

TESTING A MODEL OF PSYCHOLOGICAL INFLEXIBILITY,
RUMINATIVE THINKING, WORRY AND SELF-COMPASSION IN
RELATION TO COLLEGE ADJUSTMENT

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF MIDDLE EAST TECHNICAL UNIVERSITY

BY

YASİN AYDIN

IN PARTIAL FULLFILMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
IN
THE DEPARTMENT OF EDUCATIONAL SCIENCES

MAY 2016

Approval of the Graduate School of Social Sciences

Prof. Dr. Meliha Altunışık
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Doctor of Philosophy.

Prof. Dr. Cennet Engin Demir
Head of Department

This is to certify that we read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Doctor of Philosophy.

Prof. Dr. Oya Yerin Güneri
Supervisor

Examining Committee Members

Prof. Dr. Özgür Erdur-Baker (METU, EDS) _____

Prof. Dr. Oya Yerin Güneri (METU, EDS) _____

Prof. Dr. Zekeriya Nartgün (AIBU, EDS) _____

Assoc. Prof. Dr. Zeynep Hatipoğlu Sümer (METU, EDS) _____

Assoc. Prof. Dr. Yelda Kağnıcı (EGE UNI., EDS) _____



I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name: Yasin Aydın

Signature:

ABSTRACT

TESTING A MODEL OF PSYCHOLOGICAL INFLEXIBILITY, RUMINATIVE THINKING, WORRY AND SELF-COMPASSION IN RELATION TO COLLEGE ADJUSTMENT

Aydın, Yasin

Ph.D., Department of Educational Sciences

Supervisor: Prof. Dr. Oya Yerin Güneri

May 2016, 185 pages

This study aimed to investigate psychological inflexibility, ruminative thinking, worry and self-compassion, in relation to college adjustment within an interactional model by using structural equation modeling. The sample of the study consisted of 657 (486 females, 171 males) first year college students at a public university in western Turkey. The data instruments of the study were Demographic Information Form, University Life Scale (ULS; Aladağ, Kağnıcı, Tuna, & Tezer, 2003), Acceptance and Action Questionnaire- II (AAQ-II; Hayes et al., 2004), Ruminative Thought Style Questionnaire (RTSQ; Brinker & Dozois, 2009), Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990) and Self Compassion Scale (SCS; Neff, 2003s).

The results of the SEM analysis indicated that psychological inflexibility negatively and significantly, self-compassion positively and significantly predicted overall college adjustment. While, psychological inflexibility positively predicted ruminative thinking and worry, it negatively predicted self-compassion. Findings also revealed that ruminative thinking and worry were not significant predictors of the college adjustment.

The results of this study suggested that students with high psychological inflexibility and low level of self-compassion have difficulties in adjusting to the college environment. On the other hand, students with high psychological inflexibility were found to be more likely to experience ruminative thinking and worry. Furthermore, the findings showed that college students who experience ruminative thinking and worry did not seem to experience difficulties in adjusting to college life.

Keywords: College adjustment, psychological inflexibility, self-compassion, ruminative thinking, worry

ÖZ

ÜNİVERSİTEYE UYUMUN, PSİKOLOJİK KATILIK, RUMİNATİF DÜŞÜNME, ENDİŞE VE ÖZ-DUYARLILIK İLE İLİŞKİSİ ÜZERİNE BİR MODEL TEST ETME ÇALIŞMASI

Aydın, Yasin

Doktora, Eğitim Bilimleri Bölümü

Tez Yöneticisi: Prof. Dr. Oya Yerin Güneri

Mayıs 2016, 185 sayfa

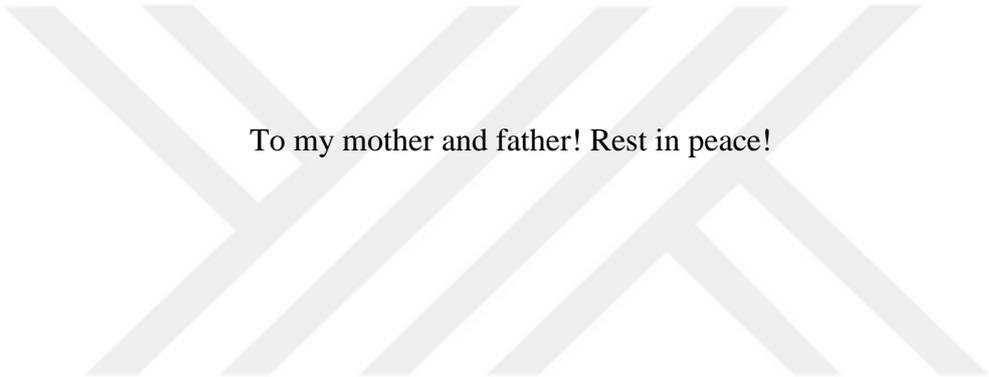
Bu çalışma, üniversiteye yeni başlayan öğrencilerin üniversite yaşamına uyumlarının psikolojik katılık, ruminatif düşünme, endişe ve öz-duyarlılık değişkenleri ile olan ilişkisini yapısal eşitlik modellemesi (YEM) kullanarak test etmeyi amaçlamıştır. Çalışmanın örneklemini, Türkiye'nin batısında bulunan bir devlet üniversitesinden toplam 657 öğrenci (486 kız, 171 erkek) oluşturmuştur. Bu çalışmada veri toplama aracı olarak; Demografik Bilgi Formu, Üniversite Yaşam Ölçeği (ULS; Aladağ, Kağncı, Tuna, & Tezer, 2003), Kabul ve Eylem Formu - II (KEF; Hayes et al., 2004), Ruminatif Düşünme Stili Ölçeği (RDSÖ; Brinker & Dozois, 2009), Penn Eyaleti Endişe Ölçeği (PEEÖ; Meyer, Miller, Metzger, & Borkovec, 1990) ve Öz-duyarlılık Ölçeği (ÖDÖ; Neff, 2003a) kullanılmıştır.

Yapısal eşitlik modellemesi analizi sonuçları, psikolojik katılığın anlamlı ve negatif olarak, öz-duyarlılığın ise anlamlı ve pozitif olarak genel üniversiteye uyumu yordadığını göstermektedir. Psikolojik katılık, ruminatif düşünme ve endişeyi anlamlı ve pozitif olarak yordarken, öz-duyarlılığı negatif ve anlamlı

birşekilde yordamıştır. Ayrıca bulgularda, ruminatif düşünme ve endişenin üniversiteye uyumu yordamadığı görülmüştür.

Bu çalışmanın sonuçları, psikolojik katılımı yüksek olan öğrencilerin ve öz-duyarlılık becerileri düşük olan öğrencilerin üniversite yaşamına uyumda zorlandıklarını ortaya koymuştur. Diğer taraftan, psikolojik katılımı yüksek olan öğrencilerin ruminatif düşünme ve endişelerinin daha yüksek olduğu bulunmuştur. Buna ek olarak; çalışmanın sonuçları, ruminatif düşünme ve endişe deneyimleyen öğrencilerin, üniversite yaşamına uyum sağlamada zorluklar yaşamadığını göstermektedir.

Anahtar Kelimeler: Üniversiteye uyum, psikolojik katılım, öz-duyarlılık, ruminatif düşünme, endişe



To my mother and father! Rest in peace!

ACKNOWLEDGEMENTS

Writing a PhD thesis is not an individual experience; rather it takes place in a social context and includes several persons, whom I would like to thank sincerely.

First and foremost, I am greatly indebted to my thesis supervisor, Prof. Dr. Oya Yerin Güneri, who kindly and expertly guided me through my doctoral education at METU. She has always encouraged me with her amazing enthusiasm even when I felt down during this demanding doctoral thesis process. I have always felt so lucky to have her as my thesis supervisor. I would also extend my appreciation and gratitude to the examining committee members, Prof. Dr. Özgür Erdur Baker, Prof. Dr. Zekeriya Nartgün, Assoc. Prof. Dr. Yelda Kağnıcı, and Assoc. Prof. Dr. Zeynep Hatipoğlu Sümer for their invaluable contributions.

I would like to express my thanks to Assist. Prof. Dr. Eralp Bahçivan for his support and patience for my endless questions. It would have been impossible for me to complete my work without his support and confidence in me. I would also extend my appreciation to Dr. Ali Bayramoğlu who has broadened my horizons in understanding the Acceptance and Commitment Therapy and mindfulness. I really enjoyed chatting with Dr. Bayramoğlu every time I visited him at METU.

There are also some other people in my education life whom I would like to thank. They were not maybe directly involved in my thesis process but I have always felt their support and encouragement. In this regard, I would like thank Assoc. Prof. Dr. Mine Aladağ and once again Assoc. Prof. Dr. Yelda Kağnıcı who have been great role models in my career. I also appreciate the support of my dear professors, Dr. Le'Ann Solmonson, Dr. David Lawson, Dr. Robert

Choate, and Mr. Patterson who helped me a lot and believed in me during my masters education at Stephen F. Austin State University in Texas, USA.

I also would like to express my great appreciation to my awesome and kind friend Selçuk Aslan whom I had the chance to know at my doctoral process at METU. I knew that he was always there for me when I had my ups and downs not only during the thesis process but also in my entire doctoral education life.

I would like to thank my brothers and sisters for their unconditional support during this stressful period. I specifically would like to express my deepest thanks to my dear brother Ahmet AYDIN. He has always been the one whom I admire with his loving, caring, understanding and supporting attitude. He is one of the main reasons I am able to write these verses of acknowledgement at the moment.

Finally, I would love to thank my beloved mother and father. I know they are proud of me and they are watching over me now with a sweet smile on their faces from heaven! Thank you!

TABLE OF CONTENTS

| | |
|---|------|
| PLAGIARISM | iii |
| ABSTRACT | iv |
| ÖZ | vi |
| DEDICATION..... | viii |
| ACKNOWLEDGEMENTS | ix |
| TABLE OF CONTENTS | xi |
| LIST OF TABLES | xiv |
| LIST OF FIGURES | xv |
| CHAPTER | |
| CHAPTER 1: INTRODUCTION | 1 |
| 1.1. Background of the Study | 1 |
| 1.2. Purpose of the Study..... | 8 |
| 1.3. Research Questions and Hypotheses | 8 |
| 1.4. Significance of the Study | 8 |
| 1.5. Definitions of Terms | 13 |
| CHAPTER 2: LITERATURE REVIEW | 15 |
| 2.1. Conceptualization of Human Adjustment | 15 |
| 2.2. College Adjustment | 16 |
| 2.3. Adjustment Theories and Models..... | 22 |
| 2.3.1. Student Development Theories..... | 22 |
| 2.3.2. Environmental/Sociological Theories..... | 25 |
| 2.4. Indicators of College Adjustment Relevant to this Study | 28 |
| 2.4.1. Psychological Inflexibility | 28 |
| 2.4.1.1. Research on Psychological Inflexibility and College Adjustment | 36 |
| 2.4.2. Self-Compassion..... | 39 |
| 2.4.2.1. Research on Self-Compassion and College Adjustment..... | 41 |

| | |
|--|-----------|
| 2.4.3. Ruminative Thinking and Worry..... | 44 |
| 2.4.3.1. Ruminative Thinking and Worry in Relation to College Adjustment..... | 46 |
| 2.5. College Adjustment in Turkey | 48 |
| 2.6. Summary of the Reviewed Literature | 53 |
| CHAPTER 3: METHOD | 55 |
| 3.1. Overall Research Design..... | 55 |
| 3.2. Sample and Procedure..... | 56 |
| 3.3. Data Collection Instruments..... | 58 |
| 3.3.1. University Life Scale (ULS)..... | 58 |
| 3.3.1.1. Confirmatory Factor Analysis of ULS..... | 60 |
| 3.3.1.2. Reliability of ULS..... | 63 |
| 3.3.2. Acceptance and Action Questionnaire- II (AAQ-II) | 63 |
| 3.3.2.1. Confirmatory Factor Analysis of AAQ-II | 65 |
| 3.3.2.2. Reliability of AAQ-II..... | 67 |
| 3.3.3. Ruminative Thought Style Questionnaire (RTSQ) | 67 |
| 3.3.3.1. Confirmatory Factor Analysis of RTSQ..... | 68 |
| 3.3.3.2. Reliability of RTSQ | 71 |
| 3.3.4. Penn State Worry Questionnaire (PSWQ) | 71 |
| 3.3.4.1. Confirmatory Factor Analysis of PSWQ | 72 |
| 3.3.4.2. Reliability of PSWQ | 75 |
| 3.3.5. Self-Compassion Scale (SCS) | 75 |
| 3.3.5.1. Confirmatory Factor Analysis of SCS | 76 |
| 3.3.5.2. Reliability of SCS | 79 |
| 3.4. Data Collection Procedure | 79 |
| 3.5. Data Analysis | 80 |
| 3.6. Limitations | 84 |
| CHAPTER 4: RESULTS | 86 |
| 4.1. Preliminary Analysis | 86 |
| 4.1.1. Missing Data..... | 86 |
| 4.1.2. Outliers | 87 |
| 4.1.3. Normality..... | 88 |

| | |
|---|-----|
| 4.2. Descriptive Analysis..... | 92 |
| 4.3. The Proposed Structural Equation Modeling (SEM) | 93 |
| 4.4. Confirmatory Structural Equation Modeling (SEM) Results..... | 95 |
| 4.5. Results of the Research Hypotheses..... | 97 |
| 4.6. Summary of the Results..... | 99 |
| CHAPTER 5: DISCUSSION..... | 101 |
| 5.1. Overview of the Hypotheses | 101 |
| 5.2. Discussion of the Results | 102 |
| 5.3. Implications for the Practice..... | 108 |
| 5.4. Implications and Recommendations for the Future Research..... | 111 |
| REFERENCES..... | 113 |
| APPENDICES | |
| Appendix A: Middle East Technical University Human Subjects Committee Approval Letter | 143 |
| Appendix B: Abant İzzet Baysal University Human Subjects Committee Approval Letter | 144 |
| Appendix C: Scale Permission ULS | 145 |
| Appendix D: Scale Permission AAQ-II | 146 |
| Appendix E: Scale Permission RTSQ | 147 |
| Appendix F: Scale Permission PSWQ | 148 |
| Appendix G: Scale Permission SCS..... | 149 |
| Appendix H: Demographic Information Form..... | 150 |
| Appendix I: University Life Scale (ULS) | 151 |
| Appendix J: Acceptance and Action Questionnaire- II (AAQ-II)..... | 153 |
| Appendix K: Ruminative Thought Style Questionnaire (RTSQ) | 154 |
| Appendix L: Penn State Worry Questionnaire (PSWQ) | 155 |
| Appendix M: Self-Compassion Scale (SCS)..... | 156 |
| Appendix N: Curriculum Vitae (CV)..... | 157 |
| Appendix O : Tez Fotokopisi İzin Formu | 159 |
| Appendix P: TURKISH SUMMARY | 160 |

LIST OF TABLES

TABLES

| | |
|--|----|
| Table 3.1 Distribution of the Participants by Gender and Faculty | 57 |
| Table 3.2 Fit Indices of CFA Model for University Adjustment..... | 61 |
| Table 3.3 Fit Indices of CFA Model for Psychological Inflexibility..... | 66 |
| Table 3.4 Fit Indices of CFA Model for Ruminative Thinking..... | 69 |
| Table 3.5 Fit Indices of CFA Model for Worry..... | 73 |
| Table 3.6 Fit Indices of CFA Model for Self-Compassion..... | 77 |
| Table 4.1 Normality Test Results for all Variables | 89 |
| Table 4.2 Descriptive Statistics for all Variables | 92 |
| Table 4.3 Bivariate Correlations between Variables | 93 |
| Table 4.4. Model Fit Criterias in SEM Analysis | 95 |
| Table 4.5. Results of the Results Hypotheses with Standardized Regression Weights | 98 |
| Table 4.6 Explained Variance for each Variable in the Model | 99 |

LIST OF FIGURES

FIGURES

| | |
|--|----|
| Figure 1.1 Psychological Flexibility/ Inflexibility Hexagon..... | 31 |
| Figure 3.1 ULS's Factor Structure with Standardized Estimates | 62 |
| Figure 3.2 AAQ-II's Factor Structure with Standardized Estimates | 66 |
| Figure 3.3 RTSQ's Factor Structure with Standardized Estimates..... | 70 |
| Figure 3.4 PSWQ's Factor Structure with Standardized Estimates..... | 74 |
| Figure 3.5 SCS's Factor Structure with Standardized Estimates..... | 78 |
| Figure 4.1 Normality Histogram for University Adjustment | 89 |
| Figure 4.2 Normality Histogram for Psychological Inflexibility | 90 |
| Figure 4.3 Normality Histogram for Ruminative Thinking | 90 |
| Figure 4.4 Normality Histogram for Worry..... | 91 |
| Figure 4.5 Normality Histogram for Self-Compassion..... | 91 |
| Figure 4.6 Proposed SEM Model..... | 94 |
| Figure 4.7 Confirmatory SEM Model..... | 96 |

CHAPTER I

INTRODUCTION

This chapter that presents an overview of the current research is composed of five parts. The first part will explain the background of the study, the second part will present the purpose of the research, the third part will focus on the statement of the research questions and hypotheses, the fourth part will focus on the significance of the study, and finally in the fifth part main key concepts of the research will be explained.

1.1. Background of the Study

“It had been a few months since Seda started the university. While she was wandering around by herself, she thought about how different this city and the university is for her. She realized that she was feeling uneasy and a little bit frightened because she had to live in an unfamiliar place among several people with different cultural backgrounds and different life styles. That moment, she thought of her home and her family who lived far away from her. She remembered the efforts her family made for her to be here and she felt the responsibility of having to be successful at the university on her shoulders. In the meantime, she wished that she had studied more so that she would be able to go to a university close to her home. She felt regret, and she got angry at herself. However, the midterms were approaching, and she was going to experience it for the first time at the university. She could not figure how she was going to prepare for the exams and how she would communicate with the professors at school. With similar complicated thoughts in her mind, she found herself walking alone on campus”.

The story of the above freshman student may sound familiar to those who had a university life experience. Every year thousands of young people graduate from high school and look forward to pursuing a degree in higher education.

The term college and university are used interchangeably to refer higher education institutions. However, these two terms can lead to confusion in the global context, due to the blurry line between them. For example, in the US, while college is relatively a smaller institution that offers mainly undergraduate degrees and two-year degrees, university is a bigger or a larger institution that usually offers both an undergraduate and a graduate degrees (Masters and PhD) that also may have medical school and a law school (Association of American Colleges and Universities [AACU], 2016) . Thus students in the USA mostly prefer to use college when they talk about a four year undergraduate education. Correspondingly, in the adjustment literature the term “college adjustment” rather than “university adjustment” is most commonly used. On the other hand, in Turkey, both students and the literature use “university” to refer to a four year undergraduate education. In the present study, in order to overcome the confusion regarding the use of the terms, college and university, both of them are used interchangeably. However, the term “college adjustment” is used while citing the original studies.

Beginning university is a significant event in a young adult’s life which provides a new life style that is very different from the high school. When considered from this point of view, starting a university life for the first time can be a very stressful and unbearable experience for some freshman or first-year students. Upcraft, Gardner, and Barefoot (2005) discusses the myth of first year college student as primarily middle-class, eighteen years old, single, newly graduated from high school, studying full time and living on campus, enrolled in a four year college, living away from home for the first time, meeting traditional standards of academic success. It is obvious that some of the myths for the first-

year college students still relevant. However, it is now known much more about the first-year of college experience and personal and environmental factors that affect students' adjustment to college (Upcraft et al., 2005).

In order to understand those personal and environmental factors of college adjustment, it is vital to understand the concept of transition. Entry into new phase of a life brings new information and experience to which people must adapt. In every life transition period, people are faced with difficult and even sometimes threatening life tasks such as changing jobs, becoming a parent, or retiring from work (Cantor, Noreem, Niedenthal, Langston, & Brower, 1987; Morton, Mergler, & Boman, 2014) and the transition from high school to college is not an exception (Brooks & Dubois, 1995; Morton et al., 2014). While this transition is an adventure both socially and intellectually for many students, the very same period may become a very overwhelming and distressing for some other students that involve number of challenges. Considering the facts of transition period, freshman students experience more adjustment difficulties than the college students in the other years. The major challenges for freshman students include homesickness (Thurber & Walton, 2012), academic difficulties that is more demanding than high school (Johnston, 2010), changing habits such as sleeping, eating and daily routines and managing time (Halamandaris & Power, 1999) and stress that is originated from a new environment and new friends and relationships (Buote et al., 2007; Clinciu, 2013; Sasaki & Yamasaki, 2007).

Psychological distress among college students represents a serious health-issue. When examining the adjustment to college life, the literature reveals an association between anxiety, stress, anger, depression, mental illness and adjustment (Clinciu, 2013). Moreover, Tinto (1996) posits that the adjustment difficulties are among the major causes of students' drop out from college. More importantly, depressive symptoms and anxiety may lead young adults to suicidal ideation and suicide attempts. Skala et al. (2012) also states that suicide is one

of the major problem among young adults. Suicidal thoughts are associated with one's cognitive styles that originated from depressive symptoms in turn. Those cognitive styles or constructs that lead to depression are explained mostly with ruminative thinking style and worry (Lamis & Dvorak, 2014).

Rumination has a strong resemblance to the construct of worry at a conceptual level (Nolen-Hoeksema, 1998). Whereas, rumination has been defined as "behaviors and thoughts that passively focus on one's attention on one's depressive thoughts and on the implications of these thoughts" (Nolen-Hoeksema, 1998, p. 239), worry is defined as "a chain of thoughts and images, negatively affect-laden, and relatively uncontrollable" (Borkovec, Robinson, Pruzinsky, & Depree, 1983, p. 10). Even though, by definitions, rumination seems to be related to depression and worry to anxiety, Starcevic (1995) suggests that worry also occurs in major depression. There are two studies available in order to explore the link between rumination, worry, depression, and anxiety, systematically. In the first study, Segerstrom, Tsao, Alden, and Craske (2000) found that rumination and worry were correlated substantially and both loaded on same latent variable, named as "repetitive thought" which was associated with depression and anxiety. In the second study, Fresco, Frankel, Mennin, Turk, and Heimberg (2002) analyzed the overlapping features of rumination and worry with college students' sample. The results of a common factor analysis showed that rumination and worry are separate but they are both highly correlated with each other. Thus the results of both studies revealed that rumination and worry are closely related but they have distinct features (Fresco et al., 2002).

Morrison and O'Connor (2005) found that rumination and stress are the strong predictors of psychological distress among college students. Moreover, Zawadzki, Graham, and Gerin (2013) investigated the possible mediating effect of rumination and anxiety between loneliness and depressed mood of college students. The results have shown that if the students who feel lonely ruminate and experience anxiety, they are more likely to get into depressive mood. These

results especially matter for freshman students considering the fact that they tend to have difficulties to get in touch with others during the first months of the college life.

Rumination was also found to be related with stressful life events in the longitudinal study of Michel, McLaughlin, Shepherd, and Nolen-Hoeksema (2013). The results suggested that exposure to stressful life events was longitudinally linked to increased engagement in rumination. In addition, rumination was found to be a mediator between self-reported stressors and symptoms of anxiety. When college adjustment process is considered as a stressful life event for freshman students, the role of rumination can be understood as an important factor.

Freshman students start to college life with a lot of questions including the uncertainties about campus life, interpersonal and academic relations, and many other in class and out class activities. These uncertainties make freshman students worry about their first-year experience. Paolini, Alejandro, and William (2006) investigated the role of worry on the college students' life satisfaction. The participants were 160 undergraduate college students. According to the results, the individuals with high worry scores indicated less life satisfaction, even when controlling the trait anxiety.

As depicted from the above explanations about the relationships between college adjustment, rumination and worry, psychological health of a college student matters especially when it comes to the freshman adjustment process. Psychological flexibility that is the core concept of Acceptance and Commitment Therapy (ACT) is one of the key ingredients to psychological health (Hayes, Strosahl, & Wilson, 2005). The concept of psychological flexibility refers to a number of dynamic processes. These processes can be explained by how a person: (1) adapts to changing situational demands in life, (2) reconstruct the mental resources, (3) have different perspectives and (4) obtain balance between

desires, needs, and life domains. Thus, a person who is psychologically flexible is able to incorporate between his/her internal private experiences and environmental context (Kashdan & Rottenberg, 2010).

The main aim in ACT is to increase the psychological flexibility of individuals. ACT uses acceptance and mindfulness processes as well as commitment and behavioral activation techniques to cultivate psychological flexibility. This approach seeks human language and cognition under effective and better contextual control so that individuals can get rid of their problem solving mind to promote a more open and valued living (Hayes, Strosahl, & Wilson, 2005).

The concept of experiential avoidance is one of the core processes in ACT. It is defined as the attempts to avoid internal private experiences including thoughts, feelings, memories, and physical sensations- even when doing so, it creates harm and destructive results in the long run (Hayes et al., 2005). The best way to conceptualize the experiential avoidance is to understand that humans are motivated into two directions. First direction is to move away from the things that they do not want and second direction is to move towards the things that they do want. This may sound particularly good idea for the things happening in the external world. However, away and towards moves do not work with the same system in the internal worlds of the humans. When people move towards something they really value, they start to experience some uncomfortable emotions and negative thoughts in the early stages. Therefore, they immediately turn back and move away from the things they really value. These attempts called experiential avoidance, which may reveal a relief. Experiential avoidance may work in the short- term, but it does not work in the long-term (Harris, 2008; Hayes et al., 2005). For example, a college freshman who struggles with academic and social adjustment difficulties may choose to isolate himself/herself from other students which creates a relief in the short run but eventually causes more isolation and academic problems in the long run. As it is seen, experiential

avoidance strategies seem to work for college students but they keep students away from a more valuable life in college environment.

The literature indicates that acceptance and mindfulness processes matter in dealing with various psychological problems in college life (Pistorello, 2013). More specifically, ACT was used as an approach with college students to treat perfectionism (Crosby, Armstrong, Nafziger, & Twoig, 2013), to overcome academic barriers (Miselli, Prevedini, & Pozzi, 2013) and to enhance peer support in college (Morse, 2013).

The concept of self-compassion that is another core component in this current study shares many commonalities with psychological flexibility including present moment awareness, mindfulness and acceptance. “Things in life may not go the way we all want them to”. This motto can be applied to college freshmen who struggle with many adjustment difficulties. The students who experience various adjustment problems in college either act in a compassionate or self-destructive manner towards themselves. Self-compassion is simply acting with a kind, understanding and accepting manner towards yourself when you are having a difficult time, fail, or even notice something you do not like about yourself (Neff, 2011). Self-compassion positively predicts well-being of adolescents (Bluth & Blanton, 2015) and negatively predicts stress in college freshmen (James, 2013).

College adjustment is not a simple process but multifaceted and complex phenomenon (Pascarella & Terenzini, 2005). All of the research about college adjustment and related variables in this study help us understand the importance of college adjustment, in addition to the mental health of a college freshman student.

1.2. Purpose of the Study

There are multiple factors contributing to the college adjustment process for the first-year students. Therefore, this study aims to investigate the relationship between university adjustment, psychological inflexibility, ruminative thinking, worry and self-compassion, in an interactional model (See Figure 4.6).

1.3. Research Questions and Hypotheses

The main research question of this study is “What is the nature of relationships among psychological inflexibility, ruminative thinking, worry and self-compassion in relation to university adjustment among freshman students?”

Research Hypotheses:

1. Psychological inflexibility will predict self-compassion.
2. Psychological inflexibility will predict university adjustment.
3. Psychological inflexibility will predict ruminative thinking.
4. Psychological inflexibility will predict worry.
5. Self-compassion will predict university adjustment.
6. Ruminative thinking will predict university adjustment.
7. Worry will predict university adjustment.

1.4. Significance of the Study

Transition from high school to college that occurs at the time period between the ages of 18-25 is also described as emerging adulthood. In this critical developmental stage many changes occur in the life of students. Most of the students move away from the homes which brings more autonomy and responsibility to their lives (Arnett, 2000). One student in Jorgenson-Earp and Staton’s (1993) metaphors for freshman college experience study described this

particular experience as “the line of demarcation of life. No longer am I a sheltered child on my parents’ schedule, but a young adult about to embark on a new life, very exciting and full of mystery” (p. 130).

College students are expected to make a series of adjustments to cope with their new ways of life. These adjustments range from academic issues to personal, emotional, and social adjustments (Baker & Siryk, 1984). Arrival to college brings a student’s life both positive (retention) and negative (attrition) effects. The negative effects are mostly related to academic boredom, lack of certainty about major or career path, limited or unrealistic expectations about college, lack of knowledge about campus life, and other transitional or adjustment difficulties (Upcraft et al., 2005). Some additional difficulties first-year college students deal with are alienation, psychological complaints, financial difficulties, moving from small town to a big city for university, language and culture related differences (Murphy & Archer, 1996).

First year of college experience has become a much higher priority for policy-makers, resource allocators, administrators, faculty, college counseling centers, and of course for families. It is now more challenging experience than ever both inside and outside of the classroom (Upcraft et al., 2005). Moreover, Johnston (2010) emphasizes the importance of first year experience from a faculty perspective and states that first year is a major part of the university life and deserves serious attention in every university.

Upcraft et al. (2005) discussed the progress over first year college experience and came up some major headlines including the increasing number of colleges, the integration of technology use into first-year initiatives, funding and other supports, and cultural diversity issues. The number of colleges and hence the first year students have been increasing. Therefore, the need for a comprehensive understanding of first-year university adjustment has been necessary more than ever. This need is also very urgent in countries such as Turkey where there are

many young universities and the number of students enrolled in universities is rapidly increasing. For example of the total 193 universities in Turkey, 115 of them are less than 10 years old. Parallel to that development, the total number of students who are enrolled in all universities in Turkey has now reached to the total of 6.062.886 (Yüksek Öğretim Kurumu [YOK], 2016).

There are other reasons to understand better the college adjustment process such as drop-outs. According to Rausch and Hamilton (2006) the majority of students drop out of college during their first year which is considered as the transitioning period. Academic failure is definitely not only problem when it comes to first year college adjustment. There are several other difficulties that students try to deal with throughout their first year college experience. According to Barefoot (2000), first year- college students are disengaged academically, unmotivated, cannot complete an assignment properly, have very short time of attention span, and expect instant gratification.

When young people start college they suddenly have to transfer from family life to an unexpected world of college where they will have to manage their life on their own, that is why those people have developmental problems of identity crisis, interpersonal relationships and sexuality issues at college. In addition to the normal developmental issues, college students also have to face with academic responsibilities, fulfill parental expectations, and cope with racial and cultural conflicts among their peers in the college environment where cultural variances occur. Besides the daily stress factors, there are also the burden of school payments that the college students have to carry on their shoulders until they graduate. College students also face with the requirements of growing up, fulfilling other people's expectations and finding the right place in the world for themselves (Kadison & DiGeronimo, 2004).

First year university experience (FYE) is an important phenomenon that researchers examine in different studies in relation to in class, out class activities,

attitudes towards the institution (Franklin, Cranston, Perry, Purtle, & Robertson, 2002). Gardner (1986) also emphasized the importance of first year experience programs for the college students.

In addition to these challenges, students in Turkey go through stressful periods to become a student in college. There are millions of students try to pass the university entrance exam every year. According to Student Selection and Placement Centre (ÖSYM) data, out of 2.126.670 candidates who took the university entrance exam, only 417.714 achieved to become a university student (ÖSYM, 2015). In other words, approximately only % 20 of all candidates started a life in university. It is not an easy process for high school graduates to become a university student which creates a lot of pressure on them. This pressure sometimes lead students to pick a major in college that is not desired by them. Students experience various difficulties as a result of this fact (Mercan & Yıldız, 2011).

Most of the existing research on the transition and college adjustment has examined the role of social variables such as friends and family (Paul & Brier, 2001; Pittman & Richmond, 2008), personality characteristics such as shyness, sociability (Mounts, Valentiner, Anderson, & Boswell, 2006), or optimism (Morton et al., 2014). Another research (Mercan & Yıldız, 2011) was conducted in order to investigate the main problems college students face during their first year experience in relation to several demographic factors. The results of this study yielded that college freshmen mostly seek help about difficulties related to academic success, career planning, stress, time management.

In this regard, despite their valuable contribution to explore the college adjustment phenomenon, the college adjustment literature was unsatisfying especially investigating the role of third wave approaches in college adjustment process. Third wave approaches in psychotherapy has emerged after the rapid developments in the field of behavioral and cognitive therapies. Third wave

approaches seek to change the function of an event, rather than changing the event itself, and the individuals' relationship to them by using strategies such as mindfulness, acceptance or cognitive defusion (Teasdale, Segal, & Williams, 2003).

Since, college is a time of transition where students experience independence from family, establish new social relationships, settle into their sexuality, and face the financial, intellectual, and social demands (Kadison & DiGeronimo, 2004). The strategies that third wave approaches use including mindfulness, acceptance, defusion, and values work might be very beneficial for students in many different ways as suggested by Pistorello (2013). These approaches are transdiagnostic in nature, flexible, easy to access, helpful also for the college staff, and sensitive to cultural differences and change.

There are limited studies that have been conducted about the effectiveness of Mindfulness-based Cognitive Therapy (MBCT) and Acceptance and Commitment Therapy (ACT) at college counseling and psychological services (Renner & Foley, 2013). Another study was a randomized control trial by Pistorello, Fruzzetti, MacLane, Gallop, and Iverson (2012) that examined the effectiveness of Dialectical Behavioral Therapy (DBT) on suicidal college students. In addition to these, a proto-type acceptance and commitment therapy (ACT) service was provided to the college students who deal with depressive and anxious symptoms. The results indicated that students who took the web-based ACT service showed significant improvements for ACT knowledge, education values and depression relative to waitlist (Levin, Pistorello, Seeley, & Hayes, 2014).

Therefore, one of the significant aspect of this current study was to emphasize the importance of underestimated variables such as psychological inflexibility, rumination, worry, and self-compassion in relation to college adjustment within an interactional structural equational model. In addition, the present study is

unique in the sense that college adjustment is not only dependent on some demographic factors but also it is an interactional process among many other variables. Therefore, this current study will be the first one in Turkey that takes Acceptance and Commitment Therapy as a framework and investigates variables such as self-compassion, ruminative thinking and worry in relation to college adjustment. In this context, the findings of the present study may provide valuable information regarding the freshman students' college adjustment process. It is also hoped that, the findings might increase college counselors', faculty members', administratives', and family members' understanding about first-year experience of college students regarding college adjustment from ACT perspective and contribute to their knowledge about college life.

1.5. Definitions of Terms

College/University Adjustment

Baker and Siryk (1984) defined university adjustment as responding to academic demands, having social integration with faculty members, being involved in campus life and having attachment and commitment to university.

College adjustment refers to how well students think they fulfill various academic and social demands associated with university experience (Akbalık, 1998).

Psychological Flexibility

Psychological flexibility is “contacting the present moment fully as a conscious human being, and based on what situation affords, changing or persisting in behavior in the service of chosen values” (Hayes et al., 2012, p.60).

Ruminative Thinking

Rumination is defined as compulsively focused attention on the symptoms of one's distress, and on possible causes and consequences, as opposed to its solutions (Nolen-Hoeksema, 1998).

Worry

“Worry is a chain of thoughts and images, negatively affect-laden and relatively uncontrollable; it represents an attempt to engage in mental problem-solving on an issue whose outcome is uncertain but contains the possibility of one or more negative outcomes; consequently, worry relates closely to the fear process” (Borkovec et al., 1983, p. 10).

Self-compassion

Self-compassion is defined as acting towards yourself in a kind and understanding manner, realizing that suffering is part of the shared human experience, when you are having difficult time, fail, or notice something you do not like about yourself (Neff, 2003a).

CHAPTER II

LITERATURE REVIEW

This chapter will provide the review of the literature on the following areas (a) conceptualization of human adjustment (b) college adjustment (c) adjustment theories and models (d) indicators of college adjustment relevant to this study and (e) college adjustment in Turkey.

2.1. Conceptualization of Human Adjustment

Adjustment is defined simply as a “psychological process of adapting to, coping with, and managing the challenges of everyday life” (Santrock, 2006, p. 5). Adjustment is also defined as the process by which individuals respond to environmental pressures and cope with stress. Adjustment is a coping behavior that helps individuals to overcome the demands of life. Sometimes the demands are physical such as dressing up warmly, exercising or turning up the thermostat when getting cold. Sometimes the demands are more psychological that individuals need to adjust (Nevid & Rathus, 2007). Adjustment may occur when a student develops a better communication skills; when an employee learns how to get along better with his/her director; when a person finds alternative and effective ways to cope with a loss; when an angry person remains calm and find other ways to deal with anger; and when a shy young man tries new ways to overcome his shyness in a group setting (Santrock, 2006).

In all of the examples above, it is not surprising to see that adjustment is not about passively accepting the existing conditions but it is mainly about stepping forward and actively taking the responsibility of the actions which eventually

provides growth. Therefore, adjustment without growth is described as hollow achievement (Glidden-Tracey, 2005).

When described, adjustment process may sound solely reactive responses to environment. However, individuals are not only reactors to the environment but also actors in the environment. Things not only happen to individuals but individuals also make the things happen (Nevid & Rathus, 2007). Thus adjustment is more a mutual interaction between human and environment.

The study of human adjustment emphasize that people do not live in segregated areas. The settings people live affect their lives, presenting not only the things that make people feel good but also problems, difficulties, and challenges that they must adjust to (Santrock, 2006; as cited in Lopez & Guarniaccia, 2005). The settings that people live in changes through various transitional periods that may disclose problems and challenges to cope with. Transition from high school to college is one of the phases that reveals a lot of stress in young people's lives (Arnett, 2004).

2.2. College Adjustment

Attending college for the first time entails a transition in young people's lives and also brings a big deal of stress (Bland, Melton, Welle, & Bigham, 2012). Although this transition is perceived as an opportunity for personal growth for some students, others are overwhelmed by the rapid and great changes and experience emotional and cognitive problems (Cutrona, 1982; Hammen, 1980; Lokitz & Sprandel, 1976). Freshman students who fail to adjust to college life may suffer from different psychological as well as academic problems. It is estimated that nearly 25 % of high school graduates attending in college drop out during their first year in college (Arnett, 2004). Students need to cope with many different challenges in order to adjust college life. Moreover, first-year

college adjustment is more difficult comparing the following years in college (Houston, 1971).

College adjustment has been defined as responding to academic demands, having social integration with faculty, being involved in campus life and having attachment and commitment to university (Baker & Siryk, 1984). The college adjustment and its dimensions have been studied over the last three decades. Most research on college adjustment mainly focused on demographic variables such as SES and gender (Chataway & Berry, 1989), entry qualifications to university and intellectual ability (Sternberg & Kaufman, 1998), personality variables, personality types such as extraversion and neuroticism and finally social support (Joiner, 1997).

There are several personal and environmental processes known to be involved in dealing with the adjustment difficulties in college. Baker and Siryk (1984) described a successful university adjustment concept as responding to academic demands, being involved in social life on campus including campus activities and getting connected with others, and finally maintenance one's own physical and psychological well-being. Therefore, Baker and Siryk (1984) determined four constructs in college adjustment namely, academic adjustment, social adjustment, personal-emotional adjustment, and goal commitment/institutional adjustment.

The overall college adjustment has been examined in various studies in relation to different variables. Perceived stress which is a mental health variable that was commonly studied in relation to college adjustment was found to be a negative predictor of overall college adjustment (Friedlander, Reid, Shupak, & Cribbie, 2007; Wintre & Yaffe, 2000). Self-esteem was also studied in relation to college adjustment and found to be a positive predictor for overall college adjustment (Becker, 2008; Toews & Yazedjian, 2007). Self-esteem was also found to be positively predictor of sub-dimensions of college adjustment (academic, social,

personal-emotional) (Mooney, Sherman, & Lopresto, 1991). Self-efficacy was also one of the commonly studied variables in college adjustment literature. Research indicates that self-efficacy positively predicts the overall college adjustment as well as all sub-dimensions of college adjustment (Zychowski, 2007).

Coping strategies have been studied in association with college adjustment in the literature. Coping strategies are considered as responses to stressful situation (Lazarus & Folkman, 1984). Jorgensen and Dusek (1990) investigated the relationship between psychosocial adjustment and coping strategies among college freshmen with 331 students. Findings of the study showed that the optimally adjusted freshmen exhibited a higher level of salutary coping skills than their less adjusted counterparts. In addition, Aspinwall and Taylor (1992) conducted a longitudinal study with 672 freshmen to investigate the role of individual differences and coping on college adjustment. The results of this study revealed that coping strategies used by freshmen significantly predicted their level of adjustment in college.

