physically and economically (The Aging Readiness and Competitiveness Initiative, 2018). In the current study, even though

almost half of the students got financial aid, one third of them were working in a job. Also, the current study indicated that the graduate and undergraduate students experienced more career/future concerns compared to the students at preparatory school who were at the beginning of their studies.

Being stressful, having obsessive thoughts, mistrust, fear, perfectionism, oversensitivity, mood swings, anger, sadness, hopelessness, orderliness, jealousy, guilt feelings, and burn-out were clustered under problems with affect. This factor explained the largest variance among the other problem area factors. As mentioned before, results of several studies about mental health (ACHA, 2019; Albayrak-Kaymak & Yücel, 2004; BÜREM, 2013, 2014, 2015, 2016, 2017; Erkman et al., 2014; Yılmaz-Atmanoğlu, Albayrak-Kaymak, & Arman, 2009) showed that most of the students who were using counseling services expressed feelings of with sadness, stress, exhaustion, anger, helplessness, desperation, and mistrust. As indicated in BÜREM annual reports from 2013 to 2017, in the research of Albayrak-Kaymak (2004), and Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009) mood states/depression were the most problematic area among the counselees while this was the second problem area that students reported in the current study. This factor in the current study and the study of Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009) explained similar variance (18.6%, 13 items, and 19.6%, 15 items, respectively). The finding that problems with affect is common among university students would not necessarily be expected as they are general population rather than counseling applicants, but the sample description in Table 7 revealed that nearly half of the participants had counseling help.

Academic problems were found to be the third most common problematic area among the university students in the current study and it had the second highest

explained variance. Academic failure, learning difficulties, attention difficulties, procrastination, forgetfulness, lack of motivation, internet/social media overuse, and troubles learning English were listed in academic problems among the university students. The university is a competitive environment of the most achieving students, therefore one could expect to find academic problems. For example, although you may have earned the right to study an undergraduate program, you are considered only a student candidate until you pass the English Proficiency Exam. This makes prep students feel incompetent and not yet sufficient to study at the university. In previous studies, majority of university students also reported difficulties in the same area (ACHA, 2019; Albayrak-Kaymak & Yücel, 2004; BÜREM, 2013, 2014, 2015, 2016, 2017; Gülerce, 1990; as cited in Lisznyai et al., 2014, p. 54; Erkman et al., 2014; Şahin & Şahin-Fırat, 2009; Yılmazoğlu-Atman, Albayrak-Kaymak, & Arman, 2009). Also, academic problems in the current study and the study of Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009) explained similar variance (around 5.5%, eight items, and around 5%, eight items, respectively).

Difficulty in forming intimate relations, and adapting the university life, loneliness, and shyness were found to be related to relational issues in our survey and, this factor explained higher variance with fewer items (3.5%, four items, and around 2.5%, eight items, respectively) in comparison with the previous study of Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009). When relational issues were taken into consideration, one might speculate that university students who came to study from another city or country to İstanbul may have more difficulty in adapting to new environment and culture and forming relations, therefore not yet feeling any belonging but feeling shy and lonely, instead. As seen Table 3, four out of five our students lived separately from their families. We did not study how living



conditions relate to problems in the current study, but in the survey of Student Mental Health Task Force, relational problems and loneliness were reported as an issue by more than half of the students who came from small settlements and lived separately from their families (Erkman et al., 2014). Developmentally, young adulthood is an age of forming satisfying relations and it takes experience to master this task. As Miller (2002) said when young adults fail to form intimate relationships, their relationships will be empty (Miller, 2002) and over time, failures in forming intimacy may lead to loneliness (Ellison, 2011). This idea was supported by the research of Shiah and colleagues (2013) who found a significant relationship between having better social skills and being psychologically healthier. In the current study, family problems, sexual problems, conflicts with friends, sexual orientation/identity problems and problems with one's partners were not found as significant problem areas as they were found in the previous research of Albayrak-Kaymak and Yücel (2004) and Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009). Maybe, emerging adults are more self-focused (Arnett, 2004), they feel freer from the pressure of the society including their family, friends and the significant others compared to earlier generations.

The third in terms of its explained variance was the problems with culture and this problem area came up the fifth in order of prevalence. Culture/tradition differences, religion and faith-related concerns, discrimination experiences, concerns over safety, residential concerns, and antidemocratic environments were among the problems with culture experienced by the university students. One might not necessarily expect that culture would play this much importance in one's psychological well-being. This factor was newly explored in the current study. Explanation of its emergence might require sociological analysis. We might

speculate that heterogeneous university life increases cultural sensitivities of individuals. It may also be that students are concerned about their potential future difficulty in adapting to the rest of majority culture outside or the university environment. We did not study how one's geographic and residential status relate to problems, but studies of Albayrak-Kaymak and Yücel (2004), Erkman and colleagues (2014), Toprak and colleagues (2011) and Gülerce (1990) emphasized the importance of the geographic origin and residential status of the students over culture/tradition differences and residential concerns. Students who came from small settlements faced more problems and stated higher percentage of negative feelings. On the other hand, students who lived with their families stated less problems and less percentage of negative feelings compared to the ones who lived in dormitory or with friends. It can be said that living with their families help university students to protect their well-being.

In addition, as university students are in the period of emerging adulthood, they want to feel free in making decisions (Arnett, 2004). Therefore, antidemocratic and insecure environments such as terrorist attacks were an important problem area for them (Efe, 2018; Gall, 2019; Özkan, 2019; Şahin & Şahin-Fırat, 2009). Almost half of the students were interested in settling abroad and the rest of them had temporary interest in our study. This may mean that university students want to live in more democratic environments where they feel secure and free. Besides, as the libertarian environment in the university allows them freely express themselves, they may wish to continue living in an environment where they can freely share their political views, they can reveal their identity, and expect the society to respect their lifestyle even if it does not meet traditional standards. Perhaps, students at this university were more prone to be interested in living abroad since majority of them

had already experienced living abroad, they were familiar with overseas cultures, and they had English proficiency.

Periodic and chronic health concerns were reported as the sixth common problem area by the university students in the current study. These two areas were newly added to the extended form of BÜREM and, the factor explained rather low level of the total variance. Emergence of this factor by itself was surprising as we consider the youth of our participants and that this factor was not the least common one. One wonders health concerns expressed by the participants were really physical or psychosomatic in origin. In the survey of Erkman and colleagues (2014), almost one-third of the participants reported that they had periodic health issues while a quarter of them had chronic health issues. Similarly, one in every four students had difficulty in personal health in the US (ACHA, 2019).

The problem area of addiction explained relatively small percent of variance of the total score and this problem area came up the seventh in order of prevalence. This factor consisted of four items regarding alcohol use, drug use, smoking, and gambling. This factor itself and the gambling item were newly added to the extended intake form but came up to be significant in their contributions. Practicing counselors share that addictive behaviors among university students is more common than one might expect. Beginning an independent life apart from family might actually ease development of addiction, but we did not have a research question asking whether students who live apart from their families have more problems than those who live with their families as previous studies already supported this situation (Erkman et al., 2014). One might argue that appearing in the last order may not reflect the true tendency of the entire group as people with addiction problems may not volunteer to report their problem in a survey or may not even pay attention that a study call was

sent to them. One would not expect that self-report methodology is the recommended way of studying addiction problems. In any case, addictive behaviors were also listed in the students' problem areas in the studies of ACHA (2019), Albayrak-Kaymak and Yücel (2004) and Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009). In related literature, addictive behaviors predicted higher probability of being depressed and suicidal ideation (Lemis et al., 2016; Lisznyi et al., 2014; Toprak et al., 2011). In the current study, students with history of receiving psychological help, suicidal ideation and attempt reported more difficulties in addiction. Also, as emerging adults are more open to new experiences (Pedilla-Walker & Nelson, 2017), they may try different behaviors and take risks but find it difficult to establish a safe balance. Living rather independently and in a relatively libertarian environment where they feel less social pressure and prejudice may have waived the supervisory support systems of family life that could have kept students from developing addictive behaviors.

Finally, traumatic experiences came the last in order of prevalence and the fourth in terms of its explained variance. Traumatic experiences including violence, bullying, sexual harassment, separation and divorce, persisting injuries, unwanted pregnancy, abortion and miscarriage, self-injurious and risky behaviors, death of a closed person, and physical aggression were seemed as another problematic area among our participants. All these listed problems were found to be significant in the studies of Albayrak-Kaymak and Yücel (2004) and Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman (2009). Only financial difficulties, concerns over physical disability, and separation from loved ones were no longer seen as significant factors in the current study in contrary to the previous ones. However, in the current study, this factor explained higher percentage of total

variance in comparison with the previous one (around 4%, eight items, and around 3%, seven items, respectively). This may be related to insecure environments such as the attempted coup of July 15 (Efe, 2018; Gall, 2019; Özkan, 2019; Şahin, Şahin-Fırat, 2009). Especially, financial concerns were seen as the one of the most problematic area among university students (ACHA, 2019; Gülerce, 1990; Lisznyi et al., 2014; Erkman et al., 2014; Toprak et al., 2011). Perhaps, this finding is unique to the particular university where almost half of the student sample received financial aid. Higher percentage of presence of economic problem might have to do with differences in economic profile of the country. The sample consisted of students of a public university rather than a private one that could have a more affluent student body.