Brissette, Scheier, and Carver (2002) conducted a study with 89 college freshmen to understand the role of optimism in developing the social network that leads eventually students to a better psychological adjustment to college life. Another purpose of the study was to examine whether optimist students show better psychosocial adjustment to the first semester of college than do pessimist students. The findings of the study revealed that greater optimism was associated with greater friendship network size and greater increases in social support. The role of optimism in college adjustment was also examined by Perera and McIlveen (2014) with 235 college freshmen and found that optimism was related to better psychological adjustment to stressful events.

Gender is a widely studied indicator in relation to college adjustment. However, studies reveal inconsistent findings about the role of gender on college

adjustment. Some studies show that female students have more difficulties and distress than male students (Alfred-Liro & Sigelman, 1998; Enochs & Roland, 2006; Lopez & Gormley, 2002). Some other studies revealed that male students have more difficulties in adjusting the college environment (Feldman, 1993; Strahan, 2003).

College adjustment and its relationship with religiosity or spirituality has also been studied. According to Berry, Bass, Shimp-Fassler and Succop (2013), although religiosity has a protective effect on college students who experience binge drinking, depression and suicidality, it remains untapped as a resource due to several reasons. Berry, Bass, Shimp-Fassler, and Succop (2013) conducted a study with freshman students from different faith groups including Christians, Jewish, Muslim and those who were religiously unaffiliated. The findings of this study indicated that religiosity was negatively and consistently correlated to risky behaviors across all faith groups. In addition, Kneip, Kelly and Cyphers (2009) also found that religiousness and spirituality both have positive effects on college adjustment of freshman students.

It is also worth mentioning the studies about four facets of college adjustment. Academic adjustment refers to the college students' success in dealing with different educational needs of the university experience. Baker and Siryk (1984) also defined academic adjustment with some other contributing elements including, academic motivation, academic success, academic ability, satisfaction with the the academic environment. Number of studies have investigated the relationship between academic adjustment and personality characteristics of freshman students. Panori, Wong, Kennedy, and King's (1995) study revealed that students who did not experience self concept problems have higher level of academic adjustment to college.

In the literature, academic adjustment was also found to be positively associated with various variables including academic motivation (Baker & Siryk, 1984),

collective self-esteem (Bettencourt, Charlton, Eubanks, Kernahan, & Fuller, 1999), perceptions of competence, internal locus of control (Njus & Brockway, 1999), and extra curricular activities (Bettencourt et al., 1999). Academic adjustment to college was also found to be negatively associated with some variables including social anxiety and lack of social skills (Strahan, 2003), excessive use of internet (Inal, Kelleci, & Canbulat, 2012).

An effective and healthy adjustment to college requires various components including interacting with friends, faculty, and staff. In this regard, social adjustment refers to the student's success in social activities, relationships with other people in college life, ability to overcome with the social difficulties such as entering into a new social environment, and feeling satisfied with the overall social life on campus (Baker & Siryk, 1984). Social and extracurricular efforts brings more learning to students throughout the college life (Pascarella & Terenzini, 2005).

In a longitudinal study that was designed by Lokitz and Sprandel (1976), it was found that first year college students were mostly concerned with their academic success rather than their social involvement or adjustment to college. However, the same study also revealed that students replaced their concerns with social ones starting from the second year of the college. Therefore, it was suggested that if the freshmen students can have an effective social networks, they may not have any difficulty in adjusting the college life. The importance of social networks on social adjustment to college was supported by another study where the in-depth interviews were conducted with first- year college students in six different Canadian universities. The results indicated that new friendships and social networks on campus bring more adjustment to college life (Buote et al., 2007).

Social factors/variables' (e.g., social support from family and friends, interpersonal relationships with academic staff and others on campus) influences

on college adjustment of a freshman student, were also investigated in various studies. These studies demonstrated that emotional support from friends (Azmitia et al., 2013) and social support from family and friends was a predictor of a better adjustment to college life during the first year (Katz, 2008; Strage, 2000; Zychowski, 2007). The findings of this study revealed that new friendships on campus predicted better adjustment to college life; this association was found stronger for the students who live on campus.

The initial weeks of the college are like being in a foreign land for some students apart from the social and academic environment (Upcraft et al., 2005). They have some difficulties of psychological distress and physical well-being during the first semester of the college. Personal and emotional adjustment requires both psychological and physical well-being skills such as feeling calm, satisfied with the things they face in college, being able to control some of the intense emotions, dealing with the stressful daily life in college, and managing the somatic complaints in an effective way (Baker & Siryk, 1984). Gerdes and Mallinckrodt's (1994) longitudinal study of college retention and attrition revealed that students with high emotional and social adjustment skills were the persisters in college.

Finally, overall college adjustment cannot be explained without students' adjustment to university and the institution that is called goal commitment and institutional adjustment (Baker & Siryk, 1984). Denson and Bowman (2015) conducted a study to develop an instrument assessing the student- institution fit in higher education settings. The results supported that a college student' s institutional adjustment is dependent on his/her academic, social,cultural, religious, socio-economic and political adjustment levels.

2.3. Adjustment Theories and Models

College adjustment has been explored through different theories and models. In their comprehensive study, Pascarella and Terenzini (2005) reviewed every major research report since 1967 on the college student development. This present study review has relied mainly on their synthesis of college student development with more emphasis on theories or models that explain individual factors affecting the college adjustment. Since, this present study aimed to investigate the roles of psychological inflexibility, ruminative thinking, worry and self-compassion that are mostly individual intrapersonal factors that are presumably affect the college adjustment.

The theories and models to explain the college adjustment process are classified under two titles in this present study. These are *student development theories* that mainly see the college adjustment as a developmental stage and emphasize the interpersonal as well as intrapersonal changes when student enter the college, and *environmental/sociological theories* that focus on student's change from an environmental and sociological perspective.

2.3.1. Student Development Theories

Although developmental stage theories date back to Freud's psychoanalytic approach, Erikson's (1959) psychosocial developmental theory is the first one which put more emphasis on social context throughout life. *Psychosocial models* emphasize the accomplishment of "developmental tasks". Arthur Chickering's seven vectors model which deals with the overall psychosocial development is one of the most comprehensive approach in explaining the development and change of individuals (Chickering, 1969). According to seven vector model the development of a student is a process of infinite complexity. Therefore it is not described as moving from one age-specific level to another level as opposed to

Erikson's model. The seven vector model was originally developed by Chickering (1969). The model was later revised by Chickering and Reisser (1993) and vectors are namely; (a) developing competence (intellectual, physical and interpersonal), (b) managing emotions (flexible control and appropriate expression), (c) moving through autonomy toward interdependence, (d) developing mature interpersonal relationships, (e) establishing identity, (f) developing purpose, (g) developing integrity. Colleges and universities can support student development along each of the seven vectors (Chickering & Reisser, 1993). Although Chickering's seven vector model has gained more attention when it comes to psychosocial explanation of student development, identity formation theories also merit attention (Pascarella & Terenzini, 2005).

Cognitive structural theories explain the changes the way people think but not what they think (Evans, 1996). In cognitive structural theories (e.g., Perry's Scheme of Intellectual and Ethical Development, Kohlberg's Moral Development) several elements are in common: All propose a series of stages which are hierarchical throughout the individual's life. It is also believed that cognitive structural stages are universal, occurring in all cultures. William Perry, Lawrence Kohlberg, and Carol Gilligan have been among the most influential cognitive- structural developmental theorists studying college students. Most of the cognitive structural developmental theorists see the process of change as series of constructions and reconstructions. Therefore effective or healthy responses to cognitive discrepancy lead to a reformation of existing structures of individuals. That is, using an existing structure or schema to deal with a new information, knowledge or experience (assimilation) or changing the current beliefs or structures to admit or be consistent with the new experience (accommodation) (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005).

Typological models emphasize relatively stable differences (e.g., learning style, personality type, temperament, or socioeconomic background) among individuals as opposed to psychosocial and cognitive structural theories which

respectively focus on the nature and process of change in individuals (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). Typological models can be useful in exploring the differences between college students and in clarifying why some students may respond in different ways to the same college environment or experience.

Person-environment theory examine not only student development or college environment, but even more important the interaction of the student with the environment. These models help college counselors, administratives, and faculty to examine the many different types of student development possible (Evans, Forney, & Guido- DiBrito, 1998; as cited in Rodgers, 1990). In this regard, throughout the 1960s, sociologists and psychologists offered a perspective at students and their interaction with their environment, recognizing how environment shapes a student's development, specifically the effect of peer group (Feldman & Newcomb, 1969). Developmental theories also share similar conceptions of the processes of student development. Miller and Winston (1990) identified basic fundamental developmental principles occur during the human development. Psychosocial development is continuous and cumulative; it progresses from a simple to a more complex state in an order with one stage leading to the next. Finally, developmental progress depends on satisfactory completion of the tasks in each stage.

Developmental theories in explaining the college adjustment have certain commonalities in both substance and process. In terms of substantive themes, as the individuals gain experience and control in their lives, external control mechanisms on behavior slowly give way to internal control mechanisms. Growth in self-awareness and understanding of and appreciation for the roles of other people are the central focus during the college years. Developmental theories including psychosocial and cognitive structural theories, share common conception of reaching the highest stage of self-definition and self-direction such as moving from personal no responsibility to responsibility, from dependence

through autonomy, from self-interestedness to a sense of responsibility for others (Rodgers, 1980).

2.3.2. Environmental/Sociological Theories

Environmental/Sociological theories seek the origins of change in students' external rather than internal worlds. These theories also focus more on inter individual changes in identifying the sets of variables which may be student (e.g., gender, achievement, status, race), organizational (institution size, mission, selectivity) or environmental related (academic, cultural, social, political climate).

Astin's Theory of Student Involvement (Astin, 1970a, 1970b) also called as input-environment-outcome (I-E-O) model, basically proposes that college outcomes are viewed as functions of three basic elements: inputs, environment, and outcomes. Inputs are the demographic characteristics, family backgrounds, and any kinds of academic or social experiences that college students' bring with themselves. The environment represents all programs, policies, cultures, and full range of people that college student meet on or off campus. Finally, the outcomes are college students' skills, values, beliefs, and behaviors after that leave the college environment. Astin (1999) also proposed a theory in explaining these dynamic change and development of college students' life which is called "theory of involvement". According to Astin (1999), theory of involvement's basic premise is that college students learn by becoming involved. He suggests five postulates: (1) if a student wants to involve in anything in college, he or she needs to invest energy both psychologically and physically in order to fulfill tasks or activities; (2) involvement is a dynamic concept and students will invest different amount of energy in order to involve in various tasks, activities or people; (3) involvement has both quantitative and qualitative sides; (4) the amount of learning and development of a student depends on the quality and quantity of involvement; (5) educational effectiveness of an any policy or

practice is related to its capacity to induce involvement which predetermines the success in college.

Student Integration Model (SIM) that is proposed by Tinto (1975) focused on that students enter a college or university with different personal, family, and academic characteristics or skills and each has different intentions and goals. Colleges and universities have also unique individual characteristics. The characteristics of students and the colleges or universities they attend may not match. This mismatch sometimes may bring conflicts into students' life. If these conflicts are not resolved, the students may drop out or depart from the college (Pascarella & Terenzini, 2005). According to Tinto (1975), whether college students persist or drop out is strongly predicted by their level of academic and social integration to college environment.

Tinto's (1993) theory that was originally named as the theory of student departure posits that the sources of student drop-out basically emerge in three areas- academic problems, failure to integrate the college environment both socially and intellectually, and problems with commitment to the college or university. He argued that colleges or universities need to work on to integrate students into this new way of life in order to decrease the chance of departure.

Ecological System Theory (EST) was developed by Bronfenbrenner (1986, 2005) to explain how human development occurs focusing largely the impact of the context that are historical, economic, cultural, and social settings and factors that influence individuals. In this regard, everything people think, feel, and do is determined by where they come from, whom they have spent time with, and finally what has happened to them (Santrock, 2006). Ecological system theory consists of five environmental systems which are structured as layers: microsystem that refers to the immediate settings in which one lives and people with whom directly interacts such as family, spouse, peers, friends, college, and neighborhood; mesosystem that refers to the links between microsystems;

exosystem refers to the social setting in which one does not have an active role such as friends of family, mass media, and legal services; macrosystem refers to the culture in which one lives; and chronosystem refers to the sociohistorical events and transitions over the life course.

According to Bronfenbrenner (2005), ecological system theory, the relations between active individuals and their active and multi-level ecology determine the driving force of human development. It is these individual and multi-level ecology interactions that must be considered in order to understand the college adjustment process comprehensively.

Finally, Pascarella (1985) proposed (cited in Pascarella and Terenzini, 2005) a model for the assessment of college student development and change in which direct and indirect effects of college or university's structural characteristics as well as its campus culture. He suggested five sets of variables that affect the college students' growth and development. Two of these variables, students' traits before entering the college (e.g., students' socioeconomic backgrounds, preparation for college work, and demographic traits) and the structural or organizational characteristics of the college or the university (e.g., size, selectivity, geographic location, secular or faith affiliation of the college). These two set of variables shape the third variable that is a college's or university's environment. These three sets of variables influence a fourth variable that includes the interactions between the student and the major socializing agents on campus. Finally the fifth set of variables are the efforts put by the students in order to move towards growth and development (e.g., quality of effort made by the students) (Pascarella & Terenzini, 2005).

Environmental/sociological theories also have certain commonalities that are needed to be expressed. First of all, environmental/sociological models emphasize the specific role to the context in which student acts and thinks. These models resemble the developmental theories in that students are actively

participating in the process of change, but these environmental/sociological models also see the environment as an active force in the change process. Therefore, environmental stimulus also influences the change of a student.

In sum, theories of student development and change are helpful in explaining the students' experience of college life in different perspectives. They are also helpful to explain and describe student behavior in different phases of college life including the adjustment process for the newcomers to college. As it was stated "Theory suggests questions to ask, avenues to explore, and hypotheses to test. It provides shortcuts to exploring students' concerns and analyzing how they are addressing them" (Evans, 1996, p. 15).

2.4. Indicators of College Adjustment Relevant to this Study

The present study aims to examine the variables related to overall college adjustment. In the previous section there are a few indicators of college adjustment which were self-esteem, self-efficacy, perceived stress, coping strategies, and gender were presented. However, there is a growing body of research related to psychological inflexibility that is the core concept of Acceptance and Commitment Therapy, self-compassion, ruminative thinking, and worry. In this section, these variables as indicators of overall college adjustment, will be defined and relevant research will be explained.

2.4.1. Psychological Inflexibility

Psychological flexibility is a concept that holds a broad philosophical and historical background. It is vital to understand the roots of psychological flexibility before we go into its relation with adjustment. It will be easier to operationalize the psychological flexibility if one can understand the word suffer which comes originally from the Latin *ferre* (*Ferry*), which means "to bear or to carry" and the prefix "suf" is a version "sub" with meaning of "from below, up

away”. Thus, the word “suffer” connotes the idea that as human being we all have burden that we are unable to carry or bear. It is maybe because of that suffering is too heavy or too unfair that human beings feel unable to experience it (Hayes & Smith, 2005).

In order to understand the central focus of human being that is suffering, it is necessary to go back to the relationship between language and suffering. Hayes et al. (2012) asserts that the core of Acceptance and Commitment Therapy (ACT) is built upon the idea that human language causes both great achievements and misery of human beings. Human language in this context is not necessarily only verbal vocalizations but mostly includes all symbolic activities in various different forms that occur such as gestures, pictures, sounds. Since humans are able to engage in all forms of symbolic activities which distinguishes them from nonhumans, very same ability also creates huge amount of suffering. Humans can carry forward aversive events; creates similarities and differences between events; and form relationships between events in the past and even create events in the future. The powerful indirect function of language together with the cognition creates potential distress in the absence of immediate environmental cues (Hayes et al., 2012). To sum up, being able to think and relate the thinking to language can easily lead human beings to misery and suffering. Therefore, suffering is needed to be understood as a natural condition of being human. Moreover, there is nothing wrong to experience suffering as a human being.

Acceptance and Commitment Therapy which is considered as one of the third wave approaches, has been developed over three decades by using the knowledge and strategy of traditional behavior analysis (Hayes et al., 2012). When ACT was originally conceived, the overarching concept for its model of psychological ill-health was “experiential avoidance”. Experiential avoidance is the former concept that was being mostly used in substitution for psychological flexibility. It refers to the occurrence of deliberate efforts to avoid and/or escape

from private events such as affects, thoughts, feelings, memories and bodily sensations. As a result of these efforts which are experienced as aversive and leads to actions that are not in the direction of one's values and goals (e.g., avoiding anxiety even when doing so prevents people from pursuing a long held-goal), individuals keep moving away from their values (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). The experiential avoidance term is very important to understand how people's actions can be inflexibly and overly determined by avoiding to experience their undesirable internal private events. The ACT model has always emphasized the importance of valued living in which people base their actions on their current internal private events regardless of those events are undesired, desired, or neutral. In this regard, experiential avoidance does not help people in the service of valued-living life. Even though the term "experiential avoidance" is used to be understood as more general in ACT, psychological flexibility is recently considered as more overarching term to refer ACT's model (Hayes et al., 2012).

The overall goal in ACT is to increase the psychological flexibility that is defined as "the ability to contact the present moment more fully as a conscious human being, and to change or persist in behavior when doing so serves valued ends" (Hayes et al., 2012, p. 60). Psychological flexibility is established through six core processes and each process areas are conceptualized as a positive psychological skill (See Figure 1.1.). On the other hand, the opposite of psychological flexibility is defined as psychological inflexibility or in other words psychological rigidity is conceptualized over six negative core processes. ACT proposes a unified model with its six core features or processes in explaining the human adaptability or human suffering.

This unified model -- six core processes (See Figure 1.1.) -- is responsible for promoting psychological flexibility and – in the absence of one or more of them-- risks the psychological rigidity or in other words psychological inflexibility.

Furthermore, psychological rigidity or inflexibility is the root cause of human suffering and maladaptive functioning (Bond et al., 2011; Hayes et al., 2012).

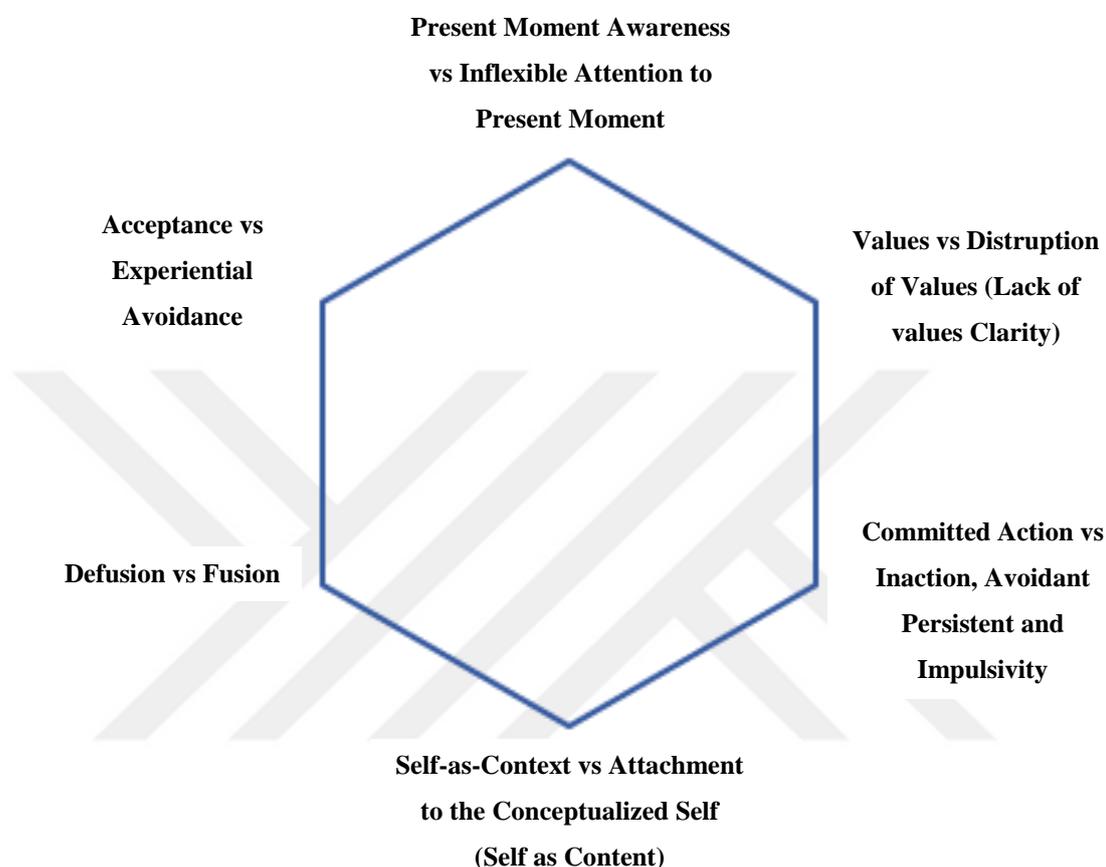


Figure 1.1. Psychological Flexibility Hexagon. Adapted from Acceptance and Commitment Therapy by S. C. Hayes, K. D. Strosahl & K. G. Wilson (2012), New York: The Guilford Press. Reprinted with permission.

The six core processes are responsible for promoting psychological flexibility and in the absence of one or more of them risks of psychological inflexibility. In this regard, considering the aim of this current study, psychological inflexibility is expected to predict negatively the college adjustment. To have a better understanding of this expected outcome, it is necessary to clarify the six core processes of psychological inflexibility.

Acceptance vs Experiential Avoidance

Acceptance refers both to behavioral willingness and psychological acceptance (Hayes et al., 2012). In other words it is involving intentionally open, receptive, non-judgmental posture with respect to different aspects of experience. In ACT, acceptance is typically spoken in terms of experiential acceptance and its counterpart is experiential avoidance. Acceptance of both internal and external events must serve on one's values. Therefore, acceptance in this context does not have an equal meaning with liking, wanting or approving. For example, one may accept thoughts about a traumatic event without approving of that trauma and without liking or wanting that traumatic event. To be more precise, acceptance means when a particular experience arises, one can acknowledge it and take it in without any particular attempt to change it (Wilson, 2008). Another misunderstanding about acceptance comes from the confusion between acceptance and resignation. Acceptance in ACT context is more like opening up and embracing with willingness, on the other hand resignation often involves a sort of giving up on life and possibilities (Wilson, 2008).

Experiential avoidance occurs when a person is unwillingly remain in contact with a particular private experiences and take steps to alter the form, frequency and sensitivity of these experiences, even taking these steps is not necessary (Hayes et al., 2012). There is a growing body of evidence showing that experiential avoidance is mostly associated with wide variety of psychopathology and behavioral problems (Chawla & Ostafin, 2007).

Defusion vs Fusion

Cognitive defusion/ cognitive fusion refers to the way one interacts with or relates to thoughts. In this context, while defusion means making contact with verbal products as what they are, not as what they say they are, fusion means taking verbal products very literally and investing them authority. Verbal

products are mostly the results of verbal learning processes coming out of any kinds of internal and/or external events (Wilson, 2008). While “verbal” sometimes means actual words (e.g., I think I will keep working on this project), the things other than words can also be verbal.

There is nothing wrong about thinking and verbalizing what we think. However, the problem arises when one look only “from his/her thoughts” rather than “at his/her thoughts”. This thin line between these two perspectives can be costly when one takes literally what his/her mind tells him/her to do. This is also the explanation of difference between fusion and defusion. ACT emphasizes the cognitive defusion techniques and they are not necessarily eliminating or managing the psychological pain but teaching individuals how to be present in the here and now in the broader and more flexible way (Blackledge & Lillis, 2005).

Present Moment Awareness vs Inflexible Attention to Present Moment

ACT promotes a continuing non-judgmental contact with psychological and environmental events as they occur. The only time that anything happens is in the present moment (Hayes et al., 2012). Contact with the present moment involves one’s capacity to bring attention to stay in a focused, deliberate, yet flexible fashion. One of the most important detail may be is differentiating the contacting the present moment from relatively rigid and fixed attention or distractibility. For example, someone might seem quite fixated on the screen or focused on the game while playing a video-game but that person might demonstrate an extreme absence of flexibility (Wilson, 2008)

It is important to understand that there is a reciprocal relationship between one’s ability to contact with the present moment on the one hand and experiential avoidance and fusion on the other hand. Considering the nature of experiential

avoidance and fusion processes, they both have difficult time to survive in the present moment (Wilson, 2008).

Self-as-Context vs Attachment to the Conceptualized Self (Self as Content)

According to the theory of language underlying ACT, there are three senses of self that mainly emerge from our verbal abilities: the conceptualized self aka self as content, self as process aka present moment awareness and the observing self aka self as context (Hayes & Smith, 2005). The conceptualized self (self as content) is one as the object of summary verbal categorizations and evaluations. It is the verbal “I am” self. When one describes himself/herself “I am stupid” or “I am brave”, that person uses the conceptualized self. According to ACT perspective conceptualized self is problematic because it interferes with the psychological flexibility. It traps one into the suffering. If someone suffer from anxiety, depression or stress, most probably it is because of that person’s identification with conceptualized self (Hayes & Smith, 2005).

The self as process is one’s continuous knowledge about his/her own experiences in the present moment. It is like conceptualized self but in the sense of applying verbal abilities to the self. However, the self as process is non-evaluative, present and flexible: “Now I am feeling angry”, “Now I am thinking that” or “Now I am experiencing this”. The self as process is important for healthy psychological functioning because it is just verbalizing the experiences as they are at the present moment without any further evaluation (Hayes & Smith, 2005). Research shows that people who cannot identify what they experience emotionally at the present moment tend to have “alexithymia” and this clinical problem unsurprisingly highly correlates with experiential avoidance (Hayes et al., 2004). One experience no or less fusion and avoidance when he/she makes contact with the present moment (Hayes & Smith, 2005).

The self as context or the observing self is the most important aspect of the selfhood and it is the least familiar with the verbal evaluations or any other verbal activity. Self as context is not a content-based sense of self. Therefore it cannot be described directly and getting in contact with the observing self or in other words self-as-context is a matter of practice that is usually called as mindfulness (Hayes & Smith, 2005).

Values vs Disruption of Values (Lack of values Clarity)

Values are understood in many different ways by different approaches. The emphasis on values distinguishes ACT from many other therapy approaches. The values as one of the core processes in ACT bring together acceptance, defusion and action in a context (Hayes et al., 2012). “In ACT there are freely chosen verbally constructed consequences of ongoing, dynamic, evolving patterns of activity, which establishes pre-dominant reinforces for that activity that are intrinsic in engagement in the valued behavioral pattern itself” (Wilson, 2008, p. 64). Values are not simply goals, feelings, thoughts, ideas or outcomes but they are chosen life directions (Hayes & Smith, 2005).

Therefore, direction and choice are two important components of values here to understand. One must choose a direction to follow to be able to say that for example “I am headed towards East!” The critical point here is that one can never get to the east but can keep moving towards East. Just like this, values are not qualities that can take or get us to a certain point but help us to move towards what we value. Choices are not reasoned judgements which involve applying evaluative metrics to alternative thinking. Values on the other hand are choices that give people a place to stop here in present rather than in the future or in past (Hayes & Smith, 2005).

When there is a problem with clarifying the values one can easily get into a problematic state which is called lack of values that eventually lead the person

to be more psychologically inflexible. Therefore, Hayes and Smith (2005) clarify that values are not just simple judgements, feelings, outcomes or goals in the future but they are lasting components in life such as family, parenting, career, citizenship.

Committed Action vs Inaction, Avoidant Persistent and Impulsivity

Committed action as a process indicates that ACT is a “hard-core” behavior therapy. “Committed action refers to a values-based action designed to create a pattern of action that is itself values-based” (Hayes et al., 2012, p. 95). In other words, there is an ongoing redirection of behavior that eventually lead a person a larger patterns of flexible and effective values-based behaviors (Hayes et al., 2012). As it is seen, there is a very close and strong connection between values and committed action. Committed action is an extension of values or a part of values for the fact that one can take actions in the service of his/her chosen directions in order to become more psychologically flexible. The other edge of the sword that is inaction, avoidant persistency and impulsivity are the results of the fusion, avoidance, and loss of contact with the values that eventually take someone to narrow, rigid pattern of behaviors (Hayes et al., 2012).

To sum up, a psychologically inflexible person is someone who attempts to avoid internal private experiences and is not able to stay in the present moment mindfully. A psychologically inflexible person is also someone who is fused with his/her thoughts and is not able to clarify values in life. Finally, psychologically inflexible person is someone who is not able commit actions in the service of clarified values.

2.4.1.1. Research on Psychological Inflexibility and College Adjustment

Depression and anxiety are among the most researched outcome variable that have been studied in ACT literature. From an ACT perspective anxiety is

characterized by emotional and experiential avoidance and avoidant situations keep the person moving toward a valued living (Hayes et al., 1999). Depressive symptoms, even severe mental illnesses are also described as the forms of experiential avoidance. In this regard, a college student may experience difficulties related to adjustment. However, from psychological flexibility perspective, how college student responds to these adjustment difficulties is more important than difficulty itself (Hayes et al., 2012).

The studies in the area of depression and anxiety in relation to ACT showed modest research support (Forman, Herbert, Moitra, Yeomans, & Geller, 2007). Masuda and Tully (2011) investigated the role of mindfulness and psychological flexibility in depression, anxiety, and general psychological distress in non-clinical college students. The results indicated that mindfulness and psychological flexibility were both negatively associated with depression and anxiety level of the college students. Consistent with these findings, Levin et al. (2014) conducted a study with 972 first-year college students to examine the psychological inflexibility across psychological disorders. The results of this study revealed that psychological inflexibility was significantly higher in students with depressive symptoms.

ACT has been applied to different populations via internet recently. In a randomized study Lappalainen et al. (2014) conducted a research in order to investigate two interventions (face-to-face vs internet) based on Acceptance and Commitment Therapy (ACT) for depressive symptoms with the participants over six weeks. The immediate posttest and 18- months follow-up showed that internet based ACT intervention (iACT) can be as effective as the face-to-face ACT intervention with the participants who had mild depressive symptoms. Moreover, Forman, Herbert, Moitra, Yeomans, and Geller (2007) compared the effectiveness of Cognitive Therapy (CT) and Acceptance and Commitment Therapy (ACT) in the treatment of heterogeneous sample of patients who had both anxiety and mood disorders in an outpatient clinic. Forman et al. (2007)

conducted their research with 101 college students (80.2 % women) who voluntarily came and sought help in a college counseling clinic. The results of this research revealed no incremental differences and the rate and degree of patient improvement over time appeared equal between CT and ACT.

The effectiveness of ACT and mindfulness based interventions were used in college students population with different problems including procrastination (Scent & Boes, 2014), perfectionism (Crosby, Armstrong, Nafziger, & Twohig, 2013) and alcohol and substance use (Levin et al., 2012). In their study Scent and Boes (2014) used ACT to ameliorate students' academic procrastination problems. Procrastination is considered as a maladaptive behavior from an ACT point of view and reflects the psychological inflexibility (Hayes et al., 2012). The intervention in the study of Scent and Boes (2014) consisted of two one and a half hour workshops in which students with procrastination problems were introduced the basic ACT processes with the help of metaphors. To assess the workshops effectiveness three quantitative measures were investigated including AAQ-II (Bond et al., 2011). Every participant who attended both workshops demonstrated an increase in psychological flexibility. Moreover, all participants indicated in a simple follow-up survey that they would recommend the workshops to others and majority of them stated that they had experience a decrease in procrastination.

To sum up, even though ACT is relatively a new approach, it has been subjected over 60 randomized control trials which has proved effective for different problems such as depression, anxiety, chronic pain, work stress, and several studies with college students (Ruiz, 2010). Recent review indicated that acceptance and commitment therapy is more effective than treatment as usual and placebo in treating the anxiety, depression, addiction, and somatic health problems (A-Tjak et al., 2015). ACT has been studied specifically with college students in individual and group format, but this body of evidence is in its early stages (Boone, 2013).

2.4.2. Self-Compassion

Self-compassion is one of the fundamental concepts of Buddhist psychology for centuries and has recently come to the focus of Western psychology. Even though Buddhism and Western psychology explain the human nature and suffering in different ways, the concept of self-compassion is part of both perspectives. Insight is the central value in explaining the self-compassion in the Western world (Jannazo, 2009). Self-compassion is explained in two different ways in Western psychology which are evolutionary neuroscience approach (Gilbert, 2004, 2005, 2009, 2014) and social psychological approach (Neff, 2003a, 2003b).

Self-compassion is based on the central idea that what has gone before always exerts a strong influence on what can evolve later, from an evolutionary neuroscience perspective. Evolution of our bodily systems is moving us toward imperfection. The process of evolution itself is the main reason why people tend to have many diseases and die in so many different ways. Depression, anxiety and many other psychological problems are not different from those diseases and injuries in terms of humans being susceptible to imperfection (Gilbert, 2014).

Social psychological way of explaining self-compassion, a concept originally developed by Neff (2003a, 2003b), emerged from understanding the compassion for others as a first step. Compassion involves being open and tuning into suffering of others. It also involves patience, kindness and non-judgmental understanding that all human beings are imperfect (Neff, 2003a). This kind of understanding and approach eases others' suffering. In a similar way, self-compassion is simply being open to our own suffering, experiencing kind feelings toward ourselves with a non-judgmental attitude during times of inadequacies and failures, and recognizing that our own experience is part of common human experience (Neff, 2003a).

Self-compassion entails three main components: (1) self-kindness which is being kind toward oneself after experienced suffering rather than being harsh, self-critical or judgmental, (2) common humanity which is seeing one's painful and suffering experiences as part of shared human experiences rather than isolating or separating oneself from others, (3) mindfulness which is a balanced awareness of one's painful feelings and thoughts rather than over-identifying with them (Neff, 2003a, 2003b). Neff (2011) emphasizes that it is important to achieve and combine three essential components in order to be truly self-compassionate. Therefore, it is necessary to clarify these essential components of self-compassion little more.

Self-kindness means stopping the constant self-judgement and destructive internal commentary that most people have come to see as normal. It requires, first of all, understanding the failures and foibles without self-criticism or self-condemning. Secondly, self-kindness requires an actively comforting (Neff, 2011). In terms of self-kindness, self-compassionate people relate to themselves more accepting, caring, kind, warm and understanding attitude when they face with psychological suffering or frustration. However, people who are not warm, kind, caring and accepting themselves when they have frustration and psychological suffering, they are more likely to have more stress, anxiety, and self-criticism (Neff, 2008; Neff, 2009; Neff, 2011).

Common humanity helps people to create a room for thinking about and remembering that there are also some other people who have similar experiences with them (Neff, 2008; Neff, 2009). Compassion literally means to "*suffer with*" that apparently implies a mutuality in the experience of suffering (Neff, 2011). People sometime fall into the trap of victimization with a sense of isolation after not getting exactly what they want in life (e.g., "I am the only one suffering"). In perspective of self-compassion, human beings are defined as vulnerable, mortal and imperfect. Self-compassionate people understands that frustration

and other forms of suffering in life is shared human experiences (Neff, 2008; Neff, 2009). Common humanity is different from self-pity. Self-compassionate people tend to remember that feelings of inadequacy and disappointment are shared by all human beings. Whereas, people with self-pity keep separating themselves from others and say “poor me” (Neff, 2011).

Mindfulness refers to seeing and accepting nonjudgmentally whatever happens in the present moment. In order to be more compassionate to ourselves we need to see the things as they are, no more, no less (Neff, 2011). Self-compassionate people do not get over-identified with their thoughts, feelings and sensations but they see and observe them as they are (Neff, 2009).

2.4.2.1. Research on Self-Compassion and College Adjustment

In most of the outcome studies, self-compassion is found to have negative associations with depression and anxiety (Neff, 2003a; Neff, Hsieh, & Dejitterat, 2005; Neff, Kirkpatrick, & Rude, 2007). Moreover, self-compassion is found to be significantly and negatively associated with rumination and thought suppression (Neff, 2003b). Self-compassion has also been explored as an important phenomenon with the college population in various studies in last ten years (Akin, 2010; Darith, 2013; Hall, Row, Wuensch, & Godley, 2013; Jing, 2012; Lockard, Hayes, Neff, & Locke, 2014; Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Neff et al., 2005; Neff & Pommier, 2013; Terry, Leary, & Mehta, 2013; Williams, Stark, & Foster, 2008).

Transition to college and adjustment process is in the core of this current study. Terry et al. (2013) wanted to explore the role of self-compassion in moderating students' reactions to social and academic difficulties during their transition period to college. In the study, 119 students completed the measure of self-compassion before they start to college. Participants also completed the measures of homesickness, depression, and satisfaction with their decision to

attend the university along with the general questions about their social and academic difficulties in college life. It was expected that self-compassion would be associated with lower depression, less homesickness, and greater satisfaction with their decision to attend the college. Social and academic adjustment to college life was specifically focused in this study. Results indicated that students with high self-compassion managed with academic and social difficulties successfully, reported lower homesickness and less depression and also expressed greater satisfaction with their decision to come to the university.

Even though, procrastination which is a very common among college students, may lead to positive outcomes, such as high grades, it can be detrimental and counterproductive to achievement for many others (Senecal, Koestner, & Vallerand, 1995). Williams et al. (2008) explored the relation of self-compassion with academic anxiety, motivation and procrastination. Participants with low, moderate, and high in self-compassion were compared on measures of motivation anxiety, achievement goal orientation, and procrastination tendency. According to results, higher levels of self-compassion were related to lower levels of worry ($r = -.45, p < .001$), and emotionality, ($r = -.46, p < .001$). Results also yielded that participants with high self-compassion indicated dramatically less procrastination compared to participants with low or moderate levels of self-compassion. However, contrary to the expectations and previous research (Neff et al., 2005) which shows that self-compassionate students report more mastery-oriented rather than performance-oriented goals, self-compassion was found to be unrelated to scores on the four academic goals measures in this current study.

The role of self-compassion on physical and psychological well-being of college students was investigated by Hall et al. (2013). Self-compassion Scale (SCS) with 26 items which has six subscales was used in this study. SCS were delineated into three composites which were self-judgment (SJ) minus self-kindness (SK), a sense of isolation (I) minus common humanity (CH), and over identification (OI) minus mindfulness (M). It was mainly hypothesized that all

three composites would be associated with better physical and psychological well-being. Participants of this study were 182 college undergraduate students. Results supported the relationship between self-compassion and physical and psychological well-being. In terms of relationships of the composites of self-compassion, SJ-SK and OI-M composites were significantly correlated only with physical well-being. However, according to the regression analysis while SJ-SK and I-CH were predictive of physical well-being, OI-M was not. As a result, even though there is a significant correlation between being kind towards oneself or being mindful and physically being well, only being kind towards oneself and understanding that difficulties are part of human nature are significant predictor of physical well-being. In that case, being mindful was not found to be a significant predictor of physical well-being.

Akin (2010) investigated the concept of self-compassion with 338 Turkish university students. The study aimed to explore the relationship between self-compassion level of students and their interpersonal cognitive distortions. Evidence suggests that self-compassion is related to personality traits such as extraversion and social connectedness (Neff & McGehee, 2010) and feeling interpersonally connected to others (Neff, 2003a). On the contrary, interpersonal cognitive distortions are the major obstacles to effective and healthy communication. According to the results of correlation analysis, self-kindness, common humanity, and mindfulness components of self-compassion were found negatively and self-judgment, isolation, and over-identification components of self-compassion were found positively related to interpersonal cognitive distortions. As a result, self-compassion can be a strong buffer against interpersonal cognitive distortions that university students experience.

In the definition of self-compassion, it was the key point that how people react to a failure. Academic failure is one of the most common situations that college students experience. Neff et al. (2005) examined the relationship between self-compassion and reactions to academic failure. The results showed that among

students who experienced an academic failure, self-compassion correlated positively with the emotion focused coping strategies such as acceptance and positive reinterpretation/growth and correlated negatively with a focus on negative emotions and avoidance-oriented coping.

To sum up, even though the self-compassion has not been studied in relation to specifically college adjustment, there are many studies with college population which explore the role of self-compassion during the difficult times that college students experience. Self-compassion is about being kind, mindful, and understanding that suffering is shared by all human beings. Thus, college students who experience adjustment problems also need self-compassion skills to deal with difficulties or failures.

2.4.3. Ruminative Thinking and Worry

Human beings are the only living creatures who can reflect upon their own internal experiences such as thoughts and feelings (Mor & Winquist, 2002; Papageorgiou & Wells, 2004). Maladaptive forms of self-reflections lead people depression, anxiety and other forms of psychopathology (Nolen-Hoeksema, Wisco & Lyubomirsky, 2008). The concepts of rumination and worry are considered as self-reflections. There is a potential confusion between the operational definition of rumination and worry that is mainly in relationship to their temporal focus. Whereas worry has been conceptualized as a future-oriented cognitive response to a threat (Borkovec, Alcaine, & Behar, 2004), rumination has been conceptualized as a past-oriented concept (Aldao, Mennin & McLaughlin, 2013).

“Rumination is engaging in behaviors and thoughts that passively focus attention on one’s symptoms of distress and on all the possible causes and consequences of these symptoms” (Nolen-Hoeksema, 1991; as cited in Nolen-Hoeksama, Jackson, 2001, p. 1). Some of the examples for the rumination might be sitting

alone and thinking about how tired and lonely one feels or thinking about the same things over and over again.

Worry, just like rumination, is a common human experience. Everyone worries for several reasons. When it becomes excessive, uncontrollable and chronically present, it may result in a condition known diagnostically as generalized anxiety disorder (GAD) (Diagnostic and Statistical Manual of Mental Disorders (5th ed.), [DSM- V]; American Psychiatric Association, 2013). Descriptively, worry simply means involving in predominantly and negatively oriented thought activity (Borkovec & Inz, 1990; as cited in Borkovec, Ray, & Stober, 1998).

Indeed, both rumination and worry consist of repetitive and negatively-oriented thought (Watkins, 2008). However, the research shows mixed evidence considering the precise relationship between these two concepts, with some studies revealing that they are indistinguishable constructs (e.g. Segerstrom et al., 2000) and others showing that they can be differentiated (e.g. Fresco et al., 2002). Both cognitive processes manifest themselves with linguistic or verbal actions. Despite the similarities in their definitions, worry is associated with anxiety and rumination is associated with depression (Fresco et al., 2002).

Even though both rumination and worry seem to have negative and destructive aspects in nature, it is important to understand different functions and roles of both constructs. According to avoidance theory of worry, worry functions as a cognitive avoidance response to a threatening stimuli and worrying also may reduce the amount of aversive imagery associated with the existing problems (Borkovec, et al., 1998). Stöber and Borkovec's (2002) study indicated that reduced concreteness of worrisome thought may provide a valuable explanation for a further understanding of the role of worry.

Rumination has evolved as a widely studied construct over the past two decades. Although the literature supporting the rumination is robust, there is still no

unified definition of the construct. Yet, there are many different approaches and models that attempt to explain the rumination and how it relates to other constructs such as emotion regulation, worry, emotion focused coping, or repetitive thought processes (Smith & Alloy, 2009).

The most recognized theory of rumination is Nolen-Hoeksema's (1991), Response Style Theory (RST). In RST, rumination was conceptualized as repetitive thinking about the causes, consequences, and symptoms of current negative affect. Although RST has the most empirical support in the literature, some aspects of the theory have been criticized for several reasons such as having the mixed support about the distraction component (Butler & Nolen-Hoeksema, 1994), its overlap with worry and its overlap with positive forms of repetitive thought such as reflection (Smith & Alloy, 2009).

In addition to RST, there are other models that explain the rumination from different perspectives. While some of the models such as The Stress- Reactive Model see the rumination as a reaction of individuals after the experience of a stressful event (Alloy et al., 2000), some others such as The Goal Progress Theory (Martin, Tesser, & McIntosh, 1993) view the rumination not as a reaction to a mood state, but a response to a failure to progress satisfactorily towards a goal. Finally, it is worth to mentioning that rumination has also been described as a type of cognitive emotion regulation such as acceptance and appraisal (Garnefski, Kraaij, & Spinhoven, 2001).

2.4.3.1. Ruminative Thinking and Worry in Relation to College Adjustment

Rumination and worry have strong relations with depression that is a predictor of college adjustment (Nolen-Hoeksema, 1998). Research shows that rumination predicts later development of depression (Nolen-Hoeksema, Stice, Wade, & Bohon, 2007; Schwartz & Koenig, 1996). According to Nolen-Hoeksema's

(1998) response style theory, there are two basic response styles when individual experiences depression. The first one involves rumination that is more repetitive thinking about the symptoms of depression and causes and consequences of depressive symptoms. It is obvious that it is an ineffective, destructive way of responding to depression. The second style of response is more diverting one's attention away from depressive symptoms. The second style also involves thinking of pleasant activities. Therefore, individuals who mostly rely on the ruminative response style suffer from more severe depressive symptoms in comparison to individuals who approach depression with second response style.

In their study Zawadzki et al. (2013) investigated whether rumination and anxiety mediates the relationship between loneliness and depressed mood and sleep quality of college students by using structural equation modeling (SEM). The participants of this study was 1244 undergraduate students from introduction to psychology pool. The proposed model was an excellent fit to the data, meaning that rumination and anxiety fully mediated the relationship between loneliness and depressed mood and sleep quality. The direct path between loneliness and depressed mood ($\beta = .56, p < .001$) was reduced to no significance when rumination and anxiety were included ($\beta = .09, p > .10$). As a result, rumination and trait anxiety mediate the effect of loneliness on depressed mood in college students.

Freshman students, who are in the transition period, have difficulties in dealing with the autonomy and responsibility that college life brings. They usually find their college experience more stressful and challenging than they have imagined. Freshman year experience also brings difficulties such as loneliness, homesickness, academic and relational difficulties along with the freedom (Wintre & Yaffe, 2000). The situation in Turkey for students who are in this transition period is not different from the other countries. Millions of students look forward to pursuing higher education in Turkey every year. However, only limited number of them get into the universities after a long and challenging

examination process. Therefore, students come to college with a few prior knowledge and many uncertainties (Mercan & Yıldız, 2011).

According to Tinto (1996), most of the students drop out from the college due to academic and adjustment difficulties. From previously outlined facts and based on the adjustment research, it is obvious that adjustment to college life is a comprehensive process that is mainly carried out during the first year of the college. Thus, college counseling centers meet the mental health needs of college students including depression, substance abuse, eating disorders (Erdur-Baker, Aberson, Barrow, & Draper, 2006, have crucial role in supporting students who experience adjustment difficulties.

2.5. College Adjustment in Turkey

When the college adjustment literature examined in Turkey, it was seen that a number of different research studies were carried out. One of the earliest studies in college adjustment was conducted with 4855 students living in dorms from different big cities in Turkey. This study aimed to explore the main problems that university students experience. The results of the study revealed that most important problems of university students were general school problems (lack of books and libraries, courses, and instructor related problems), social and economic problems, lack of social activities on campus, physical problems related to dorms, general personal problems (health and sexual life, loneliness, future anxiety) and social/political problems mostly related to country (Baymur, 1960; as cited in Yalım, 2007). Ekşi's (1982) study on the general problems of university students in Turkey revealed that % 70 of university students had economical, % 40 of them had accommodation and % 29 of them had adjustment related problems in university.

Aksu and Paykoç (1986) also conducted a study with 968 METU undergraduate students and found out that overloaded curriculum and courses, transportation,

and lack of social activity centers were the three biggest problems. In addition, Aksu and Paykoç's (1986) study showed that instructors, academic advisers, financial issues, accommodation and interpersonal relations were the other following problems of students. In another study, Gülmez (1992) investigated the problems of Gaziantep University students and found that political environment, financial issues, adaptation to university life, time management, accommodation, lack of social and cultural activities and English as a foreign language were the most important problems. In addition to this study, Alpan (1992) also conducted a research with the freshman students in order to explore the main adjustment problems. The results of the study revealed that students' psychological problems were found to be the most important determinants of the failure to adjust to college life.

Considering the fact that there were various studies conducted exploring the college students' problems in Turkey, it is worth mentioning the study of İmamoğlu and Yasak (1993). They examined the papers/books published between 1982 and 1992 related to Turkish university students' problems. Their review also confirmed that main problems university students experience were related to academic, identity, health and interpersonal issues in Turkish universities.

College adjustment has been studied in relation to different variables in Turkey. For example, Arı (1989) examined the roles of gender, department, class, and dominance of ego states on college adjustment and found that gender and class have no effect on the adjustment of students. Arı also found that dominant ego states of the students were effective on their adjustment.

Alperden (1993) examined the effect of various personal, social and family related variables on college adjustment level of 735 students. The results of the study demonstrated that general adjustment level was found significantly higher for students who felt satisfied with their physical appearance and have strong

religious beliefs that students who felt dissatisfied with their physical appearance and who did not have strong religious beliefs. It was also reported that students who have satisfying relationships with family and friends, and involve in extracurricular activities showed higher adjustment to university life. In another study, Tuna (2003) investigated the cultural differences in coping strategies as predictors of overall and four dimensions university adjustment between Turkish (n = 695) and American (n = 448) first- year university students. The results revealed that having a personal and emotional support was found to be a positive predictor of university adjustment for both Turkish and American students.

In an experimental research where the purpose was to examine the effect of information giving and group counseling on the academic, social and total university adjustment of freshmen at the University of Ankara, it was found that students who received information giving and group counseling showed positive changes on social and total university adjustment, but not on academic adjustment (Akbalık, 1998).

Yalın (2007) investigated the roles of ego resiliency, coping styles, optimism and gender on the level of college adjustment with 420 English prep students. The results showed that all predictor variables were found to be significant predictors of college adjustment. More specifically, the results yielded that the students who reported high resilience and optimism had better adjustment to college. In addition, results of the study also revealed that the factors predictive of adjustment differed for male and female students. Accordingly, ego resiliency, problem solving, seeking social support, fatalistic, and helplessness/self-blaming coping styles predicted adjustment of male students, whereas ego resiliency, optimism, and seeking social support and helplessness/self-blaming coping styles predicted adjustment of female students.

Sevinç (2010) investigated in a qualitative study, the most common factors affecting the college adjustment and coping strategies used in dealing with the

challenges experienced in the adjustment process. The results of this study provided evidence that there were factors affecting the academic (e.g., relationships with faculty, teaching quality of faculty), instruction process, social (e.g., friendships, participation to social, cultural and sport activities), personal-emotional (e.g., loneliness), and institutional adjustment of freshman students.

Another recent research was conducted by Sun-Selişik (2009) which focused on the changes in social, academic, and total adjustment, perceived stress, self-esteem, college adjustment, self-efficacy and cultural distance levels of students through three assessment processes (3 months, 6 months, 9 months). In addition, college adjustment process was investigated through three interviews at three stages (3 months, 6 months, and 9 months). The results of this study revealed that students' self-controlled persistence increased significantly from 3 to 9 months. However, no significant differences were found in other variables among three assessments. The qualitative results of this study indicated that students used active coping strategies such as getting social support from family and friends when they experienced several challenges during the first year of college.

College adjustment has been studied recently in relation to different variables in Turkey. Mercan and Yıldız (2011) conducted a study with 311 freshman students from Faculty of Education in order to understand the main adjustment problems they experience. The results of the study showed that students mainly experienced economic and academic problems. The participants also indicated that they preferred to use counseling services about the problems related to academic issues, communication skills, social anxiety-assertiveness, coping with stress, time management, and anger control.

Bülbül and Acar-Güvendir (2014) also conducted a study with 849 freshman students from Faculty of Education to find out their adjustment levels in relation to pre-college enrollment variables. The findings of this study revealed that

students who came to college with low motivation and lived away from their families experienced more adjustment difficulties compared to those who came to college with have high motivation.

Adjusting to college life is a challenging process for freshman students. Therefore, some of them choose to drop out the college. Drop out intentions of Turkish freshman students were examined in relation to sense of school membership, loneliness, and coping strategies with 164 university students. The analysis revealed that the intentions to drop out the university were better predicted by non-academic factors such as acceptance dimension of sense of school membership, loneliness and use of humor as a coping strategy (Alkan, 2014). Coping strategies with college adjustment problems of Turkish college freshman students were also investigated in a qualitative study by Sevinç and Gizir (2014). The results of the analysis gathered from 25 freshman students via interviews, revealed the significant factors that negatively affect the academic, social, personal-emotional, and institutional adjustment of freshman students. The findings of this study specifically showed that students' academic adjustment was negatively affected by their relationships with faculty and teaching quality, and social adjustment was negatively affected by friendship relations, participation in extracurricular activities. Moreover, the findings indicated that students mostly used avoidant types of coping strategies to deal with challenges during the adjustment process.

It is also worth mentioning the study that was conducted by İkiz, Savcı, and Yörük (2015) in order to investigate the relationships between problematic internet use and adjustment to college life. According to the results, there was a significant negative relationship between problematic internet use and adjustment to college life. In addition, problematic internet use was found to be more intense in freshman students.

Finally, besides the University Life Scale (Aladağ, Kağnıcı, Tuna, & Tezer, 2003), there is another scale named as Adjustment to University Life Scale (AULS) that was developed recently by Aslan (2015) to measure the college adjustment phenomenon in Turkish population. AULS consisted of 60 items and three factors (personal adjustment, social adjustment and academic adjustment). AULS was found to be a valid and reliable measurement tool for Turkish college students.

2.6. Summary of the Reviewed Literature

In conclusion, adjustment is a way of responding to environmental pressures and challenges. It is not about passively accepting the existing conditions but it is mainly about actively taking the responsibility of the actions in life. In this regard, college adjustment is a challenging and complex process influenced by multiple variables such as perceived stress, self-esteem, self-efficacy, coping strategies, religiosity, and gender. In the literature, college adjustment process has been explained by several theories and models. While student development theories explain the college adjustment process as a developmental stage, environmental/sociological theories focus on more environmental changes of a student. These theories and models provide valuable knowledge and help for college counseling centers, faculty and administratives, and families in understanding the difficulties and challenges that freshman students face during the first year.

This present study specifically aimed to investigate the college adjustment process from an Acceptance and Commitment Therapy and its core concept psychological inflexibility perspective. In the literature, ACT was found to be effective in treating all forms of psychopathology. In addition to factors affecting college adjustment stated above, other factors mostly associated with intrapersonal experiences of a student (e.g., ruminative thinking, worry, and self-

compassion) were also investigated in this study. Ruminative thinking and worry, are two concepts mainly associated with depression and anxiety respectively, in the literature were found to be associated with all forms of psychological distress. In this regard, both ruminative thinking and worry were negatively associated with college adjustment. In the literature, self-compassion has also been explored within the college population in various studies. Self-compassion was found to be associated with lower depression, less homesickness and several other positive outcomes in college students.

College adjustment has also been studied for over three decades in Turkey. The earliest studies in Turkey mostly focused on the problems students experience in college life. The more recent studies emphasized the importance of factors affecting college adjustment in Turkish students such as coping strategies, ego resiliency, and problematic internet use. However, none of the studies conducted with Turkish students investigated the college adjustment from the Acceptance and Commitment Therapy perspective and related intrapersonal variables (e.g., ruminative thinking, worry, and self-compassion). Thus, the present study also aimed at filling this gap in the college adjustment literature.

CHAPTER III

METHOD

This chapter will present research design, research questions and hypotheses, description of variables, data collection instruments, data collection procedure, data analysis, and limitations of the study.

3.1. Overall Research Design

Correlational research design was used in this study to investigate the relationships among psychological flexibility, self-compassion, rumination, worry, and adjustment to college life within a proposed model. “A correlational study describes the degree to which two or more quantitative variables are related, and it does so by using a correlation coefficient” (Fraenkel, Wallen, & Hyun, 2012, p. 331). It is possible to observe multiple variations via causal processes with structural equation modeling (SEM). SEM is also a collection of statistical technique which answers the questions of multiple regression analyses of factors simultaneously. SEM is also a confirmatory technique in which the researcher should have a prior knowledge of, or hypotheses about, potential relationships among variables (Tabachnick & Fidell, 2007). Therefore, the hypothesized model in the present study was tested statistically with a simultaneous analysis of the all variables with SEM.

In order to examine the research question, the hypothesized model that proposes the interactional relationship among college adjustment of freshman students and their level of psychological inflexibility, ruminative thinking, worry and self-compassion was constructed. Followed by the model construction, target

population of the study was selected. The target population was the freshman students enrolled in various programs at a public university in western Turkey. After collecting the data, each instrument of the study was employed to Confirmatory Factor Analysis (CFA) in order to ensure the factor structures. Finally, the hypothesized model was tested by Structural Equation Modeling (SEM) technique using AMOS .20 (Arbuckle & Wothke, 1999). The model was evaluated by several model fit indices such as Chi-Square (χ^2), The Bentler Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square of Error of Approximation (RMSEA). Choosing the fit indices to evaluate the structural models is not a simple task, largely because particular indices have been shown to operate differently based on the sample size, estimation procedure, model complexity, and violation of underlying assumptions (Byrne, 2010).

3.2. Sample and Procedure

In this study convenience sampling method was used. Convenience sampling, or as it is sometimes called opportunity sampling- is choosing the nearest individuals who happen to be available at the time as participants and continuing that procedure until the required sample size has been gathered (Cohen, Manion, & Morrison, 2011). In the present study data were collected from the first year students enrolled in a public state university in western Turkey during the first two weeks of December in 2014. According to Tinto (1996) adjustment to the university life is an extensive process which is mainly carried out especially during the first semester of the freshman year. Adjustment, as a process, means passing from an initial stage generating emotional tension and stress towards a final stage in which there prevail the state of well-being and a functioning adequate (Clinciu, 2013). Therefore, it was expected that freshman students could have certain degree of experience about university life from late September to December. So that, they could experience adjustment to college.

According to Council of Higher Education data (www.yok.gov.tr), 3174 students were admitted by the university for the fall semester in 2014. The sample of this current study consisted of first year university students from divergent faculties who were admitted in 2014, in the university (*see* Table 3.1). Of the total participants, 171 (% 26) were male and 486 (% 74) were female. Age of the participants ranged between 18 – 25 ($M = 18,64$, $SD = 1.18$). There were 657 participants from six different faculties. As shown in the Table 3.1., 358 (% 54, 5) of the sample were from Faculty of Education, 136 (%20.7) were from School of Health, 87 (% 13.2) were from Faculty of Economics and Administrative Sciences, 56 (% 8.5) were from Faculty of Engineering and Architecture, and 20 (% 3.0) were from Faculty of Medicine.

Table 3.1

Distribution of the Participants by Gender and Faculty

| Variables | Gender | | | | Total | |
|------------------------------|----------|-------|----------|-------|----------|------|
| | Male | | Female | | | |
| Faculty | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % |
| Education | 77 | 11.72 | 281 | 42.78 | 358 | 54.5 |
| School of Health | 25 | 3.80 | 111 | 16.90 | 136 | 20.7 |
| Economics/Administ. Sciences | 36 | 5.48 | 51 | 7.72 | 87 | 13.2 |
| Engineering/Architecture | 25 | 3.80 | 31 | 4.70 | 56 | 8.5 |
| School of Medicine | 8 | 1.20 | 12 | 1.80 | 20 | 3.0 |
| Total | 171 | 26 | 486 | 74 | 657 | 100 |

Even though there is no clear-cut answer to the sample size question of this research, considering the fact that parameter estimates and chi-square tests are very sensitive to sample size, SEM is a large sample technique and may yield in a significant value with samples larger than 200 (Tabachnick & Fidell, 2007). However, new statistics have been developed that allow for good estimation of

models with even 60 participants (Bentler & Yuan, 1999; Tabachnick & Fidell, 2007).

Since, structural equation modelling (SEM) was used as a statistical method in this research, sample size question was taken into consideration carefully. “A typical sample size in studies where SEM is used is about 200 cases” (Kline, 2011, p. 12). This number corresponds to the approximate median sample size in many published articles in which SEM was used, including 72 studies in the field of personality and social psychology journals by Brexler (1990) and 93 studies in management journals by Kline (2011) Shah and Goldstein (2006).

3.3. Data Collection Instruments

In order to collect data, the demographic information form (See Appendix H) and five measures namely University Life Scale (ULS), Acceptance and Action Questionnaire-II (AAQ-II), Self-Compassion Scale (SCS), Ruminative Thought Style Questionnaire (RTSQ), Penn State Worry Questionnaire (PSWQ) were utilized in the study. Findings of the validity and reliability analyses for the each instrument were presented after the measures were introduced.

3.3.1. University Life Scale (ULS)

University Life Scale (ULS) was developed to measure university adjustment by Aladağ, Kağnıcı, Tuna, and Tezer (2003). The ULS has 48 items, with a 7 point Likert scale, ranging from “*not at all applicable*” (1), to “*totally applicable*” (7). The ULS has six subscales, namely, (i) adjustment to college environment (12 items e.g., “Üniversite yaşamına uyum sağladım -I have adjusted to university life”), (ii) emotional adjustment (nine items e.g., “Kendimi genellikle gergin hissederim- I usually feel tense”), (iii) personal adjustment (seven items e.g., “Kendimi severim – I like myself”), (iv) relationships with opposite sex (seven items e.g., “Cinsel yaşamımdan memnunum- I am satisfied with my sexual

life”), (v) academic adjustment (seven items e.g., “Derslerde başarılı olup olamayacağımdan emin değilim- I am not sure whether I will be successful in courses or not”) and, (vi) social adjustment (six items e.g., “Kendimi yalnız hissediyorum- I feel lonely”). While the higher points obtained from the scale represent better adjustment to university life, lower points represent poor adjustment.

In order to investigate the construct validity of the ULS, Aladağ et al., (2003) employed Exploratory Factor Analysis (EFA) with principal component model. EFA revealed six factors with eigenvalues greater than 1.0. Adjustment to college environment as the first factor explained % 19.62 of variance, emotional adjustment as the second factor explained % 5.97 of variance, personal adjustment as the third factor explained % 4.25 of variance, relationships with opposite sex as the fourth factor explained % 3.93 of variance, academic adjustment as the fifth factor explained % 3.50 of variance and finally social adjustment as the sixth factor explained % 3.32 of variance. Cronbach alpha values of the subscales were found between, .63 and .80. On the other hand, the Cronbach alpha for total ULS was .91.

Furthermore, ULS was also used in a study conducted by Kağnıcı (2012) with 221 participants. The Cronbach alphas calculated in this study for the six subscales of ULS ranged between. 77 to. 63. However, emotional adjustment subscale had the lowest Cronbach alpha score with. 63 and personal adjustment subscale had the highest Cronbach alpha score with. 77 in that study. The Cronbach alpha calculated for the total ULS score was also. 89.

In another study which was conducted with 311 freshman students by Mercan and Yıldız (2011) with ULS, the Cronbach alpha values of the six subscales were ranged between. 75 to. 62 and the Cronbach alpha for total ULS score was .89. The six factor structure of the original ULS was confirmed in both studies

(Kağnıcı, 2012; Mercan & Yıldız, 2011) by Confirmatory Factor Analysis (CFA) results.

3.3.1.1. Confirmatory Factor Analysis of ULS

The original six factor structure of ULS was tested by the use of CFA in the current study. The AMOS Version 20 was used for the data analysis. Prior to running confirmatory factor analysis, item 30 (Cinsel yaşamımdan memnunum- I am satisfied with my sexual life) and item 35 (Dersleri İngilizce takip etmekte zorluk çekiyorum- I am having difficulty to follow the classes in English) were excluded from the analysis due to low factor loadings (.17 and .20 respectively). According to Hair, Black, Babin, and Anderson (2010) items should be loaded on each factor over .30.

After the extraction of low loading items and normality assumption check, CFA analysis were conducted with 657 participants by AMOS 20.0 software (Arbuckle & Wothke, 1999). Maximum Likelihood (ML) estimation was used to obtain the simultaneous, numerical values for the unknown parameters. The ML estimation is the default and most widely used method in many model-fitting programs (Kline, 2011).

Analysis resulted in a significant chi-square, $\chi^2(2307, 95 n = 657) = 887, p = .00$. Other fit indices can be considered in case of significant chi-square, because chi-square is affected by sample size (Byrne, 2010). Fit indices were found as follows: CFI = .77, TLI = .73, RMSEA = .049. RMSEA value greater than .10 represents poor fitting model (MacCallum, Browne, & Sugawara, 1996). To modify the model, error covariances were investigated and several items were allowed to covary among the same subscale. At the end of the covariances applications, the model fit indices were as follows: $\chi^2(1897, 42 n = 657) = 867, p = .00$, CFI = .82, TLI = .80, RMSEA = .043. After the modifications among the items, while RMSEA value was a good fit, CFI and TLI values were

indicators of mediocre fit (Hu & Bentler, 1999). The factor model of ULS is displayed in Figure 3.2. The standard estimates varied between .26 and .67 for the adjustment to university environment, .29 and .62 for the emotional adjustment, .26 and .65 for the personal adjustment, .28 and .62 for the relationship with opposite sex, .37 and .66 for the academic adjustment, and finally .32 and .59 for the social adjustment.

Standardized estimates of each items in ULS can be seen in Figure 3.2. ULS has six subscales that are called six latent variables according to SEM terminology. The two way arrows between latent variables in the model represents the covariance or in other words correlation coefficient scores. It is possible to see that latent variables in this confirmatory model are found to be correlated.

Table 3.2

Goodness of Fit Indexes for Six Factor Model for ULS

| | χ^2 | <i>df</i> | χ^2/df | <i>CFI</i> | <i>TLI</i> | <i>RMSEA</i> |
|-------|----------|-----------|-------------|------------|------------|--------------|
| Model | 1897.42 | 867 | 2.18 | .82 | .80 | .04 |

p < .001

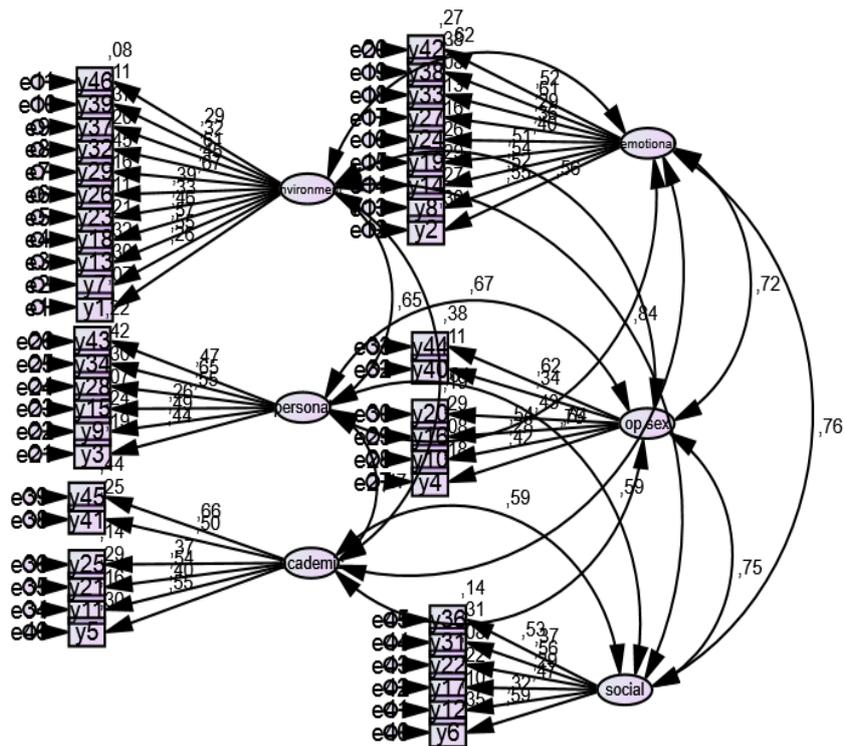


Figure 3.1 University Life Scale' Factor Structure with Standardized Estimates

3.3.1.2. Reliability of ULS

Reliability analyses was conducted for the ULS in this current study and the findings were also presented below. The internal consistency of ULS was evaluated by computing Cronbach alpha coefficient. The Cronbach alpha coefficient values were as follows, .89 for the ULS total score and the internal consistency of the subscales were ranged between .73 and .58. The internal consistency for the subscales were found as follows: adjustment to college environment subscale was .72, emotional adjustment subscale was .73, personal adjustment subscale was .64, adjustment to relationship with opposite sex subscale was .58, academic adjustment subscale was .66, and social adjustment subscale was .60.

3.3.2. Acceptance and Action Questionnaire- II (AAQ-II)

First version of Acceptance and Action Questionnaire (AAQ) was developed by Hayes et al. (2004) to measure experiential avoidance and psychological flexibility. AAQ was a Likert style scale which had 9-16 items (depending on the version). The scale contained items on negative evaluations of feelings, avoidance of thoughts such as “Anxiety is bad” and “I try to suppress thoughts and feelings that I don't like by just not thinking about them”. AAQ was found to be broadly useful with wide range of quality of life studies such as depression, anxiety, general mental health, job satisfaction, future work absence and future job performance. Despite the widespread usage of the AAQ, the internal consistency and factor structure of the scale has usually been a problem. Hayes et al. (2004) found the alpha coefficient of the AAQ just satisfactory .70 in early validation study and test re-test reliability was .64 over 4 months. The factor structure was also found to be unstable over time. Thus, there was a need to develop a more stable, reliable and valid scale to measure psychological inflexibility (Bond et al., 2011).

Twelve Acceptance and Commitment Therapy (ACT) researchers and practitioners addressed the shortcomings of AAQ-I in explaining the core concepts of ACT namely psychological flexibility and inflexibility. Thus, the need to develop a second version of the scale as a measure of psychological flexibility was obvious. The researchers generated the item pool for AAQ-II as a first step which resulted 49 items, all of which used a Likert-type scale ranging from 1 (never true), 7 (always true) with higher scores representing the greater level of psychological inflexibility. The researchers then eliminated the items with low corrected item-total correlations in order to obtain a unidimensional scale. This item elimination process provided satisfactory internal consistency. Exploratory factor analysis was subjected as the second step to establish the structure of the measure. AAQ-II was then subjected to three different populations to examine the validity scores and as consistent with first version of the AAQ, AAQ-II was also found to be a unidimensional measure that assess the psychological flexibility. AAQ-II contains 7 items (e.g., “My painful experiences and memories make it difficult for me to live a life that I would value”) or (“I worry about not being able to control my worries and feelings”) (Bond et al., 2011). The Cronbach alpha of the one factor solution of AAQ-II was .88.

AAQ-II was translated and adapted to Turkish by Yavuz, Iskin, Ulusoy, Esen, and Burhan (2016). Prior to validity and reliability analyses, the AAQ-II was translated to Turkish independently by the authors who were trained in Acceptance and Commitment Therapy (ACT). Back-translation was carried out by a bilingual (Turkish-English) translator who had no interest in psychopathological issues. The authors then, compared the independent translations and back translation in order to form the final version of Turkish AAQ-II (TAAQ-II). TAAQ-II was administered 107 students with the mean age 21.8 studying in a Turkish public university in Istanbul. The administration was held in a classroom setting. The Cronbach alpha of the TAAQ-II was .90. Single factor solution with Principal Component Analysis (PCA) was applied to test the factor

structure of TAAQ-II. TAAQ-II found to have similar factor structure with the original AAQ-II. Single factor structure explained the % 61,802 of total variance (Yavuz et al., 2016).

AAQ-II was also translated and adapted to Turkish by Meunier et al. (2014) with a sample of 291 university students. Confirmatory factor analysis (CFA) supported one factor solution with seven items as it was found in the original version of AAQ-II. The internal consistency of the scale was .88 and the test-retest reliability that conducted over 2 months period was .78.

3.3.2.1. Confirmatory Factor Analysis of AAQ-II

In the current study proposed single factor solution of the AAQ-II was tested with 657 participants. The AMOS Version 20 was used for the data analysis. Analysis resulted following chi-square, $\chi^2(193, 85, n = 657) = 14, p = .00$. Other fit indices for AAQ-II were found as follows: CFI = .89, TLI = .83, RMSEA = .14. These results showed that the model has a mediocre fit with its fit indices and chi-square score. To modify the model, error covariances were investigated and e1 and e3, e1 and e4, e2 and e3, e6 and e7 were allowed to covary. At the end of the covariances applications the model fit indices were found as follows: CFI = .99, TLI = .99, RMSEA = .04. CFI and TLI values showed very good fit. RMSEA value also indicated a very good fit, as it was found between .00 and .05 (MacCallum et al., 1996). After these covariances applications, the results showed good fit of one factor solution for the data (Table 3.3). The factor model of AAQ-II is displayed in Figure 3.3. The standard estimates for the single factor structure of AAAQ-II varied between .58 and .73.

Table 3.3.

Goodness of Fit Indexes for Single Factor Model for AAQ-II

| | χ^2 | df | χ^2/df | CFI | TLI | RMSEA |
|-------|----------|----|-------------|-----|-----|-------|
| Model | 16.05 | 8 | 2.06 | .99 | .98 | .04 |

p < .001

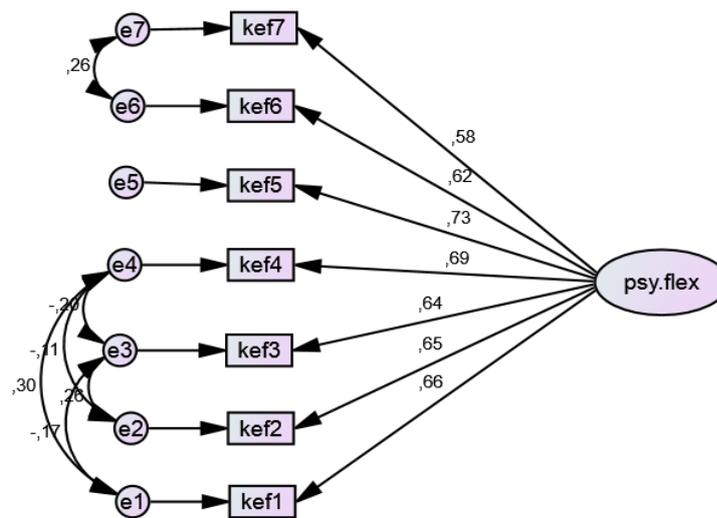


Figure 3.2 *Acceptance and Action Questionnaire-II's Factor Structure with Standardized Estimates*

3.3.2.2. Reliability of AAQ-II

Internal consistency coefficient of the AAQ-II was evaluated by computing Cronbach alpha coefficient. The Cronbach alpha was found as .85.

3.3.3. Ruminative Thought Style Questionnaire (RTSQ)

Ruminative Thought Style Questionnaire (RTSQ) was originally developed by Brinker and Dozois (2009). The scale consisted of 20 items rated on a Likert type scale from 1 (not at all descriptive of me) to 7 (describes me best) and it describes the positive, negative and neutral facets of the global rumination. The scale is comprised of a single factor with items such as “Even if I think about a problem for hours, I still have a hard time coming to a clear understanding” or “I like to sit and reminisce about pleasant events from the past”. The scale evaluates the ruminative thought that is considered as repetitive, recurrent, uncontrollable, and intrusive thinking. These are the main characteristics of a ruminative thought (Brinker & Dozois, 2009). In terms of developing the Ruminative Thought Style Questionnaire (RTSQ), Brinker and Dozois (2009) collected data from 118 undergraduate students with the mean age 18.86 (SD = 1.08, range = 17-24) years. The internal reliability of the scale 20- item scale was excellent (coefficient alpha $\alpha = .92$).

Additionally, another research which was conducted by Tanner, Voon, Hasking, and Martin (2012) supported a multidimensional structure for the ruminative thought style. The aim of this research was to examine the factor structure of RTSQ with adolescent sample (N = 2362). Contrary to the initial validation study, an exploratory factor analysis and following confirmatory factor analysis revealed a 15- item scale with four subscales named as “Problem-Focused Thoughts” with the coefficient alpha $\alpha = .89$, “Counterfactual Thinking” with the coefficient alpha $\alpha = .87$, “Repetitive Thoughts” with the coefficient alpha $\alpha = .89$, and “Anticipatory Thoughts” with the coefficient alpha $\alpha = .71$.

Ruminative Thought Style Questionnaire (RTSQ) was translated and adapted to Turkish language by Karatepe, Yavuz, and Turkcan (2013). The psychometric examination and adaptation process of the RTSQ was conducted with 262 participants. Factor structure of the RTSQ was tested in that research by using Principal Component Analysis (PCA) with varimax rotation. As a result of the analysis, it was found in the Scree-plot analysis that the RTS has a single-factor structure (Karatepe et al., 2013). The internal consistency of RTSQ was very high ($\alpha = .907$). The researchers also checked for the test- retest reliability of the scale and it was found to be strong relationship between two measurements $r = .84$.

3.3.3.1. Confirmatory Factor Analysis of RTSQ

Proposed single factor solution of the RTSQ was tested with 657 participants in this current study. The AMOS Version 20 was used for the data analysis. Analysis resulted following chi-square, $\chi^2(1525, 88, n = 657) = 8, 98, p = .00$. Other fit indices for RTSQ were found as follows: CFI = .74, TLI = .7, RMSEA = .11. These results showed that the model has a poor fit with its fit indexes and chi-square score. To modify the model, error covariances were investigated and several covariances were applied. At the end of the covariances applications the chi-square score was found to be good fit, $\chi^2(375, 64, n = 657) = 2.49, p = .00$. Other fit indices for RTSQ were found as follows after several error covariance applications: CFI= .96, TLI= .95, RMSEA = .05. CFI and TLI values showed very good fit. RMSEA value indicated a good fit, as it was found between .00 and .05 (MacCallum et al., 1996). After these error covariance applications, the model yielded good fit results (Table 3.5). The single factor structure model of RTSQ is displayed in Figure 3.5. The standard estimates for the single factor structure of RTSQ varied between .34 and .78.

Table 3.4.

Goodness of Fit Indexes for Single Factor Model for RTSQ

| | χ^2 | <i>df</i> | χ^2/df | <i>CFI</i> | <i>TLI</i> | <i>RMSEA</i> |
|-------|----------|-----------|-------------|------------|------------|--------------|
| Model | 375.64 | 151 | 2.49 | .96 | .95 | .05 |

p < .001



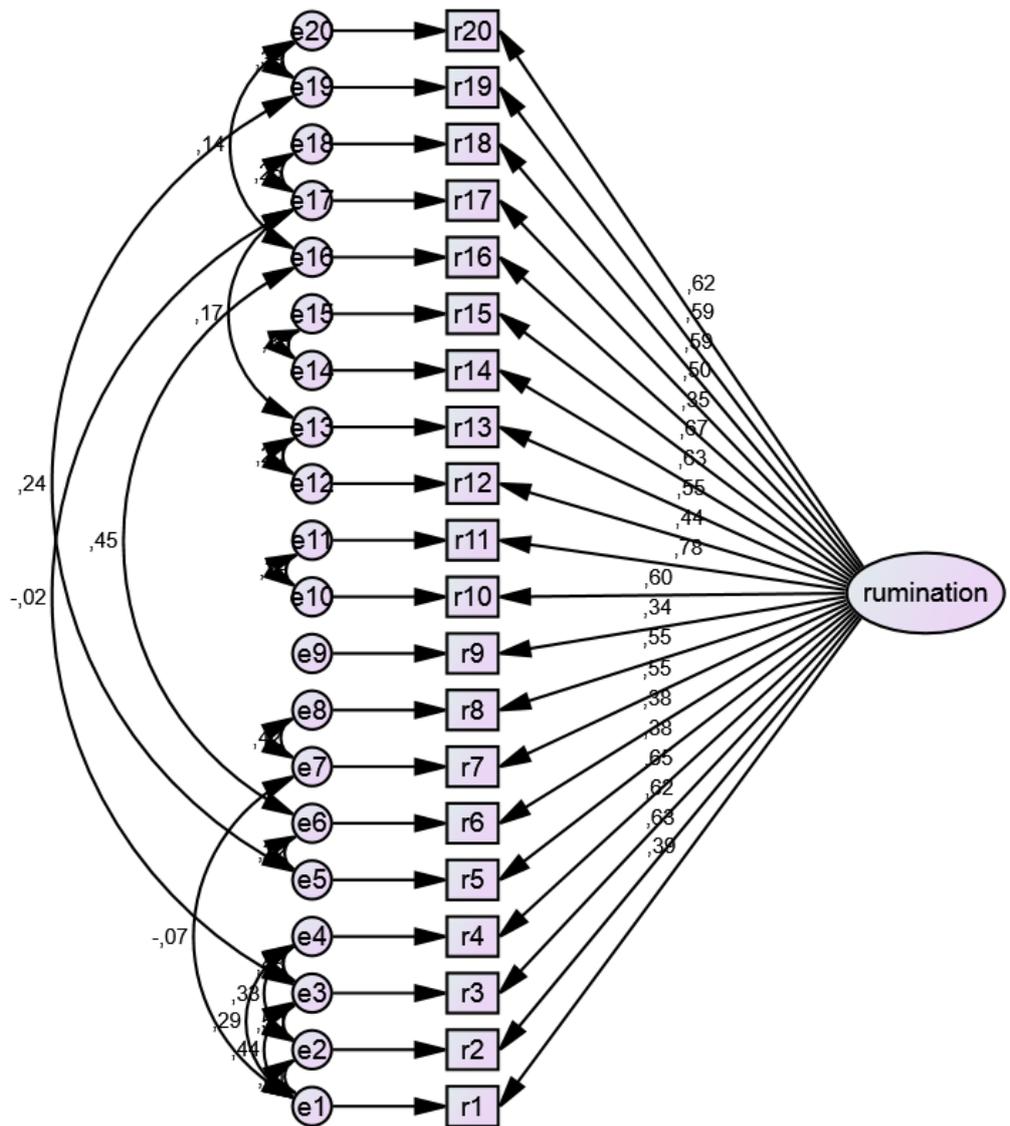


Figure 3.3. *Ruminative Thought Style Questionnaire's Factor Structure with Standardized Estimates*

3.3.3.2. Reliability of RTSQ

Internal consistency coefficient of the RTSQ was evaluated by computing Cronbach alpha coefficient in this present study. The Cronbach alpha coefficient for the RTSQ was .89.