When the factorial structure of the EBIF was examined, the eight factors listed above explained 42.8% of variance in the current survey in comparison to the six factors that explained 42% of variance in the BIF (Yılmaz-Atmanoğlu, Albayrak-Kaymak and Arman, 2009). The total reliability of the current form (EBIF) was .91 as in the previous one (BIF). The reliability values of the eight factors varied between .68 and .89 while the reliabilities of the previous six factors varied between .61 and .90 in the previous one. Therefore, validity and reliabilities of the BIF and the EBIF were similar and satisfactory. The current was more comprehensive in reflecting more diverse problems of university students. Nevertheless, as in the previous form, the same factors (problems with affect, academic problems, relational issues, and traumatic experiences) were remained in the current form.

### 5.1.2 Sex differences in the degree of problems and problem areas

The second question aimed to investigate whether sex mattered in the areas including career/future concerns, problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences. The overall difference between females and males was such that females expressed more problems than males.

Significant differences between sex were found in career/future concerns, problems with affect, health concerns, problems with culture, and addiction, respectively. The problem areas regarding career/future concerns, health concerns and problem with culture were newly added to the EBIF. The most common problem area was career/future concern for females. They also experienced more problems in health concerns, and problems with culture, respectively. Similar to our survey results, females had more difficulty in career/future concerns (ACHA, 2019), problems with affect, relational issues, problems with culture, health concerns, traumatic experiences (Erkman, et. al., 2014; Albayrak-Kaymak & Yücel, 2004). Also, the sample of the current and the previous study (Yılmaz-Atmanoğlu, Albayrak-Kaymak, & Arman, 2009) were similar in distribution of sex. Almost two third of the participants was female. Traditional gender roles are such females are more likely to participate in studies (68.8%) and prone to express their feelings than males. A Turkish saying exists that “men do not cry.” Therefore, existing differences in problems with affect might be explained by the assigned gender roles. There may also be factual basis for sex differences in problem experiences. For example, Turkish women are exposed to more discrimination experiences especially in social and working life (Çelik, 2019), and women might simply be experiencing more traumas.

On the other hand, males had significantly more problems in addiction although the group difference was the smallest in addiction. In the literature, studies reported that male had addiction problems in alcohol, drug and smoking habits (Albayrak-Kaymak & Yücel, 2004; Lamis et al., 2016; Yılmaz-Atmanoğlu, Albayrak-Kaymak, & Arman, 2009). Additionally, gambling that was added newly to the EBIF was found as a problem area related to addiction. Perhaps, this chance is due to the fact that sports related gambling increased in recent years in Turkey (Doğan, 2016) and with widespread use of internet, online gambling became easier (McCormack & Griffiths, 2012).

There were no significant differences between males and females in academic problems and relational issues. This was in contrast to the previous study (Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman, 2009) where females were found to experience fewer academic problems and more relational problems compared to males.

### 5.1.3 Academic level differences in the degree of problems and problem areas

The third question examined what academic level differences were present in problem areas including career/future concerns, academic problems, relational issues, problems with affect, culture, health concerns, addiction, and traumatic experiences. Due to the small number of repeating students ( $f = 14$ ) who failed to pass or retake the English Proficiency Exam or who were on leave from the English Preparatory School, they were combined with the regular students at English Preparatory School. Similar to the previous study of Erkman and the colleagues (2014), most of the participants (74%) were undergraduate students as expected, and 17% of the participants were graduate students while fewer graduate students

participated in the current study (around 8%). Perhaps, more graduate students could have participated in our survey if there was no age restriction.

Analyses in the total problem scores showed no difference among academic level groups. When factor scores were analyzed significant differences existed only for career/future concerns. Students at English Preparatory School had significantly less difficulty compared to the undergraduate and the graduate students. There was no difference between the undergraduate and graduate students in the same problem area. All three subgroups had almost the same difficulty in area of problems with affect, culture, and addiction, health concerns and, traumatic experiences. In the previous study of Albayrak-Kaymak and Yücel (2004), there was no significant relationship between academic levels and problem areas, neither. The study of Erkman and colleagues (2014) indicated similar results in terms of career/future concerns. The students who were studying in a master or PhD program experienced more career/future concerns than others. As mentioned before, to graduate from university might be seen as the end of emerging adulthood. You may be expected to find a job and gain economic independence, meet your soulmate and to get married before graduation despite the fact that you are yet to know exactly who you are and what you want to do with your life. This phase of life youth maybe in the period when mentoring is needed most.

In the end, except for career/future concerns, studying at different academic levels did not relate elevations in terms of problem areas. University students are in a stage of instability and exploration and constantly change their directions in the area of love and work. They try to find a job that they enjoy most (Arnett, 2004). It may be that undergraduate and graduate students are more prone to question their career path choice, to have concerns over career and future, because the older they are, the



more they may feel the responsibilities of young adulthood such as gaining economic independence. This may be seen as their largest academic status related major responsibility.

#### 5.1.4 Extracurricular activity involvement differences in the degree of problems and problem areas

Level of extracurricular activities consisted of three subgroups; students who had no interest, students who had some interest and students who have high interest in involvement. This university is known with the room it allows for student social, cultural and sports engagements. Forty-four student clubs are listed at the university website. Four out of five of our students reported that they were interested in extracurricular activities. They also reported that they were actively participating and organizing student activities including art, music and hobbies (84%), university student clubs (43.2%), in training, professional development or internship programs (48%), social services for the benefit of disadvantaged groups (34.9%), student university managerial tasks (around 8%), and political engagements (around 6%), respectively. It can be said that popularity of the extracurricular activities at this university was a deserved judgement.

Existing group differences in the total problem scores were statistically significant. Students who had high interest experienced less difficulty indicating that extracurricular activities can be viewed as a protective factor helping university students to cope with problems.

When factor scores were examined involvement in extracurricular activities did not matter in problems with affect, and culture, health concerns, addiction, and traumatic experiences. In a previous study, Fares and the colleagues (2016) found

that extracurricular activities helped students solve problems with affect, while the current study did not find this kind of an effect. On the other hand, there were significant differences among groups in three areas including career/future concerns, academic problems and relational issues. The students who had no interest in extracurricular activities had more difficulty in career/future concerns in comparison with the students with high interest as expected since they may get to know new people and strengthen their network, learn to manage people, get the chance to experience working life. In a previous study of Shiah and colleagues (2013), students who were more involved in extracurricular activities found to develop their skills related to career and relationships. The most striking finding was that students who were highly interested in extracurricular activities experienced significantly less difficulty in academic problems than the students who were not interested. Students who had no interest tended to have more academic problems than students who had some interest even though the difference was not significant. Similar to our survey results, Wang and Shiveley (2009) found that extracurricular activities helped students gain academic success. Prevalent belief is that social engagements keep students from academic focus and negatively influence their academic success. Fares and colleagues (2016) supported that idea as they advocated that involvement in extracurricular activities were time and energy consuming and led to reduced academic success among university students. Although we did not examine academic success, we can say that involvement in extracurricular activities help mental health of university students by leading to less reports of academic problems (Shiah et al, 2013). In terms of relational issues, all the subgroups were different from one another. The biggest differences among the groups of high and no interest was in relational issues. The students who were highly interested in extracurricular activities

had less difficulty in relational issues than the other two groups. Even for students who only had some interest, fewer relational issues were reported than students with no interest. Our findings based on extracurricular interest demonstrated positive effect of involvement on relationship issues.

In the previous study of Albayrak-Kaymak and Yücel (2004), and Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman (2009), there was no question on extracurricular activities. The items that were related to this topic were newly added to the survey and it was found to be important factor for the university students in terms of career/future concerns, academic problems and, relational issues. As mentioned earlier, involved students had more opportunities for self-development, conducting relationships, setting goals, and increasing tolerance against stress (National Research Council, 2002). Therefore, they have increased capacity to build healthy relationships, to set short and long-term goals related to career, and to cope with academic problems. Involvement in activities may also provide opportunities of self-exploration in areas of work and love through the emerging adulthood period.

#### 5.1.5 Preferences for living abroad differences in the degree of problems and problem areas

Preferences of living abroad consisted of three subcategories; the students who had no interest in living abroad, students who had temporary interest through studying or working abroad and students who had interest in settling abroad. As sample descriptions showed, there were sizeable differences among the three groups; the students who had temporary interest (47.6%), settlement interest (42.9%) and, no interest (around 9%). It can be said that a heavy majority of the university students wanted to migrate from Turkey, temporarily or permanently. Maybe, since our

sample had English proficiency and two thirds of them had already been abroad, they may feel ready and more confident to make such a radical decision.

Group differences in problem areas were found to be significant in terms of preferences of living abroad. Students who had settlement interest had more problems than students who had temporary interest, but no other groups were different from one another in total problem scores.

Factor scores by preferences of living abroad were not different in career/future concerns, problems with affect, academic problems, relational issues, health concerns, and traumatic experiences. In career/future concerns, students who had no interest and temporary interest experienced almost the same level of difficulties. Maybe, these problem areas did not significantly affect their preferences regarding living abroad. On the other hand, there were significant differences among students with different preferences regarding abroad experiences in problems with culture and addiction. Students who were interested in settling abroad had more difficulty in problems with culture compared to other students. As the items in the factor of problems with culture included culture/tradition differences, religion/faith-related concerns, discrimination experiences, concerns over safety, residential concerns, and antidemocratic environments, one might view these items as among the reasons for considering living abroad rather than in Turkey. Students at this university did not want to be discriminated based on their differences in their view of life, thoughts, and beliefs, but instead wish to live in more libertarian environments. Even though, we failed to find relevant studies on causes of recent migration among youth, news informs us that terrorist attacks, nondemocratic rise and, the attempted coup of July 15, 2016 were seen as the main reasons for recent migration from Turkey (Efe, 2018; Özkan, 2019; Gall, 2019).

Studies conducted before 2016 indicated that emerging adults experienced career/future concerns such as economic instability, low salaries, and lack of professional development and, problems with culture such as political instability and corruption (Güngör, 2003; Pazarcık, 2010; Akman, 2014). According to Pedilla-Walker and Nelson (2017) emerging adults want to have better quality of life, to seek opportunities for self-care and development, economic comfort and career advancement. They are in stage of establishing intimate relations and exploring new cultures, therefore they may wish to migrate as an escape from prejudice and discrimination.

Another escape strategy seemed to be addiction, as there were more addiction problems among the students who were interested in settling abroad than other subgroups, and this difference was the biggest. Arnett (2005) claimed that emerging adults could have addiction problems because of identity explorations, instability in love, work, and, residential status, being free from family and society, and openness to new experiences. Maybe, these were the reasons behind their addiction problems.

#### 5.1.6 Differences by presence and absence of history of receiving psychological help in the degree of problems and problem areas

This question investigated whether history of receiving psychological help mattered in the areas including career/future concerns, problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences in the sixth question. It was interesting that numbers of students with history (42.7%) and with no history (57.3%) of receiving psychological help were similar. One would not expect that the group size of these two groups could be almost the same in general population, but it was. It may be that for young

generations asking for help is more acceptable and they may be more prone to receive psychological help even they were not in trouble. In the same line, these two groups differed in total problem scores; students with history of receiving psychological help expressed more problems than those with no such history.

In terms of factor scores, significant differences favored the students without history of receiving psychological help in health concerns, problems with affect, problems with culture, traumatic experiences, addiction, and career/future concerns, respectively. The problem areas regarding career/future concerns, health concerns, and addiction were newly added to the EBIF. In the previous study of Yılmaz-Atmanoğlu, Albayrak-Kaymak, and Arman (2009), students who applied for psychological help had more difficulties in all problems areas including mood status, academic problems, relational problems, externalization/somatization, adapting university life and traumatic experiences in comparison with students who had no service application. Problems with affect (mood status), and traumatic experiences factors that were present in the previous study were also included in the current study. The three new problem areas had similar issues such as alcohol and smoking use, career concerns, and career path choice. Except for academic problems and relational issues, findings of the two studies overlapped in favoring the students who had no history of receiving psychological help. In the current study, both groups had similar level of academic problems. The previous study findings showed that students with history of receiving psychological help had more relational problems, but in our study, existing group differences in relational issues were only approaching the significance level in the same direction i.e., favoring students without history of receiving help. Annual BÜREM reports (2013, 2014, 2015, 2016, and 2017) provided similar results about students who applied for psychological

help. Mood status (depression), anxiety, academic/career issues, and relational problems were the most common reasons reported by applicants and, on average 40% of the applicants were referred to psychiatrists between the years of 2012 to 2016. Students report that high parental and social expectations are placed on them as successful university students. One might speculate that students experience a lot of difficulties in handling these pressures as they already have high expectations from themselves to find their place in this world.

#### 5.1.7 Differences by presence and absence of suicidal thoughts and attempts in the degree of problems and problem areas

Differences suicidal thought and attempt were examined separately. First, differences between the students with and without suicidal thoughts were investigated and second, differences between the students with suicidal attempts were investigated. Subgroup sizes in both analyses were different as one might expect, i.e., less students with suicidal attempt ( $f = 37$ ; 7%), than just thought ( $f = 151$ ; 29,6%) existed among the participants. This was similar to the previous study of Erkman and the colleagues (2014), students with suicidal attempt (around 7%) that can be considered as clinical was smaller as expected while 28.8% of the participants thought suicide and that it was more than expected in general population. According to CDC (2015), around 4% of the US citizens (around nine million) who were older than 18 years old had suicidal ideation while less than 1% of them (more than one million) attempted suicide in 2013. It can be said that the prevalence of suicidal thoughts and attempts among university students were a vital problem (CDC, 2015). The overall differences among groups showed that students with suicidal thoughts and attempts experienced more problems than students who did not think or attempt suicide.

When group differences were examined in eight problem areas including career/future concerns, academic problems, relational issues, problems with affect, and culture, health concerns, addiction, and traumatic experiences. Students with suicidal thoughts had significantly more difficulties in all problem areas; problems with affect, problems with culture, health concerns, relational issues, traumatic experiences, addiction, career/future concerns, and academic problems, respectively. But for students with suicidal attempts there was no difference in career/future concerns and academic problems between the groups. Differences existed showed that's students with suicidal attempts had significantly more health concerns, problems with affect, traumatic experiences, addiction, problems with culture, and relational problems, respectively.

Although one might expect that the group differences would increase for the suicidal attempt group than just the suicidal thought group, this was not the case. It just seemed that in academic, future or career concerns there were no group differences between the students with and without suicidal attempt. It was pointed out by Walker, Joiner, and Rudd (2001) that since suicidal attempt has a cathartic effect, previously existing group differences might have decreased after the suicidal attempt and therefore, the suicidal thought group remained high. Walker and colleagues defined suicide catharsis as “decreased suicidal symptoms caused by the outward expression of suicidality in the form of a suicide attempt (p. 144).” In fact, two analyses (for thought and attempt) of the total scores yielded comparable findings and if anything differences diminished in favor of the suicidal group. We may conclude that when it came to clinical range thought or attempt did not matter much, students simply had more problems and even if catharsis based decreases can be observed, they would not indicate mental health improvements.



Earlier results showed that students had to handle with feelings of hopelessness, loneliness, helplessness, sadness, anger, guilt, and anxiety (Erkman, 2014). One might speculate that the same social events and circumstances as the attempted coup of July 15 in 2016 terrorist attack and nondemocratic rise (Efe, 2018; Gall, 2019; Hernandez & Stylianou, 2016; Özkan, 2019) that may lead students fall into addiction and consider migrating into another country could also underlie their suicidal thought and attempt. As they are more acculturated, university students may be socially more sensitive and be more prone to suffer from hopelessness and helplessness, and insecurities. And these emotions lead university students to suicidal conditions (Hess et al. 2011).

This study did not investigate the influence of familial factors in suicidal conditions of young adults, but we already knew that young people need to get support from their families (Gürkan & Dirik, 2009) as they are in the period of instability and identity exploration (Arnett, 2004). Erkman and colleagues (2014) and Uğurlu and Ona (2016) supported this notion as they found that living with family reduced the probability of suicide. In addition, Toprak and colleagues (2016) advocated that students who had relational issues with their families have increased prevalence rates of suicide indicating that the impact of family could also be in the opposite (negative) direction.

Addictive behaviors such as alcohol consumption and smoking habits were found to be significant factors leading to suicidal thoughts and attempts (Lamis et al., 2016). Students might be feeling stuck between what they want and the expectations of the society they live in. Hopelessness lies at the bottom of suicidal situations. Students may have lost hope that they can be the person they want to be and reaching their dreams is out of their reach.

## 5.2 Conclusions

The EBIF came out to be a valid and internally consistent measure to examine the psychological problems of university students. It is more comprehensive in content than the earlier BIF with eight factor structure. Career/future concerns, problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences were found to be the main problem areas among university students, respectively.

Group differences in total problem scores were found to be significant in terms of sex, extracurricular activity involvement, preference regarding abroad experience, history of receiving psychological help, and history of suicidal thoughts and attempt. Females, students who were not interested in extracurricular activities, students who had interest in settling abroad, students with history of receiving psychological help, students who had suicidal ideation and attempt experienced more problems.

The most common problem area was career/future concerns where significant group differences existed. Females, undergraduate and graduate students, students who had no interest in extracurricular activities, students with history of receiving psychological help, and students who thought suicide experienced more career/future concerns.

Problems with affect was the second common problem area and some group differences were observed. These differences were such that females, students with history of receiving psychological help, students with suicidal ideation and attempt expressed more problems with affect.

Academic problems came up the third in order of prevalence and there were significant group differences in terms of extracurricular activity involvement and

students with presence and absence of history of suicidal ideation. The students who had no interest and who had suicidal ideation reported higher academic problems.

Significant group differences lied in relational issues that was the fourth common problem area. The more university students involved in extracurricular activities the less they experienced relational issues. Besides, students with suicidal thought and attempts had more relational issues.

Also, significant group differences existed in problems with culture that came up the fifth in order of prevalence. Problems with culture were found to be more common among females, students who wanted to settle abroad, students with history of receiving psychological help, and students who had suicidal ideation and attempt.

Health concerns was the sixth common problem area in that significant group differences lied in terms of sex, presence and absence of history of receiving psychological help, and suicidal thoughts and attempts. Health concerns were expressed more by females, students with history of receiving psychological help and suicidal conditions.

Addiction that came up the seventh in order of prevalence and significant group differences existed. Males, students with interest of settlement abroad, and students with history of receiving psychological help, and suicidal ideation and attempt.

The least common problem area was traumatic experiences. Students who were receiving or received psychological help, and students who had suicidal ideation and attempt reported significantly more traumatic experiences.