3.3.4. Penn State Worry Questionnaire (PSWQ)

Penn State Worry Questionnaire is a 16- item scale that was developed by Meyer, Miller, Metzger, and Borkovec (1990) with 1580 college students. PSWQ with 16 items, with a five point Likert scale was re-assessed by Molina and Borkovec (1994) with 337 college students. There were five items negatively loaded in the scale and needed to be reverse coded before the analyses (items 1, 3, 8, 10 and 11). The total score of PSWQ is calculated by summing all items. While the minimum score can be obtained is 16, maximum score is 80. The higher scores in this scale indicate the higher level of worry. Even though some confirmatory factor analyses yielded two factor solution as 11 items worded into direction of worry and five items into direction of absence of worry (Fresco, Mennin, Heimberg, & Turk, 2003; Hazlett-Stevens, Craske, Mayer, Chang, & Naliboff, 2003) PSWQ is best conceptualized with a single factor solution (Startup & Erickson, 2006).

PSWQ had high internal consistency with both clinical and non-clinical samples. The Cronbach alpha values were found to range between .88 and .95 for non-clinical college students (Molina & Borkovec, 1994; Startup & Erickson, 2006; van Rijsoort, Emmelkamp, & Vervaeke, 1999). PSWQ also yields good test-retest reliability with college student sample $r = .74-.92$ over intervals of 2- 10 weeks (Startup & Erickson, 2006).

The 16-item PSWQ was translated and adapted into Turkish language by Yilmaz, Gençöz, and Wells (2008). The psychometric properties of the scale was

conducted with 561 non-clinical participants. The researchers found two factor structure in Turkish adaptation process: while the first factor consisted of 11 items that were positively scored (presence of worry items), the second factor consisted five reverse- coded items (absence of worry items). While the Cronbach's alpha coefficient for the whole scale was found to be .91, the Cronbach's alpha for presence and absence of worry factors were .92 and .68 respectively. The Guttman split-half reliability for the whole PSWQ was .91, the test- retest reliability were found to be .88 ($p < .01$), .88 ($p < .01$) and .72 ($p < .01$), respectively (Yilmaz et al., 2008).

3.3.4.1. Confirmatory Factor Analysis of PSWQ

Yilmaz et al. (2008) proposed and confirmed the single factor of the Turkish version of PSWQ. The single factor structure of PSWQ was also tested by using CFA with 657 participants in this current study. The AMOS Version 20 was used for the data analysis. Confirmatory Factor Analyses resulted following chi-square, $\chi^2(538, 84, n = 657) = 5, 18, p = .00$. Other fit indexes for PSWQ were found as follows: CFI = .89, TLI = .88, RMSEA = .08. These results showed that the model has a mediocre fit with its fit indexes and chi-square score.

When standardized estimates of the 16 items of PSWQ evaluated, the item 1 "If I do not have enough time to do everything, I do not worry about it" yielded the lowest estimate .28. The items should be loaded on the factor at least .30 (Hair et al., 2010). Therefore, the CFA analysis was run after excluding the item 1. However, the results of the CFA showed that, the chi-square score has increased after this extraction, $\chi^2(501, 92, n = 657) = 5, 58, p = .00$. Other fit indices were remained almost the same. RMSEA fit indice showed a little higher score as it was .08. Therefore, the item 1 was kept in the CFA analyses.

To modify the confirmatory model, error covariances were investigated and error covariances between e1 and e3, e3 and e10, e5 and e8, and e10 and e15

were applied. At the end of the covariance applications the chi-square score was found to have a good fit, $\chi^2(328, 79, n = 657) = 3, 42, p = .00$. After several error covariance applications, other fit indices for PSWQ were found as: CFI = .94, TLI = .93, RMSEA = .06. CFI, TLI values showed good fit as they were found close to 1.0. RMSEA value indicated a mediocre fit, as it was found between .05 and .08 (MacCallum et al., 1996). The fit indices results for the model can be seen in Table 3.6. The single factor structure model of PSWQ is displayed in Figure 3.6. The standard estimates for the single factor structure of RTSQ varied between .28 and .79.

Table 3.5.

Goodness of Fit Indexes for Single Factor Model for PSWQ

| | χ^2 | <i>df</i> | χ^2/df | <i>CFI</i> | <i>TLI</i> | <i>RMSEA</i> |
|----------|----------|-----------|-------------|------------|------------|--------------|
| Model | 328.79 | 96 | 3.43 | .94 | .93 | .06 |
| p < .001 | | | | | | |

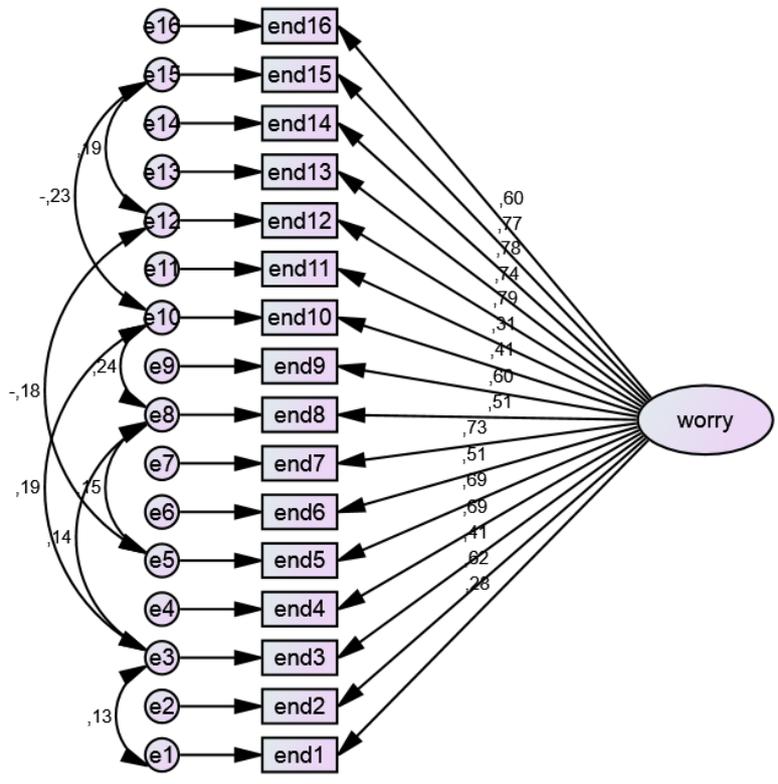


Figure 3.4. *Penn State Worry Questionnaire's Factor Structure with Standardized Estimates*

3.3.4.2. Reliability of PSWQ

The internal consistency for PSWQ was checked in this present study. The calculated Cronbach alpha value was .90.

3.3.5. Self-Compassion Scale (SCS)

Neff (2003a) developed the 26- item Self Compassion Scale (SCS) with a general question “How do I typically act towards myself in difficult times?” The scale aims to measure continual self-compassion. SCS is a five point Likert scale and each item answered on a scale ranging from “almost never” to “almost always”. The SCS has six subscales: Self-Kindness subscale with 5 items (e.g., “When I am going through a very hard time, I give myself the caring and tenderness I need”), the 5-item Self-Judgment subscale (e.g., “I am intolerant and impatient towards those aspects of my personality I don’t like”), the 4-item Common Humanity subscale (e.g., “When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.”), the 4-item Isolation subscale (e.g., “When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world”), the 4-item Mindfulness subscale (e.g., “When I am feeling down I try to approach my feelings with curiosity and openness”), and the 4-item Over-Identification subscale (e.g., “When something painful happens I tend to blow the incident out of proportion”). Higher scores on the SCS indicate a higher tendency for self-compassion. After scores on Self-Criticism, Isolation and Over-identification subscales are reverse coded, mean scores of the six subscales are summed in order to create a total self-compassion score (Neff, 2003).

Factor structure of SCS was tested by the use of confirmatory factor analyses (CFA). As a result of series of CFA, the intercorrelation between six subscales were explained by a single higher order factor of “self-compassion” (NNFI = .90; CFI = .92). Internal consistency of SCS was reported as .92, and internal

consistency of the subscales were ranged from .75 to .81. Test-retest reliability of SCS was reported as .93 (Neff, 2003b). Construct validity of SCS was tested with other scales measuring related constructs. SCS found to have significant negative association with self-criticism, and significant positive associations with social connectedness and emotional intelligence. Discriminate validity of SCS was tested with scales measuring social desirability and narcissism. SCS is found to have no significant associations with either social desirability or narcissism (Neff, 2003a).

SCS was translated and adapted to Turkish by Akın, Akın and Abacı (2007). The psychometric examination and adaptation process of the SCS was conducted with 633 university students. Results of the Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) showed that SCS has 6 factor structure as it was found in the original version. The Cronbach alpha coefficients varied between .72 and .80, and test re-test reliability varied between .48 and .71 (Akın et al., 2007).

SCS was also translated and adapted to Turkish by Deniz, Kesici, and Sümer (2008) in a study with 341 university students. Before the validity and reliability analyses, 66 English teachers administered the Turkish and English versions of the SCS in order to examine the linguistic equivalence of the scale and the correlations between two forms were used ($r = .96, p < .001$). The EFA supported one factor solution with the examination of scree plot test as it was in the original SCS. First factor had 8.264 Eigenvalue with % 31, 7 explained variance.

3.3.5.1. Confirmatory Factor Analysis of SCS

The six factor structure of SCS was tested by the use of CFA in this current study with 657 participants. The AMOS Version 20 was used for the data analysis. Analysis resulted following chi-square, $\chi^2(786, 40, n = 657) = 2, 77, p = .00$. Other fit indices for SCS were as follows: CFI = .91, TLI = .90, RMSEA = .05.

These results showed that the model has a good fit. In addition, to modify the model, error covariances were investigated and there was only one error covariance allowed to covary between e25 and e26 in “isolation” subscale, one error covariance allowed to covary between e19 and e20 in “mindfulness” subscale, and finally one error covariance allowed to covary between e6 and e8 in “common humanity” subscale. At the end of the covariance applications, the model yielded a better and significant chi-square $\chi^2(633.12, n = 657) = 2.25, p = .00$, as it was closer to 2.00. Other indices also yielded better model fit scores as follows: CFI = .94, TLI = .93, RMSEA = .04. As a result, CFA of SCS showed good fit of six factor solution for the data. The CFA fit indexes for SCS are displayed in Table 3.4. The standard estimates varied between .48 and .69 for the self-kindness, .40 and .77 for the common-humanity, .55 and .67 for the mindfulness, .56 and .67 for the self-judgement, .58 and .71 for the over-identification, and .58 and .70 for the isolation. The factor structure of the model for the SCS is displayed in Figure 3.4.

Table 3.6.

Goodness of Fit Indexes for Six Factor Model for SCS

| | χ^2 | <i>df</i> | χ^2/df | <i>CFI</i> | <i>TLI</i> | <i>RMSEA</i> |
|-------|----------|-----------|-------------|------------|------------|--------------|
| Model | 633.12 | 281 | 2.25 | .94 | .93 | .04 |

$p < .001$

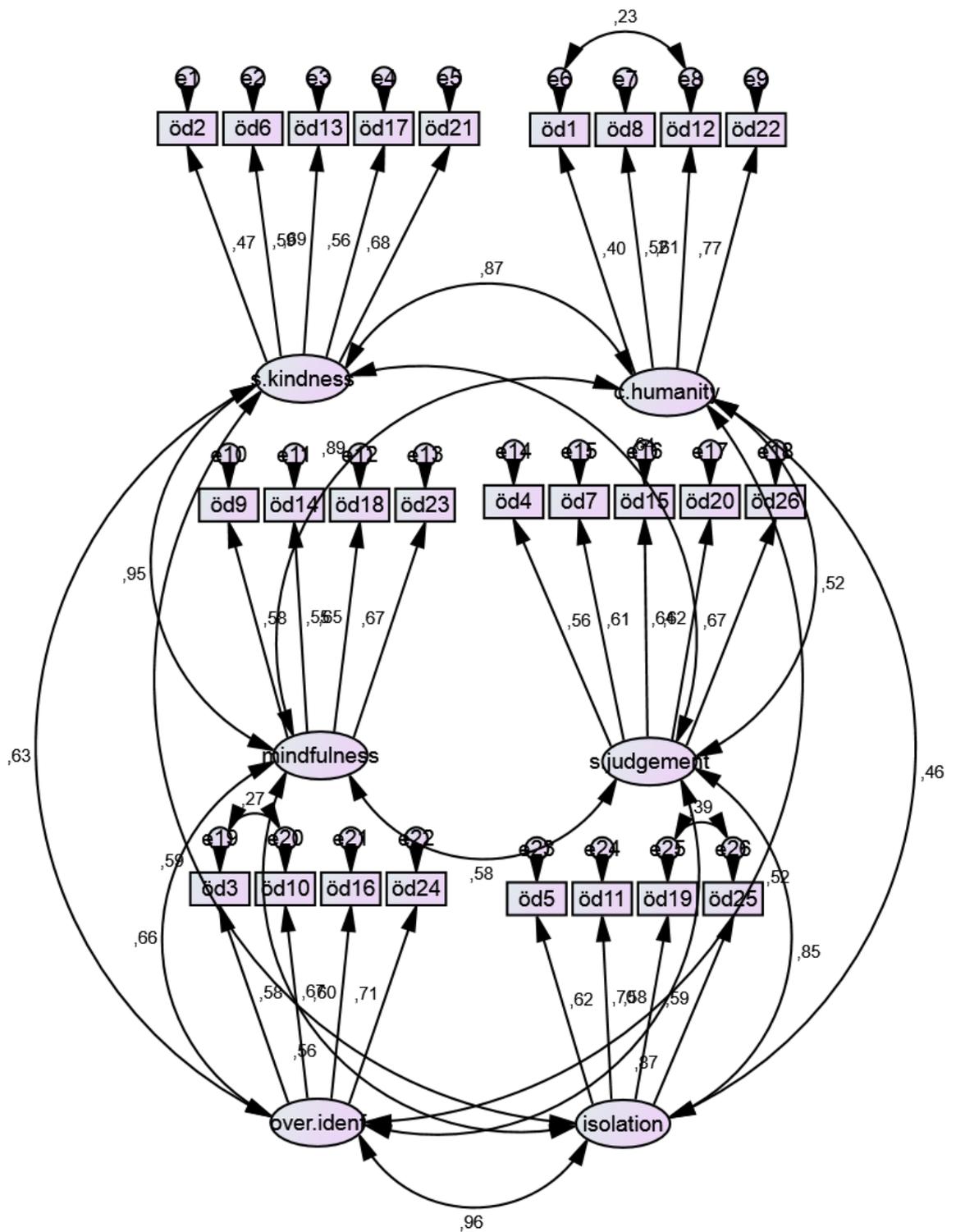


Figure 3.5. *Self-Compassion Scale's Factor Structure with Standardized Estimates*

3.3.5.2. Reliability of SCS

Internal consistency coefficient of the SCS was evaluated by computing Cronbach alpha coefficient. The Cronbach alpha coefficient was found as .91 for the SCS total score and the internal consistency of the subscales were ranged between .71 and .76. The internal consistency for the subscales were found as follows: self-kindness subscale was .73, common humanity subscale was .69, mindfulness subscale was .70, self-judgement subscale was .76, and over-identification subscale was .76, and isolation subscale was .75.

3.4. Data Collection Procedure

Prior to data collection, basic information about the research, instruments and design of the study were submitted to Human Subjects Ethics Committee of Middle East Technical University (Appendix A)- and Human Research Ethical Committee of Abant Izzet Baysal University (Appendix B) for suitability of human research ethical conduct. After the approval of the both ethic committees, the researcher collected data from first year students from different faculties and schools in the university (*see* Table 3.1). The order of the instruments was counterbalanced meaning that the scales with more items and the scales with less items were put in different order in the data collection set before the administration in order to avoid any possible ordering effect. The measures were administered during the class hours it took approximately 20 minutes to complete. The approval of the instructor in each class was taken before the administration. The researcher himself attended the most of the classrooms and explained the purpose of the study and asked the participants to fill out the questionnaires. There were four classes where the researcher himself could not attend to collect data. The lecturers or the professors of the each class were introduced the brief explanation of the rationale of the study in order to overcome any administration problem.

During the data collection process, ethical issues such as informed consent and confidentiality were ensured by the researcher. Even though the purpose of the research was already written on the consent form given on the first page of data collection set, during the administration of measures the researcher also explained participants the aim of the study and informed them that participation to the research is voluntarily. The privacy of the participants was ensured by not asking any personal information. It was emphasized that all of the answers will be kept confidential and will not be shared with anyone else. The data will only be used for the purpose of research.

3.5. Data Analysis

IBM SPSS20 and IBM AMOS21 were used in order to examine the role of psychological flexibility, self-compassion, rumination and worry on college adjustment within an interactional model. In order to understand this examination, structural equation modeling (SEM) was used. Data analysis included several steps. First of all, data was checked in terms of accuracy, missing values and outliers. Following these steps, normality, linearity and homoscedasticity assumptions were checked. Then, descriptive analyses were conducted. All these analyses were conducted by using IBM SPSS Version 20. Confirmatory factor analyses were conducted for each instrument by using IBM AMOS Version 21 prior to running the proposed SEM model. In terms of factor analyses, confirmatory factor analysis using structural equation modeling with maximum likelihood estimation conducted. Because the data were normally distributed (Kline, 2011).

Since, the main aim of this study was to test the proposed interactional model (See Figure 4.6), Structural Equation Modeling (SEM) with IBM AMOS21 statistical program was used. SEM is a term which conveys two main aspects of the procedure: (a) series of structural (i.e., regression) equations that represents the causal processes, (b) these structural equations can be visually modelled in

order to clarify a clearer conceptualization of the theory (Byrne, 2010). The primary goal of SEM is to determine and validate a proposed causal process and/or model. Therefore, SEM is a confirmatory technique. There is a covariance matrix to serve as the dataset, which is based on the sample of collected measurements. The empirical question of SEM is therefore whether the proposed model produces a population covariance matrix that is consistent with the sample covariance matrix (Kline, 2011).

There were many advantages using SEM instead of other regression techniques. First of all, SEM provides an overall model fitness values and estimates for individual parameters. Second, complex and multidimensional relationships can be examined simultaneously and when relationships among factors are examined, the relationships are free of measurement error because it is estimated and removed (Tabachnick & Fidell, 2007). After conducting confirmatory factor analysis and reliability analysis for each instrument, the proposed model was ran and necessary modifications were conducted with IBM AMOS21. The basic SEM terms were presented below, in order to make it easy to understand the findings of this present study.

Observed (Manifest) Variables are also known as indicators and “used as an indirect measure of construct” (Kline, 2011, p. 9). The observed variables in this current study are the items of five instruments.

Unobserved (Latent) Variables are used indirect measures and “correspond to hypothetical constructs or factors, which are explanatory variables presumed to reflect a continuum that is not directly” (Kline, 2011, p. 9). The unobserved variables in this current study were university adjustment, psychological inflexibility, self-compassion, rumination and worry.

Exogenous Latent Variables are “synonymous with independent variables; they “cause” fluctuations in the values of other latent variables in the model. Changes

in the values of exogenous variables are not explained by the model. Rather, they are considered to be influenced by other factors external to the model” (B. M. Byrne, 2010, p. 5). The exogenous latent variables in this current study were psychological inflexibility, self-compassion, rumination and worry.

Endogenous Latent Variables are “synonymous with dependent variables and, as such, are influenced by the exogenous variables in the model, either directly or indirectly” (B. M. Byrne, 2010). The endogenous latent variable in this current study was university adjustment.

Confirmatory Factor Analysis is “a type of structural equation modeling (SEM) that deals specifically with measurement models, that is, the relationships between observed measures or indicators (e.g., test items, test scores, behavioral observation ratings) and latent variables or factors” (T. A. Brown, 2006, p. 1).

Model Specification is representing the hypotheses in a structural equation format which usually happens by drawing the proposed structural model diagram by using symbols (Kline, 2011).

Model Identification is the theoretical explanation of the specified model before running the computer based analyses for SEM. If the model is not identified then it should be respecified again (Kline, 2011).

Model Estimation is the step where the researcher tests the identified model by using a computer program. There are several steps of estimation process. First step is, evaluating model fit, which means finding out how well the model explains the data. If the model fit is satisfactory then the next step is interpreting the estimates. Finally, considering the equivalent models is the last step in model estimation process (Kline, 2011).

Model Evaluation: To evaluate model fit, fit indexes were used. The names and the detailed description for each fit index were listed below:

Model Chi-Square (χ^2): This is a basic value in examining the model fit and a value of 0 with a non-significant p value indicates a perfect model fit < 2.00 (B. M. Byrne, 1989). Since, chi-square value is sensitive to sample size, in order to eliminate problems caused by this sensitivity, normed Chi-square (χ^2/df) was used. The criterion for the (χ^2/df) is 3 (Kline, 2011).

The Bentler Comparative Fit Index (CFI): This index compares the proposed model and the independence model. The range of the fit index is between 0 and 1 with the values greater than .95 are considered as an indicative of good-fitting models (Hu & Bentler, 1999; Tabachnick & Fidell, 2007).

Tucker-Lewis Index (TLI): This index is also named as Non-Normed Fit Index (NNFI). TLI is also ranges between 0 and 1. As the scores get closer to 1, model fit increases and TLI values higher than .95 indicates good fit (Hu & Bentler, 1999).

Root Mean Square of Error of Approximation (RMSEA): This index represents how bad the model fit is. Therefore, a value close to 0 indicates a good fit. According to Hu and Bentler (1999) values less than .06 indicate a good fit. Values as high as .08 a reasonable fit, and those ranging from .08 to .10 a mediocre fit (MacCallum et al., 1996).

In addition to these, Kline (2011) suggested that the squared multiple correlation (R^2) calculated for each indicator is another fit statistics that is used for measurement models. Squared multiple correlation gives the proportion of the explained variance and values less than .50 mean that more than half of an

indicator's variance is unexplained by the factors it is specified to measure (Kline, 2011).

3.6. Limitations

There were several limitations of this research. It is important to consider these limitations when interpreting the findings of this current study. First of all, the data was gathered from university students through convenience sampling method. Convenience sampling as opposed to random sampling strategy, directly reaches the participants who are available at the time of data collection. It is possible to get some biased results with the use of convenience sampling as the researcher has the tendency to treat the data as a precise depiction of the population, even though the data is not representing the entire population. In this current study, gender inequality was one of the results of the convenience sampling method. Out of 657 participants in this study 486 (% 74) were female and 171 (% 26) were male. This rate was majorly originated from the participants in Faculty of Education. Because, more than half of the participants in this study (n = 358, % 54.5) were from Faculty of Education and the male-female rate was % 22- % 78. Therefore, more male students could have been included in the study in order to have a better generalization of the findings to whole freshman students. Thus, studies used convenience sampling should be replicated with a number of similar samples to decrease the likelihood that the findings were one-time occurrence (Fraenkel, Wallen, & Hyun, 2012).

Second, the collected data rely on the self- report of participants. Although it was important to give an opportunity for all participants to express their feelings and thoughts through questionnaires, there was no way to control the validity of their answers by a survey research. The researcher and the person who collected the data stated the importance of giving sincere answers for each questions before starting to collect the data.

Third, data collection process is one of the most important phase during a study. Even though, the researcher tried to attend most of the classrooms in order to collect data, there were four classes that the researcher could not be present at the time of data collection. The survey applications were administered with only the help of the lecturer or professor of the class. Researcher took all necessary precautions to ensure that data collection procedure was applied in a standard manner. For example, the nature and the rationale of the present study was introduced to the lecturer or the professor of the class who applied the questionnaires. In addition, they were also explained that participation to this research is voluntary. In each survey set, researcher also provided information to students regarding the study and voluntary participation. Despite these precautions, there is a possibility that in some survey applications, participants might have not received the detailed oral instructions by the instructor regarding the study.

Finally, there were some sensitive questions in the questionnaires related to one's sexual life or emotional life which participants may not want to disclose themselves freely due to privacy issues or social desirability.

CHAPTER IV

RESULTS

This chapter includes the results of the analyses in the current study. First, the findings of the preliminary analyses will be reported. Preliminary analyses such as screening the data in terms of missing data, outliers and tests of required assumptions (normality, multicollinearity will be included). Second, descriptive statistics for each variable, including frequencies, means and standard deviations will be presented. Finally, findings of the proposed structural model will be presented along with the results of the hypothesis of the study.

4.1. Preliminary Analysis

Before running Structural Equation Modeling (SEM) analyses, data was screened whether there was any missing value, misentry or extreme cases. Frequency tables were examined and unusual data entry for each case was checked and any identified mistake was corrected by the researcher. Assumptions of this statistical method (i.e., normality, linearity, outliers) were also examined.

4.1.1. Missing Data

The presence of missing data can occur for several reasons such as absence on the day of data collection, failure to answer certain items related to sensitive issues, equipment failure or attrition of subjects that are usually beyond the

researcher's control (Byrne, 2010). Kline (2011) discusses various forms in dealing with missing data. First one is available case methods which analyze data through deletion of cases either list wise or pairwise which were not completed. The second form is single-imputation methods that allow replacing each missing case with a single-calculated score. Third form of analyzing missing data is model based imputation methods that provide more than one estimated score for each missing observation with multiple imputations. This form has greater advantages over single-imputation methods. The fourth form of dealing with missing data does not delete cases or impute missing observations. Instead, parameter estimates and their standard errors are calculated directly from original data without deletion or imputation of missing values.

Although there are no clear guidelines when analyzing the missing data, usually data set get included into analysis if the missing data is not over 5 % of the whole data (Tabachnick & Fidell, 2007). Therefore, in this present study, cases which have missing values more than % 5 ($n = 47$) were excluded; in other words, list wise deletion was subjected as the first step from the analysis due to non-ignorable number of missing values. After the list wise deletion, sample size counted up to 657 (571 females and 206 males) with a mean age of 18.67 ($SD = .44$). As suggested by Kline (2011) mean value substitution was done as the last step in dealing with the missing values for the observations which had missing data lower than % 5.

4.1.2. Outliers

Outliers refers to the values that are extreme and could possibly influence the mean, standard deviation and correlational values (Schumacker & Lomax, 2004). Univariate outliers represent the unusual scores on a single case in data, while the multivariate outliers represent the cases which have an unusual combination of scores on more than one variable. Univariate outlier scores were examined through standardized (z) scores. The cases with z scores lower than -

3.29 and higher than +3.29 could be labeled as outliers (Tabachnick & Fidell, 2007). Univariate outlier analysis resulted that there were not more than seven outliers in each scales. According to Tabachnick and Fidell (2007) it is possible to observe a few scores exceeding the -3.29 and +3.29 especially when the sample size of the study is large. Since the sample size of this current study is considerably large, it was decided to keep these outliers in the analysis. On the other hand, multivariate outliers were investigated through Mahalanobis Distance (MD) values for each cases. There were 15 cases which had Mahalanobis Distance greater than critical value. The analysis were run after removing these cases to understand whether these cases had a significant influence on the results of the structural model. The analysis results indicated that there was not a considerable change compared to previous results. Therefore the cases which had greater Mahalanobis Distance value were decided to be retained in the data.

4.1.3. Normality

Moreover, the data was screened and checked in order to examine whether it was normally distributed or not for each variables. The skewness and kurtosis values were checked via SPSS20 program. The skewness is described as the measure of the symmetry of the distribution. According to the results, all variables in this study were found approximately skewed as the skewness score were between -1 and +1. Kurtosis on the other hand, refers to peakedness or flatness of the distribution. The kurtosis scores were in between acceptable values as they were between -3.0 to + 3.0 (Tabachnick & Fidell, 2007). Skewness and kurtosis values (*see* Table 4.1) and histograms for each variable were presented below.

Table 4.1

Normality Test Results for all Variables

| | <i>n</i> | <i>Mean</i> | <i>Median</i> | <i>S.D</i> | <i>Skewness</i> | <i>Kurtosis</i> |
|-----------------------------|----------|-------------|---------------|------------|-----------------|-----------------|
| University Adjustment | 657 | 209.40 | 209.00 | 32.62 | -.34 | .28 |
| Psychological Inflexibility | 657 | 24.07 | 24.00 | 9.22 | .34 | -.46 |
| Ruminative Thinking | 657 | 99.28 | 101.00 | 22.07 | -.54 | .09 |
| Worry | 657 | 48.28 | 48.00 | 12.86 | .06 | -.49 |
| Self-Compassion | 657 | 81.46 | 81.00 | 16.98 | -.14 | .08 |

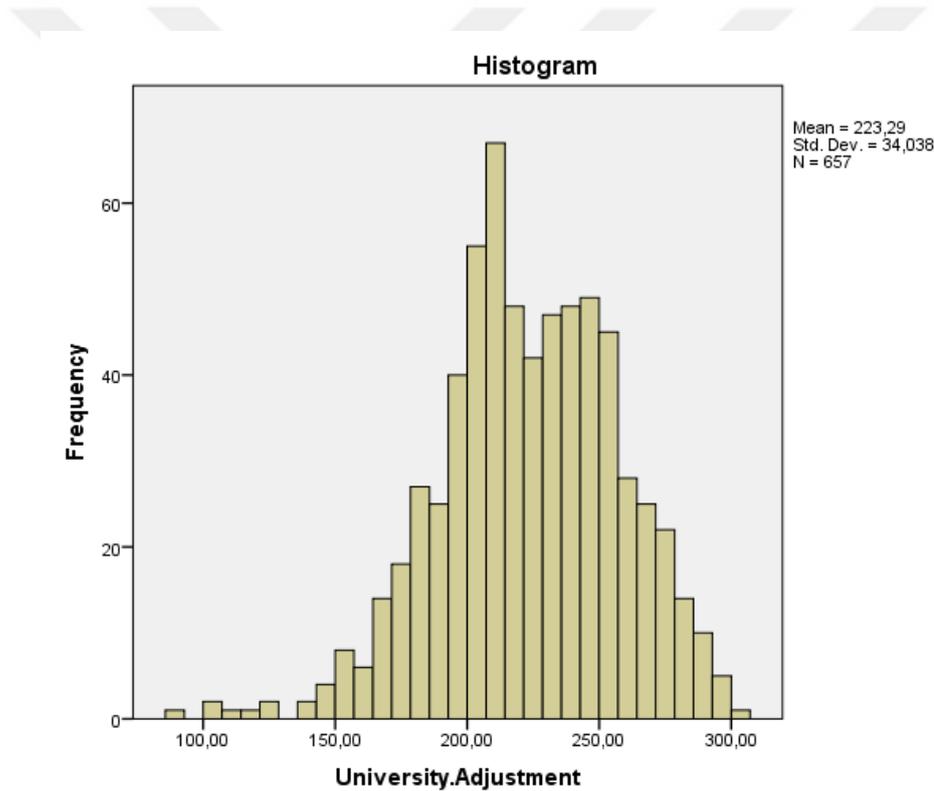


Figure 4.1. *Normality Histogram for University Adjustment*

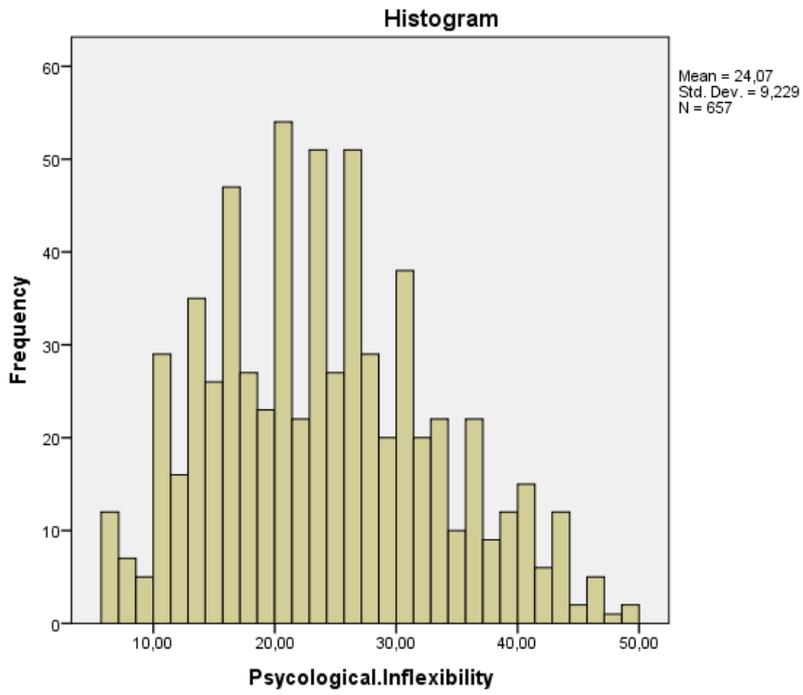


Figure 4.2. *Normality Histogram for Psychological Inflexibility*

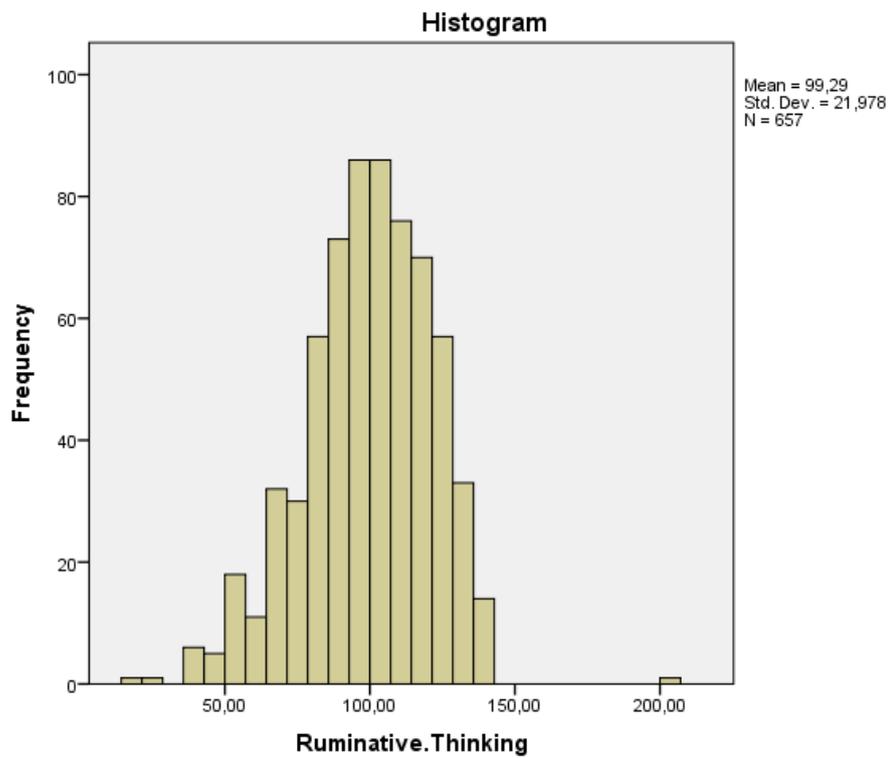


Figure 4.3. *Normality Histogram for Ruminative Thinking*

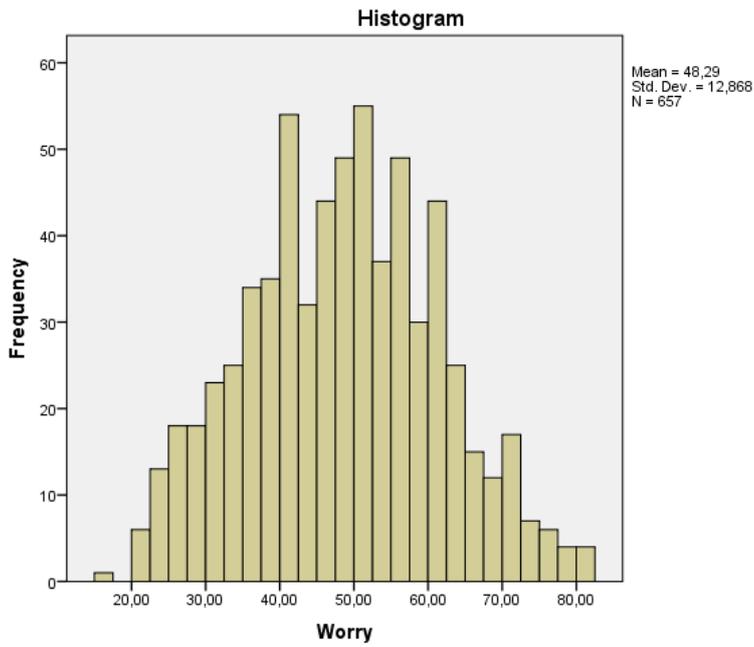


Figure 4.4. Normality Histogram for Worry

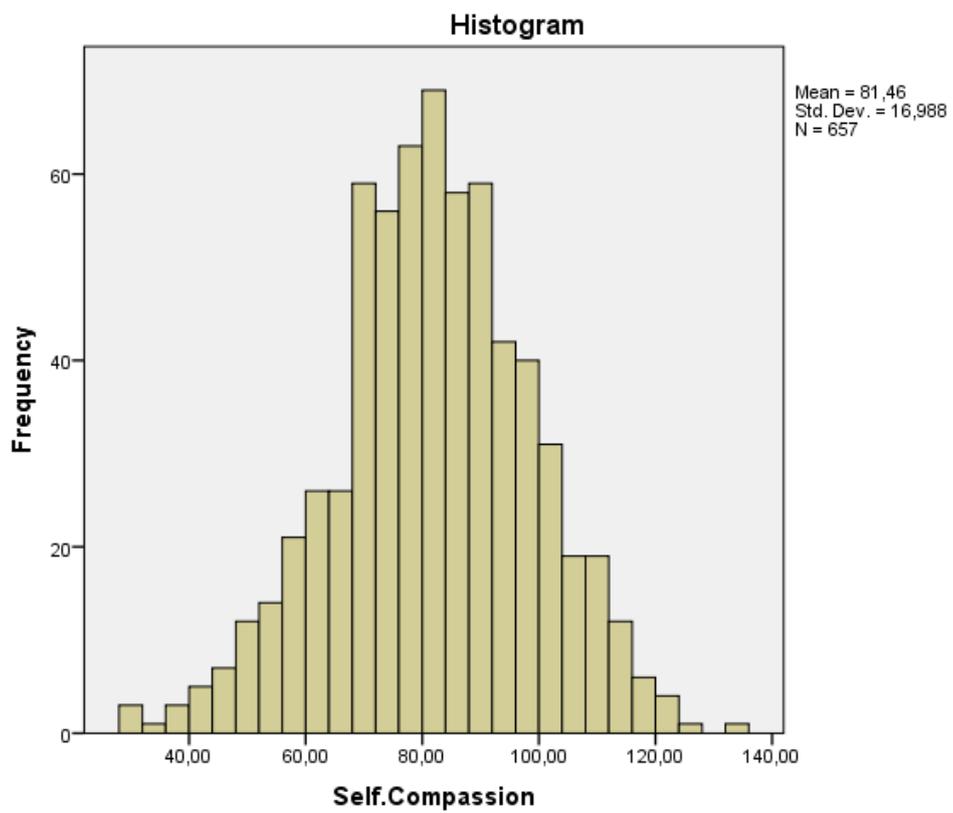


Figure 4.5. Normality Histogram for Self Compassion

4.2. Descriptive Analysis

The summary of the descriptive statistics (means, standard deviations, minimum and maximum values and variance) for university adjustment as measured by ULS, for self-compassion which was measured by Self- Compassion Scale (SCS), psychological inflexibility which was measured by Acceptance and Action Questionnaire- II (AAQ-II), ruminative thinking which was measured by Ruminative Thought Style Questionnaire (RTSQ) and worry which was measured by Penn State Worry Questionnaire (PSWQ) were presented in Table 4.2.