### 5.3 Implications of the study

This research is a screening study aiming to determine the psychosocial problems of university students. Since university students are in a transitional period called emerging adulthood (Arnett, 2007), it is important to understand their needs, feelings, thoughts, and concerns so that appropriate services can be provided.

It is normative that university students go through significant and rapid changes during university life. They are expected to take their own possibilities in academic, social, economic, physical, psychological, and emotional issues. Their changing demands, mental health status and problem areas need to be observed by service providers (ACHA, 2019). Therefore, university counseling centers in Turkey should periodically (once a year or once in every two years) examine the profiles of their students. Changes through generations of students can be made observable and proactive services can be designed to promote and protect mental health status of university students (Stanford University Student Mental Health and Well-Being Task Force, 2008).

The current study included problem items inclusive of cultural issues and utilized positive indicators of mental health (coping with engagement in extra-curricular activities and using an escape strategy regarding abroad experiences). This approach was in line with WHO (2019) in adapting the view that biological factors are not the only determinants for mental health. Rapid social change, concerns over future and career, discrimination experiences, unhealthy life style, and human right violations are highly related to poor mental health.

Therefore, we should no longer define mental health as absence of illness, but consider positive characteristics that may promote well-being of university students. These include but not limited to skill development programs, learning centers,

community involvement programs, anti-discrimination laws, and promotion of human rights.

This study also indicated the importance of career counseling centers within universities. Career, future, and career path choice concerns were the most prevalent problems reported by university students. University students need to be prepared to work life. They as emerging adults have are to enter into a world of possibilities in domains of work and career. They need support as they hesitate to make decisions that may play a crucial role in their lives. They need how to be aware of their strengths and weaknesses, they need to discover what they want to do and they need to learn how to set short and long-term targets, and start trying. Career counseling centers are in the best positions in helping university students in this journey (Staiculescu, Lacatus, & Nastase, 2015).

The current study also showed that university students were struggling with problems with affect, academic problems, relational issues, problems with culture, health concerns, addiction, and traumatic experiences. Therefore, policy makers, university administrators and university counseling centers should focus on these problem areas to protect the mental health of students. First, as mentioned in YÖK regulations (1984), student counseling centers must be present to meet support needs of students. However, regulations can only be followed by appointment of appropriate number of psychological counselors, psychiatrists and other medical staff. Otherwise, university students' mental and physical health needs cannot be met. This study implied that university counseling centers are needed to design interventions to help students regulate their feelings, strengthen their academic skills, adapt university life, cope with their traumatic experiences, and avoid addictions (Suicide Prevention Resource Center, 2004).

The current study showed that involvement in extracurricular activities help university students in management of academic problems, career/future concerns, and relational issues. So, policy makers and university administrators should allocate resources to support the development of extracurricular activities such as student clubs within university campuses (Drum, Brownson, Burton Denmark, & Smith, 2009).

Finally, since university students are in the developmental period of emerging adulthood, it is important for everyone who works with them to be aware of what university student experiences are. University students struggle with making decisions from eternal possibilities and opportunities, they search for meaning, they take their own responsibilities, they feel uncertain about their future, and they have difficulty in establishing intimate relationships. And on the top of all, they want to feel free from the expectation of society (Arnett, 2004). Therefore, they want and need to be understood to fully grow as responsible citizens. Policy makers and university administrators should listen to emerging adults more carefully while they take proactive initiatives to establish appropriate environments. Emerging adults need to discuss their problems, to express their demands for more democratic environments, and to participate in decision making processes (Crowley & Moxon, 2017). If their needs are not properly responded, they may find escape strategies and exhibit psychosocial problems. And the flight or fall situations of youth do not remain as just a threat to their well-being but a threat to the future of a society.

#### 5.4 Limitations of the method and recommendations for further research

The study served two purposes. First, the existing BIF was updated to reflect more problem areas and to renew some items, and the psychometric characteristics of the

new EBIF were examined. Second, by use of the EBIF psychological problems of university students were examined as related to a series of student characteristics. We intended to reach a larger sample to be able to use independent subsample to serve each purpose. But the data collection process could be initiated towards the end of semester when most students are busy with preparations for final exam and assignments, and involvement in end of year festivals at the university. This may have been a reason of not attaining a larger sample. As the sample size was not large enough to be divided into subsamples, the same data were used to serve both goals. Ideally, either the data could be collected at two different times, or more participants (around 1,500 students) could be reached.

Collecting data at two data points could also allow collection of stability (test-retest) data for the EBIF, and this had to be left to future studies. Collecting two data sets could have also allowed studying the factorial structure independently. Nevertheless, since there were earlier data on the factorial structure of the main form BIF, use of confirmatory factor analysis was justified.

Due to volunteer nature of the data collection process sex distribution of the sample was not reflective of the sex distribution of the University population; males participated less than females and thus were underrepresented in the findings.

A limitation of the validity of our findings relates to online nature of data collection. Not everyone feels an interest in responding to online surveys. Also students who have more severe problems may not have been sufficiently represented in our sample as they may be less likely to show an effort to participate in studies. Generalization of the findings to the entire population of the university is therefore limited.

Another limitation of the study had to do with its restriction to a single university population and this is a barrier in making generalizations regarding other populations. Future studies are needed to include other universities to draw more valid conclusions. The EBIF could be used to compare the profiles of several universities and that could allow better understanding of university youth in our country.

To draw a comprehensive psychosocial profile of university students, a large list of psychosocial problems rather than a narrowly defined problem area was examined. Since most studies of the existing literature was kept limited in scope, we failed to make detailed comparisons with other populations that could allow generalizations.

Using self-report methodology in the current survey was another limitation. Subjective nature of self-reports is well known. Although anonymity assurance of our survey responses might have helped them feel comfortable in expressing their issues there was no way to test the validity of the truth in their reports. Even though, students might have honestly tried to express themselves, they may have had difficulty in assessing themselves objectively. Intake interview based data collection therefore could allow more valid findings. However, one needs to remember that first interviews are not the best ways as participants may be more prone to conceal themselves, especially in sensitive matters such as addiction and suicide. Such personal issues arise only after a rapport with the interviewer is established that means restriction to more clinical samples.

This study purposefully used an age restriction. As the emerging adulthood phase was targeted, only the university students who were in the 18-25 age group were allowed to participate in the study. Therefore, generalizability of the findings is



limited to emerging adulthood as intended but this meant that our sample is limited in representing the entire university population particularly at the graduate level. Because of the relatively smaller sizes of students in master's and doctoral programs, they were combined as a single group and thus examination of potential differences within the graduate group was not possible.

Although we expected that like within graduate group differences, within English Preparatory school differences might have existed. But due to time limits, no further attempts of data collection could be made. Thus particularly a significant group of English Preparatory School students with repeating status were largely left out. There were only 14 repeating students and their data were combined with the remaining regular students at English Preparatory School. We could not examine their unique profiles despite the fact that repeating students constitute a distinct group with particular problems such as loss of right to get financial aid. Further research is needed to reach out larger groups of repeating students via pursued contacts with administrators of the School of Foreign Languages.

We found that students with history and with no history of receiving psychological help were similar in size as subsamples. One would not expect such similarities in a general population. A recommendation for further research therefore would be to collect normative data from other populations. If the finding of commonality of asking for psychological help is verified, then future researchers could go further to investigate whether this increase has to do with increased social acceptability of psychological help among university students.

Arnett (2004) viewed emerging adulthood as having five main features of ages; including the age of identity explorations, instability, self-focus, feeling in-between, and possibilities. Emerging adults are expected to explore themselves in the

domain of work and love, so that their identity formation begins. Arnett (2004) suggested that failures in work and love help emerging adults understand themselves through the explorations. Many of these explorations were to be for fun, a kind of play, or to have some life experiences before entering young adulthood. But perhaps the realization that these experiences are part of the exploration process might develop later in life, as the young adults in our sample seemed not to view their experiences as opportunities for identity explorations but they mostly experienced uncertainty, and reported loneliness, and hopelessness. On the other hand, Arnett (2004) described the age of possibilities as the age with high hopes and great expectations. Our participants, again seemed pessimistic as they reported high levels of career/future concerns and were interested in living abroad either temporarily or permanently. It may be that within their environments they found more anxiety than hope and optimism, therefore, they considered living abroad expecting that they can make their dreams come true elsewhere. Emerging adults are expected to be wanting to gain a better understanding of who they are and what they want from life, wanting to feel free from the pressure of society, and to enjoy the freedom of making decisions. Our participants, nevertheless, seemed to be feeling stuck between what they want for themselves and the expectations of their families and the society from them. Arnett's theory of emerging adulthood helped our understanding of the participants' developmental challenges (problems and needs), but did not fully explain them. Further research with qualitative methodologies might better fit to explore young adults' inner experiences and motives. This way, validity of the theory of emerging adulthood for the Turkish culture can also be studied.

The current study was comprehensive in nature as it was directed to provide a general description of student profile in terms of psychosocial problems. Each of the

problem areas that were studied deserve further examination; narrower in scope but in-depth in analysis. For example, social and cultural activity engagement needs to be explored by itself as well as cultural adaptation struggles of young adults.

As a last word, although the current study was limited in its generalizations, it did not only open multiple ways for future studies on the grounds of description of student profiles that can shed light for intervention needs of students, but also indicated directions to services providers who can design appropriate services and to policy makers who can provide resources for such services at higher education institutions.

## REFERENCES

- Aging Readiness and Competitiveness Initiative. (2018). Aging readiness & competitiveness report. Retrieved 2019, from <https://arc.aarpinternational.org/File%20Library/Full%20Reports/ARC-Report---Turkey.pdf>
- Akman, V. (2014). Factors influencing international student migration: A survey and evaluation of Turkey's case. *Interdisciplinary Journal of Contemporary Research in Business*, 5(11), 390-415. Retrieved 2019, from <https://journal-archives36.webs.com/390-415mar14.pdf>
- Albayrak-Kaymak, D., & Yücel, D. (September 6-11, 2004). *Boğaziçi Üniversitesi'nde psikolojik yardıma başvuruda bulunan öğrencilerin profili*. Poster session presented at the XIII. Ulusal Psikoloji Kongresi (XIII th National Psychology Congress), İstanbul Bilgi Üniversitesi, Dolapdere Kampüsü, İstanbul, Türkiye.
- Alemdaroğlu, A. (2005). Bir imkan olarak gençlik. Retrieved 2018, from [https://www.academia.edu/1030352/Bir\\_imkan\\_olarak\\_gençlik](https://www.academia.edu/1030352/Bir_imkan_olarak_gençlik)
- American College Health Association. (2008). ACHA-NCHA II paper survey 2008 sample. Retrieved 2018, from [https://www.acha.org/documents/ncha/ACHA-NCHA\\_II\\_Paper\\_Survey\\_2008\\_SAMPLE.pdf](https://www.acha.org/documents/ncha/ACHA-NCHA_II_Paper_Survey_2008_SAMPLE.pdf)
- American College Health Association. (2018). NCHA II spring 2018 reference group executive summary. Retrieved 2018, from [https://www.acha.org/documents/ncha/NCHA-II\\_Spring\\_2018\\_Reference\\_Group\\_Executive\\_Summary.pdf](https://www.acha.org/documents/ncha/NCHA-II_Spring_2018_Reference_Group_Executive_Summary.pdf)
- American College Health Association. (2019). About ACHA-NCHA. Retrieved 2019, from [https://www.acha.org/NCHA/About\\_ACHA\\_NCHA/Overview/NCHA/About/About\\_NCHA.aspx?hkey=75eaa64f-e82c-4cf-d-a19c-4e3f9bf126ee](https://www.acha.org/NCHA/About_ACHA_NCHA/Overview/NCHA/About/About_NCHA.aspx?hkey=75eaa64f-e82c-4cf-d-a19c-4e3f9bf126ee)
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469. Retrieved 2017, from <https://psycnet.apa.org/record/2000-15413-004>
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.

- Arnett, J. J. (2005). The developmental context of substance use in emerging adulthood. *Journal of Drug Issues*, 35(2), 235-254. doi:10.1177/002204260503500202
- Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, 1(2), 68-73. Retrieved 2017, from <https://psycnet.apa.org/record/2008-16701-003>
- Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., ... & Nock, M. K. (2016). Mental disorders among college students in the World Health Organization world mental health surveys. *Psychological Medicine*, 46(14), 2955-2970. doi:0.1017/S0033291716001665
- Batıgün-Durak, A. (2005). İntihar olasılığı: Yaşamı sürdürme nedenleri, umutsuzluk ve yalnızlık açısından bir inceleme. *Türk Psikiyatri Dergisi*, 16(19), 29-39. Retrieved 2019, from <http://0-web.a.ebscohost.com.seyhan.library.boun.edu.tr/ehost/detail/detail?vid=3&sid=e50afb52-0996-45f9-a66e-94652c1a95a5%40sessionmgr4009&bdata=JnNpdGU9ZWwhvc3QtG12ZQ%3d%3d#AN=53218&db=uvr>
- Bland, H. W., Melton, B. F., Bigham, L. E., & Welle, P. D. (2014). Quantifying the impact of physical activity on stress tolerance in college students. *College Student Journal*, 48(4), 559-568. Retrieved 2019, from <http://0-web.b.ebscohost.com.seyhan.library.boun.edu.tr/ehost/pdfviewer/pdfviewer?vid=5&sid=373f954d-5b21-4289-8fad-43bcd3d55d03%40sessionmgr120>
- Bauer, B. W., Capron, D. W., Ward-Ciesielski, E., Gustafsson, H. C., & Doyle, C. (2018). Extracurricular activities are associated with lower suicidality through decreased thwarted belongingness in young adults. *Archives of Suicide Research*, 22(4), 665-678. doi:10.1080/13811118.2018.1427162
- Boğaziçi Üniversitesi Rehberlik ve Psikolojik Danışmanlık Merkezi. (2013). Yıllık raporlar. Retrieved 2018, from [https://burem.boun.edu.tr/sites/burem.boun.edu.tr/files/BÜREMÇalışmaRaporu2012-2013Aylin%20\(2\).pdf](https://burem.boun.edu.tr/sites/burem.boun.edu.tr/files/BÜREMÇalışmaRaporu2012-2013Aylin%20(2).pdf)
- Boğaziçi Üniversitesi Rehberlik ve Psikolojik Danışmanlık Merkezi. (2014). Yıllık raporlar. Retrieved 2018, from [https://burem.boun.edu.tr/sites/burem.boun.edu.tr/files/2014%20rapor\\_3.pdf](https://burem.boun.edu.tr/sites/burem.boun.edu.tr/files/2014%20rapor_3.pdf)
- Boğaziçi Üniversitesi Rehberlik ve Psikolojik Danışmanlık Merkezi. (2015). Yıllık raporlar. Retrieved 2018, from <https://burem.boun.edu.tr/node/79>

- Boğaziçi Üniversitesi Rehberlik ve Psikolojik Danışmanlık Merkezi. (2016). Yıllık raporlar. Retrieved 2018, from <https://burem.boun.edu.tr/node/79>
- Boğaziçi Üniversitesi Rehberlik ve Psikolojik Danışmanlık Merkezi. (2017). Yıllık raporlar. Retrieved 2019, from <https://burem.boun.edu.tr/node/79>
- Centers for Disease Control and Prevention. (2015). Suicide facts at a glance 2015. Retrieved 2019, from <https://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf>
- Centers for Disease Control and Prevention. (2015). Suicide trends among persons aged 10-24 years – United States, 1994-2012. Retrieved 2019, <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6408a1.htm>
- Centers for Disease Control and Prevention. (2017). 10 leading causes of death by age group, United States – 2017. Retrieved 2019, from [https://www.cdc.gov/injury/images/lc-charts/leading\\_causes\\_of\\_death\\_by\\_age\\_group\\_2017\\_1100w850h.jpg](https://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_by_age_group_2017_1100w850h.jpg)
- Cuijpers, P., Auerbach, R. P., Benjet, C., Bruffaerts, R., Ebert, D., Karyotaki, E., & Kessler, R. C. (2019). Introduction to the special issue: The WHO World Mental Health International College Student (WMH-ICS) initiative. *International Journal of Methods in Psychiatric Research*, e1762. Retrieved 2019, from <https://doi.org/10.1016/j.sbspro.2015.09.077>
- Crowley, A., Moxon, D. (2017). New and innovative forms of youth participation in decision-making processes. Retrieved 2019, from <https://rm.coe.int/new-and-innovative-forms-of-youth-participation-in-decision-making-pro/1680759e6a>
- Çelik, F. (2019). Türkiye’de ayrımcılık algısı ve gerçeği. *Yeniçağ*. Retrieved 2019, from <https://www.yenicaggazetesi.com.tr/turkiyede-ayrimcilik-algisi-ve-gercegi-51025yy.htm>
- Çivitci, A. (2015). Perceived stress and life satisfaction in college students: Belonging and extracurricular participation as moderators. *Procedia-Social and Behavioral Sciences*, 205, 271-281. Retrieved 2019, from <https://doi.org/10.1016/j.sbspro.2015.09.077>
- Demirören Haber Ajansı (DHA, News Agency). (2019, March 27). Üniversite öğrencisi siyanürle intihar etti, 5 katlı apartman boşaltıldı. *Habertürk*. Retrieved 2019, from <https://www.haberturk.com/denizli-haberleri/67880137-universite-ogrencisi-siyanurle-intihar-etti-5-katli-apartman-bosaltildi>