Table 4.2.

Descriptive Statistics for Variables

| | <i>n</i> | <i>Min.</i> | <i>Max.</i> | <i>M</i> | <i>SD</i> |
|-----------------------------|----------|-------------|-------------|----------|-----------|
| University Adjustment | 657 | 90.00 | 281.00 | 209.40 | 32.63 |
| Psychological Inflexibility | 657 | 7.00 | 49.00 | 24.07 | 9.22 |
| Ruminative Thinking | 657 | 20.00 | 205.00 | 99.29 | 21.98 |
| Worry | 657 | 16.00 | 80.00 | 48.28 | 12.87 |
| Self-Compassion | 657 | 30.00 | 81.46 | 81.46 | 16.98 |

Before testing the model, bivariate correlations among study variables were tested. To evaluate the correlations, the cutoff point as +/- .10 is considered small, +/- .30 is considered medium, and +/- .50 is considered large correlation (Field, 2009). Correlations among study variables are presented in Table 4.3. The Pearson correlation coefficient between *psychological inflexibility* and *self-compassion* was found to have a high correlation (-.61). The lowest correlation was found between *university adjustment* and *ruminative thinking* (-.38). All the correlations among study variables were found significant. That is, those who reported high psychological inflexibility had mostly low self-compassion. On

the other hand, the students who reported high ruminative thinking also reported low in college adjustment but this relationship was not found to be strong.

Table 4.3.

Correlation between Variables

| | 1 | 2 | 3 | 4 | 5 |
|--------------------------------|-------|-------|-------|-------|---|
| 1. University Adjustment | 1 | | | | |
| 2. Psychological Inflexibility | -.53* | 1 | | | |
| 3. Ruminative Thinking | -.38* | .53* | 1 | | |
| 4. Worry | -.44* | .55* | .59* | 1 | |
| 5. Self-Compassion | .52* | -.61* | -.49* | -.60* | 1 |

* $p < .01$

As depicted in Table 4.3 while university adjustment has only positive strong correlation with self-compassion, it has negative correlations with other variables.

4.3. The Proposed Structural Equation Modeling (SEM)

Confirmatory SEM analysis, including all variables, was conducted by utilizing AMOS 20 software, after deciding which items should be extracted, if any, from each instrument as a result of CFA. The proposed model (See Figure 4.6) in which, the students' level of psychological inflexibility, level of self-compassion, rumination and worry were placed as predictors of students' level of adjustment to college life. Initially the following fit indices were examined: χ^2 , CFI, NFI, TLI and RMSEA. In addition to the fit indices in the model, parameter estimates were examined to explore the latent factors and manifest variables. Finally, the squared multiple correlation coefficients (R^2) were

examined to understand the amount of variance explained for endogenous variables which were university adjustment, self-compassion, ruminative thinking, and worry in this current study. Psychological inflexibility is the only exogenous variable in this current study.

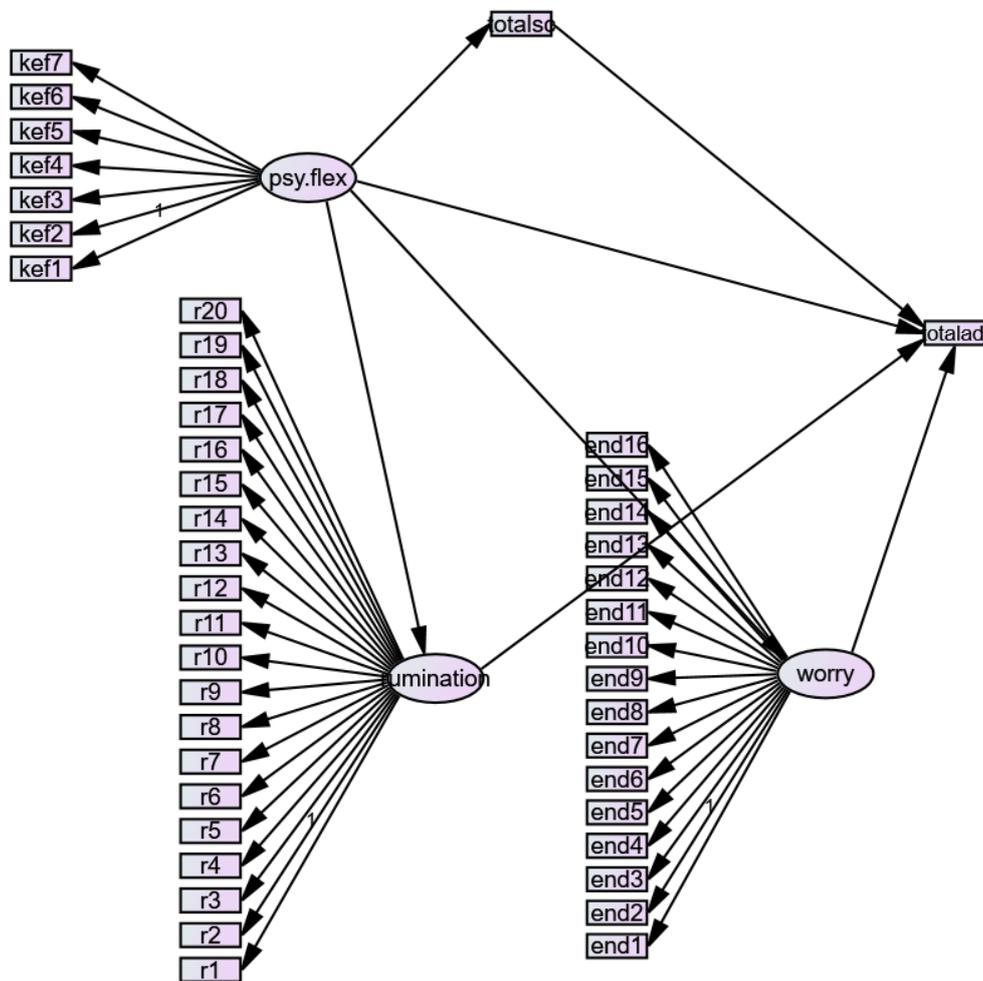


Figure 4.6. Proposed Structural Equation Model

4.4. Confirmatory Structural Equation Modeling (SEM) Results

Model testing yielded following fit indices: χ^2 (2118.87, n = 657) = 2, 32 and CFI = .91, TLI = .90, NFI = .85. Compared Fit Index (CFI) and Tucker-Lewis Index (TLI) were greater than .90 and these values were the indicators of good fit of the model (Bentler & Yuan, 1999). On the other hand, Normed- Fit Index (NFI) value was found as .85 which was a mediocre fit. Additionally, Root Mean Square of Approximation (RMSEA) was found .04 which was an evidence for a good fit (MacCallum et al., 1996). The cut-offs for the presented fit indices in this study were also given (*see* Table 4.4. based on the research (Hu & Bentler, 1999; Kline, 2011; MacCallum et al., 1996). The model with parameter estimates are also given in Figure 4.7.

Table 4. 4.

Model Fit Criterias in SEM Analysis

| Fit Indices | Good Fit | Mediocre Fit |
|-------------|----------|--------------|
| CMIN / df | < 3.00 | < 5.00 |
| CFI | > .90 | >.85 |
| TLI | > .90 | > .85 |
| NFI | > .90 | > .85 |
| RMSEA | < .04 | < .08 |

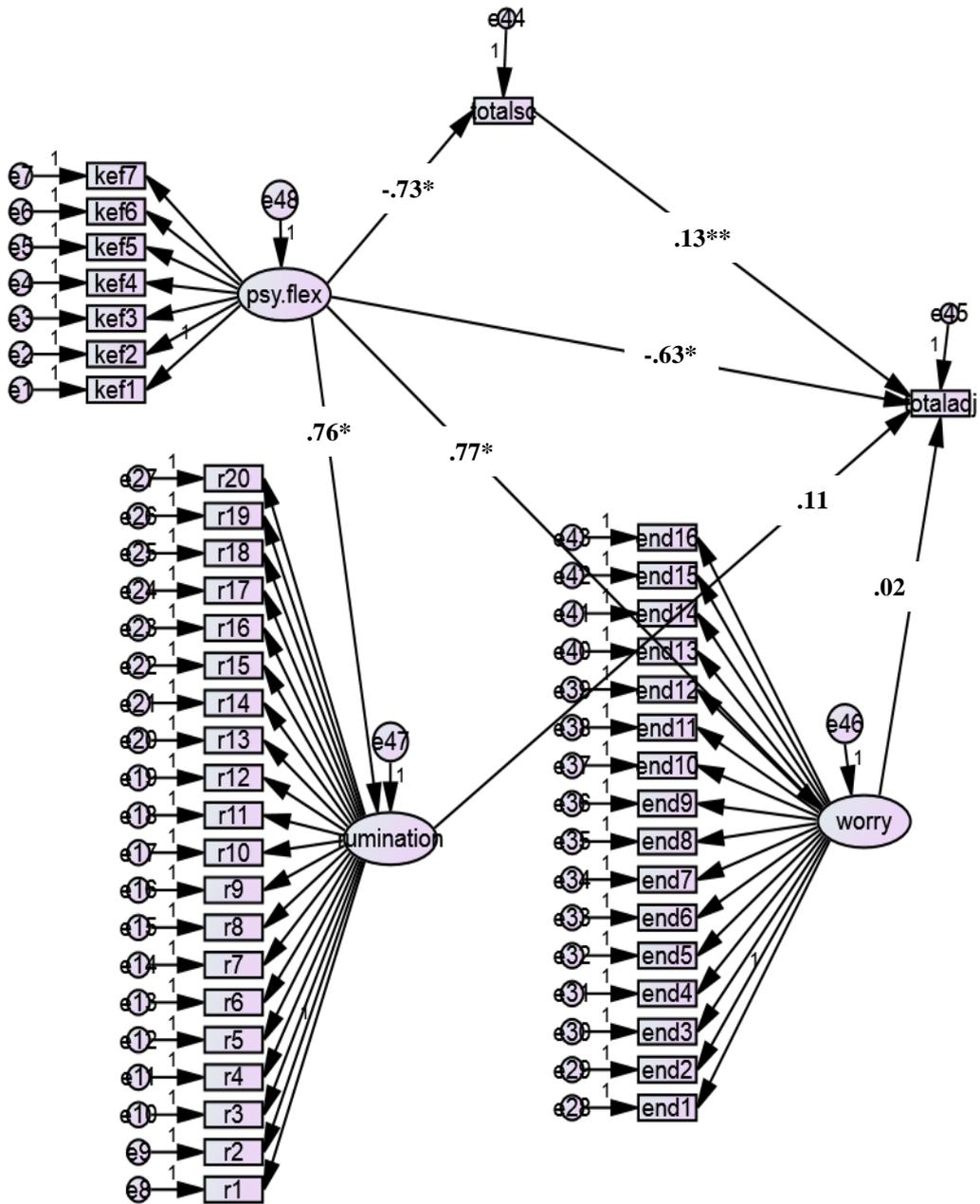


Figure 4.7. Structural Equation Model with Standardized Parameter Estimate

4.5. Results of the Research Hypotheses

The proposed structural model was based on seven hypotheses. According to the results of the model testing, while university adjustment was significantly predicted by psychological inflexibility ($\beta = -.63$) and by self-compassion ($\beta = .13$), it was not significantly predicted by ruminative thinking and worry with the values respectively ($\beta = .11$) and ($\beta = .02$). In addition, psychological inflexibility was found to be a significant predictor of self-compassion ($\beta = -.73$), ruminative thinking ($\beta = .76$) and finally worry ($\beta = .77$). The results of the hypotheses are displayed in the Table 4.5.

In this context, it is possible to say that the freshman students who have high psychological inflexibility or in other words, students with high psychological rigidity have difficulties in university adjustment process. Moreover, high self-compassion in freshman students predicts the greater adjustment to university life in general. Psychological inflexibility was found to be negatively associated with self-compassion and positively associated with ruminative thinking and worry as it was hypothesized. These results explain that, while high psychological inflexibility predicts the lower self-compassion, it also predicts the greater ruminative thinking and worry in freshman university students. As opposed to the original hypothesis, the results of the tested model indicated that the university adjustment was not significantly predicted by ruminative thinking and worry.

Table 4.5.

Results of the Research Hypotheses (Standardized Regression Weights)

| | Hypothesis | β | Result |
|-----------|--|---------|----------|
| <i>H1</i> | Psychological inflexibility negatively predicts self-compassion. | -.73* | Accepted |
| <i>H2</i> | Psychological inflexibility negatively predicts university adjustment. | -.63* | Accepted |
| <i>H3</i> | Psychological inflexibility positively predicts rumination. | .76* | Accepted |
| <i>H4</i> | Psychological inflexibility positively predicts worry. | .77* | Accepted |
| <i>H5</i> | Self-compassion positively predicts university adjustment. | .12** | Accepted |
| <i>H6</i> | Rumination negatively predicts university adjustment | .11 | Rejected |
| <i>H7</i> | Worry negatively predicts university adjustment. | .02 | Rejected |

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

Following the results of the research hypotheses, finally amount of variance for each endogenous variables explained by the model was checked by examining squared multiple correlation coefficient (R^2) of the variables in the model (see Table 4.6). Proportions of the variance explained by the model were as follows: % 60 variance was explained by worry, % 59 variance explained by rumination, % 54 variance explained by total self-compassion, % 41 variance explained by total university adjustment.

Table 4.6.

R² for Endogenous Variables (n = 657)

| Variables | Estimate |
|-----------------------------|----------|
| Worry | .60 |
| Rumination | .58 |
| Total self- compassion | .54 |
| Total university adjustment | .41 |

4.6. Summary of the Results

In this study, the relationships among psychological inflexibility, ruminative thinking, worry, self-compassion, and university adjustment were tested through Structural Equation Modeling (SEM). Before running the analyses, Confirmatory Factor Analysis (CFA) for each instrument was conducted and outliers and basic assumptions (normality, linearity and homoscedasticity) were checked. The proposed model was included seven basic hypotheses. While five of these hypotheses were accepted, two hypotheses were rejected.

According to the results, psychologically inflexible students have difficulties in adjusting the university life in general. Self-compassion positively predicts the adjustment to university. That means students who have more self-compassionate attitudes towards themselves have less difficulty in a new challenging environment like university life. Moreover, results shows that psychological inflexibility is negatively associated with self-compassion and it is positively associated with ruminative thinking and worry. These results explains that, psychologically inflexible students have hard times to act compassionately towards themselves and they also tend to ruminate and worry during their first year in university. It was interesting to find that while ruminative thinking was not negatively and significantly related to university

adjustment, worry was found to be negatively associated with university adjustment but this association was not significant. Finally, the model that was proposed initially was found to be good fit with overall good model fit indices.



CHAPTER V

DISCUSSION

This chapter consists of three sections. The first section will discuss the results of the study considering the relevant review of the literature. The second section will include implications of the findings relevant to practice. Finally, the third section will focus on the recommendations for the future research.

5.1. Overview of the Hypotheses

The first hypothesis of the study, *psychological inflexibility* will have a negative association with *self-compassion*, was accepted ($\beta = -.73$). The second hypothesis, *psychological inflexibility* will have a negative association with *university adjustment*, was accepted ($\beta = -.63$). The third hypothesis of the study which states that *psychological inflexibility* will have a positive association with *ruminative thinking*, was accepted ($\beta = .76$). The fourth hypothesis of the study which states that *psychological inflexibility* will have a positive association with *worry*, was accepted ($\beta = .77$). The fifth hypothesis of the study, *self-compassion* will have a positive association with *university adjustment*, was also accepted, ($\beta = .12$). On the other hand, the sixth hypothesis of the study which states that *ruminative thinking* will have a negative association with *university adjustment*, was rejected, ($\beta = .11$). Finally, the seventh hypothesis of the study which states that *worry* will have a negative association with *university adjustment* was also rejected, ($\beta = .02$). The results of each hypothesis will be discussed below.

5.2. Discussion of the Results

This study investigated the relationships among psychological inflexibility, ruminative thinking, level of worry, and self-compassion in relation to university adjustment level within an interactional model in freshman students. The results of the current study confirmed that psychological inflexibility and self-compassion significantly predict the university adjustment as it was expected. However, ruminative thinking and worry did not significantly predict the university adjustment. Finally, psychological inflexibility was found to be the significant predictor for self-compassion, ruminative thinking and worry in the structural equation model.

According to the results of the model testing, psychological inflexibility which was measured by Acceptance and Action Questionnaire- II (AAQ-II) found as a significant predictor of university adjustment which was measured by University Life Scale (ULS). High scores in AAQ-II were the indicator of more psychological inflexibility or in another words lower scores was the indicator of more psychological flexibility. Psychological flexibility was defined as “process of contacting the present moment and the thoughts and feelings it contains, without needless defense, fully as a conscious human being and, depending on what the situation affords, persisting or changing behavior in the service of chosen values” (Gloster, Klotsche, Chaker, Hummel, & Hoyer, 2011, p. 1). Thus, the present study findings indicated that college students who had greater level of psychological inflexibility also had experienced adjustment difficulties in college. This finding is parallel to Masuda and Tully’s (2011) study which emphasized the importance of psychological flexibility and its protective role on all forms of psychological distress. More specifically, psychological flexibility was found as a common protective factor in the development of different psychological problems for university students including, depression, anxiety, substance use problems, adjustment to traumatic experiences, school

performance and burn out (Biglan, Hayes, & Pistorello, 2008; Michael E. Levin et al., 2014).

In this present study, psychological inflexibility was found to be negatively associated with self-compassion. In other words, the students who have high psychological flexibility are more compassionate to themselves. This was an expected finding, since constructs of self-compassion and psychological flexibility share many common sub constructs or techniques such as the present moment awareness which is also called mindfulness. As stated by Germer (2009), one can become more self-compassionate by being kind towards himself/herself, listening to his/her body that is more like observing the body, bringing difficult emotions or in other words letting the suffering be. In this regard, in the present study, the students with high psychological flexibility would have better capacity to have present moment awareness and therefore they would have more self-compassion. A recent study conducted by Yadavaia, Hayes, and Vilaradaga (2014) with 73 undergraduate students aimed to investigate the efficacy of ACT approach on self-compassion. As a result of six-hour ACT based workshops, ACT was found to be effective in self-compassion, psychological distress, and anxiety. According to another recent supporting study that was conducted with 144 undergraduate students, self-compassion was found to be significantly correlated with psychological flexibility processes (Marshall & Brockman, 2016).

The findings indicated that the self-compassion was another variable that was a significant predictor of the university adjustment. As it was hypothesized, more self-compassionate students (mindful, conscious of common humanity and self-kind) expressed less difficulty to adjust university life. University environment might become very challenging and, may create a lot of stress for the freshman students, self-compassionate behaviors may help them to overcome these challenges and difficulties.

According to the model test it was hypothesized that college students who are self-compassionate (mindful, conscious of common humanity and self-kind) expressed less difficulty to adjust university life. University environment might become very challenging and, may create a lot of stress for the freshman students, thus self-compassionate behaviors may help them to overcome these challenges and difficulties. In other words, when freshmen students have the knowledge of common-humanity, negatively experienced life events could become more tolerable and adjustment difficulties could become more bearable.

In line with the findings of the present study, Terry et al. (2013), in a study conducted with 119 undergraduate students, found that self-compassion is associated with lower depression, less homesickness, and higher satisfaction with the decision to attend the university. Students who score high in self-compassion presumably exercise some forms of self-compassion on a regular basis, thereby reducing the emotional impact of both small and large events as they emerge.

Hall et al. (2013) also investigated the role of self-compassion on physical and psychological well-being with 182 college students. The findings supported the relationship between self-compassion and both physical and psychological well-being.

Finally, the relationship between self-compassion and adaptive psychological functioning was investigated in a laboratory setting in two different studies by Neff, Rude, and Kirkpatrick (2007). Since, self-compassion enhances well-being due to helping people to feel cared for, connected, and calm (Gilbert, 2005).

When first-year students start university life, they face with many challenges related to academic, social, emotional, and environmental issues which eventually creates anxiety and other psychological problems (Upcraft et al., 2005). As Neff et al., (2007) indicated self-compassion is a strong protective

factor against self-evaluative anxiety when considering the personal weaknesses, and increases in self-compassion were found to be linked to better mental health.

Based on the findings of the current study and the literature, it could be concluded that, if college students can have an open-minded attitude when observing their emotions and thoughts during the difficult times with mindfulness, they can contact the present moment without fusing them. Further, with self-kindness attitude, students can contact themselves in a compassionate manner. Finally, with this mindful, kind and compassionate manner students can tolerate failures and more specifically, difficulties they face during the first months in college.

Another hypothesis of the study was the positive association between psychological inflexibility, ruminative thinking and worry. According to the results, as it is hypothesized, psychological inflexibility was positively and significantly predicted ruminative thinking and worry. These results are in line with previous studies supporting that psychological inflexibility which is the central concept of ACT, is associated with psychological distress such as depression, anxiety (Fledderus et al., 2012; Forman et al., 2007).

ACT posits that psychological problems stem from experiential avoidance that is taking our thoughts literally (Hayes, Strosahl & Wilson, 2011). In fact, the core understanding of ACT originally comes from Relational Frame Theory (RFT). According to RFT, individuals are over-identified, or fused with their thoughts and emotions. They even experience them as real objects of the physical world. The fusion of thoughts is described as the dark side of the language. Thus, human language may lead individuals to many psychological problems. As a result of fusion, individuals experience the world indirectly (Törneke, 2010). For instance, fear of tomorrow that is called worry or regrets of the past that is called rumination may cause a lot of unbearable problems instead of being in the present. Thus, the results of this current study also clarifies that psychologically

inflexible students most likely tend to fuse with their thoughts and emotions and either stuck with them in the present or in the future.

Similar to the results of the present study, Levin et al. (2012) conducted a study that can be considered as supporting the findings of this present research. They aimed to explore the relationship between alcohol use problems and the experiential avoidance strategies of first year university students. In this regard, both ruminative thinking and worry can be the experiential avoidance behaviors for the first year students in the sense that rumination and worry do not serve students towards their values that they are willing to commit actions.

In the current study it was interesting to find that, ruminative thinking and worry were two variables which were not significant predictors of university adjustment. These findings were contrary to the existing literature and hypotheses of the present study. Rumination and worry are two constructs found to be strongly linked to depression and anxiety (Davey & Wells, 2006). Even though the existing literature supports that rumination and worry are related to psychological distress and less life satisfaction (Paolini et al., 2006; Segerstrom et al., 2000), the roles of ruminative thinking and worry on college adjustment has not been studied yet. According to De-Chen's (2009) study, rumination was found to be one of the main factor influencing the first-year university students' level of depressive symptoms. It is quite possible that students who ruminate on negative experience of failure will be susceptible to depression.

The explanation of this contradictory result in this present study might be understood if the functions of rumination and worry can be clarified. Rumination and worry were described by several different models and approaches as it was stated earlier in the literature. Several theories indicate that rumination is a misguided emotion regulation strategy. More specifically, individuals who ruminate believe that rumination will help them to solve their problems, analyze the discrepancies between current status, help in goal attainment, or process

information related to stressful event (Papageorgiu & Wells, 2001a, b; as cited in Smith & Alloy, 2009). Garnefski, Kraaij, & Spinhoven (2001) described rumination as a type of cognitive emotion regulation such as acceptance and appraisal. In this context, students who ruminate may reinterpret the situation and respond more effectively to adjustment difficulties they experience.

Rumination which has several common points with the construct of worry is best characterized as an avoidant coping strategy within the context of emotion regulation and coping (Smith & Alloy, 2009). Avoidance of private internal experiences- experiential avoidance- is detrimental as it leads individuals to move away from valued living (Hayes et al., 2005). In this regard, rumination and worry may function in the service of adjusting the university life in the short run during the first semester. The explanation behind this results might be that rumination and worry can be taken into consideration by college students as experiential avoidance strategies in the short run, which help them to feel better. However, ruminators or those students who worry too much in this case will not do better in adjusting to college in the long run. Since the nature of college life is full of stress, especially in the first semester of the college, ruminating and worrying can foster the occurrence of adjustment difficulties along with other mental health problems (Upcraft et al., 2005). Moreover, Flett, Madorsky, Hewitt, and Heisel (2002) conducted a research with 65 undergraduate students in order to investigate which dimensions of perfectionism are associated with rumination and experience of cognitive intrusions in response to stressful life events. The results indicated that ruminative thinking is associated with psychological distress in college students.

Even though there is a close association between rumination and mood disorders (Nolen- Hoeksema, 1991), it is still a contradictive issue whether rumination is a coping strategy to deal with problems in goal attainment process or it is a factor that increases the risk of depression. Thus, rumination has also been conceptualized as an attempt for problem solving and a self-regulatory strategy

in analyzing the unattained goals (Martin & Tesser, 1996). In addition, when rumination is considered as a multidimensional construct, it is possible to notice that some sub-dimensions of the rumination may reveal functional results. Reflection as a subdimension of rumination may provide help individuals to solve problems (Joorman, Dkane & Gotlib, 2006). In parallel with these research and explanations, ruminative thinking and worry may serve as an adaptive and problem solving strategy or response in the process of college adjustment.

Finally, the contradictory result for this specific hypothesis might emerge due to interaction effect of the variables in the structural model. Therefore, future research might illuminate this obscure area between the relationship of rumination, worry and university adjustment. For the overall model fit, the results of the study showed that the hypothesized structural model was supported with the data with good model fit values.

5.3. Implications for the Practice

Attending a university becomes one of the “musts in life” almost for all high school graduates more than ever. Considering the fact that the process of becoming a university student requires mostly a lot of difficulties and stress, the newcomers to university face with loads of new challenges after all sacrifices they made in order to become a part of university life. Making the transition from high school to university is a challenging process. Administrators, faculty, college counseling centers, parents, and even senior students have the responsibility to support the freshman students during this challenging period (Sun-Selişik, 2009).

The primary objective of this present study was to emphasize the importance of first-year college experience and the adjustment difficulties that freshman students face. In this regard, this study investigated the roles of psychological inflexibility, self-compassion, rumination, and worry in relation to university

adjustment in a structural model. According to the results of this current study several implications might be proposed for college counseling centers and administratives, faculty members, families, and finally for students.

One of the major findings of the present study revealed that both psychological flexibility and self-compassion were found to be the major indicators of college adjustment. Therefore, it might be important for college administratives, faculty, and families to take into account supporting the students with self-compassion and psychological flexibility skills training including but not limited to mindfulness skills, values clarification, and acceptance skills. Gilbert (2014) emphasizes the importance of learning how to cultivate compassion skills which will eventually improve not only students' well-being but also the way that they relate with others. Moreover, compassion and kindness which are very similar and usually overlapping concepts encompass a variety of sentiments such as sympathy, generosity, humanity, altruism, benevolence, and open heartedness (Gilbert, 2014). Thus, especially freshman students who experience some adjustment related problems may benefit from these compassion skills training programs.

The results of this current study revealed the importance of mindfulness and acceptance-based programs in higher education settings and specifically with students who struggle with some adjustment problems. Mindfulness and acceptance programs in college students matter due to several reasons. First of all, what acceptance and mindfulness programs offer is the chance of a transdiagnostic approach that can develop resilience skills that are applicable to the prevention of a wide range of problems and difficulties college students' experience. Second, mindfulness and acceptance work, especially for college campus settings, is flexible. Working in acceptance and mindfulness can be done individually or in groups; in classes or in therapy; over the internet or in person; via peer support or professional intervention. Third, the university staff can also benefit from these programs such as conducting Mindfulness-Based Stress

Reduction (MBSR) (Kabat-Zinn, 1990). The final reason to think acceptance and mindfulness work as particularly relevant and is needed on college campuses now, is that the world has changed rapidly. The increased use of technology such as computers and internet, smart phones, virtual reality technology and many more (Hayes, Pistorello, & Levin, 2013).

Moreover, students who suffer from various psychological problems can learn psychological flexibility skills through six core processes namely: be here and now, know what matters, do what it takes, obtain flexible perspective taking, watch your thinking, and finally open up for your experiences. Learning and applying these processes is called hexadancing (Harris, 2010). In this regard, consistent with the Harris's (2010) approach, learning six core psychological flexibility processes may be preventive for college students who experience various difficulties including adjustment difficulties.

For instance, it is also quite common in Turkey that college students experience over identification with cultural expectations around success and they cannot decenter themselves from the current adjustment problems (Renner & Foley, 2013). Considering also the fact that many college students enter the university, after a big struggle for long period of time, ACT- based approaches that also includes compassion and mindfulness skills seem fitting to the college context. Therefore, college students with adjustment issues might benefit from learning psychological flexibility skills through six core processes on hexagon.

Traditionally, college counseling centers (CCC) provide various mental health support for college students via individual and group therapy. Groups are very effective in providing therapeutic support for individuals with the sense of universality (Yalom, 2005). ACT has shown efficacy as a short-term group intervention for various problems (Zettle & Rains, 1989; Bach & Hayes, 2002). Thus, group interventions might be effective with the college students who

experience adjustment or related problems. The pro-side of applying ACT-based intervention is that it is flexible in conduct.

Additionally, ACT based treatments can be applied on-line on campuses via some structured web-based manuals which will make easier to reach more students. ACT work reduce psychological distress and promote important elements of psychological flexibility such as living a valued life, being in the present with an accepting attitude (Pistorello, 2013). Miselli, Prevedini, Pozzi, and McNally (2013) used podcasts to help college students who struggle with various problems. As a result of this study in which mindfulness and acceptance based content was delivered via podcasts, majority of students reported that the themes were relevant to them and claimed that they were helped. Similarly, web-based interventions of acceptance and mindfulness might be delivered also for students who struggle with various problems.

5.4. Implications and Recommendations for the Future Research

In this present study, psychological flexibility as the core concept of ACT, ruminative thinking worry, and self-compassion were investigated in relation to college adjustment in an interactional structural equation model. Results shown that psychological flexibility and self-compassion played fundamental roles in relation to college adjustment. On the other hand, ruminative thinking and worry did not seem to be major significant predictors of college adjustment.

Existing literature demonstrated that most of the studies used college adjustment as the outcome variable (Orbay, 2009; Sun-Selışık, 2009; Yalım, 2007). It is suggested that future research can expand this present study by using other outcome variables such as general mental health or adjustment can be used as the predictor variable.

According to Neff et al., (2007), self-compassionate people are less likely to ruminate on their negative thoughts and emotions or to suppress them. Thus, in the future studies, it might be possible to investigate the mediating effect of self-compassion in the relationship between rumination and college adjustment. This is one of the inferences that might be studied in the future, out of this interactional model test. Therefore, these studies will be able to give us the direct, indirect effects of each variable in different model tests. Furthermore, rather than college adjustment in general, in future studies the model might be tested specifically with other sub-dimensions such as academic, emotional, personal, social adjustment in order to have clearer and specific understanding of adjustment problems of the students.

Moreover, in this current study self-compassion and college adjustment scores were obtained as total scores. However, both self-compassion scale and university life scale have sub-scales and were investigated in different studies. It might be meaningful to test the model in the future by using sub-dimensions of self-compassion scale and university life scale.

Finally, this present study used correlational analysis. It is not possible to give absolute information about causality with correlational analysis. Therefore, longitudinal studies can be conducted in the future in order to understand the causal relationships between the variables of this current study.

REFERENCES

- AACU (2016). Association for American College and Universities. Retrieved from <https://www.aacu.org>.
- A-Tjak, J. G. L., Davis, M. L., Morina, N., Powers, M. B., Smiths, J. A. J., & Emmelkamp, P. M. G. (2015). A meta-analysis of the efficacy of acceptance and commitment therapy for clinically relevant mental and physical health problems. *Psychotherapy and Psychosomatics*, 84, 30-36.
- Adams, C. E., & Leary, M. R. (2007). Promoting self-compassionate attitudes toward eating among restrictive and guilty eaters. *Journal of Social and Clinical Psychology*, 26(10), 1120-1144. doi: 10.1521/jscp.26.10.1120
- Akbalık, F. G. (1998). *Bilgilendirme ve grupla psikolojik danışmanın üniversite birinci sınıf öğrencilerinin üniversiteye uyumları üzerine etkisi*. Unpublished doctoral dissertation, Ankara University, Ankara.
- Akın, A. (2010). Self-compassion and inter-personal cognitive distortions. *H.U. Journal of Education*, 39, 1-9.
- Akın, Ü., Akın, A., & Abacı, R. (2007). Öz-duyarlılık Ölçeği: Geçerlik ve güvenilirlik çalışması. Self-compassion scale: The study of validity and reliability. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 33, 1-10
- Aksu, M., & Paykoç, F. (1986). *O.D.T.Ü Kampüsünde gençlik ve sorunları*, Ankara Üniversitesi Basımevi, Ankara
- Aladağ, M., Kağnıcı, D. Y., Tuna, M. E., & Tezer, E. (2003). Üniversite yaşamı ölçeği: Ölçek geliştirme ve yapı geçerliliği üzerine bir çalışma. *Turkish Psychological Counseling and Guidance Journal*, 2(20).

- Alfred-Liro, C., & Sigelman, C. (1998). Sex differences in self-concept and symptoms of depression during the transition to college. *Journal of Youth and Adolescence*, 27(2), 219-244.
- Alkan, N. (2014). Humor, loneliness and acceptance: Predictors of university drop-out intentions. *Erpa International Congress on Education (Erpa Congress 2014)*, 152, 1079-1086. doi: 10.1016/j.sbspro.2014.09.278
- Alloy, L. B. Abramson, L. Y. Hogan, M. E. Whitehouse, W. G. Rose, D. T. Robinson, M. S., et al., (2000). The temple-Wisconsin cognitive vulnerability to depression project: Lifetime history of axis I psychopathology in individuals at high and low cognitive risk for depression. *Journal of Abnormal Psychology*. 109 (3), 403-418.
- Alpan, A. (1992). *Cumhuriyet Üniversitesi ve Erciyes Üniversitesi Fen ve Edebiyat Fakültesi öğrencilerinde çevreye ve üniversiteye uyum sorunları*. (Yayımlanmamış Yüksek Lisans Tezi), Cumhuriyet Üniversitesi, Sivas.
- Alperden, I. N. (1993). *Some personal, social and familial factors that influence the adjustment levels of METU students*. (Unpublished Master Thesis), Hacettepe University, Ankara.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC
- Arbuckle, C., & Wothke, W. (1999). *AMOS 4 user's reference guide*. Chicago: Smallwaters Corp
- Arı, R. (1989). *Üniversite öğrencilerinin baskın ben durumları ile bazı özlük niteliklerinin, ben durumlarına, atılganlık ve uyum düzeylerine etkisi* (Yayımlanmamış Doktora Tezi), Hacettepe Üniversitesi, Ankara.
- Arnett, J. J. (2000). Emerging adulthood - A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037//0003-066x.55.5.469

- Aslan, S. (2015). Üniversite Yaşamına Uyum Ölçeği'nin geliştirilmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 30(4), 132-145.
- Aspinwall, L. G., & Taylor, S. E. (1992). Modeling cognitive adaptation: A Longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology*, 63(6), 989-1003. doi: 10.1037/0022-3514.63.6.989
- Astin, A. W. (1970a). Methodology of research on college impact .2. *Sociology of Education*, 43(4), 437-&. Doi: 10.2307/2111842
- Astin, A. W. (1970b). Methodology of research on college impact, .1. *Sociology of Education*, 43(3), 223-254. doi: 10.2307/2112065
- Astin, A. W. (1999). Student involvement: A developmental theory for higher education (Reprinted from Journal of College Student Development, July, 1984). *Journal of College Student Development*, 40(5), 518-529.
- Azmitia, M., Syed, M., & Radmacher, K. (2013). Finding your niche: Identity and emotional support in emerging adults' adjustment to the transition to college. *Journal of Research on Adolescence*, 23(4), 744-761. doi: 10.1111/Jora.12037
- Baker, R. W., & Siryk, B. (1984). Measuring academic motivation of matriculating college-freshmen. *Journal of College Student Development*, 25(5), 459-464.
- Baker, W. B., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, 31(2), 179-189.
- Barefoot, B. O. (2000). The First-year experience are we making it any better? *About Campus*, 4(6), 12-18.
- Batten, S. V., & Hayes, S. C. (2005). Acceptance and commitment therapy in the treatment of comorbid substance abuse and post-traumatic stress disorder: a case study. *Clinical Case Studies*, 4(3), 246-262.

- Becker, M. (2008). *Personality and social network variables as predictors of adjustment: The transition from high school to college*. (Unpublished Doctoral Dissertation). Boston University, Boston, MA, US.
- Bentler, P. M., & Yuan, K. H. (1999). Structural equation modeling with small samples: Test statistics. *Multivariate Behavioral Research, 34*(2), 181-197.
- Berry, D., Bass, C. P., Shimp-Fassler, C., & Scoop, P. (2013). Risk, religiosity, and emerging adulthood: description of Christian, Jewish, and Muslim university students at entering the freshman year. *Mental Health, Religion & Culture, 19*(7), 695-710. doi: 10.1080/13674676.2012.715145.
- Bettencourt, B. A., Charlton, K., Eubanks, J., Kernahan, C., & Fuller, B. (1999). Development of collective self-esteem among students: Predicting adjustment to college. *Basic and Applied Social Psychology, 21*(3), 213-222. doi: 10.1207/S15324834basp2103_5
- Biglan, A., Hayes, S. C., & Pistorello, J. (2008). Acceptance and commitment: Implications for prevention science. *Prevention Science, 9*(3), 139-152. doi: 10.1007/s11121-008-0099-4
- Blackledge, J. T., & Lillis, J. (2005). *Having a thought versus buying a thought: Get out of your mind into your life*. Oakland, CA: The New Harbinger.
- Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S. M., & Olfson, M. (2008). Mental health of college students and their non-college-attending peers results from the national epidemiologic study on alcohol and related conditions. *Archives of General Psychiatry, 65*(12), 1429-1437. doi: 10.1001/archpsyc.65.12.1429
- Bland, H. W., Melton, B. F., Welle, P., & Bigham, L. (2012). Stress tolerance: New challenges for millennial college students. *Stress Tolerance and Millennials: College Student Journal, 362- 375*.

- Bluth, K., & Blanton, P. W. (2014). Mindfulness and self-compassion: Exploring pathways to adolescent emotional well-being. *Journal of Child and Family Studies, 23*(7), 1298-1309. doi: 10.1007/s10826-013-9830-2
- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire-II: A Revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy, 42*(4), 676-688.
- Boone, M. S. (2013). Acceptance and Commitment Therapy (ACT): Processes and application. In P. Jacqueline (Ed.), *Mindfulness and acceptance for counseling college students: Theory and practical applications for intervention, prevention and outreach*. California: New Harbinger.
- Borkovec, T. D., Robinson, E., Pruzinsky, T., & Depree, J. A. (1983). Preliminary exploration of worry - some characteristics and processes. *Behaviour Research and Therapy, 21*(1), 9-16. doi: 10.1016/0005-7967(83)90121-3
- Borkovec, T. D., Ray, W. J., & Stöber, J. (1998). Worry: A cognitive phenomenon intimately linked to affective, physiological, and interpersonal behavioral processes. *Cognitive Therapy and Research, 22*, 561-576.
- Brinker, J. K., & Dozois, D. J. A. (2009). Ruminative thought style and depressed mood. *Journal of Clinical Psychology, 65*(1), 1-19. Doi: 10.1002/Jclp.20542
- Brisette, I., Scheier, M. F., & Carver, C. S. (2002). The role of optimism in social network development, coping, and psychological adjustment during a life transition. *Journal of Personality and Social Psychology, 82*(1), 102-111. doi: 10.1037//0022-3514.82.1.102
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human-development research perspectives. *Developmental Psychology, 22*(6), 723-742. doi: 10.1037//0012-1649.22.6.723

- Bronfenbrenner, U. (2005). *Making human beings human: Biological perspectives on human development*. California: Sage Publications.
- Brooks, J. H., & Dubois, D. L. (1995). Individual and environmental predictors of adjustment during the first year of college. *Journal of College Student Development, 36*(4), 347-360.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822-848. doi: 10.1037/0022-3514.84.4.822
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research* (First ed.). New York: The Guilford Press.
- Buote, V. M., Pancer, S. M., Pratt, M. V., Adams, G., Birnie-Lefcovitch, S., Polivy, J., & Wintre, M. G. (2007). The Importance of friends: Friendship and adjustment among 1st-year university students. *Journal of Adolescent Research, 22*(6).
- Butler, L. D., & Nolen-Hoeksema, S. (1994). Gender differences in responses to depressed mood in a college sample. *Sex Roles, 30*, 331-346.
- Bülbül, T., & Acar-Güvendir, M. (2014). Üniversite birinci sınıf öğrencilerinin yükseköğretim yaşamına uyum düzeylerinin incelenmesi. *Eğitim Bilimleri Araştırma Dergisi, 4*(1). doi: 10.12973/jesr.2014.41.21
- Byrne, B. M. (1989). *A primer of LISREL: Basic applications and programming for confirmatory factor analytic models*. New York: Springer-Verlag.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York, USA: Routledge.