- Demirören Haber Ajansı (DHA, News Agency). (2019, March 29). İşte kameraya yansıyan son görüntüsü! Boğaziçili Arda'da intihar şüphesi!. *Habertürk*. Retrieved 2019, from <https://www.haberturk.com/iste-kameraya-yansiyan-son-goruntusu-bogazicili-arda-da-intihar-suphesi-2417836>
- Doğan, Y. (2016, December 6). 4.5 milyarlık sanal kumar pazarında kaybolan hayatlar. *Habertürk*. Retrieved 2019, from <https://www.haberturk.com/gundem/haber/1332863-45-milyar-liralik-sanal-kumar-pazarinda-kaybolan-hayatlar>
- Doğan Haber Ajansı (DHA, News Agency). (2015, December 10). Ayrılık acısına dayanamadı intihara kalkıştı! *Habertürk*. Retrieved 2018, from <https://www.haberturk.com/gundem/haber/1165260-ayrilik-acisina-dayanamadi-intihara-kalkisti>
- Doğan Haber Ajansı (DHA, News Agency). (2016, May 21). Çorum'da 19 yaşındaki üniversite öğrencisi intihara kalkıştı. *Habertürk*. Retrieved 2018, from <https://www.haberturk.com/gundem/haber/1242702-corumda-19-yasindaki-universite-ogrencisi-intihara-kalkisti>
- Doğan Haber Ajansı (DHA, News Agency). (2018, March 28). Alara neden ölmek istedi? Sır perdesi aralanıyor. *Habertürk*. Retrieved 2018, from <https://www.haberturk.com/alaranin-intihar-girisiminde-sir-perdesi-1894230>
- Drum, D. J., Brownson, C., Burton Denmark, A., & Smith, S. E. (2009). New data on the nature of suicidal crises in college students: Shifting the paradigm. *Professional Psychology: Research and Practice*, 40(3), 213. doi: 10.1037/a0014465
- Efe, G. (2018). Türkiye'den göç yüzde 42,5 arttı: Diplomalı göçmenler anlatıyor. *Euronews*. Retrieved from <https://tr.euronews.com/2018/09/21/turkiye-nin-beyin-gocu-sorunu-diplomali-gocmenler-anlatiyor>
- Ellison, G. C. (2011). Intimacy versus isolation (Erikson's young adult stage). *Encyclopedia of Child Behavior and Development*, 833-835. Retrieved 2019, from [https://doi.org/10.1007/978-0-387-79061-9\\_1535](https://doi.org/10.1007/978-0-387-79061-9_1535)
- Erikson, H. E. & Erikson, J. M. (1998). *The Life Cycle Completed* (Eds.). New York: W. W. Norton & Company.
- Erkman, F., Albayrak-Kaymak, D., Cihan, A., Çakıcı-Alpaslan, S., Karagöz, Y., Manav, J., Müderrisoğlu, S., & Sart, H. (2014). Boğaziçi University mental health survey: Unpublished report of the task force. Boğaziçi University, Istanbul, Turkey.

- Eurostat. (2018). Statistics illustrated. Retrieved 2018, from <https://ec.europa.eu/eurostat/web/population-demography-migration-projections/statistics-illustrated>
- Fares, J., Saadeddin, Z., Al Tabosh, H., Aridi, H., El Mouhayyar, C., Koleilat, M. K., Chaaya, M., & El Asmar, K. (2016). Extracurricular activities associated with stress and burnout in preclinical medical students. *Journal of Epidemiology and Global Health*, 6(3), 177-185. doi:10.1016/j.jegh.2015.10.003
- Galambos, N. L., Barker, E. T., & Krahn, H. J. (2006). Depression, self-esteem, and anger in emerging adulthood: Seven-year trajectories. *Developmental Psychology*, 42(2), 350. Retrieved 2019, from <http://dx.doi.org/10.1037/t01038-000>
- Gall, C. (2019). Spurning Erdogan's vision, Turks leave in droves, draining money and talent. *The New York Times*. Retrieved 2019, from <https://www.nytimes.com/2019/01/02/world/europe/turkey-emigration-erdogan.html>
- Gülerce, A. (1990). Psychological problems our students report to experience: A need assessment for psychological counseling services. *Boğaziçi University Journal*, 3(14), 149-158. Retrieved 2019, from [https://www.academia.edu/36117668/Psychological\\_problems\\_our\\_students\\_report\\_to\\_experience\\_A\\_need\\_assessment\\_for\\_psychological\\_counseling\\_services](https://www.academia.edu/36117668/Psychological_problems_our_students_report_to_experience_A_need_assessment_for_psychological_counseling_services)
- Güngör, N. D. (2003). *Brain drain from Turkey: An empirical investigation of the determinants of skilled migration and student non-return* (Unpublished PhD thesis). Institute of Social Sciences, Middle East Technical University, Ankara, Turkey.
- Gürkan, B., & Dirik, G. (2009). Üniversite öğrencilerinde intihar düşünce ve davranışları ile ilişkili faktörler: Yaşamı sürdürme nedenleri ve baş etme yolları. *Türk Psikoloji Yazıları*, 12(24), 58-69. Retrieved, 2019 from <http://web.b.ebscohost.com/ehost/detail/detail?vid=2&sid=4667d65c-eb8f-46e9-883d-14587fa4ab4e%40pdv-sessionmgr02&bdata=JnNpdGU9ZWWhvc3QtbGl2ZQ%3d%3d#AN=107854&db=uvt>
- Hernandez, V., & Stylianou, N. (2016, May 11). İsimsiz gömülenler. *BBC*. Retrieved 2019, from <https://www.bbc.co.uk/news/resources/1d41713b06-2f9d-4f15-887e-93b1e84555e6>



- Hess, E. A., Becker, M. A., Pituch, K. A., & Saathoff, A. K. (2011). Mood states as predictors of characteristics and precipitants of suicidality among college students. *Journal of College Student Psychotherapy*, 25(2), 145-155. doi:10.1080/87568225.2011.556955
- Karabulut, G. (2012, January 25). Bir saat arayla aynı son. *Habertürk*. Retrieved 2018, from <https://www.haberturk.com/yasam/haber/709634-bir-saat-arayla-ayni-son>
- Lamis, D. A., Ballard, E. D., May, A. M., & Dvorak, R. D. (2016). Depressive symptoms and suicidal ideation in college students: The mediating and moderating roles of hopelessness, alcohol problems, and social support. *Journal of Clinical Psychology*, 72(9), 919-932. doi:10.1002/jclp.22295
- Lisznyai, S., Vida, K., Németh, M., & Benczúr, Z. (2014). Risk factors for depression in the emerging adulthood. *The European Journal of Counselling Psychology*, 3(1), 54–68, doi:10.5964/ejcop.v3i1.22
- Massachusetts Institute of Technology Mental Health Task Force. (2001). MIT mental health task force report. Retrieved 2018, from <http://web.mit.edu/chancellor/mhtf/>
- McCormack, A., & Griffiths, M. D. (2012). Motivating and inhibiting factors in online gambling behaviour: A grounded theory study. *International Journal of Mental Health and Addiction*, 10(1), 39-53. doi:10.1007/s11469-010-9300-7
- Miller, P. H. (2002). *Theories of developmental psychology* (5th ed.). New York: New York Worth Publishers.
- National Research Council. (2002). *Community programs to promote youth development*. Washington, DC: National Academies Press.
- Office for National Statistics. (2017). Suicides in the UK: 2016 registrations. Retrieved 2018, from <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2016registrations#suicide-rates-in-the-uk-decrease-in-2016>
- Özdemir, K. (2014, March 11). Üniversite öğrencisi intihar etti. *Habertürk*. Retrieved 2018, from <https://www.haberturk.com/gundem/haber/928863-universite-ogrencisi-intihar-etti>

- Özkan, Y. (2019). Geçen yıl Türkiye'den 1020 kişi 'beyin göçü' için Hollanda'ya başvurdu. *BBC*. Retrieved 2019, from <https://www.bbc.com/turkce/haberler-dunya-46774679>
- Padilla-Walker, L. M., & Nelson, L. J. (2017). *Flourishing in emerging adulthood: Positive development during the third decade of life*. New York: Oxford University Press.
- Pallant, J. (2013). *SPSS survival manual* (6th ed.). Berkshire: Open University Press.
- Pazarcık, S. F. (2010). *Beyin göçü olgusu ve Amerika Birleşik Devletleri üniversitelerinde çalışan Türk sosyal bilimciler üzerine bir araştırma* (Master's thesis). Retrieved 2019, from [http://acikerisim.lib.comu.edu.tr:8080/xmlui/bitstream/handle/COMU/639/Sevda\\_Figan\\_Pazarcik\\_Tez.pdf?sequence=1&isAllowed=y](http://acikerisim.lib.comu.edu.tr:8080/xmlui/bitstream/handle/COMU/639/Sevda_Figan_Pazarcik_Tez.pdf?sequence=1&isAllowed=y)
- Shiah, Y. J., Huang, Y., Chang, F., Chang, C. F., & Yeh, L. C. (2013). School-based extracurricular activities, personality, self-concept, and college career development skills in Chinese society. *Educational Psychology*, 33(2), 135-154. Retrieved 2019, from <http://dx.doi.org/10.1080/01443410.2012.747240>
- Staiculescu, C., Lacatus, M. L., & Nastase, R. E. R. (2015). Students' career counseling-a need in contemporary universities: Career counseling services provided by career counseling center of Bucharest University of economic studies. *Revista de Management Comparat International*, 16(4), 506. Retrieved 2019, from <http://0-web.a.ebscohost.com.seyhan.library.boun.edu.tr/ehost/pdfviewer/pdfviewer?vid=0&sid=7c340848-a234-4ea6-b93e-4f0aa3363553%40sdc-v-sessmgr03>
- Stanford University Student Mental Health and Well-Being Task Force. (2008). Stanford mental health and well-being task force report. Retrieved 2019, from <https://stacks.stanford.edu/file/druid:pb321zj7538/report.pdf>
- Suicide Prevention Resource Center. (2004). Promoting mental health and preventing suicide in college and university settings. Retrieved 2019, from [https://www.sprc.org/sites/default/files/migrate/library/college\\_sp\\_whitepaper.pdf](https://www.sprc.org/sites/default/files/migrate/library/college_sp_whitepaper.pdf)
- Şahin, I., & Şahin-Fırat, N. (2009). Üniversite öğrencilerinin sorunları. *Education Sciences*, 4(4), 1435-1449. Retrieved 2018, from [https://www.researchgate.net/publication/281612657\\_UNIVERSITE\\_OGRENCILERININ\\_SORUNLARI](https://www.researchgate.net/publication/281612657_UNIVERSITE_OGRENCILERININ_SORUNLARI)

- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston: Pearson
- Toprak, S., Cetin, I., Guven, T., Can, G., & Demircan, C. (2011). Self-harm, suicidal ideation and suicide attempts among college students. *Psychiatry Research, 187*(1-2), 140-144. doi:10.1016/j.psychres.2010.09.009
- Türkiye İstatistik Kurumu (Turkstat). (2016). İntihar istatistikleri, 2015. Retrieved 2018, from <http://www.tuik.gov.tr/HbPrint.do?id=21516>
- Türkiye İstatistik Kurumu (Turkstat). (2018). Uluslararası göç istatistikleri, 2017. Retrieved 2019, from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=30607>
- Uğurlu, N., & Ona, N. (2009). Relationship between the stress-coping levels of university students and their probability of committing suicide. *Social Behavior and Personality: An International Journal, 37*(9), 1221-1230. doi:10.2224/sbp.2009.37.9.1221
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner Jr, T. E. (2010). The interpersonal theory of suicide. *Psychological Review, 117*(2), doi:575. 0.1037/a0018697
- Walker, R. L., Joiner Jr, T. E., & Rudd, M. D. (2001). The course of post-crisis suicidal symptoms: How and for whom is suicide “cathartic”? *Suicide and Life-Threatening Behavior, 31*(2), 144-152. Retrieved 2019, from <https://onlinelibrary.wiley.com/doi/abs/10.1521/suli.31.2.144.21514>
- Wang, J., & Shiveley, J. (2009). The impact of extracurricular activity on student academic performance. Retrieved 2019, from [https://www.researchgate.net/publication/228472976\\_The\\_impact\\_of\\_extracurricular\\_activity\\_on\\_student\\_academic\\_performance](https://www.researchgate.net/publication/228472976_The_impact_of_extracurricular_activity_on_student_academic_performance)
- World Health Organization. (2014). Mental health: States of well-being. Retrieved 2018, from [https://www.who.int/features/factfiles/mental\\_health/en/](https://www.who.int/features/factfiles/mental_health/en/)
- World Health Organization. (2019). Mental health: Strengthening our response. Retrieved 2019, from <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>

Yılmaz-Atmanoğlu, B., Albayrak-Kaymak, D., Arman T. (2009). *Üniversite psikolojik danışmanlık merkezine başvurusu olan ve olmayan öğrencilerin sorun alanlarının karşılaştırılması*. Oral presentation submitted at X. Ulusal Psikolojik Danışma ve Rehberlik Kongresi (X th National Psychological Counseling and Guidance Congress), Çukurova Üniversitesi, Adana, Türkiye.

Yüksek Öğretim Kurulu. (1984). Yükseköğretim kurumları, mediko-sosyal sağlık, kültür ve spor işleri dairesi uygulama yönetmeliği. Retrieved 2019, from <http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=7.5.10169&MevzuatIlski=0&sourceXmlSearch=Yükseköğretim%20Kurumları%2c%20Mediko-Sosyal%20Sağlık%2c%20Kültür%20ve%20Spor%20İşleri%20Dairesi%20Uygulama%20Yönetmeliği>

Yüksek Öğretim Yönetim Bilgi Sistemi (YÖKSİS, Higher Education Management Information System). (2018). Öğrenim düzeyine göre öğrenci sayısı. Retrieved 2018, from <https://istatistik.yok.gov.tr>

## APPENDIX A

### DIRECTIONS OF THE SURVEY

Dear participant,

This thesis study is being conducted by Akin CİHAN who is graduate student in the Guidance and Psychological Counseling Master's Program, under the supervision of Assoc. Prof. Deniz ALBAYRAK KAYMAK. The purpose of the thesis is to examine the psycho-social problems of students at Boğaziçi University. The data are being collected by this survey that has two sections. The first section is on some demographic (age, department, academic term, residential status, etc.) and psycho-social characteristics (preferences of living abroad, history of receiving psychological help, etc.) of students. The second section is a list of problem areas such as academic, social, emotional and physical. This list consists of 75 items that are to be rated on a five scale basis including "0: none, 1: some, 2: much, 3: very much, and I do not want to answer." For example, the item called "difficulty in adapting to university life" is answered by selecting one of five options related to your life experience. The data will be analyzed to identify the psychosocial profile of university students and intended to be used in designing appropriate support services for students, campus-wide.

The study is open to all the registered students of Boğaziçi University who are in 18-25 age range. If you are not a student at Boğaziçi University, or younger or older than the age limit, please do not answer the survey.

Participation in the study is voluntary. There is no item that could personally identify student identity. All the data are being collected anonymously and cumulatively, and

individual responses are kept confidential. There are no known risks associated with answering the survey. However, if you feel any discomfort, you may choose not to participate and may withdraw from participation at any time. The survey takes about 10-15 minutes to complete. For the reliability of the study, please do not leave any questions blank.

You have the right to ask questions about the study and have those questions answered by the researcher Akın CİHAN ([akin.cihan@boun.edu.tr](mailto:akin.cihan@boun.edu.tr)) or the thesis advisor Deniz ALBAYRAK KAYMAK ([deniz.kaymak@boun.edu.tr](mailto:deniz.kaymak@boun.edu.tr)) before, during or after the study. If you have any further concerns about the study, contact with the Institutional Review Board for Research with Human Subjects at Boğaziçi University (İNAREK, [sbe-ethics@boun.edu.tr](mailto:sbe-ethics@boun.edu.tr)) that granted ethical approval of the study.

Thank you for your contribution.

I have read the statement above and agree to participate in the survey.

☐ Yes, I do

☐ No, I do not.

## APPENDIX B

### BÜREM EXTENDED INTAKE FORM SAMPLE ITEMS

- SEX:  
☐ Female    ☐ Male    ☐ I do not want to specify
- FACULTY:
- RESIDENTIAL STATUS:  
☐ Living on your own  
☐ Living in dormitory  
☐ Living with friends  
☐ Living with partners  
☐ Living with nuclear family  
☐ Living with extended family  
☐ Living with relatives
- DO YOU RECEIVE FINANCIAL AID?  
☐ No   ☐ Yes

## LIST OF PROBLEM AREAS

Please, consider what you are currently experiencing according to the following five options:

0 - None, 1- Some, 2- Much, 3- Very much, 4- I do not want to answer

- |   |   |   |   |   |
|---|---|---|---|---|
| • Difficulty in adapting to university life.....0 | 1 | 2 | 3 | 4 |
| • Sadness/hopelessness.....0                      | 1 | 2 | 3 | 4 |
| • Academic failure.....0                          | 1 | 2 | 3 | 4 |
| • Lack of motivation.....0                        | 1 | 2 | 3 | 4 |
| • Internet/social media overuse.....0             | 1 | 2 | 3 | 4 |
| • Difficulty in forming intimate relations.....0  | 1 | 2 | 3 | 4 |
| • Alcohol use.....0                               | 1 | 2 | 3 | 4 |
| • Future concerns.....0                           | 1 | 2 | 3 | 4 |



## APPENDIX C

### PERMISSION GIVEN BY INSTITUTION REVIEW BOARD FOR RESEARCH WITH HUMAN SUBJECTS AT BOĞAZİÇİ UNIVERSITY

**T.C.**  
**BOĞAZİÇİ ÜNİVERSİTESİ**  
**İnsan Araştırmaları Kurumsal Değerlendirme Alt Kurulu**

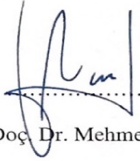
Sayı: 2018-17

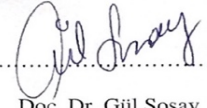
25 Nisan 2018


Akın Cihan  
Eğitim Bilimleri


Sayın Araştırmacı,

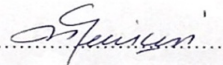
"Boğaziçi Üniversitesi öğrencilerinin psikososyal sorunlarının incelenmesi" başlıklı projeniz ile ilgili olarak yaptığınız SBB-EAK 2018/17 sayılı başvuru İNAREK/SBB Etik Alt Kurulu tarafından 25 Nisan 2018 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

  
Doç. Dr. Mehmet Yiğit Gürdal

  
Doç. Dr. Gül Sosay

  
Dr. Öğr. Üyesi İnci Ayhan

  
Dr. Öğr. Üyesi Bengü Börkan

  
Dr. Öğr. Üyesi Nur Yeniçeri

## APPENDIX D

### FREQUENCIES AND PERCENTAGES

#### FOR THE ACADEMIC UNITS OF THE PARTICIPANTS

Academic units	<i>f</i>	%
THE FACULTY OF ARTS AND SCIENCE	227	30.8
Psychology	36	4.9
Translation and Interpreting Studies	23	3.1
Chemistry	20	2.7
Mathematics	18	2.4
Turkish Language and Literature	18	2.4
Linguistics	17	2.3
Western Languages and Literatures	17	2.3
Molecular Biology and Genetics	17	2.3
Sociology	16	2.2
Philosophy	16	2.2
Physics	16	2.2
History	13	1.8
THE SCHOOL OF FOREIGN LANGUAGES	161	21.7
THE FACULTY OF EDUCATION	119	16.1
Foreign Language Education	35	4.7
Mathematics and Science Education	33	4.5
Educational Sciences	32	4.3
Primary Education	13	1.8
Computer Education and Educational Technology	6	.8
THE FACULTY OF ENGINEERING	79	10.6
Computer Engineering	20	2.7
Civil Engineering	15	2.0
Industrial Engineering	13	1.8
Chemical Engineering	12	1.6
Electrical and Electronic Engineering	10	1.3
Mechanical Engineering	9	1.2
THE FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES	63	8.6
Management	23	3.1
Political Science and International Relations	21	3
Economics	19	2.6
THE SCHOOL OF APPLIED DISCIPLINES	29	3.8
Management Information Systems	12	1.6
Tourism Administration	10	1.3
International Trade	7	.9
INSTITUTE OF GRADUATE STUDIES IN SCIENCE AND ENGINEERING	25	3.5
Chemical Engineering (M.A.)	5	.7
Computer Engineering (M.A.)	5	.7
Mathematics and Science Education (M.A.)	4	.5
Molecular Biology and Genetics (M.A.)	3	.4
Civil Engineering (M.A.)	3	.4
Chemistry (M.A.)	2	.3
Electrical and Electronic Engineering (M.A.)	1	.1
Mathematics (M.A.)	1	.1
Mechanical Engineering (M.A.)	1	.1
Molecular Biology and Genetics (Ph.D.)	1	.1
Physics (M.A.)	1	.1