- Cantor, M., Noreem, J. K., Niedenthal, P. M., Langston, C. A., & Brower, A. M. (1987). Life tasks, self-concept ideals, and cognitive strategies in a life transition. *Journal of Personality and Social Psychology*, *53*, 1178-1191.
- Chataway, C. J., & Berry, J. W. (1989). Acculturation experiences, appraisal, coping, and adaptation - a comparison of Hong-Kong Chinese, French, and English students in Canada. *Canadian Journal of Behavioural Science-Revue Canadienne Des Sciences Du Comportement*, *21*(3), 295-309. doi: 10.1037/H0079820
- Chawla, N., & Ostafin, B. (2007). Experiential avoidance as a functional dimensional approach to psychopathology: An empirical review. *Journal of Clinical Psychology*, *63*(9), 871-890. doi: 10.1002/jclp.20400
- Chickering, A. W. (1969). *Education and identity*. San Francisco: Jossey-Bass.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity*. San Francisco: Jossey-Bass.
- Clinciu, A. (2013). Adaptation and stress for the first year university students. *Procedia Social and Behavioral Sciences*, *78*, 718-722. doi: 10.1016/j.sbspro.2013.04.382
- Cohen, L., Manion, L., & Morrison, K. L. (2011). *Research methods in education* (7th ed.). New York: Routledge.
- Crosby, J. M., Armstrong, A. B., Nafziger, M. A., & Twohig, M. P. (2013). Using acceptance and commitment therapy (ACT) to treat perfectionism in college students. In P. Jacqueline (Ed.), *Mindfulness and acceptance for counseling college students: theory and practical applications for intervention, prevention, and outreach*. CA: New Harbinger.
- Cutrona, C. E. (1982). Transition to college: Loneliness and the process of social adjustment. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A Sourcebook of Current Theory, Research and Therapy* (pp. 291-309). New York: Wiley- Interscience.

- Darith, J. (2013). *Associations among self-compassion, stress, and eating behavior in college freshmen*. (Unpublished Master Thesis), Arizona State University, AZ, USA.
- Davey, G. C. L., & Wells, A. (2006). *Worry and its psychological disorders: Theory, assessment and treatment*. UK: Wiley.
- De-Chen, J. (2009). *Understanding Depression Among First-Semester College Students: The Predictive Power of Perfectionism, Rumination, and Self-Esteem* (Unpublished Doctoral Thesis), University of South Carolina, CA, USA.
- Deniz, M. E., Kesici, Ş., & Sümer, A. S. (2008). The validity and reliability of the Turkish version of the self-compassion scale *Social Behavior and Personality*, 36, 1151-1160.
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46(3), 223-236. doi: 10.1353/csd.2005.0023
- Denson, N. Bowman, N. (2015). The development and validation of an instrument assessing student- institution fit. *Assessment & Evaluation in Higher Education* 40 (8), 1104- 1122. Doi: 10.1080/02602938.2014.970513.
- Eifert, G. H., Forsyth, J. P., Arch, J., Espejo, E., Keller, M., & Langer, D. (2009). Acceptance and Commitment Therapy for anxiety disorders: Three case studies exemplifying a unified treatment protocol. *Cognitive and Behavioral Practice*, 16(4), 368-385.
- Eisenberg, D., Golberstein, E., & Hunt, J. B. (2009). Mental health and academic success in college. *B E Journal of Economic Analysis & Policy*, 9(1).
- Ekşi, A. (1982). *Gençlerimiz ve sorunları*. İstanbul Üniversitesi Yayınları. 2790, İstanbul

- Enochs, W. K., & Roland, C. B. (2006). Social adjustment of the college freshmen: The importance of gender and living environment. *College Student Journal*, 40(1), 63-73.
- Erdur-Baker, O., Aberson, C. L., Barrow, J. C., & Draper, M. R. (2006). Nature and severity of college students' psychological concerns: A comparison of clinical and nonclinical national samples. *Professional Psychology-Research and Practice*, 37(3), 317-323. doi: 10.1037/0735-7028.37.3.317
- Erikson, E. (1959). *Identity and life cycle: Psychological issues monograph*. (Vol. 1). New York: International Universities Press.
- Evans, N. J. (1996). *Theories of student development. A handbook for profession*. San Francisco: Jossey-Bass.
- Evans, N. J., Forney, D. S., & Guido- DiBrito, F. (1998). *Student development in college: Theory, research, and practice*. San Francisco: Jossey-Bass.
- Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students*. San Francisco: Jossey-Bass.
- Feldman, M. J. (1993). Factors associated with one-year retention in a community- college. *Research in Higher Education*, 34(4), 503-512. doi: 10.1007/Bf00991857
- Field, A. (2009). *Discovering statistics using SPSS*. London: SAGE.
- Fledderus, M., Bohlmeijer, E. T., Pieterse, M. E., & Schreurs, K. M. G. (2012). Acceptance and Commitment Therapy as guided self-help for psychological distress and positive mental health: A randomized controlled trial. *Psychological Medicine*, 42(3), 485-495. doi: Doi 10.1017/S0033291711001206

- Flett, G. L., Madorsky, D., Hewitt, P. L., & Heisel, M. J. (2002). Perfectionism cognitions, rumination, and psychological distress. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 4(1), 33-47.
- Forman, E. M., Herbert, J. D., Moitra, E., Yeomans, P. D., & Geller, P. A. (2007). A randomized controlled effectiveness trial of acceptance and commitment therapy and cognitive therapy for anxiety and depression. *Behavior Modification*, 31(6), 772-799. doi: 10.1177/0145445507302202
- Fraenkel, J., Wallen, N., & Hyun, H. (2012). *How to design and evaluate research in education* (8th ed.). New York: McGraw Hill.
- Franklin, K. K., Cranston, V., Perry, S. N., Purtle, D. K., & Robertson, B. E. (2002). Conversations with metropolitan university first-year students. *Journal of the First-Year Experience & Students in Transition*, 14(2), 57-88.
- Fresco, D. M., Frankel, A. N., Mennin, D. S., Turk, C. L., & Heimberg, R. G. (2002). Distinct and overlapping features of rumination and worry: The relationship of cognitive production to negative affective states. *Cognitive Therapy and Research*, 26(2), 179-188. doi: 10.1023/A:1014517718949
- Fresco, D. M., Mennin, D. S., Heimberg, R. G., & Turk, C. L. (2003). Using the Penn State Worry Questionnaire to identify individuals with generalized anxiety disorder: A receiver operating characteristic analysis. *Journal of Behavior Therapy and Experimental Psychiatry*, 34, 283-291.
- Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development*, 48(3), 259-274. doi: 10.1353/csd.2007.0024
- Gardner, F. L., & Moore, Z. E. (2004). A mindfulness-acceptance-commitment-based approach to athletic performance enhancement: Theoretical consideration. *Behavior Therapy*, 35, 707-723.

- Gardner, J. N. (1986). The freshman year experience. *College and University*, 61(4), 261-274.
- Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences*. 30 (8). 1311-1327.
- Gerdes, H., Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: a longitudinal-study of retention. *Journal of Counseling and Development*. 72 (3), 281- 288.
- Germer, C. K. (2009). *The mindful path to self-compassion: freeing yourself from destructive thoughts and emotions* (1st ed.). New York, USA: The Guilford Press.
- Gilbert, P. (2004). *Evolutionary theory and cognitive therapy*. New York: Springer.
- Gilbert, P. (2005). *Compassion: Conceptualisations, research and use in psychotherapy*. Sussex: Routledge.
- Gilbert, P. (2009). *The compassionate mind: A new approach to life's challenges*. CA: New Harbinger.
- Gilbert, P. (2014). *Mindful compassion: How the science compassion can help you understand your emotions, live in the present, and connect deeply with others*. CA: New Harbinger.
- Glidden-Tracey, C. (2005). *Counseling and therapy with clients who abuse alcohol or other drugs*. New Jersey: Erlbaum.
- Gloster, A. T., Klotsche, J., Chaker, S., Hummel, K. V., & Hoyer, J. (2011). Assessing psychological flexibility: What does it add above and beyond existing constructs? *Psychological Assessment*, 23(4), 970-982.

- Gülmez, Y. (1992). *Yüksek öğretimde öğrenci başarısını etkileyen etmenler*, Gaziantep Üniversitesi Basımevi, Gaziantep
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.): New Jersey: Prentice Hall.
- Halamandaris, K. F., & Power, K. G. (1999). Individual differences, social support and coping with the examination stress: A study of the psychosocial and academic adjustment of first year home students. *Personality and Individual Differences*, 26(4), 665-685. doi: 10.1016/S0191-8869(98)00172-X
- Hall, C. W., Row, K. A., Wuensch, K. L., & Godley, K. R. (2013). The Role of self-compassion in physical and psychological well-being. *The Journal of Psychology*, 147(4), 311-323.
- Hammen, C. L. (1980). Depression in college-students - Beyond the Beck Depression Inventory. *Journal of Consulting and Clinical Psychology*, 48(1), 126-128. doi: 10.1037//0022-006x.48.1.126
- Harris, R. (2008). *The Happiness trap: How to stop struggling and start living: A Guide to ACT*. Boston, MA: Trumpeter.
- Harris, R. (2010). *Getting unstuck in ACT: A clinician's guide to overcome common obstacles in Acceptance and Commitment Therapy*. California: New Harbinger.
- Hayes, S. C. (2004). Acceptance and Commitment Therapy, Relational Frame Theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, 35(4), 639-665. doi: 10.1016/S0005-7894(04)80013-3
- Hayes, S. C., Pistorello, J., & Levin, M. E. (2013). Mindfulness and acceptance in college students: Why it matters. In P. Jacqueline (Ed.), *Mindfulness and acceptance for counseling college students: Theory and practical applications for intervention, prevention and outreach*. California: New Harbinger.

- Hayes, S. C., & Smith, S. (2005). *Get out of your mind into your life*. Oakland, CA: The New Harbinger.
- Hayes, S. C., Strosahl, K., Wilson, K. G., Bissett, R. T., Pistorello, J., Toarmino, D., & McCurry, S. M. (2004). Measuring experiential avoidance: A preliminary test of a working model. *Psychological Record, 54*(4), 553-578.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. New York: Guilford Press.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). *Acceptance and commitment therapy: the process and practice of mindful change*. New York: Guilford Press.
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64*(6), 1152-1168. doi: 10.1037//0022-006x.64.6.1152
- Hazlett-Stevens, H., Craske, M. G., Mayer, E. A., Chang, L., & Naliboff, B. D. (2003). Prevalence of irritable bowel syndrome among university students: The roles of worry, neuroticism, anxiety sensitivity and visceral anxiety. *Journal of Psychosomatic Research, 55*, 501-505.
- Hoff, E. R., & Muehlenkamp, J. J. (2009). Nonsuicidal self-injury in college students: The role of perfectionism and rumination. *Suicide and Life-Threatening Behavior, 39*(6).
- Hofmann, S. G., & Asmundson, G. J. G. (2008). Acceptance and mindfulness-based therapy: New wave or old hat? *Clinical Psychology Review, 28*(1), 1-16. doi: 10.1016/j.cpr.2007.09.003

- Houston, B. K. (1971). Sources, effects, and, individual vulnerability of psychological problems for college students. *Journal of Counseling Psychology*, 18 (2), 157- 165. Doi: 10. 1037/h0030622.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, 6, 1-55.
- Inal, S., Kelleci, M., & Canbulat, N. (2012). Internet use and its relation with the academic performance for a sample of high school students. *Healthmed*, 6(5), 1643-1650.
- İkiz, F. E., Savcı, M., & Yörük, C. (2015). Problemlı internet kullanımı ile üniversite yaşamına uyum ilişkisi. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 4(1), 34-50. doi: 10.14686/BUEFAD.2015111013
- İmamođlu, E. O., & Yasak- Gültekin, Y. (1993). Önerilen dengelenmiş toplumsal birey modeli ışığında üniversite gençliğın sorunları: 1982-1992 döneminde yayınlanan araştırmalara ilişkin bir değerlendirme, yorum ve öneriler. *Türk Psikoloji Dergisi*. 8 (30). 27- 41.
- James, D. (2013). *Associations among self-compassion, stress, and eating behavior in college freshmen*. (Unpublished Master Thesis). Arizona State University, AZ.
- Jing, K. (2012). A study of college students' personality, self-compassion and anxiety. *International Journal of Psychology*, 47, 405-405.
- Johnston, B. (2010). *The first year at university teaching students in transition* (1st ed.). Berkshire, England: McGraw Hill.
- Joiner, T. E. (1997). Shyness and low social support as interactive diatheses, with loneliness as mediator: Testing an interpersonal-personality view of vulnerability to depressive symptoms. *Journal of Abnormal Psychology*, 106(3), 386-394.

- Jorgenson-Earp, C. R., & Staton, A. Q. (1993). Student metaphors for the college freshmen experience. *Communication Education, 42*, 123-141.
- Jorgensen, R. S., & Dusek, J. B. (1990). Adolescent adjustment and coping strategies. *Journal of Personality, 58*(3), 503-513. doi: 10.1111/j.1467-6494.1990.tb00240.x
- Jorman, J., Dkane, M. & Gotlib, I. H. (2006). Adaptive and maladaptive components of rumination. *Behaviour Therapy, 37*, 269- 280.
- Kabat-Zinn, J. (1990). *Full catastrophe living: using the wisdom of your body and mind to face stress, pain, and illness* (15th ed.). New York: Bantam Dell.
- Kadison, R. D., & DiGeronimo, T. F. (2004). *College of the overwhelmed: the campus mental health crisis and what we must do about it*. San Francisco: John Wiley.
- Kağnıcı, D. Y. (2012). The role of multicultural personality in predicting university adjustment of international students in Turkey. *International Journal for the Advancement of Counselling, 34*(2), 174-184. doi: 10.1007/s10447-012-9149-5
- Karatepe, H., Yavuz, F., & Turkcan, A. (2013). Ruminatif düşünme biçimi ölçeğinin Türkçe geçerlik ve güvenilirliği. *Bulletin of Clinical Psychopharmacology, 1*. doi: 10.5455/bcp.20121130122311
- Kashdan, T. B. & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review, 30* (7), 865-878.
- Katz, S. (2008). *Individual and environmental factors associated with college adjustment*. (Unpublished Doctoral Thesis), Wayne State University, Detroit, Michigan.

- Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions' of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62(6), 593-602. doi: 10.1001/archpsyc.62.6.593
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guilford Press.
- Kneipp, L. B., Kelly, K. E., & Cyphers, B. (2009). Feeling at peace with college: Religiosity, spiritual well-being, and college adjustment. *Individual Differences Research* 7 (3), 188-196.
- Krumrei-Mancuso, E. J., Newton, F. B., Kim, E., & Wilcox, D. (2013). Psychosocial factors predicting first-year college student success. *Journal of College Student Development*, 54(3), 247-266.
- Lamis, D. A., & Dvorak, R. D. (2014). Mindfulness, nonattachment, and suicide rumination in college students: The mediating role of depressive symptoms. *Mindfulness*, 5(5), 487-496. doi: 10.1007/s12671-013-0203-0
- Lappalainen, P., Granlund, A., Siltanen, S., Ahonen, S., Vitikainen, M., Tolvanen, A., & Lappalainen, R. (2014). ACT Internet-based vs face-to-face? A randomized controlled trial of two ways to deliver Acceptance and Commitment Therapy for depressive symptoms: An 18-month follow-up. *Behaviour Research and Therapy*, 61, 43-54. doi: 10.1016/j.brat.2014.07.006
- Lazarus, S. L., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lee, D., Olson, E. A., Locke, B., Michelson, S. T., & Odes, E. (2009). The effects of college counseling services on academic performance and retention. *Journal of College Student Development*, 50(3), 305-319.

- Levin, M. E., Lillis, J., Seeley, J., Hayes, S. C., Pistorello, J., & Biglan, A. (2012). Exploring the relationship between experiential avoidance, alcohol use disorders, and alcohol-related problems among first-year college students. *Journal of American College Health, 60*(6), 443-448. doi: 10.1080/07448481.2012.673522
- Levin, M. E., MacLane, C., Daflos, S., Seeley, J. R., Hayes, S. C., Biglan, A., & Pistorello, J. (2014). Examining psychological inflexibility as a transdiagnostic process across psychological disorders. *Journal of Contextual Behavioral Science, 3*(3), 155-163. doi: 10.1016/j.jcbs.2014.06.003.
- Levin, M. E., Pistorello, J., Seeley, J. R., & Hayes, S. C. (2014). Feasibility of a prototype web-based acceptance and commitment therapy prevention program for college students. *Journal of American College Health, 62*(1), 20-30. doi: 10.1080/07448481.2013.843533
- Lockard, A. J., Hayes, J. A., Neff, K., & Locke, B. D. (2014). Self-compassion among college counseling center clients: An examination of clinical norms and group differences. *Journal of College Counseling, 17*(3), 249-259. doi: 10.1002/j.2161-1882.2014.00061.x
- Lokitz, B. D., & Sprandel, H. Z. (1976). 1st year - look at freshman experience. *Journal of College Student Development, 17*(4), 274-279.
- Lopez, A. (2000). Acceptance and Commitment Therapy (ACT) in panic disorder with agoraphobia: A case study. *Psychology in Spain, 4*(1), 120-128.
- Lopez, F., & Gormley, B. (2002). Stability and change in adult attachment style over the first-year college transition: relations to self-confidence, coping, and distress patterns *Journal of Counseling Psychology, 49*(3), 355-364.
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review, 32*(6), 545-552. doi: 10.1016/j.cpr.2012.06.003

- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods, 1*(2), 130-149. doi: 10.1037//1082-989x.1.2.130
- Marshall, E. J., & Brockman, R. N. (2016). The relationships between psychological flexibility, self-compassion, and emotional well-being. *Journal of Cognitive Psychotherapy, 30*(1), 60-72. doi: 10.1891/0889-8391.30.L60
- Martin, L. L., Tesser, A., & McIntosh, W. D. (1993). Wanting by not having: The effects of unattained goals on thoughts and feelings. In D. Wegner, & C. Papageorgiu (Eds.), *Handbook of Mental Control Englewood cliffs*, New Jersey: Prentice Hall.
- Martin, L. L., Tesser, A., (1996). Some ruminative thoughts. In R.S. Wyer (Ed.), *Advances in Social Cognition*. Manwah: Lawrence Erlbaum Associates.
- Masuda, A., & Tully, E. C. (2011). The role of mindfulness and psychological flexibility in somatization, depression, anxiety, and general psychological distress in a nonclinical college sample. *Journal of Evidence-Based Complementary & Alternative Medicine, 17*(1), 66-71. doi: 10.1177/2156587211423400
- McCracken, L. M. (2013). Committed action: an application of the psychological flexibility model to activity patterns in chronic pain. *Journal of Pain, 14*(8), 828-835. doi: 10.1016/j.jpain.2013.02.009
- McCracken, L. M., Sato, A., & Taylor, G. J. (2013). A trial of a brief group-based form of Acceptance and Commitment Therapy (ACT) for chronic pain in general practice: Pilot outcome and process results. *Journal of Pain, 14*(11), 1398-1406. doi: 10.1016/j.jpain.2013.06.011
- Mercan, Ç. S., & Yıldız, S. A. (2011). Eğitim fakültesi birinci sınıf öğrencilerinin üniversiteye uyum düzeylerinin farklı değişkenler açısından incelenmesi. *Hasan Ali Yücel Eğitim Fakültesi Dergisi, 16*, 135-154.

- Meunier, B., Atmaca, S., Ayrancı, E., Gökdemir, B. P., Uyar, T., & G., B. (2014). Psycho-metric properties of the Turkish version of the Acceptance and Action Questionnaire-II. *Journal of Evidence-Based Psychotherapies*, 14(2), 179-196.
- Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy*, 28(6), 487-495. doi: 10.1016/0005-7967(90)90135-6
- Michl, L. C., McLaughlin, K. A., Shepherd, K., & Nolen-Hoeksema, S. (2013). Rumination as a mechanism linking stressful life events to symptoms of depression and anxiety: Longitudinal evidence in early adolescents and adults. *Journal of Abnormal Psychology*, 122(2), 339-352. doi: 10.1037/a0031994
- Miller, T. K., & Winston, R. B. (1990). Assessing development from a psychosocial perspective. In D. G. Creamer (Ed.), *College student development: Theory and practice for the 1990s* (pp. 99-126). Alexandria, Virginia: American College Personnel Association.
- Miselli, G., Prevedini, A. B., Pozzi, F., & McNally, J. (2013). Podcasts to help students overcome academic barriers in Australia and Italy. In J. Pistorello (Ed.), *Mindfulness and acceptance for counseling college students: Theory and practical applications for intervention, prevention and outreach*. California: New Harbinger.
- Molina, S., & Borkovec, T. D. (1994). The Penn State Worry Questionnaire: Psychometric properties and associated characteristics. In D. F. Tallis (Ed.), *Worrying: Perspectives on theory, assessment, and treatment* (pp. 265-283). Chichester, UK: JohnWiley & Sons Ltd.
- Mooney, S. P., Sherman, M. F., & Lopresto, C. T. (1991). Academic locus of control, self-esteem, and perceived distance from home as predictors of college adjustment. *Journal of Counseling and Development*, 69(5), 445-448.
- Mor, N., & Winquist, J. (2002). Self-focused attention and negative affect: A meta-analysis. *Psychological Bulletin*. 128 (4), 638-662.

- Morrison, R., & O'Connor, R. C. (2005). Predicting psychological distress in college students: the role of rumination and stress. *Journal of Clinical Psychology, 61*(4), 447-460. doi: 10.1002/jclp.20021
- Morse, C. (2013). Teaching mindfulness and acceptance within college communities to enhance peer support. In J. Pistorello (Ed.), *Mindfulness and acceptance for counseling college students: Theory and practical applications for intervention, prevention and outreach*. California: New Harbinger.
- Morton, S., Mergler, A., & Boman, P. (2014). Managing the transition: The Role of optimism and self-efficacy for first-year Australian university students. *Australian Journal of Guidance and Counselling, 24*(1), 90-108. doi: 10.1017/Jgc.2013.29
- Mounts, N. S., Valentiner, D. P., Anderson, K. L., & Boswell, M. K. (2006). Shyness, sociability, and parental support for the college transition: Relation to adolescents' adjustment. *Journal of Youth and Adolescence, 35*(1), 71-80. doi: 10.1007/s10964-005-9002-9
- Murphy, M. C., & Archer, J. (1996). Stressors on the college campus: A comparison of 1985 and 1993. *Journal of College Student Development, 37*(1), 20-28.
- Muto, T., Hayes, S. C., & Jeffcoat, T. (2011). The Effectiveness of Acceptance and Commitment Therapy, bibliotherapy for enhancing the psychological health of Japanese college students living abroad. *Behavior Therapy, 42*(2), 323-335. doi: 10.1016/j.beth.2010.08.009
- Neely, M. E., Schallert, D. L., Mohammed, S. S., Roberts, R. M., & Chen, Y. J. (2009). Self-kindness when facing stress: The role of self-compassion, goal regulation, and support in college students' well-being. *Motivation and Emotion, 33*(1), 88-97. doi: 10.1007/s11031-008-9119-8
- Neff, K. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223-250. doi:15298860390209035

- Neff, K. (2011). *The proven power of being kind to yourself: Self-compassion*. New York: Harper Collins.
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223-250. doi: 10.1080/15298860309027
- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2(2), 85-101. doi: 10.1080/15298860390129863
- Neff, K. D., & Beretvas, S. N. (2013). The role of self-compassion in romantic relationships. *Self and Identity*, 12(1), 78-98. doi: 10.1080/15298868.2011.639548
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 69(1), 28-44. doi: 10.1002/Jclp.21923
- Neff, K. D., Hsieh, Y. P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4(3), 263-287. doi: 10.1080/13576500444000317
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41(1), 139-154. doi: 10.1016/j.jrp.2006.03.004
- Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, 9(3), 225-240. doi: 10.1080/15298860902979307
- Neff, K. D., & Pommier, E. (2013). The Relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity*, 12(2), 160-176. doi: 10.1080/15298868.2011.649546

- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality, 41*(4), 908-916. doi: 10.1016/j.jrp.2006.08.002
- Nevid, J. S., & Rathus, S. A. (2007). *Psychology and the challenges of life*. New Jersey: John Wiley & Sons.
- Njus, D. M., & Brockway, J. H. (1999). Perceptions of competence and locus of control for positive and negative outcomes: predicting depression and adjustment to college. *Personality and Individual Differences, 26*(3), 531-548. doi: 10.1016/S0191-8869(98)00169-X
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology, 100*, 569-582.
- Nolen-Hoeksema, S., & Jackson, B. (2001). Mediators of the gender difference in rumination. *Psychology of Women Quarterly, 25*, 37-47.
- Nolen-Hoeksema, S. (1998). The other end of the continuum: The costs of rumination. *Psychological Inquiry, 9*(3), 216-219. doi: DOI 10.1207/s15327965pli0903_5
- Nolen-Hoeksema, S., Stice, E., Wade, E., & Bohon, C. (2007). Reciprocal relations between rumination and bulimic, substance abuse, and depressive symptoms in female adolescents. *Journal of Abnormal Psychology, 116*(1), 198-207. doi: 10.1037/0021-843X.116.1.198
- Orbay, Ö. (2009). *Resilience /Vulnerability Factors as Predictors of Turkish University Students' Adjustment to College*. (Unpublished Doctoral Thesis), Middle East Technical University, Ankara.
- Ost, L. G. (2008). Efficacy of the third wave of behavioral therapies: A systematic review and meta-analysis. *Behaviour Research and Therapy, 46*(3), 296-321. doi: 10.1016/j.brat.2007.12.005

OSYM, (2015). 2015 LYS sonuçlarına göre sayısal bilgiler belgesi. Retrieved From: <http://www.osym.gov.tr/belge/1-23564/2015-lys-sonuclarina-iliskin-sayisal-bilgiler.html>

Panori, S. A., Wong, E. H., Kennedy, A. L., & King, J. R. (1995). A Pilot project on college-students satisfaction and self-concept. *Psychological Reports*, 77(1), 255-258.

Pantages, T. J., & Creedon, C. F. (1978). Studies of college attrition - 1950-1975. *Review of Educational Research*, 48(1), 49-101. doi: 10.3102/00346543048001049

Paolini, L., Alejandro, P. Y., & William, E. K. (2006). Worry and life satisfaction among college students. *Individual Differences Research*, 4(5), 331-339.

Parker, B. J., Hernandez, D. H., & Sperry, J. A. (2003). Valued directions: Acceptance and Commitment Therapy in the treatment of alcohol dependence. *Cognitive and Behavioral Practice*, 10, 278-383.

Pascarella, E. T., & Terenzini, P. T. (1979). Student-faculty informal contact and college persistence - further investigation. *Journal of Educational Research*, 72(4), 214-218.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (2nd ed.). CA: Jossey Bass.

Pasha, H. S., & Munaf, S. (2013). Relationship of self-esteem and adjustment in traditional university students. *Procedia - Social and Behavioral Sciences*, 84, 999-1004. doi: 10.1016/j.sbspro.2013.06.688

Paul, E. L., & Brier, S. (2001). Friendsickness in the transition to college: Precollege predictors and college adjustment correlates. *Journal of Counseling and Development*, 79(1), 77-89.

- Pauley, G., & McPherson, S. (2010). The experience and meaning of compassion and self-compassion for individuals with depression or anxiety. *Psychology and Psychotherapy-Theory Research and Practice*, 83(2), 129-143. doi: 10.1348/147608309X471000
- Perera, H. N., & McIlveen, P. (2014). The role of optimism and engagement coping in college adaptation: A career construction model. *Journal of Vocational Behavior*, 84(3), 395-404. doi: 10.1016/j.jvb.2014.03.002
- Pistorello, J. (2013). *Mindfulness and acceptance for counseling college students. Theory and practical applications for intervention prevention and outreach*. Oakland, CA: New Harbinger.
- Pistorello, J., Fruzzetti, A. E., MacLane, C., Gallop, R., & Iverson, K. M. (2012). Dialectical Behavior Therapy (DBT) applied to college students: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 80(6), 982-994. doi: 10.1037/a0029096
- Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality and psychological adjustment during the transition to college. *Journal of Experimental Education*, 76(4), 343-361. doi: 10.3200/Jexe.76.4.343-362
- Pritchard, M. E., Wilson, G. S., & Yamnitz, B. (2007). What predicts adjustment among college students? A longitudinal panel study. *Journal of American College Health*, 56(1).
- Raes, F. (2010). Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. *Personality and Individual Differences*, 48(6), 757-761. doi: 10.1016/j.paid.2010.01.023
- Rausch, J. L., & Hamilton, M. W. (2006). Goals and distractions: explanations of early attrition from traditional university freshmen. *The Qualitative Report*, 11, 317-334.

- Renner, P., & Foley, E. (2013). Mindfulness-based cognitive therapy (MBCT) and Acceptance and Commitment Therapy (ACT) at a college counseling and psychological service. In J. Pistorello (Ed.), *Mindfulness and acceptance for counseling college students: Theory and practical applications for intervention, prevention and outreach*. Oakland, CA: New Harbinger.
- Rodgers, R. F. (1980). Theories underlying student development. In D. G. Creamer (Ed.), *Student development in higher education* (pp. 10-95). Cincinnati, OH: American College Personnel Association.
- Roth, A., & Fonagy, P. (2005). *What works for whom? A Critical review of psychotherapy research*. New York: Guilford Press.
- Santrock, J. W. (2006). *Human adjustment*. New York: McGraw Hill.
- Sasaki, M., & Yamasaki, K. (2007). Stress coping and the adjustment process among university freshmen. *Counselling Psychology Quarterly*, 20(1), 51-67. doi: 10.1080/09515070701219943
- Scent, C. L., & Boes, S. R. (2014). Acceptance and Commitment Training: A brief intervention to reduce procrastination among college students. *Journal of College Student Psychotherapy*, 28(2), 144-156. doi: 10.1080/87568225.2014.883887
- Schwartz, J. A. J., & Koenig, L. J. (1996). Response styles and negative affect among adolescents. *Cognitive Therapy and Research*, 20(1), 13-36. doi: 10.1007/Bf02229241
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling* (2nd ed.). New Jersey: Lawrence Erlbaum Associates.
- Seegerstrom, S. C., Tsao, J. C. I., Alden, L. E., & Craske, M. G. (2000). Worry and rumination: Repetitive thought as a concomitant and predictor of negative mood. *Cognitive Therapy and Research*, 24(6), 671-688. doi: 10.1023/A:1005587311498

- Senecal, C., Koestner, R., & Vallerand, R. J. (1995). Self-regulation and academic procrastination. *Journal of Social Psychology, 135*(5), 607-619.
- Sevinç, S. (2010). *Mersin üniversitesi birinci sınıf öğrencilerinin akademik, sosyal, kişisel ve kurumsal uyumlarını olumsuz etkileyen faktörlerin incelenmesi*. (Yayımlanmamış Yüksek Lisans Tezi), Mersin Üniversitesi, Mersin.
- Sevinc, S., & Gizir, C. A. (2014). Factors negatively affecting university adjustment from the views of first-year university students: The case of Mersin University. *Kuram Ve Uygulamada Eğitim Bilimleri, 14*(4), 1301-1308.
- Skala, K., Kapusta, N. D., Schlaff, G., Unseld, M., Erfurth, A., Lesch, O. M., & Akiskal, H. S. (2012). Suicidal ideation and temperament: An investigation among college students. *Journal of Affective Disorders, 141*(2-3), 399-405. doi: 10.1016/j.jad.2012.03.010
- Smith, J. M. & Alloy, L. B. (2009). A roadmap to rumination: A review of the definition, assessment, and conceptualization of this multifaceted construct. *Clinical Psychology Review, 29* (2). 116-128.
- Starcevic, V. (1995). Pathological worry in major depression – A preliminary report. *Behaviour Research and Therapy, 33*(1), 55-56. doi: 10.1016/0005-7967(93)E0028-4
- Startup, H. M., & Erickson, T. M. (2006). The Penn State Worry Questionnaire (PSWQ). *Worry and its psychological disorders: Theory, assessment and treatment*. UK: Wiley.
- Sternberg, R. J., & Kaufman, J. C. (1998). Human abilities. *Annual Review of Psychology, 49*, 479-502. doi: 10.1146/annurev.psych.49.1.479
- Stöber, J., & Borkovec, T. D. (2002). Reduced concreteness of worry in Generalized Anxiety Disorder: Findings from a therapy study. *Cognitive Therapy and Research, Vol. 26, No. 1*, 89–96.

- Strage, A. (2000). Predictors of college adjustment and success: Similarities and differences among Southeast-Asian American, Hispanic, and White students. *Education, 120*(4), 731-741.
- Strahan, E. Y. (2003). The effects of social anxiety and social skills on academic performance. *Personality and Individual Differences, 34*(2), 347-366. doi: Pii S0191-8869(02)00049-1.
- Sun-Selişik, Z. E. (2009). *College adjustment: A study on English prep school students studying in Northern Cyprus*. (Unpublished Doctoral Thesis), Middle East Technical University, Ankara.
- Swain, J., Hancock, K., Hainsworth, C., & Bowman, J. (2013). Acceptance and Commitment Therapy in the treatment of anxiety: A systematic review. *Clinical Psychology Review, 33*(8), 965-978. doi: 10.1016/j.cpr.2013.07.002
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn and Bacon.
- Tanner, A., Voon, D., Hasking, P., & Martin, G. (2012). Underlying structure of ruminative thinking: Factor analysis of the Ruminative Thought Style Questionnaire. *Cognitive Therapy and Research, 37*(3), 633-646. doi: 10.1007/s10608-012-9492-1
- Teasdale, J. D., Segal, Z. V., & Williams, J. M. G. (2003). Mindfulness training and problem formulation. *Clinical Psychology-Science and Practice, 10*(2), 157-160. doi: 10.1093/clipsy/bpg017
- Terry, M. L., Leary, M. R., & Mehta, S. (2013). Self-compassion as a buffer against homesickness, depression, and dissatisfaction in the transition to college. *Self and Identity, 12*(3), 278-290. doi: 10.1080/15298868.2012.667913

- Thompson, B. L., & Waltz, J. (2008). Self-compassion and PTSD symptom severity. *Journal of Traumatic Stress, 21*(6), 556-558. doi: 10.1002/jts.20374
- Thurber, C. A., & Walton, E. A. (2012). Homesickness and adjustment in university students. *Journal of American College Health, 60*(5).
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Tinto, V. (1996). Reconstructing the first year of college. *Planning for Higher Education, 25*(1).
- Toews, M. L., & Yazedjian, A. (2007). College adjustment among freshmen: Predictors for white and Hispanic males and females. *College Student Journal, 41*(4), 891-900.
- Tuna, M. E. (2003). *Cross-cultural differences in coping strategies as predictors of university adjustment of Turkish and U.S. students*. (Unpublished doctoral dissertation). Middle East Technical University, Ankara.
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (2005). *Challenging and supporting the first year student: A handbook for improving the first year of college*. . CA: John Wiley and Sons.
- Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earley, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mexied anxiety and depression. *Journal of Anxiety Disorders, 25*, 123-130.
- van Rijsoort, S., Emmelkamp, P., & Vervaeke, G. (1999). The Penn State Worry Questionnaire and the Worry Domains Questionnaire: Structure, reliability, and validity. *Clinical Psychology and Psychotherapy, 6*, 297-307.

- Veehof, M. M., Oskam, M. J., Schreurs, K. M., & Bohlmeijer, E. T. (2011). Acceptance-based interventions for the treatment of chronic pain: A systematic review and meta-analysis. *Pain, 152*(3), 533-542. doi: 10.1016/j.pain.2010.11.002
- Vowles, K. E., McCracken, L. M., & O'Brien, J. Z. (2011). Acceptance and values-based action in chronic pain: A three-year follow-up analysis of treatment effectiveness and process. *Behaviour Research and Therapy, 49*(11), 748-755. doi: 10.1016/j.brat.2011.08.002
- Wetherell, J. L., Afari, N., Rutledge, T., Sorrell, J. T., Stoddard, J. A., Petkus, A. J., & Atkinson, J. H. (2011). A randomized, controlled trial of Acceptance and Commitment Therapy and Cognitive Behavioral Therapy for chronic pain. *Pain, 152*(9), 2098-2107. doi: 10.1016/j.pain.2011.05.016
- Williams, J. G., Stark, S. K., & Foster, E. E. (2008). Start today or the very last day? The relationships among self-compassion, motivation, and procrastination. *American Journal of Psychological Research, 4*(1), 37-44.
- Wilson, K. G. (2008). *Mindfulness for two: An Acceptance and Commitment Therapy approach to mindfulness in psychotherapy*. California: New Harbinger Publications.
- Wilson, K. G., & Roberts, M. (2002). Core principles in Acceptance And Commitment Therapy: An application to anorexia. *Cognitive and Behavioral Practice, 9*, 237-243.
- Wintre, M. G., & Yaffe, M. (2000). First-year students' adjustment to university life as a function of relationships with parents. *Journal of Adolescent Research, 15*(1), 9-37. doi: 10.1177/0743558400151002
- Yadavaia, J. E., Hayes, S. C., & Vilardaga, R. (2014). Using Acceptance and Commitment Therapy to increase self-compassion: A randomized controlled trial. *Journal of Contextual Behavior Science, 3*(4), 248-257. doi: 10.1016/j.jcbs.2014.09.002

- Yalim, D. (2007). *First year college adjustment: The role of coping, egoresiliency, optimism and gender*. (Unpublished Master Thesis), Middle East Technical University, Ankara.
- Yalom, I. (2005). *The theory and practice of group therapy*. (5th ed.). New York: Basic Books.
- Yavuz, K. F., Ulusoy, S., Iskin, M., Esen, F. B., Burhan, H. S., Karadere, M. E. & Yavuz, N. (2016). Turkish version of Acceptance and Action Questionnaire-II (AAQ-II): A reliability and validity analysis in clinical and non-clinical samples. *Bulletin of Clinical Psychopharmacology*. Doi: 10.5455/bcp.20160223124107
- Yilmaz, A. E., Gençöz, T., & Wells, A. (2008). Psychometric characteristics of the Penn State Worry Questionnaire and Metacognitions Questionnaire-30 and metacognitive predictors of worry and obsessive-compulsive symptoms in a Turkish sample. *Clin Psychol Psychother*, 15(6), 424-439. doi: 10.1002/cpp.589
- YÖK, (2016). Üniversite öğrenci sayıları istatistik raporu. Retrieved from <https://istatistik.yok.gov.tr/>
- Zawadzki, M. J., Graham, J. E., & Gerin, W. (2013). Rumination and anxiety mediate the effect of loneliness on depressed mood and sleep quality in college students. *Health Psychology*, 32(2), 212-222. doi: 10.1037/a0029007
- Zychowski, L. A. (2007). *Academic and social predictors of college adjustment among first-year students: Do high school friendships make a difference?* (Unpublished Doctoral Thesis), Indiana University, Pennsylvania.

APPENDICES

Appendix A: Middle East Technical University Human Subjects Committee Approval Letter

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

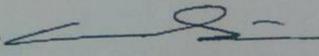
ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

DÜZELTİRİNAR BULVARI 06800
ÇANKAYA ANKARA/TÜRKİYE
T: +90 312 210 22 51
F: +90 312 210 79 59
ueam@metu.edu.tr
www.ueam.metu.edu.tr

Sayı: 28620816/ 533-1059

05.12.2014

Gönderilen : Prof. Dr. Oya Yerin GÜNERİ
Eğitim Bilimleri

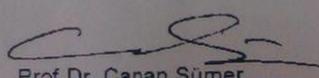
Gönderen : Prof. Dr. Canan Sümer 
IAK Başkanı Vekili

İlgili : Etik Onayı

Danışmanlığını yapmış olduğunuz Psikolojik Danışma ve Rehberlik
Bölümü öğrencisi Yasin Aydın'ın "Psikolojik Esneklik ve Üniversiteye
Uyum İlişkisinin, Öz-duyarlılık, Ruminasyon ve Endişe Aracı
Değişkenleriyle İncelenmesi" isimli araştırması "İnsan Araştırmaları
Komitesi" tarafından uygun görülerek gerekli onay verilmiştir.

Bilgilerinize saygılarımla sunarım.

Etik Komite Onayı
Uygundur
05/12/2014


Prof. Dr. Canan Sümer
Uygulamalı Etik Araştırma Merkezi
(UEAM) Başkanı Vekili
ODTÜ 06531 ANKARA

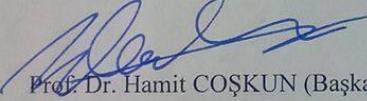
**Appendix B: Abant İzzet Baysal University Human Subjects Committee
Approval Letter**

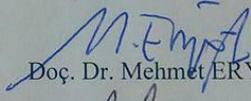

Abant İzzet Baysal Üniversitesi
Sosyal Bilimlerde İnsan Araştırmaları Etik Kurulu

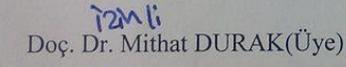
Öğr. Görv. Yasin AYDIN
Abant İzzet Baysal Üniversitesi
Eğitim Bilimleri Enstitüsü
Eğitim Bilimleri / Psikolojik Danışma ve Rehberlik A. B. D.

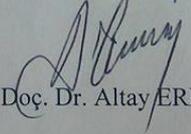
Sayın Öğr. Görv. Yasin AYDIN,

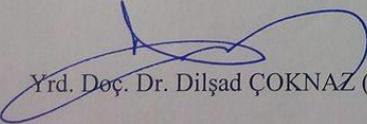
“Psikolojik Esneklik ve Üniversiteye Uyum İlişkisinin Özduyarlılık, Ruminasyon ve Endişe Aracı Değişkenleriyle İncelenmesi” konulu araştırmanız ile ilgili olarak Abant İzzet Baysal Üniversitesi Sosyal Bilimlerde İnsan Araştırmaları Etik Kuruluna yapmış olduğunuz başvuru (Protokol NO. 2014/116) Kurulumuzun 30.12.2014 tarihli ve 2014/116 toplantısında değerlendirilerek etik olarak uygun bulunmuştur. Bilgilerinize sunarız.

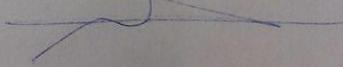

Prof. Dr. Hamit COŞKUN (Başkan)

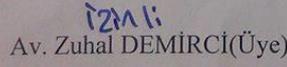

Doç. Dr. Mehmet ERYİĞİT (Üye)


Doç. Dr. Mithat DURAK (Üye)


Doç. Dr. Altay EREN (Üye)


Yrd. Doç. Dr. Dilşad ÇOKNAZ (Üye)


Yrd. Doç. Dr. Seval ALKOY (Üye)


Av. Zuhâl DEMİRCİ (Üye)

Appendix C: Scale Permission ULS

Sep 29

Yasin Aydin <yasnaydin@gmail.com>

to mine.aladag

Merhaba hocam

Tarafınızca geliştirilen "Üniversite Yaşamı Ölçeği" nin doktora tez çalışmamın bir parçası olarak izninizle kullanmak istiyorum. Çalışmamı, Üniversite 1. sınıf öğrencilerinin uyum sürecinde yaşadıkları stres ile öz-duyarlılık ve psikolojik esnekliğin rolünü anlamak üzerine planlamaktayım.

Saygılarımla

Sep 30

mine aladag <mine.aladag@ege.edu.tr>

to me

Translate message

Turn off for: Turkish

YASİNCİM,
ÖLÇEK VE PUANLAMASI EKTE

SEVGİLER

Kimden: "Yasin Aydin" <yasnaydin@gmail.com>

Kime: "mine aladag" <mine.aladag@ege.edu.tr>

Gönderilenler: 29 Eylül Pazartesi 2014 18:40:55

Konu: Üniversite Yaşamı Ölçeği- Y.AYDIN

Yrd. Doç. Dr. Mine ALADAĞ
Ege Üniversitesi, Eğitim Fakültesi
Eğitim Bilimleri Bölümü
Rehberlik ve Psikolojik Danışmanlık Anabilim Dalı
35100 Bornova, İzmir

Appendix D: Scale Permission AAQ-II

Nov 10
Yasin Aydin <yasnaydin@gmail.com>

to Sevinç

Merhaba Sevinç Hanım,
Adım Yasin AYDIN. ODTÜ PDR de doktora tez çalışmamın bir parçası olarak, sizin Türkçeye uyarladığınız Acceptance and Action Questionnaire -II (Kabul ve Eylem Formu- II) izninizle kullanmak istiyorum.

Çalışmam üniversite birinci sınıf öğrencilerinin uyum süreçlerinde öz-duyarlılık ve psikolojik esnekliğin rolünün nitel ve nicel verilerle araştırılması üzerine olacaktır.
Saygılarımla,
Yasin AYDIN

Nov 10 (10 days ago)
Sevinç Ulusoy <sevinc_ulusoy@icloud.com>

to me

Sevinç Ulusoy <sevinc_ulusoy@icloud.com>

Yasin Aydin <yasnaydin@gmail.com>

Mon, Nov 10, 2014 at 7:38 PM

Re: AAQ-II kullanım izni

Translate message
Turn off for: Turkish
Yasin Bey Merhabalar,
Kabul ve Eylem Formu-II yi kullanmanızda bir sakınca yoktur.
Araştırmanızda kolaylıklar dilerim.
Saygılarımla,
Dr. Sevinç Ulusoy
Elazig Ruh Sagligi ve Hastaliklari Hastanesi
Psikiyatri
sevinc_ulusoy@yahoo.com

Appendix E: Scale Permission RTSQ

Nov 17
Yasin Aydin <yasnaydin@gmail.com>

to htkaratepe

Merhaba Hasan Hocam,
Üniversite öğrencilerinin uyum süreçlerinde psikolojik esneklik ve ruminasyon un rolü üzerinde yaptığım araştırmamda, tarafınızca Türkçe ye uyarlanan "Ruminative Thought Style Scale" i izninizle kullanmak istiyorum.
Teşekkür ederim.

Öğr.Gör. Yasin AYDIN
A.İ.B.Ü Eğitim Fakültesi
Eğitim Bilimleri Bölümü
Rehberlik ve Psikolojik Danışmanlık ABD /226
Gölköy Kampüsü 14280 BOLU
Tel : (374) 254 10 00 / 1657
Fax: (374) 253 46 41

Nov 17

Hasan

to me

Hasan <htkaratepe@yahoo.com>

Yasin Aydin <yasnaydin@gmail.com>

Mon, Nov 17, 2014 at 10:08 PM

Re: Ruminative Thought Style Scale - izin

Translate message

Turn off for: Turkish

Merhabalar Yasin Bey,

Çalışmanızın sonuçlarını merakla bekliyorum. Tabii ki kullanabilirsiniz. İyi çalışmalar

iPhone'umdan gönderildi

Appendix F: Scale Permission PSWQ

Yasin Aydin <yasnaydin@gmail.com> Nov 17 (3 days ago)

to esin.yilmaz

Merhaba Hocam

Adım Yasin AYDIN. Abant İzzet Baysa Üniversitesi, Eğitim Fakültesi, Psikolojik Danışmanlık Bölümünde Öğretim Görevlisiyim. Aynı zamanda ODTÜ de PDR de doktora yapıyorum. Doktora tezimle ilgili araştırma yaparken Penn State Worry Questionnaire ' in Türkçe ye uyarlanması geçerlik ve güvenilirlik çalışması tarafınızca yapıldığını gördüm. İzininizle ölçeği doktora tez çalışmamda kullanmak istiyorum. Saygılarımla

Öğr.Gör. Yasin AYDIN
A.İ.B.Ü Eğitim Fakültesi
Eğitim Bilimleri Bölümü
Rehberlik ve Psikolojik Danışmanlık ABD /226
Gölköy Kampüsü 14280 BOLU

Nov 17
esin.yilmaz@deu.edu.tr

to me

esin.yilmaz@deu.edu.tr

Yasin Aydin <yasnaydin@gmail.com>

Mon, Nov 17, 2014 at 7:48 PM

Re: Penn State Worry Questionnaire- izin

Yasin bey merhaba,
Öncelikle nazik tarzınız ve ölçeğe olan ilginiz için teşekkür ediyorum. PSWQ'yu elbette kullanabilirsiniz. Çok iyi psikometrik özelliklere sahip olan bir ölçek. Ekte ölçeği ve makalesini de yolluyorum. Sormak istediğiniz bir şey olursa her zaman yazabilirsiniz. Tezinizde kolaylıklar,
Esin Yılmaz

Appendix G: Scale Permission SCS

Yasin Aydin <yasnaydin@gmail.com> Sep 29

to aakin

Merhaba Hocam,

Adım Yasin AYDIN. ODTÜ PDR de doktora tez çalışmamın bir parçası olarak, Neff (2003b) tarafından geliştirilen ve sizin Türkçe'ye uyarladığınız "Self Compassion Scale" i izninizle kullanmak istiyorum.

Çalışmam üniversite birinci sınıf öğrencilerinin uyum süreçlerinde öz-şefkat in rolü üzerinde nitel ve nicel veriler üzerine olacaktır.

Saygılarımla,
Yasin AYDIN

Ahmet Akın <aakin@sakarya.edu.tr> Sep 29

to me Ahmet Akın <aakin@sakarya.edu.tr>

Yasin Aydin <yasnaydin@gmail.com>

Mon, Sep 29, 2014 at 1:22 PM

Re: Öz-şefkat Ölçek izin

Translate message

Turn off for: Turkish

Bence öz-duyarlık diyelim. içerik bu isim için daha uygun. ölçek ektedir, iyi çalışmalar.

Appendix H: Demographic Information Form

(Katılımcı Bilgi Formu)

1. Cinsiyetiniz:

Kız Erkek

2. Yaşınız:

3. Fakülte ve Bölümünüz:

4. Abant İzzet Baysal Üniversitesi' ne (AİBÜ) ilk kayıt olduğunuz yıl?

2014 Diğer.....

5. Eğitim öğretim türünüz:

I. Öğretim (Gündüz) II. Öğretim (Gece)

6. Hangi şehirden geliyorsunuz?

Appendix I: University Life Scale (ULS)

(Üniversite yaşamı ölçeği)

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

| | | Bana hiç uygun değil | (2) | (3) | (4) | (5) | (6) | (7) Bana tamamen |
|----|---|----------------------|-----|-----|-----|-----|-----|------------------|
| 1 | Üniversitedeki topluluklara girmeye çekinirim. | | | | | | | |
| 2 | Kendimi genellikle gergin hissedirim. | | | | | | | |
| 3 | Kendimi severim. | | | | | | | |
| 4 | Arkadaşlarımla yakınlaşmam | | | | | | | |
| 5 | Derslerde işlenen konuları anlamakta zorluk çekiyorum | | | | | | | |
| 6 | Kendimi yalnız hissedirim. | | | | | | | |
| 7 | Üniversite öğrencisi olmaktan memnun değilim. | | | | | | | |
| 8 | Olayların hep kötü gideceğini düşünürüm | | | | | | | |
| 9 | Hayatımı istediğim gibi yönlendiriri | | | | | | | |
| 10 | Cinsellik beni korkutur. | | | | | | | |

| | | | | | | | | |
|----|---|--|--|--|--|--|--|--|
| 11 | Sınıf içinde konuşmaktan çekinirim | | | | | | | |
| 12 | Kaldığım yerdeki kişilerle anlaşırım | | | | | | | |
| 13 | Kendimi bu üniversitenin kültürüne uzak hissediyorum. | | | | | | | |
| 14 | Genellikle olaylar karşısında kendimi suçlarım. | | | | | | | |
| 15 | Kararlarımın sonuçlarına katlanırım. | | | | | | | |
| 16 | Benimle kimsenin çıkmak istemeyeceğini düşünüyorum. | | | | | | | |
| 17 | Kaldığım yere uyum sağlayamadım. | | | | | | | |
| 21 | Öğretmenlerimle ilişkilerimden memnun değilim. | | | | | | | |

Appendix J: Acceptance and Action Questionnaire- II (AAQ-II)

(Kabul ve Eylem Formu-2)

Aşağıda bir dizi ifade bulunmaktadır. Her bir ifadenin sizin için ne kadar doğru olduğunu yanında yazan rakamı yuvarlak içine alarak belirtiniz. Seçiminizi yapmak için aşağıdaki cetveli kullanınız.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------------|-------------------|---------------|-------------|----------------|---------------------------|-------------|
| Hiçbir zaman doğru değil | Çok nadiren doğru | Nadiren doğru | Bazen doğru | Sıklıkla doğru | Neredeyse her zaman doğru | Daima doğru |

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------|--|---|---|---|---|---|---|---|
| 1 | Geçmişte olan acı veren yaşantılarım ve hatıralarım, değer verdiğim bir hayatı yaşamayı zorlaştırıyor. | | | | | | | |
| 3 | Kaygılarımı ve hislerimi kontrol edememekten endişelenirim. | | | | | | | |
| 4 | Acı hatıralarım dolu dolu bir hayat yaşamamı engelliyor. | | | | | | | |
| 6 | İnsanların çoğu hayatlarını benden daha iyi idare ediyor gibi görünüyor | | | | | | | |

Appendix L: Penn State Worry Questionnaire (PSWQ)
(Penn Eyalet Endişe Ölçeği)

Her bir ifadenin sizi ne ölçüde tanımladığını, aşağıda verilen ölçekten yaralanarak değerlendiriniz ve uygun olan numarayı ilgili maddenin yanındaki boşluğa yazınız

| 1 | 2 | 3 | 4 | 5 |
|-----------------------|-----------------------|-----------------------|-------------------------|-------------------------|
| Beni hiç tanımlamıyor | Beni biraz tanımlıyor | Beni biraz tanımlıyor | Beni çok iyi tanımlıyor | Beni çok iyi tanımlıyor |

- ___ 1. Her şeyi yapmaya yeterli zamanım yoksa bunun için endişelenmem.
- ___ 2. Endişelerim beni bunaltır.
- ___ 3. Yaşamakta olduğum şeyler hakkında endişelenme eğiliminde değilimdir.
- ___ 4. Birçok durum beni endişelendirir.
- ___ 5. Yaşamakta olduğum şeyler hakkında endişelenmemem gerektiğini biliyorum ama kendime engel olamıyorum.
- ___ 6. Baskı altında olduğumda çok endişelenirim.
- ___ 7. Her zaman bir şeyler hakkında endişeleniyorum.
- ___ 8. Endişe verici düşünceleri aklımdan kolaylıkla atarım.
- ___ 9. Bir işi bitirir bitirmez, yapmak zorunda olduğum tüm diğer şeyler hakkında endişelenmeye başlarım.

Appendix M: Self-Compassion Scale (SCS)

(Öz- duyarlılık ölçeği)

Envanterdeki ifadeleri okuduktan sonra kendinizi değerlendiriniz ve sizin için en uygun seçeneğin karşısına çarpı (X) işareti koyunuz.

(1) Hiç bir zaman (2) Nadiren (3) Sık sık (4) Genellikle (5) Her zaman

| | | Hiçbir zaman | Nadiren | Sık sık | Genellikle | Her zaman |
|----|---|--------------|---------|---------|------------|-----------|
| 1 | Bir yetersizlik hissettiğimde, kendime bu yetersizlik duygusunun insanların birçoğu tarafından paylaşıldığını hatırlatmaya çalışırım. | | | | | |
| 2 | Kişiliğimin beğenmediğim yönlerine ilişkin anlayışlı ve sabırlı olmaya çalışırım. | | | | | |
| 3 | Bir şey beni üzdüğünde, duygularıma kapılıp giderim | | | | | |
| 4 | Hoşlanmadığım yönlerimi fark ettiğimde kendimi suçlarım | | | | | |
| 5 | Benim için önemli olan bir şeyde başarısız olduğumda, kendimi bu başarısızlıkta yalnız hissederim. | | | | | |
| 6 | Zor zamanlarımda ihtiyaç duyduğum özen ve şefkati kendime gösteririm. | | | | | |
| 7 | Gerçekten güç durumlarla karşılaştığımda kendime kaba davranırım. | | | | | |
| 8 | Başarısızlıklarımı insanlık halinin bir parçası olarak görmeye çalışırım | | | | | |
| 9 | Bir şey beni üzdüğünde duygularımı dengede tutmaya çalışırım | | | | | |
| 10 | Kendimi kötü hissettiğimde kötü olan her şeye kafamı takar ve onunla meşgul olurum. | | | | | |
| 11 | Yetersizliklerim hakkında düşündüğümde, bu kendimi yalnız hissetmeme ve dünya ile bağlantımı koparmama neden olur. | | | | | |
| 14 | Kendimi kötü hissettiğimde duygularıma ilgi ve açıklıkla yaklaşılmaya çalışırım. | | | | | |

Appendix N: Curriculum Vitae (CV)

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Aydın, Yasin

Nationality: Turkish (TC)

Date of Birth: 9 December 1980

Marital Status: Single

Phone: +90 507 864 8612

email: yasnaydin@gmail.com

EDUCATION

| Degree | Institution | Year of Graduation |
|-------------|---|--------------------|
| MS | SFASU, TX, US, Mental Health Counseling | 2010 |
| BA | EGE University, Counseling | 2007 |
| High School | Open High School | 1999 |

WORK EXPERIENCE

| Year | Place | Enrollment |
|---------------|---|---|
| 2013- Present | AİBÜ, Bolu, TR | Lecturer |
| 2010-2013 | MEB, Bolu, TR | School Counselor |
| 2009- 2010 | Burke Psychiatric Emergency Serv Center, TX, US | Intern Therapist |
| 2008-2009 | SFASU, Counseling Clinic, TX, US | Counselor in Training |
| 2006-2007 | C. Sociale Chronos, Turin, ITALY | Volunteer work with disabled people. |
| 2004-Present | EU Youth Programme | Freelance trainer within non-formal education |

FOREIGN LANGUAGES

Advanced English, Fluent Italian, Elementary Spanish

PUBLICATIONS / PRESENTATIONS

1. Kolski, T. D., Jongsma, A. E. & Myer, R. A. (2015). Kriz danışması ve travmatik olaylar tedavi planlayıcısı. [The crisis counseling an traumatic events planner] (Aydın, Y. ve diğerleri.; Çev.) (*in press*).
2. Harris, R. (2009). *Kabul ve Kararlılık Terapisi. ACT'i kolay öğrenmek: İlkeler ve ötesi için hızlı bir başlangıç*. [Act made simple] (Karadere, M. E, Ulusoy, S., Çankaya, B., Yerin-Güneri, O., ve Aydın, Y.; Çev.)
3. Aydın, Y. (July, 2015). *ACT, psychological flexibility, and college students: Relevance across the World*. Presented as one of the panelists in 13th ACBS World Conference in Berlin, Germany.
4. Aydın, Y., Muyan, M., Akçabozan, N. B., Aslan, S., & Engin- Demir, C. (2013). *Advising Relationship at a Turkish Public University: Satisfaction and Perceived Support*. Presented in International ECER Conference, 2013 İstanbul, Turkey.

HOBBIES

Basketball, travelling, singing, foreign languages

MEMBERSHIPS

Turkish Counseling and Guidance Association

TREX (Turkish Ex- European Voluntary Service Volunteers Association)-
Founder

Association for Contextual Behavioral Science (ACBS)

Appendix O : Tez Fotokopisi İzin Formu

ENSTİTÜ

| | |
|--------------------------------|-------------------------------------|
| Fen Bilimleri Enstitüsü | <input type="checkbox"/> |
| Sosyal Bilimler Enstitüsü | <input checked="" type="checkbox"/> |
| Uygulamalı Matematik Enstitüsü | <input type="checkbox"/> |
| Enformatik Enstitüsü | <input type="checkbox"/> |
| Deniz Bilimleri Enstitüsü | <input type="checkbox"/> |

YAZARIN

Soyadı : AYDIN
Adı : YASİN
Bölümü : EĞİTİM BİLİMLERİ

TEZİN ADI (İngilizce) : TESTING A MODEL OF PSYCHOLOGICAL INFLEXIBILITY, RUMINATIVE THINKING, WORRY AND SELF-COMPASSION IN RELATION TO COLLEGE ADJUSTMENT

TEZİN TÜRÜ: Yüksek Lisans Doktora

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopialınabilir.
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz.

TEZİN KÜTÜPHANEYE TESLİM TARİHİ:

Appendix P: TURKISH SUMMARY

ÜNİVERSİTEYE UYUMUN, PSİKOLOJİK KATILIK, RUMİNATİF DÜŞÜNME, ENDİŞE VE ÖZDUYARLILIK İLE İLİŞKİSİ ÜZERİNE BİR MODEL TEST ETME ÇALIŞMASI

1. GİRİŞ

Üniversiteye başlamak lisedekinden oldukça farklı olan yeni bir yaşam tarzı sunmasıyla birlikte, genç bir yetişkinin hayatındaki en anlamlı olaylardan bir tanesidir. Bu açıdan bakıldığında üniversiteye başlamak öğrenciler için oldukça stresli ve zor bir süreç olabilmektedir. Bu bağlamda, “ilk yıl üniversite öğrencisi” nin tam olarak nasıl kavramsallaştırıldığını anlamak önemlidir. Upcraft, Gardner ve Barefoot (2005) ilk yıl üniversite öğrencilerini tanımlarken onlar hakkında, orta sınıf, 18 yaşında, ailesinden ilk defa ayrılmış, dört yıllık bir fakültede okuyan ve geleneksel akademik başarı standartlarını yakalamış kişiler olduklarına dair bir takım mitler (yaygın inanışlar) olduğunu belirlemişlerdir. Bu yaygın inanışlardan bazılarının hala geçerli olduğu bilinmektedir. Ancak, ilk yıl üniversite öğrencilerinin uyum süreçlerini etkileyen kişisel ve çevresel faktörler hakkında artık daha çok bilgi sahibiyiz (Upcraft ve ark., 2005).

Bu kişisel ve çevresel faktörlerin neler olduğunu belirleyebilmek için geçiş kavramını tanımlamak oldukça önemlidir. Yeni bir yaşam aşamasına geçmek insanların hayatlarında uyum sağlamalarını gerektiren yeni bilgiler ve deneyimleri de beraberinde getirmektedir. Yaşamdaki her geçiş aşamasında insanlar zor, hatta bazen de tehdit edici yaşam görevleri ile karşı karşıya kalırlar (Cantor, Noreem, Niedenthal, Langston ve Brower, 1987; Morton, Mergler ve Boman, 2014) ve liseden üniversiteye geçiş de bunlardan bir tanesidir (Brooks ve Dubois, 1995; Morton ve ark., 2014). Bu geçiş, bazı öğrenciler için sosyal ve

entelektüel bir macera olarak algılansa da, birçok öğrenci için aynı deneyim bunaltıcı ve acı veren bir yaşantı olabilmektedir. Bundan dolayı, üniversiteye yeni gelen öğrenciler birçok zorlukla baş etmek durumunda kalmaktadırlar. Bu zorluklar ev özlemi (Thurber ve Walton, 2012), lisedekinden daha zorlayıcı olan akademik problemler (Johnston, 2010), uyku düzeni, yeme- içme, günlük rutinler ve zaman yönetimi gibi değişen alışkanlıklar (Halamandaris ve Power, 1999), yeni bir çevre ve arkadaş ve ilişkilerden kaynaklanan stres (Buote ve ark., 2007; Clinciu, 2013; Sasaki ve Yamasaki, 2007) olarak ortaya çıkmaktadır.

Üniversite öğrencilerindeki psikolojik rahatsızlıklar birçok ciddi sağlık sorunlarını da beraberinde getirmektedir. Üniversite yaşamında uyum temel bir psikolojik problem alanı olarak ele alındığında literatür, uyum güçlüğünün beraberinde kaygı, stres, öfke, depresyon ve diğer ruh sağlığı sorunlarını da beraberinde getirdiğini vurgulamaktadır (Clinciu, 2013). Ayrıca, Tinto (1996), uyum güçlüğünün üniversite öğrencilerinin okulu bırakma nedenleri arasında en önemli etkenlerden biri olduğunu vurgulamaktadır. Daha da önemlisi depresif belirtiler ve kaygı, genç yetişkinleri intihara kadar sürükleyebilmektedir. İntihar düşünceleri genç yetişkinler arasında önemli bir problemdir (Skala ve ark., 2012). İntihar düşüncelerine kadar gidebilen bu bilişsel düşünme stilleri veya bilişsel yapılar çoğunlukla ruminatif (tekrarlayıcı) düşünme biçimi ve endişe ile açıklanmaktadır (Lamis ve Dvorak, 2014).

Ruminatif (tekrarlayıcı) düşünme biçimi ile endişe birbirlerine oldukça benzerlik gösteren kavramlardır (Nolen-Hoeksema, 1998). Ancak, ruminatif düşünme “bireyin pasif olarak kendi duygu ve düşüncelerine, depresif düşüncelerine ve bu düşüncelerin çıkarsamalarına dikkatini vermesi” (Nolen-Hoeksema, 1998, p. 239) olarak tanımlanırken, endişe ise “Negatif duygu yüklü ve göreceli olarak kontrol edilemeyen düşünce ve imgeler zinciri” olarak tarif edilmektedir (Borkovec, Robinson, Pruzinsky ve Depree, 1983, p. 10). Çalışmalar ruminatif düşünme ve endişenin birbiriyle çok yakın ancak farklı kavramlar olduğunu göstermektedir (Fresco ve ark., 2002).

Morrison ve O'Connor (2005), ruminatif düşünme ve stresin üniversite öğrencilerindeki psikolojik problemlerin güçlü birer yordayıcısı olduklarını bulmuşlardır. Paolini, Alejandro ve William (2006) endişenin, üniversite öğrencilerinin yaşam doyumları üzerindeki etkisini lisans öğrencileri üzerinde araştırmıştır. Araştırma sonuçlarına göre, endişesi yüksek seviyedeki öğrencilerin, endişesi düşük seviyede olan öğrencilere göre üniversite hayatından daha az doyum aldıkları gözlemlenmiştir.

Üniversiteye yeni başlayan öğrencilerin ne kadar önemli olduğu düşünüldüğünde, bu çalışmanın da kavramsal çerçevesini oluşturan Kabul ve Kararlılık Terapisi (KKT)'nin temel kavramı olan psikolojik esnekliği açıklamak önemlidir (Hayes, Strosahl & Wilson, 2005). Psikolojik esneklik, bireyin değişen ortamlara nasıl uyum sağlığı, zihinsel yapılarını nasıl yeniden yapılandığı, nasıl farklı bakış açılarına sahip olduğu ve hayatındaki istekler, arzular ve gereklilikler arasında nasıl bir denge kurduğu ile ilgilidir. Bu bağlamda psikolojik olarak esnek olan birey kendi içsel deneyim ve süreçleri ile çevresel bağlam arasında dengeli bir bağ kurabilen kişidir (Kashdan & Rottenberg, 2010). Bu bağlamda KKT'nin amacı da bireylerdeki psikolojik esnekliği geliştirmektir.

Öz-duyarlılık kavramı da bu çalışmanın temel değişkenlerinden birisidir ve psikolojik esneklik ile bilinçli farkındalık (mindfulness), kabul ve şimdiki zamana odaklanma noktalarında keşşimektedir. Öz-duyarlılık, temel olarak bireyin başarısızlık, hayal kırıklığı veya kendisi ile ilgili hoş gitmeyen şeyler deneyimlediğinde kendisine sevecen ve anlayışlı davranması olarak tanımlanmaktadır (Neff, 2011). Öz-duyarlılık ergenlerde iyi oluşu olumlu olarak yordarken, üniversiteye yeni başlayan ve uyum sürecinde olan öğrencilerdeki stresi de olumsuz olarak yordamaktadır (Bluth & Blanton, 2015; James, 2013).

Bu çalışmalar, üniversiteye uyum sürecinin, dahası, üniversite öğrencilerinin ruh sağlıklarının ne kadar önemli olduğunu göstermektedir. Bu bağlamda üniversite psikolojik danışma merkezleri çeşitli psikolojik sorunlar yaşayan öğrencilere yardım sunmaktadırlar. Üniversite yaşamına uyum sorunları da bu yardım konularından biridir. Üniversiteye uyum alanındaki çalışmaların büyük çoğunluğu, sosyal ve akademik uyum süreçlerine odaklanmış ve dolayısıyla üniversite psikolojik danışma merkezleri de geleneksel olarak, sosyal ve akademik uyum problemleri ile ilgili semptomları (belirtiler) belirleyip bunları azaltmak ya da yok etmek doğrultusunda hizmetler sunmuşlardır (Krumrei-Mancuso, Newton, Kim ve Wilcox, 2013; Lee, Olson, Locke, Michelson ve Odes, 2009).

1.1. Araştırmanın Amacı

Üniversite uyum süreci ile ilgili Türkiye’de ve başka ülkelerde birçok çalışma yapılmasına karşın, üniversiteye ilk yıl uyumu insan davranışını göreceli olarak yeni bir yaklaşımla ele alan Kabul ve Kararlılık Terapisi yaklaşımı çerçevesinden inceleyen çalışma yapılmamıştır. Bu bakımdan bu araştırmanın amacı, KKT’nin ana kavramı olan psikolojik esneklik/katılık, özduyarlık, ruminatif düşünme ve endişenin ilk yıl üniversiteye uyumu üzerindeki rollerini etkileşimli bir modelde test etmektir.

1.2. Araştırma Sorusu ve Hipotezleri

Bu çalışmanın temel araştırma sorusu, “Üniversiteye yeni başlayan öğrencilerin psikolojik katılık, ruminatif (tekrarlayıcı) düşünme, endişe ve özduyarlılıkları ile üniversiteye uyumları arasındaki ilişkilerin doğası nedir?” olarak belirlenmiştir.

Bu temel araştırma sorusu bağlamındaki araştırma hipotezleri de şunlardır:

1. Psikolojik katılık özduyarlığı yordayacaktır.

2. Psikolojik katılık üniversiteye uyumu yordayacaktır.
3. Psikolojik katılık ruminatif (tekrarlayıcı) düşünmeyi yordayacaktır.
4. Psikolojik katılık endişeyi yordayacaktır.
5. Özduyarlık üniversiteye uyumu yordayacaktır.
6. Ruminatif (tekrarlayıcı) düşünme üniversiteye uyumu yordayacaktır.
7. Endişe üniversiteye uyumu yordayacaktır.

1.3. Araştırmanın Önemi

Öğrenciler üniversiteye geldiklerinde yeni bir yaşam tarzına uyum sağlamak ve farklı zorluklarla baş etmek zorunda kalırlar. Bu sorunlar, akademik konulardan, kişisel, duygusal ve sosyal konulara kadar farklılık gösterebilir (Baker ve Siryk, 1984). Bunların yanı sıra, üniversiteye yeni gelen öğrenciler ek olarak, yabancılaşma, diğer psikolojik şikâyetler, maddi ya da finansal sorunlar, dil ve kültür ile ilgili farklı sorunlarla başa çıkmaya çalışırlar (Murphy ve Archer, 1996).

İlk yıl üniversiteye uyum süreci, eğitim süreçleri hakkında politika belirleyiciler, kaynak yaratıcılar, akademisyenler, üniversite yöneticileri ve tabiki aileler için oldukça yüksek bir öncelik arz etmektedir (Upcraft ve ark., 2005). Üniversite sayıları ve dolayısıyla öğrenci sayılarının da gittikçe arttığı düşünüldüğünde, öğrencilerin ilk yıl üniversiteye uyum sürecinin kapsamlı bir şekilde incelenmesi ve anlaşılmasına ihtiyaç vardır. Bu ihtiyaç Türkiye’de acil bir şekilde giderilmelidir. Özellikle son 10 yılda Türkiye’de kurulan ve eğitime başlayan üniversitelerin sayısının 100’den daha fazla olduğu ve Türkiye’de halen yükseköğretime devam eden öğrencilerin sayısının 6.062.886 olduğu (YÖK, 2016) düşünüldüğünde bu ihtiyacın önemi ortaya çıkmaktadır. Bu çalışmanın bir diğer önemi de üniversite öğrencilerinin okulu bırakma oranının ilk yılda en yüksek seviyede olduğunun tespit edilmesidir. Ayrıca, akademik başarısızlık üniversitenin ilk yılında yaşanan tek sorun da değildir (Rausch ve Hamilton,

2006); üniversite öğrencilerinin 50% si farklı formlarda tanımlanabilen bir psikiyatrik bozukluğa sahiptirler (Blanco ve ark., 2008).

Üniversiteye uyum sorunu birçok araştırmada incelenmiş ve bu alana değerli katkılarda bulunmuş olmasına karşın, üniversiteye uyum üçüncü dalga terapi yaklaşımları penceresinden ele alınmamıştır. Bu bakımdan bu çalışma özellikle Türkiye’de Kabul ve Kararlılık Terapisi (KKT)’nin temel unsuru olan psikolojik esneklik/katılık kavramının, ruminatif düşünme, endişe ve özduyarlık ile birlikte üniversiteye uyum üzerindeki rolünü bir model üzerinde test etme açısından bir ilk olacaktır.

2. LİTERATÜR TARAMASI

Bu bölümde uyum teori ve modelleri, insan uyumunun kavramsallaştırılması, üniversiteye uyum ve Türkiye’de üniversiteye uyum ile ilgili literatürle birlikte, üniversiteye uyumun bu çalışma kapsamındaki belirleyicileri ele alınacaktır.

2.1. Uyum Teorileri ve Modelleri

Üniversiteye uyum farklı teori ve modellerle açıklanmıştır. Bu çalışma, Pascarella ve Terenzini’nin (2005) 1967’den beri üniversiteye uyum literatürüyle ilgili yaptığı kapsamlı araştırmayı temel almakla birlikte, üniversiteye uyumu etkileyen bireysel faktörleri açıklayan teori ve modellere vurgu yapmıştır. Üniversiteye uyumu açıklayan teori ve modeller bu çalışma kapsamında iki başlık altında toplanmıştır. Bunlar, uyum sürecini gelişimsel bir görev ve kişiler arası ilişkiler ile içsel süreçler bağlamında açıklayan öğrenci gelişim teorileri ve uyum sürecini çevresel ve toplumsal bakış açısıyla açıklayan çevresel ve sosyolojik teorilerdir.

2.1.1. Öğrenci Gelişim Teorileri

Öğrenci gelişim teorilerinden ilki bilişsel yapısal teorilerdir. Bu teorilere örnek olarak Perry'nin Zekâ ve Etik Şemalarının Gelişimi teorisiyle, Kohlberg'in Ahlak Gelişimi verilebilir. Bu teorilerin ortak özellikleri bireylerin yaşamları boyunca hiyerarşik olarak belirli evrelerden geçtikleri gerçeğidir. Bu teorilerin birçoğu değişim sürecini, bir seri yapılandırma ve yeniden yapılandırma olarak görür. Bu da aslında zihinsel özümleme ve uyum sağlama kavramları ile açıklanabilmektedir (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005).

Tipolojik modeller ise uyum sürecinde, bireylerdeki öğrenme stilleri, kişilik tipleri, mizaç veya sosyo-ekonomik statü gibi durağan farklılıkları vurgular. Tipolojik modeller, neden üniversite öğrencilerinin aynı çevresel veya deneysel uyarıcılara farklı tepkiler verdiklerini açıklamakta yararlı olabilirler (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). Bir diğer teori ise, Kişi-Çevre Teorisidir. Bu teori öğrenci ile içinde bulunduğu çevrenin etkileşimini ve bu etkileşimin gelişimini inceler. Tüm bu modeller, üniversite psikolojik danışmanlarına, üniversite çalışanlarına ve akademik personele öğrenci gelişimini detaylı bir şekilde analiz etme olanağı sağlar (Rodgers, 1990; akt, Evans, Forney, & Guido- DiBrito, 1998).

2.1.2. Çevresel/Sosyolojik Teoriler

Çevresel ve Sosyolojik teoriler ise, öğrencilerdeki değişimin kaynağını içselden daha çok dışsal dünyalarında arar. Astin'in Öğrenciyi Dâhil Etme Teorisi (Astin, 1970a, 1970b) ya da diğer bir adla girdi-çevre-çıkı teorisine göre, öğrenciler bireysel, ailevi ya da herhangi bir kişisel özelliklerle üniversite ortamına gelirler ve üniversite deneyiminden sonra çeşitli inanç, duygu, düşüncelerle bu ortamdan ayrılırlar.

Bir diğeri teori olan Öğrenci Bütünleşme Modeli'ne (Tinto, 1975) göre öğrenciler üniversiteye çok farklı kişisel, ailevi, akademik özellikler, beceriler ve niyetlerle gelirler. Bununla birlikte üniversiteler de çok farklı biricik özelliklere sahiptirler. Eğer üniversite ile öğrencilerin özellikleri uyuşmazsa, öğrenciler çatışma yaşayabilirler. Bu çatışmalarda öğrencilerin okulu bırakmalarına neden olabilir (Pascarella & Terenzini, 2005).

Bronfenbrenner'in (1986, 2005) insan gelişiminin tarihsel, ekonomik, kültürel ve sosyal ortam ve faktörlerden etkilendiğini savunduğu Ekolojik Sistem Teorisi vardır. Bu bağlamda, insanların düşündüğü, hissettiği ve yaptığı her şey, onların nereden geldiklerine, kimlerle zaman geçirdiklerine ve kendilerinin bu ortamlarda başlarına ne geldikleri tarafından belirlenmektedir (Santrock, 2006). Bronfenbrenner'in (2005) Ekolojik Sistem Teorisine göre insanlar beş aşamalı çevresel sistemler içerisinde bulunurlar. Bu sistemler, insanların direkt olarak ilişki kurduğu bireylerin içerisinde olduğu mikrosistem, mikrosistemler arası etkileşimi sağlayan mesosistem, insanların doğrudan içerisinde rol almadıkları ama dolaylı olarak etkilendikleri ekzosistemler, içinde yaşanılan kültürü tanımlayan makrosistem ve son olarak ise insan hayatındaki sosyolojik ve tarihsel olayları ve geçişleri ifade eden kronosistemlerdir.

Sonuç olarak, öğrenci gelişim ve değişimini açıklayan bu teori modeller, öğrencilerin üniversite deneyimlerini farklı bakış açılarıyla açıklamada yararlıdır. Bu teoriler ayrıca, üniversitenin farklı zamanlarındaki öğrenci davranışlarını ve aşamalarını açıklamada faydalıdır. Üniversiteye uyum süreci de bu aşamalardan birisidir.

2.2. İnsan Uyumunun Kavramsallaştırılması

Uyum en basit olarak, günlük yaşamdaki zorluklarla baş edebilme ve onlara uyum sağlayabilme süreci olarak tanımlanmaktadır (Santrock, 2006). Uyum

ayrıca, bireylerin çevresel baskılara tepki verebilme süreci ve stresle baş etme süreci olarak da tanımlanmaktadır. Bu bağlamda uyum, yaşamdaki taleplerle baş etme davranışıdır (Nevid & Rathus, 2007). Bu tanımlara bakıldığında uyumun, bireyin var olan koşulları pasif olarak kabul etmek yerine, aktif olarak adım atarak bireyi gelişime götüren bir süreç olduğu anlaşılmaktadır (Glidden-Tracey, 2005). Uyum aslında birey ile çevre arasındaki karşılıklı aktif etkileşimden ibarettir (Nevid & Rathus, 2007). Bu bağlamda, içinde yaşadıkları ortamlar insanları olumlu ve olumsuz olarak etkilemektedir. Bu ortamlar çeşitli geçiş aşamalarıyla birlikte değişim göstermektedir. Liseden üniversiteye geçiş de genç bireylerin hayatlarında önemli derecede stres oluşturmaktadır (Arnett, 2004).