Academic units	<i>f</i>	%
THE INSTITUTE FOR GRADUATE STUDIES IN SOCIAL SCIENCES	25	3.2
Psychology (M.A.)	4	.5
Sociology (M.A.)	4	.5
Educational Sciences (M.A.)	3	.4
International Trade Management (M.A.)	2	.3
Management (Ph.D.)	2	.3
Political Science and International Relations (M.A.)	2	.3
Economics (M.A.)	2	.3
History (M.A.)	2	.3
Sustainable Tourism Management (M.A.)	2	.3
Linguistics (M.A.)	1	.1
Management (M.A.)	1	.1
THE INSTITUTE OF BIOMEDICAL ENGINEERING	5	.6
Biomedical Engineering (M.A.)	4	.5
Biomedical Engineering (Ph.D.)	1	.1
THE INSTITUTE OF ENVIRONMENTAL SCIENCES	4	.5
Environmental Sciences (M.A.)	4	.5
THE KANDİLLİ OBSERVATORY AND EARTHQUAKE RESEARCH INSTITUTE	1	.1
Earthquake Engineering (M.A.)	1	.1
THE ATATURK INSTITUTE FOR MODERN TURKISH HISTORY (M.A.)	1	.1

# APPENDIX E

## EXPLORATORY FACTOR ANALYSIS LOADINGS OF THE EBIF

	Factor																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Q1		.330				.335													
Q2						.546													
Q3						.788													
(Q4)						.403												.588	
(Q5)																			
Q6				.708															
Q7				.790															
Q8				.610															
Q9						.461													
(Q10)																		.332	
Q11						.502													
Q12							.497												
Q13							1.089												
Q14							.689												
(Q15)														.408					
Q16			.328																
Q17			.369																
Q18			.454																
Q19			.811																
Q20			.886																
Q21			.567																
(Q22)													.642						
(Q23)													.838						
(Q24)																	.592		
(Q25)																	.720		
Q26	.699																	.412	
Q27	.545																	-.392	
Q28	.842																		
(Q29)	.921																		

	Factor																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
(Q30)														.394					
(Q31)														.707					
(Q32)														.489					
(Q33)																			
(Q34)																			
Q35					.377														
Q36					.439														
Q37															.703				
(Q38)															.718				
(Q39)					.406														
(Q40)																			
(Q41)																			
Q42					.595														
Q43					.701														
Q44					.330														
Q45												.303							
Q46												.850							
Q47	.544																		
Q48	.415																		
Q49	.523																		
(Q50)	.373																		
(Q51)	.409																		
Q52	.365															.311			
Q53											.458					.477			
Q54	.823																		
Q55	.832																		
Q56	.679																		
Q57	.335										.548								
Q58	.515										.439								
Q59	.613																		
Q60	.687																		
Q61	.580																		
(Q62)												.719							
(Q63)																			
(Q64)										.527									
Q65									.905										
Q66									.779										

	Factor																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
(Q67)										.837									
(Q68)																.616			
(Q69)										.500						.370			
(Q70)																.628			
Q71																			
Q72								.661											
Q73								.712											
Q74								.469											
Q75								.658											

Extraction Method: Maximum Likelihood.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 15 iterations.

Twenty-seven items were eliminated and the numbers of the items eliminated are indicated in parentheses.

## APPENDIX F

## FACTORIAL STRUCTURE OF THE EBIF THROUGH CONFIRMATORY FACTOR ANALYSIS

	Factor							
	1	2	3	4	5	6	7	8
PROBLEMS WITH AFFECT (Factor 1, 18.6%)								
Stressed	.797							
Obsessions	.753							
Mistrust	.710							
Fear	.693							
Perfectionism	.686							
Oversensitivity	.669							
Mood swings	.662							
Anger/Rage	.595							
Sadness/Hopelessness	.525							
Orderliness	.487							
Jealousy	.476							
Guilt feelings	.434							
Burn-out	.429							
ACADEMIC PROBLEMS (Factor 2, 5.4%)								
Academic failure		.743						
Learning difficulties		.733						
Attention difficulties		.728						
Procrastination		.708						
Forgetfulness		.591						
Lack of motivation		.580						
Internet/social media overuse		.465						
Troubles in learning English <sup>12</sup>		.441						
PROBLEMS WITH CULTURE (FACTOR 3, 4.5%)								
Culture/tradition differences			.871					
Religion/faith related concerns			.746					

<sup>12</sup> The language of instruction is English at Boğaziçi University

	1	2	3	4	5	6	7	8
Discrimination experiences			.564					
Concerns over safety			.454					
Residential concerns			.372					
Antidemocratic environments			.346					
TRAUMATIC EXPERIENCES (Factor 4, 3.9%)								
Violence/bullying				.797				
Sexual harassment/abuse				.612				
Separation/divorce				.468				
Persisting injuries				.466				
Unwanted pregnancy/abortion/miscarriage				.398				
Self-injurious/risky behavior				.381				
Death of a closed person				.363				
Physical aggression				.343				
RELATIONAL ISSUES (Factor 5, 3.5%)								
Difficulty in forming intimate relations					.979			
Loneliness					.849			
Shyness					.452			
Difficulty in adapting to university life					.398			
ADDICTION (Factor 6, 2.5%)								
Alcohol use						.780		
Drug use						.662		
Smoking						.653		
Gambling						.457		
CAREER/FUTURE CONCERNS (Factor 7, 2%)								
Career concerns							1.029	
Future concerns							.731	
Career path choice concerns							.455	
HEALTH CONCERNS (Factor 8, 2%)								
Periodic health problems								.827
Chronic health problems								.763

Extraction Method: Maximum Likelihood.

Rotation Method: Promax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 7 iterations.



# APPENDIX G

## ITEM BASED RELIABILITIES

Items	Item rest correlations	Item factor correlations	Item total correlations
PROBLEMS WITH AFFECT			
Q47	0.576	0.645	0.554
Q48	0.615	0.689	0.659
Q49	0.467	0.551	0.504
Q52	0.614	0.694	0.660
Q53	0.308	0.403	0.337
Q54	0.582	0.661	0.576
Q55	0.679	0.741	0.664
Q56	0.657	0.723	0.577
Q57	0.426	0.520	0.358
Q58	0.618	0.685	0.542
Q59	0.662	0.721	0.601
Q60	0.681	0.738	0.609
Q61	0.641	0.712	0.603
ACADEMIC PROBLEMS			
Q2	0.371	0.522	0.424
Q3	0.622	0.479	0.494
Q6	0.567	0.695	0.520
Q7	0.487	0.652	0.417
Q8	0.602	0.719	0.462
Q9	0.649	0.494	0.534
Q11	0.346	0.513	0.453
Q71	0.438	0.587	0.484
PROBLEMS WITH CULTURE			
Q16	0.457	0.658	0.486
Q17	0.534	0.688	0.512
Q18	0.515	0.709	0.422
Q19	0.579	0.729	0.457
Q20	0.506	0.662	0.382
Q21	0.359	0.560	0.478
TRAUMATIC EXPERIENCES			
Q35	0.394	0.596	0.358
Q36	0.375	0.570	0.360
Q37	0.361	0.555	0.291
Q42	0.386	0.549	0.243
Q43	0.535	0.662	0.398
Q44	0.422	0.647	0.464
Q45	0.259	0.387	0.268
Q46	0.366	0.535	0.470
RELATIONAL ISSUES			
Q1	0.436	0.685	0.456
Q26	0.466	0.732	0.369
Q27	0.615	0.784	0.447
Q28	0.646	0.814	0.387
ADDICTION			
Q72	0.598	0.823	0.328
Q73	0.683	0.841	0.350
Q74	0.509	0.671	0.205
Q75	0.635	0.793	0.347

Items	Item rest correlations	Item factor correlations	Item total correlations
CAREER/FUTURE CONCERNS			
Q12	0.385	0.693	0.453
Q13	0.646	0.888	0.426
Q14	0.606	0.804	0.471
HEALTH CONCERNS			
Q65	0.706	0.930	0.414
Q66	0.706	0.916	0.371
Extraction Method: Maximum Likelihood.			
Rotation Method: Promax with Kaiser Normalization. <sup>a</sup>			
a. Rotation converged in 15 iterations.			