2.3. Üniversiteye Uyum

Üniversiteye başlamak genç bireylerin hayatlarında stres yaratan bir geçiş sürecidir (Bland, Melton, Welle, & Bigham). Bazı öğrenciler bu süreci kişisel gelişimleri için bir fırsat olarak görse de, bazı öğrenciler için bu süreç birçok duygusal ve bilişsel problemi beraberinde getiren oldukça zorlayıcı bir deneyim olabilmektedir (Cutrona, 1982; Hammen, 1980; Lokitz & Sprandel, 1976). Üniversite yaşamına uyum sağlayamayan öğrenciler, zamanla birçok psikolojik ve akademik problem yaşamaktadırlar (Arnett, 2004).

Üniversiteye uyum birçok farklı değişkenle ilişkili olarak çalışılmıştır. Bu çalışmaların çoğunluğunda uyum demografik değişkenler (Chataway & Berry, 1989), üniversiteye giriş özellikleri ve yetenekler (Sternberg & Kaufman, 1998), kişilik ile ilgili değişkenler, kişilik tipleri ve sosyal destek (Joiner, 1997) ile ilişkili olarak incelenmiştir. Bunların dışında üniversiteye uyum, algılanan stres (Friedlander, Reid, Shupak & Cribbie, 2007; Wintre & Yaffe, 2000), benlik saygısı (Becker, 2008; Toews & Yazedjian, 2007), öz-yeterlilik (Zychowski, 2007), baş etme becerileri (Aspinwall & Taylor, 1992; Jorgensen & Dusek, 1990), iyimserlik (Brissette, Scheier & Carver, 2002) ve cinsiyet (Alfred-Liro &

Sigelman, 1998; Enochs & Roland, 2006; Lopez & Gormley, 2002) ile de ilişkili olarak çalışılmıştır.

2.4. Bu Çalışma Bağlamında Üniversiteye Uyumun Yordayıcıları

Bu çalışmada üniversiteye uyumu yordayan değişkenleri incelemek amaçlanmıştır. Bu bölümde, Kabul ve Kararlılık Terapisi'nin temel kavramı olan psikolojik esneklik/katılık, ruminatif düşünme, endişe ve özduyarlılık kavramlarının üniversiteye uyumla ilişkileri ele alınacaktır.

2.4.1. Psikolojik Katılık/Esneklik

Psikolojik esneklik, içerisinde tarihi ve felsefi anlamları barındırmaktadır. Psikolojik esnekliğin tanımında insanın en temel odağı olan acı vurgulanmaktadır. Bu psikolojik acıyı insanlar oluşturdukları dil aracılığıyla deneyimlerler. Bu dil sadece sözel olarak kendini göstermez, aynı zamanda sembolik aktiviteler, sesler, jestler ve imgeler olarak kendini ortaya çıkarmaktadır (Hayes ve ark., 2012). Bu bağlamda psikolojik esneklik, içerisinde altı süreci barındıran bir modelden oluşmaktadır. Psikolojik katılık psikolojik acıların kaynağıdır (Bond et al., 2011; Hayes et al., 2012).

Psikolojik esneklik ve katılığı açıklayan bu altı süreç, kabul ve yaşantısal kaçınma, ayrışma ve birleşme, şimdiki anın farkındalığı ve şimdiki zamana odaklanamama, bağlamsal olarak ben ve içerik olarak ben, değerler ve değerlerin belirsizliği ve son olarak da kararlı davranışlarda bulunmak ve kaçınmacı dürtüsel davranışlar olarak ortaya konmuştur (Hayes ve ark., 2012).

Psikolojik esneklik/katılık çoğunlukla depresyon ve kaygı ile ilişkili olarak çalışılmıştır. KKT bakış açısına göre anksiyete ve depresyon birer yaşantısal kaçınma davranışı olarak ortaya çıkmaktadırlar. Bu bağlamda bir üniversite

öğrencisi uyum sorunları yaşayabilir ancak önemli olan bu sorunlara onun nasıl cevap vereceğidir (Hayes et al., 2012).

Psikolojik esneklik/katılık, depresyon ve kaygı (Forman, Herbert, Moitra, Yeomans, & Geller, 2007; Masuda & Tully, 2011), üniversite öğrencilerindeki erteleme davranışı (Scent & Boes, 2014), mükemmeliyetçilik (Crosby, Armstrong, Nafziger, & Twohig, 2013), alkol ve madde kullanımı (Levin et al., 2012) ile ilişki olarak çalışılmıştır. Sonuç olarak, KKT göreceli olarak yeni bir yaklaşım olmasına karşın, Ruiz'e (2010) göre, KKT'nin farklı problem alanlarında etkinliğini kanıtlayan katılımcıların gruplarının rastgele belirlendiği 60 deneysel çalışma yapılmıştır. Ayrıca KKT üniversite öğrencileri ile bireysel ve grup ortamında da çalışılmıştır. Ancak bu çalışmalar henüz yenidir (Boone, 2013).

2.4.2. Özduyarlılık

Yüzyıllardır Budist psikolojinin temelini oluşturan özduyarlılık, son yıllarda Batı psikolojisinin de odağı haline gelmeye başlamıştır. Her ne kadar Budizm ve Batı psikolojileri insan doğasını ve psikolojik acıyı biraz farklı açıklasalar da, özduyarlılık her ikisinde de ortak noktadır (Jannazo, 2009).

Özduyarlılık, batı psikolojisinde evrimsel sinirbilim yaklaşımı (Gilbert, 2004, 2005, 2009, 2014) sosyal ve psikolojik yaklaşım (Neff, 2003a, 2003b) olarak iki şekilde açıklanmaktadır. Evrimsel bakış açısına göre, daha önce gerçekleşen şeyler daha sonra olanlara mutlaka bir etkide bulunur, anlayışı vardır. Bedensel sistemlerimizin evrimi, bizi eksikliğe doğru yöneltir. İnsanların çok farklı yollarla hasta olmalarının asıl nedeni temelde evrim sürecidir. Depresyon, kaygı ve diğer psikolojik problemler de fiziksel hastalık sürecinden bağımsız değildir ve insanı eksikliğe doğru sürükler (Gilbert, 2014).

Neff (2003a, 2003b) tarafından geliştirilen sosyal- psikolojik bakış açısına göre ise özduyarlılığı anlamak için öncelikle başkalarına gösterilen duyarlılık kavramını anlamak önemlidir. Duyarlılık, içerisinde başkalarının acılarına açık olmayı barındırır. Ayrıca sabrı, sevecenliği, yargısız anlayışı ve hiçbir insanın mükemmel olmadığı anlayışını içinde barındırır. Bu bağlamda, basit bir dille, özduyarlılık ise, insanın kendi acılarına açık olması, başarısızlık ve yetersizliklerinde kendisine karşı sevecen duygular beslemesi ve kendi deneyimlerinin aslında insanların ortak deneyimlerinin bir parçası olduğunu fark etmesidir (Neff, 2003a).

Özduyarlılık, içerisinde bireyin zor zamanlarda kendisine karşı sevecen olmasını ifade eden özsevecenliği vardır. Özsevecenlik, birey acı dolu zor yaşantılarla karşılaştığında ortaya çıkar. Özduyarlılık, bireyin kendisini izole etmek yerine bunların tüm insanlığın bir parçası olduğunu kabul eden ortak insanlık bilincini vurgular. Son olarak, özduyarlılık acı veren duygu ve düşünceler ile aşırı özdeşleşmek yerine, onlar hakkında dengeli bir farkındalığı ifade eden bilinçli farkındalık unsurlarını barındırır (Neff, 2003a, 2003b).

Özduyarlılığın birçok çalışmada depresyon ve kaygı ile negatif ilişkisi olduğu görülmüştür. (Neff, 2003a; Neff, Hsieh, & Dejitterat, 2005; Neff, Kirkpatrick, & Rude, 2007). Bunun yanı sıra, özduyarlılık, ruminasyon ve düşünce bastırma ile de anlamlı ve negatif bir şekilde ilişkilidir (Neff, 2003b). Özduyarlılık son zamanlarda üniversite öğrencileriyle de çok farklı çalışmalarda incelenmiştir (Akın, 2010; Darith, 2013; Hall, Row, Wuensch, & Godley, 2013; Jing, 2012; Lockard, Hayes, Neff, & Locke, 2014; Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Neff et al., 2005; Neff & Pommier, 2013; Terry, Leary, & Mehta, 2013; Williams, Stark, & Foster, 2008). Terry ve arkadaşları (2013) üniversite öğrencileriyle yaptıkları bir çalışmada, özduyarlılığı yüksek olan öğrencilerin üniversitedeki akademik ve sosyal zorluklarla daha kolay baş edebildiklerini ve daha az ev özlemi ve depresyon belirtileri gösterdiklerini ortaya koymuştur. Mercan ve Yıldız'a (2011) göre ise Türkiye'deki öğrenciler üniversiteye

girebilmek için çok zorlu şartlardan ve süreçlerden geçip üniversite yaşamına başlamaktadırlar. Bu bağlamda öğrencilerin üniversite yaşamında depresyon, kaygı, ev özlemi ve diğer sorumluluklarla baş edebilmeleri için özduyarlılık etkili bir beceri olabilmektedir (Wintre & Yaffe, 2000).

2.4.3. Ruminatif Düşünme ve Endişe

İnsanlar kendi içsel süreçleri ile ilgili düşünüp yansıtma yapabilen tek canlılardır (Mor & Winquist, 2002; Papageorgiou & Wells, 2004). İşlevsel olmayan öz-yansıtma bireyleri depresyon, kaygı ve diğer psikopatolojilere yönlendirebilmektedir (Nolen-Hoeksema, Wisco & Lyubomirsky, 2008). Ruminasyon ve endişe bir çeşit öz-yansıtma olarak kabul edilmektedir. Ruminasyon ve endişenin operasyonel tanımlarındaki potansiyel karmaşa, bu iki kavramın geçiciliği ile ilişkilidir. Endişe gelecek kaynaklı bir bilişsel tepki iken (Borkovec, Alcaine & Behar, 2004), ruminasyon daha çok geçmiş odaklı bir kavramdır (Aldao, Mennin & McLaughlin, 2013).

Aslında, hem ruminasyon hem de endişe içerisinde tekrarlayıcı olumsuz yönelimli düşünceleri barındırmaktadır (Watkins, 2008). Ancak, araştırma bulguları bu iki kavramı ayrıştırmada değişken sonuçlar göstermektedir. Bazı araştırmacılara göre bu iki kavram ayrılmaz bir bütün iken (Seegerstrom et al., 2000), diğerleri bu iki kavramın ayrıştırılması gerektiğini savunur (Fresco et al., 2002). Benzerliklerine rağmen, endişenin kaygı ile ruminasyonun ise depresyonla ilişkili olduğu bilinmektedir (Fresco et al., 2002).

Ruminasyon ve endişe, üniversiteye uyumun en belirgin yordayıcılarından biri olan depresyonla çok güçlü olarak ilişkilidir (Nolen-Hoeksema, 1998). Araştırmalar, ruminasyonun depresyonun bir belirleyicisi olduğunu göstermektedir (Nolen-Hoeksema, Stice, Wade, & Bohon, 2007; Schwartz & Koenig, 1996).

Zawadzki ve arkadaşları (2013) yaptıkları çalışmada üniversite öğrencilerinde ruminasyon ve kaygının, yalnızlık ve depresif duygu durum ile öğrencilerin uyku kaliteleri arasındaki ilişkide aracı rollerini araştırmışlardır. 1244 üniversite öğrencisinin katıldığı bu çalışmaya göre ruminasyon ve kaygı, yalnızlık, depresif duygu durum ve uyku kalitesi arasındaki ilişkide tam bir aracı etki görülmüştür.

2.5. Türkiye’de Üniversiteye Uyum

Üniversiteye uyum kavramı, Türkiye’de yaklaşık olarak son 25 yılda çok farklı çalışmalarda farklı değişkenlerle ele alınmıştır. Alperden (1993) öğrencilerin uyumlarını etkileyen kişisel, ailevi ve sosyal değişkenleri ele almış ve fiziksel görünüşünden memnun olan ve güçlü dini inançları olan öğrencilerin üniversiteye daha iyi uyum sağladıklarını ortaya koymuştur. Yalın (2007) ise, üniversiteye yeni başlayan ve hazırlık sınıfında okuyan öğrencilerin uyumlarını benlik dayanıklılığı, baş etme stili, iyimserlik ve cinsiyet ile ilişkisini 420 öğrenciyle yaptığı çalışmada incelemiş ve yüksek benlik dayanıklılığı ve iyimserliği olan öğrencilerin daha iyi uyum sağladıklarını bulmuştur. Mercan ve Yıldız (2011) Eğitim Fakültesi’nde okuyan 311 öğrenci ile yaptıkları çalışmada öğrencilerin üniversiteye uyum süreçlerinde en çok ekonomik ve akademik sorunlar yaşadıklarını göstermektedir.

Türkiye’de üniversiteye uyumla ilişkili olarak, öğrencilerin problemleri internet kullanımı ile uyumları arasındaki ilişkinin incelendiği İkiz, Savcı ve Yörük (2015) tarafından gerçekleştirilen güncel çalışmaya göre, problemleri internet kullanımı ile uyum arasında anlamlı ve negatif bir ilişki bulunmuştur. Ayrıca problemleri internet kullanımı üniversiteye yeni başlayan öğrencilerde daha yoğun olarak görülmüştür.

Aladağ, Kağnıcı, Tuna ve Tezer, (2003) tarafından geliştirilen ve Türkiye’de üniversite yaşamına uyumu ölçmek için yaygın olarak kullanılan 48 maddelik Üniversite Yaşam Ölçeği’nin yanı sıra, Aslan (2015) tarafından geliştirilen üç

faktörden oluşan (kişisel uyum, sosyal uyum ve akademik uyum) 60 maddelik Üniversite Yaşamına Uyum Ölçeği de bundan sonra ki çalışmalarda kullanılabilir güncel bir ölçek olarak geliştirilmiştir.

2.6. Literatür Özeti

Öğrencilerin üniversite yaşamlarındaki değişimi ve uyum süreçlerini açıklayan çok farklı teoriler, modeller ve bakış açıları geliştirilmiştir. Bunlardan bazıları uyum sürecinde öğrencilerin bireysel, bilişsel ve yaşantısal gelişim süreçlerinin önemini vurgularken, diğerleri ise, daha çok çevresel ve sosyolojik faktörlerin etkisinden bahsetmişlerdir. Tüm bu farklı teori, model ve yaklaşımlar, üniversite öğrencisinin uyum sürecini daha iyi anlayabilmek adına üniversite psikolojik danışma merkezleri, akademik ve idari personel ve aileler için oldukça faydalıdır.

Çevre ile etkileşim sürecinde bir baş edebilme becerisi olarak da algılanabilecek uyum sağlama kimi zaman zordur. Uyum süreci bireyin aktif olmasını ve yeni beceriler geliştirmesini gerektirir. Stresli yaşantılardan sonra üniversiteye başlamak ve bu farklı ortama uyum sağlamak yeni gelen öğrenciler için oldukça zorlayıcı olabilmektedir. Bu süreçte öğrencilerin uyumunu kolaylaştıran ve/veya zorlaştıran faktörleri inceleyebilmek için bu çalışmada psikolojik esneklik/katılık, ruminatif düşünme, endişe ve özduyarlılığın üniversiteye uyumla ilişkisi incelenmiştir.

3. YÖNTEM

3.1. Araştırma Deseni

Bu çalışmada korelasyonel araştırma deseni kullanılmıştır. “Korelasyonel araştırma, iki ya da daha fazla nicel değişkenin ne derecede ilişkili olduklarını korelasyon katsayısı kullanarak belirleyen çalışmalardır” (Fraenkel, Wallen ve

Hyun, 2012, p. 331). Yapısal Eşitlik Modellemesi (YEM) ile de çoklu nedensel süreçleri gözlemlemek mümkündür. YEM, araştırmacının hipotezler ve değişkenler arası potansiyel ilişkiler hakkında ön bilgiye sahip olması ve bunları doğrulamak üzere bir modelde test etmesi dolayısıyla doğrulayıcı bir tekniktir (Tabachnick ve Fidell, 2007). Bu nedenle, bu çalışmada varsayılan modelde, istatistiksel olarak tüm değişkenler simultane bir şekilde YEM ile test edilmiştir. YEM analizinde her bir ölçme aracı doğrulayıcı faktör analizinden (DFA) geçirildikten sonra, varsayılan model AMOS 20. versiyonu kullanılarak değerlendirilmiştir. Değerlendirmede Chi-Square (χ^2), The Bentler Comperative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square of Error of Approximation (RMSEA) gibi fit değerleri dikkate alınmıştır.

3.2. Örneklem

Bu çalışmada amaçlı örneklem yöntemi kullanılmıştır. Amaçlı örneklem, çalışma sırasında uygun olan en yakındaki katılımcıların seçildiği ve gerekli sayıda katılımcıya ulaşılan kadar uygulamaya devam edilen örneklem yöntemidir (Cohen, Manion ve Morrison, 2011). Bu çalışmada veriler bir devlet üniversitesine kayıtlı birinci sınıf öğrencilerinden 2014 yılının Aralık ayının ilk iki haftasında toplanmıştır. Üniversiteye uyum süreci temel olarak üniversitenin ilk yılının ilk döneminde deneyimlenen kapsamlı bir olgudur. Bu nedenle üniversiteye yeni gelen öğrencilerin Eylül ayından Aralık ayının sonlarına kadar belirli derecede uyum sorunlarını deneyimledikleri tahmin edilmektedir.

Yüksek Öğretim Kurumu'na (YÖK) göre verilerin toplandığı devlet üniversitesine 2014 yılında 3174 öğrenci kayıt yaptırmıştır. Bu araştırmaya üniversitenin farklı fakültelerinden toplam 657 birinci sınıf öğrencisi katılmıştır. Bu katılımcılardan 171 (%26) i erkek, 486 (%74) ise kadındır. Katılımcıların yaşları 18-25 (M=18.64, SD= 1.18) arasında değişmektedir. Bu araştırmada altı farklı fakülteden birinci sınıf öğrencileri katılmıştır. Bu katılımcılardan 358 (%54,5)'i Eğitim Fakültesinden, 136 (%20,7)'si Sağlık Yüksek Okulundan, 87

(%13,2)'si İktisadi ve İdari Bilimler Fakültesinden, 56 (%8,5)'sı Mühendislik ve Mimarlık Fakültesinden ve 20 (%3,0) ise Tıp Fakültesinden oluşmaktadır. Her ne kadar örneklem büyüklüğü hakkında kesin bir cevap verilemese de, YEM araştırmalarında tipik olarak 200 ve üzeri örneklem büyüklüğü ideal olarak kabul edilmektedir (Kline, 2011, p. 12).

3.3. Ölçme Araçları

Üniversite Yaşam Ölçeği (ÜYÖ; Aladağ, Kağnıcı, Tuna ve Tezer, 2003. Üniversite yaşamına uyumu ölçmek için geliştirilen bu ölçek altı alt boyuttan ve toplamda 48 maddeden oluşmaktadır. Bu boyutlar, 12 maddeden oluşan “üniversite ortamına uyum”, dokuz maddeden oluşan “duygusal uyum”, yedi maddeden oluşan “kişisel uyum”, yedi maddeden oluşan “karşı cinsle ilişkilere dair uyum”, yedi maddeden oluşan “akademik uyum” ve altı maddeden oluşan “sosyal uyum” dan oluşmaktadır. Ölçeğin toplam güvenirlik katsayısı .89 olarak belirlenmiştir. Alt ölçeklerin güvenirlik katsayıları .73 ile .58 arasında değişmektedir.

Kabul ve Eylem Formu –II (KEF-II; Bond ve ark., 2011; Uyarlayan: Yavuz, Işkın, Ulusoy, Esen ve Burhan, 2014). Kabul ve Eylem Formu (KEF)'nin ilk versiyonu Hayes ve ark., (2004) tarafından yaşantısal kaçınmayı ölçmek amacıyla geliştirilmiştir. Ancak ilk versiyonunun test tekrar test güvenirliği düşük çıkınca zamanla yeni bir ölçek geliştirme çalışması gerekli hale gelmiş, yedi maddeden oluşan ve psikolojik esneklik/katılığı ölçen Kabul Eylem Formu (KEF)- II geliştirilmiştir (Bond ve ark., 2011). Ölçeğin güvenirlik katsayısı .85 olarak bulunmuştur.

Ruminatif Düşünme Stili Ölçeği (RDSÖ; Brinker ve Dozois, 2009; Uyarlayan: Karatepe, Yavuz ve Türkcan, 2013). RDSÖ 20 maddeden oluşan ve global ruminasyonun (tekrarlayıcı düşünceler) pozitif, negatif ve nötr taraflarını tanımlayan bir ölçektir. Ölçek tek faktörlü bir yapıdadır. Ölçekte ruminatif

düşünce, tekrarlayıcı, nükseden, kontrol edilemeyen ve zorlayıcı bir özellikte olarak değerlendirilmektedir. Brinker ve Dozois (2009) ölçeği 118 lisans öğrencisinden veri toplayarak geliştirmiştir. Bu araştırmada ölçeğin güvenirlik katsayısı .89 olarak bulunmuştur.

Penn- Eyalet Endişe Ölçeği (PEEÖ; Meyer, Miller, Metzger ve Borkovec, 1990; Uyarlayan: Yılmaz, Gençöz ve Wells, 2008). PEEÖ 16 maddeden oluşan tek faktörlü bir yapıya sahip olan bir ölçektir. Ölçekten alınan yüksek puanlar bireyin yüksek seviyede endişeye sahip olduğunu göstermektedir. Her ne kadar bazı faktör analizi sonuçları PEEÖ'nin iki faktörlü bir yapıya, 11 maddenin endişenin varlığı yönünde, beş maddenin ise endişenin yokluğu yönünde, sahip olduğunu söylese de, PEEÖ en iyi bir şekilde tek faktörlü yapıda kendini göstermektedir (Startup ve Erickson, 2006). Bu araştırmada ölçeğin güvenirlik katsayısı ise .90 olarak bulunmuştur.

Özduyarlık Ölçeği (ÖDÖ; Neff, 2003; Uyarlayan: Akın, Akın ve abacı, 2007). “Zor zamanlarda genelde kendime nasıl davranırım?” sorusuyla bu ölçeğin temelini oluşturan Neff (2003), özduyarlık ölçeğini geliştirmiştir. ÖDÖ, 26 maddeden ve altı alt ölçekten oluşan bir yapıdadır. Alt ölçekler, beş maddeden oluşan “özsevecenlik”, beş maddeden oluşan “özyargılama”, dört maddeden oluşan “ortak insanlık bilinci”, dört maddeden oluşan “izolasyon”, dört maddeden oluşan “bilinçli farkındalık” ve “ dört maddeden oluşan “aşırı özdeşleşme” dir. Özduyarlık ölçeğinden alınan yüksek puanlar yüksek özduyarlığın olduğunu göstermektedir. Ölçeğin toplam güvenirlik katsayısı .91 iken, alt ölçeklerin güvenirlik katsayıları .71 ile .76 arasında değişmektedir.

3.4. Veri Toplama Süreci

Veri toplama sürecinden önce, araştırma hakkındaki temel bilgiler, kullanılacak ölçekler ve araştırma dizaynı ile ilgili bilgiler Orta Doğu Teknik Üniversitesi İnsan Araştırmaları Etik Komitesi ve Abant İzzet Baysal Üniversitesi İnsan

Arařtırmaları Etik Komitesi'ne sunulmuřtur. Her iki üniversitenin etik komitelerinin onayından sonra arařtırmacı, Abant İzzet Baysal Üniversitesi'nde farklı fakültelerde birinci sınıfta okuyan öğrencilere amaçlı örneklem yöntemiyle ulaşarak ölçekleri uygulamıştır. Ölçekler, öğrencilerin ders saatleri sırasında uygulanmıştır. Arařtırmacı uygulamaların büyük kısmını kendisi gerçekleřtirmiştir.

Veri toplama sırasında, arařtırmaya katılımda gönüllülük ve bilgilerin gizliliđi gibi konulara açıklık getirilmiştir. Bunlara ek olarak, arařtırmanın amacı ve toplanan verilerin ne amaçla kullanılacağı konuları da uygulamalar öncesi katılımcılara açıklanmıştır.

3.5. Veri Analizi

IBM SPSS20 ve AMOS21 bilgisayarlı istatistik programları, psikolojik esneklik/katılık, özduyarlık, ruminatif düşünme ve endişenin üniversiteye uyumla ilişkisini etkileşimsel bir modelde test etmek üzere kullanılmıştır. Bu arařtırmanın veri analizi birkaç adımı içermektedir. Öncelikle veri seti, uygunluk, kayıp veriler ve uç deđerler bakımından kontrol edilmiştir. Daha sonra, tanımlayıcı analizler yapılmıştır. Daha sonra arařtırmada kullanılan tüm ölçekler için Doğrulayıcı Faktör Analizi (DFA) uygulanmıştır. DFA uygulamasında, veri normal dağılım gösterdiği için yapısal eşitlik modellemesinde en büyük olabilirlik kestirimi kullanılmıştır.

Bu arařtırmada YEM kullanılmıştır. YEM arařtırmalarında, nedensel süreçleri temsil eden bir yapısal eşitlikler (örneğin, regresyon) serisi ve bu yapısal eşitliklerin daha iyi kavramsallařtırabilmesi için görsel olarak modellenmesi mümkün olabilmektedir (Byrne, 2010). Bir YEM arařtırmasının temel amacı, ortaya atılan nedensel süreç ve/veya modelin belirlenmesi ve doğrulanmasıdır. Bundan dolayı YEM doğrulayıcı bir tekniktir (Kline, 2011).

3.6. Araştırmanın Sınırlılıkları

Bu araştırmanın bazı sınırlılıkları vardır. Araştırmanın bulgularını yorumlarken bu sınırlılıkları da dikkate almak oldukça önemlidir. Öncelikle, veriler üniversite öğrencilerinden amaçlı örneklem yöntemiyle toplanmıştır. Amaçlı örneklem, rastgele örneklemin tersi olarak, veri toplama süreci sırasında uygun olan katılımcılara direkt olarak ulaşan yöntemdir. Bu bakımdan amaçlı örneklem bazı yanlış sonuçlar doğurabilir. İkinci olarak, veriler, katılımcıların ölçeklerdeki sorulara kendi verdikleri cevaplardan elde edilmiştir. Ölçeklerde her bir katılımcının kendi duygu ve düşüncelerini rahatça ifade etmeleri sağlanmışsa da, verilen cevapların geçerliğinin kontrol edilmesi mümkün değildir.

Üçüncü olarak, her ne kadar araştırmacı birçok veri toplama uygulamasına bizzat katılmış olsa da, bazı uygulamalar ders sırasında sadece dersin öğretmeni tarafından yapılmıştır. Bu nedenle, her uygulamanın tamamen aynı süreç ve şekillerden geçilerek yapıldığını söylemek mümkün değildir. Dördüncü olarak, bazı ölçeklerde, bireyin cinsel yaşamı ve duygusal yaşamına dair, katılımcıların hassas bulabilecekleri konulardan soruların olması, onların içtenlikle cevap vermelerini sınırlayıcı bir etken olmuş olabilir.

4. BULGULAR

4.1. Varsayım Analizleri

YEM analizine başlamadan önce veri seti, kayıp değer, yanlış veri girişi ve aşırı uç değerler bakımından değerlendirilmiş ve normallik, doğrusallık ve uç değerler varsayımları değerlendirilmiştir. Bu değerlendirmelere göre, kayıp veri incelenmesi yapılmıştır. Kayıp veri, katılımcının veri uygulama gününde hazır bulunamamasından, hassas sorulara cevap verilememesinden, ölçeğin iyi düzenlenememesinden ve katılımcının cevap vermek istememesinden

kaynaklanıyor olabilmektedir (Byrne, 2010). Her ne kadar kayıp verileri analiz etmede belirli net bir kılavuz olmasa da çoğunlukla, kayıp veri oranının %5'i geçmediği veri setleri analize dâhil edilmektedir (Tabachnick ve Fidell, 2007). Bu nedenle bu araştırmada %5'ten daha fazla kayıp veriye sahip olan vakalar (n=47) analize dâhil edilmemiştir. Bu aşamadan sonra, örneklem büyüklüğü 657 (571 kadın, 206 erkek) ortalama yaş 18.67 (SD= .44) olarak belirlenmiştir. Kayıp veri analizinde son adım olarak da vakalardaki boş maddelere de ortalama ataması yapılmıştır.

Uç değerler verideki ortalama, standart sapma ve korelasyon değerlerini etkileyen değerlerdir (Schumacker ve Lomax, 2004). Tek değişkenli uç değerler, tek bir vakadaki olağan olmayan değerleri temsil ederken, çok değişkenli uç değerler birden çok değişkendeki olağan dışı değerlerin kombinasyonunu temsil eder. Tek değişkenli uç değerler z skorları alınarak incelenirken, çok değişkenli normallik Mahalonobis Mesafesi a bakılarak incelenir (Tabachnick ve Fidell, 2007). Bu araştırmada tek değişkenli uç değerler analizi sonucunda her bir ölçekte yediden fazla uç değer görülmediği için, bu uç değerlerin analizde tutulmasına karar verilmiştir. Diğer taraftan çok değişkenli uç değer analizi Mahalonobis Mesafesi ile yapılmış ve 15 vakanın kritik değer üzerinde olduğu anlaşılmıştır. Bu değerler çıkarılıp analiz tekrar yapıldığında yapısal eşitlik modellemesindeki fit değerlerinde belirgin değişikliklerin olmadığı gözlemlenmesi sonucu bu 15 vakanın analizde kalmasına karar verilmiştir.

Varsayım analizlerindeki bir sonraki inceleme verinin her bir değişken için normal dağılıp dağılmadığını anlamak üzerine olmuştur. Eğrilik ve basıklık değerleri SPSS20 programı kullanılarak kontrol edilmiştir. Bu değerlendirme sonucuna göre, her bir değişkenin normal dağılım gösterdiği gözlemlenmiştir.

Son olarak, doğrusallık eş değişkenlik varsayımları da her bir değişken arasındaki doğrusal ilişkiler için SPSS20 kullanılarak test edilmiştir. Dağılım grafiği bulgularında değişkenler arası örüntülerin dağınık, başka bir ifadeyle

regresyon çizgisi etrafında rastgele dağıldığı, olduğu gözlemlenmiştir. Bu da doğrusallık eş değişkenlik varsayımının analizler öncesi sağlandığı anlamına gelmektedir.

Yapısal eşitlik modeli test edilmeden önce çalışmada yer alan değişkenler arası ikili korelasyonlar test edilmiştir. Field (2009)'a göre, iki değişken arasındaki korelasyon, +/-0.10 olduğunda küçük, +/-0.30 olduğunda orta ve +/-0.50 den büyük olduğunda büyüktür. Buna göre, psikolojik katılık ve özduyarlılık arasındaki korelasyon (-0.61) olarak bulunmuştur. Değişkenler arası en düşük korelasyon ise üniversiteye uyum ve ruminatif düşünme arasında (-0.38) bulunmuştur.

4.2. Yapısal Eşitlik Modeli (YEM) Bulguları

Bu çalışma için önerilen modelin test edilmesi AMOS 20 bilgisayar programı ile yapılmıştır. Önerilen yapısal eşitlik modellemesinde psikolojik katılık, özduyarlılık, ruminatif düşünme ve endişe değişkenleri üniversiteye uyumun yordayıcıları olarak yer almışlardır. Model test edilirken, χ^2 , CFI, NFI, TLI ve RMSEA değerleri dikkate alınmıştır. Bu değerlerin test edilmesini takiben modeldeki gizil faktörleri ve görünen değişkenleri ortaya çıkarmak adına katsayı tahminleri analiz edilmiştir. Son olarak ise çoklu korelasyon katsayılarının kareleri (R^2), her bir içsel değişkenin (üniversiteye uyum, özduyarlılık, ruminatif düşünme ve endişe) modelde açıkladığı varyans analiz edilmiştir. Bu çalışmadaki tek dışsal değişken ise psikolojik katılıktır.

Bu çalışmadaki model test sonuçlarına göre, psikolojik katılık ile üniversite uyum arasındaki ilişki katsayısının -0.63, ruminatif düşünme ile 0.76, endişe ile 0.77, ve özduyarlılık ile ise -0.73 olarak anlamlı bir şekilde yordadığı görülmektedir. Ayrıca, özduyarlılık ile üniversiteye uyum arasındaki ilişki katsayısının 0.12 olduğu ve özduyarlılığın da üniversiteye uyumu anlamlı bir şekilde yordadığı görülmüştür. Bu çalışmada ruminatif düşünme ile üniversiteye uyum arasındaki ilişki katsayısının 0.11, ve endişe ile üniversiteye uyum

arasındaki ilişki katsayısının .02 olduğu ve bu iki değişkenin beklendiği gibi üniversiteye uyumu yordamadıkları görülmüştür. Ayrıca model test sonuçlarına göre Ki- kare değerinin ($\chi^2 = 2118.87$, $n = 657$, $\chi^2 / df = 2,32$) anlamlı olduğu görülmüştür. Uyum indeksi değerleri ise CFI = .91, TLI = .90, NFI = .85, RMSEA = .04 olarak bulunmuştur.

Bu araştırmanın modeli yedi hipotez üzerine kurulmuş ve belirtilen sonuçlara göre bu hipotezlerden beş tanesi kabul edilmiş, iki tanesi reddedilmiştir. Bu bağlamda, üniversiteye yeni başlayan ve psikolojik esnekliği düşük olan ya da psikolojik katılığı yüksek olan öğrencilerin üniversiteye uyum sağlamalarında zorluklar yaşadığı söylenebilir. Bunun yanı sıra, yüksek seviyedeki özduyarlılık üniversiteye yeni başlayan öğrencilerin uyum süreçlerini kolaylaştırdığı sonucuna varılmıştır. Bu çalışmadaki model testinin sonuçlarına göre, psikolojik katılığın, özduyarlılık ile negatif, ruminatif düşünme ve endişe ile pozitif şekilde ilişkili olduğu anlaşılmıştır. Son olarak, model test sonuçlarına göre, üniversiteye uyum beklendiği gibi ruminatif düşünme ve endişe değişkenleri tarafından anlamlı ve negatif bir şekilde yordanmadığı bulunmuştur. Bu beklenmedik bulgulara tartışma kısmında değinilecektir.

Araştırma bulgularına göre, test edilen yapısal eşitlik modelindeki toplam varyansın % 60'ını endişe değişkeni, %59'unu ruminatif düşünme değişkeni, %54'ünü özduyarlılık değişkeni ve %41'unu ise üniversiteye uyum değişkeni açıklamaktadır.

5. TARTIŞMA

5.1. Araştırma Bulgularının Tartışılması

Bu çalışma üniversiteye yeni başlayan öğrencilerin üniversiteye genel uyumlarının, psikolojik katılıkları, özduyarlılıkları, ruminatif düşünme ve endişeleri ile ilişkisini etkileşimli bir modelde test etmiştir. Bu araştırma

modelinde önerilen yedi hipotezden beşi kabul edilmiş, ikisi reddedilmiştir. Bulgular, psikolojik katılığın ve özduyarlılığın üniversiteye genel uyumu anlamlı bir şekilde yordadığını doğrulamıştır. Ancak, ruminatif düşünme ve endişe değişkenlerinin üniversiteye genel uyumu beklendiği gibi yordamadığı anlaşılmıştır.

Psikolojik esneklik, bireyin şimdi ve buradaki duygu ve düşünceleriyle, o andaki durum neyi gerektiriyorsa, savunmaya geçmeden bilinçli bir farkındalıkla belirlenen değerler doğrultusunda temas etme süreci olarak tanımlanmaktadır (Gloster, Klotsche, Chaker, Hummel, ve Hoyer, 2011). Bu bağlamda, bu çalışma sonuçlarına göre, psikolojik esnekliği düşük olan (psikolojik katılığı yüksek olan) öğrencilerin, üniversiteye uyum süreçlerinde zorlandıkları ortaya çıkmaktadır. Bu bulgu, psikolojik katılığın her türlü psikolojik sıkıntıda önleyici bir faktör olduğunu vurgulayan Masuda ve Tully'nin (2011) ile paralellik göstermektedir. Daha belirli olarak ise psikolojik esneklik, üniversite öğrencilerinin deneyimleyebileceği depresyon, kaygı, madde kullanımı ile ilgili sorunlar, travmatik deneyimler sonrası uyum problemleri, okul performansı ve tükenmişlik gibi birçok konuda genel koruyucu bir faktör olarak karşımıza çıkmaktadır (Biglan, Hayes, ve Pistorello, 2008; Michael E. Levin et al., 2014).

5.2. Uygulama için Öneriler

Bu çalışmanın temel amacı öğrencilerin üniversitedeki ilk yıl deneyiminin önemini vurgulamak ve onların yaşadıkları uyum sorunlarını ele almaktır. Bu bağlamda, psikolojik katılık/esneklik, ruminatif düşünme, endişe ve özduyarlılığın üniversite yaşamına uyum üzerindeki rolleri araştırılmıştır. Ortaya çıkan sonuçlara dayalı olarak, üniversite psikolojik danışma merkezleri, yöneticileri akademik personel, aileler ve son olarak öğrenciler için çeşitli öneriler sunmak mümkündür?

Bu alıřmadaki en temel bulgulardan birine gre, psikolojik esneklik ve zduyarlılık niversiteye uyumu anlamlı bir řekilde belirleyen etkenlerden biri olarak ortaya konmuřtur. Bu baęlamda, Gilbert (2014) de vurguladıęı gibi, ęrenciler duyarlılık temelli beceri geliřtirme programlarından ve ayrıca bilinli farkındalık programlarından yarar saęlayabilirler. Kabul ve bilinli farkındalık temelli programlar, tanı st bir yaklařım saęladıęı ve diren gelişimine katkıda bulunduęu iin ęrencilere birok zorluęun oluřumunu nlemelerinde oldukça fayda saęlayabilecektir.

Ayrıca, psikolojik olarak esnek olan ęrencilerin daha kolay uyum saęladıkları sonucu da dřnlrse, ęrencilere psikolojik esneklięin altı temel sreci hakkında eęitimler verilebilir ve bu sreler sayesinde ęrenciler uyum sorunları da dhil olmak zere, ok farklı psikolojik sorunların oluřumunu nlemiř olabilirler.

niversite psikolojik danıřmanlık merkezleri aracılıęıyla KKT uygulamaları grup temelli yaklařımlarla ve internet zerinden ok daha geniř kitlelere ulařabilir. Bu sayede ok fazla sayıda niversite ęrencisi, uyum sorunları da dhil olmak zere ok farklı psikolojik sorunlarla bař etme noktasında etkin yardım almıř olacaktır.

5.3. Gelecekteki alıřmalar iin neriler

niversite uyum ile ilgili var olan alıřmaların oęunda, uyumun baęımlı deęiřken olarak incelendięi grlmektedir (Orbay, 2009; Sun-Selıřık, 2009; Yalım, 2007). Gelecekte uyumun yordayıcı deęiřken olarak ele alınacaęı ve genel ruh saęlıęı gibi farklı deęiřkenlerle iliřkisinin arařtırılacaęı alıřmalar yapılabilir.

Neff ve ark.'a (2007) göre özduyarlılığı yüksek olan bireyler daha az ruminatif düşünmeye yatkındırlar. Bundan dolayı, gelecekteki yapılacak çalışmalarda özduyarlılığın ruminatif düşünme ve üniversiteye uyum arasındaki aracı etkisi incelenebilir. Ayrıca bu çalışmadaki model, üniversiteye uyumun alt boyutlarının her bir değişkenle ilişkisi ayrı ayrı incelenerek oluşturulacak olan farklı modellerde test edilebilir.

Bu çalışmada özduyarlılık ve üniversiteye uyum toplam puanları ile ele alınmış ve model toplam puanlar üzerinden test edilmiştir. Daha sonra yapılacak olan çalışmalarda üniversiteye uyum ve özduyarlılığın alt boyutlarının modeldeki diğer değişkenlerle ilişkisi, oluşturulacak olan farklı ölçme modelleri ile test edilebilir.

Son olarak ise, bu araştıma değişkenler arası karşılıklı ilişkiyi temel alan ilişkiyel (korelasyon) bir çalışmadır. Korelasyonel bir çalışmada neden sonuç ilişkisinin tam olarak açıklanamayacağı düşünüldüğünde, boylamsal çalışmalarla öğrencilerin üniversiteye uyum süreçlerinin değişimi zaman içerisinde daha net anlaşılabilir.