

EXAMINING THE RELATIONSHIP AMONG INTOLERANCE TOWARD
UNCERTAINTY, MINDFULNESS LEVELS AND COPING WITH STRESS
STRATEGIES OF SENIOR UNDERGRADUATE STUDENTS

by Gülce Zorlutuna

Submitted to Graduate School of Educational Sciences
in Partial Fulfillment of the Requirements
for the Degree of Master of Guidance and Counselling

Yeditepe University

2022

EXAMINING THE RELATIONSHIP AMONG INTOLERANCE TOWARD
UNCERTAINTY, MINDFULNESS LEVELS AND COPING WITH STRESS
STRATEGIES OF SENIOR UNDERGRADUATE STUDENTS

APPROVED BY:

Assist. Prof. Dr. Berke Kırıkkanat

.....

(Thesis Supervisor)

(Yeditepe University)

Assist. Prof. Dr. Adem Semai Tuzcuoğlu

.....

(Marmara University)

Assoc. Prof. Dr. Yelkin Diker Coşkun

.....

(Yeditepe University)

DATE OF APPROVAL: / ... 2022

DECLARATION

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:Gölce Zorlutuna

ACKNOWLEDGEMENTS

I would like to thank,

my graduate thesis advisor Assistant Professor Berke Kırıkkanat who guided me with her knowledge and experience throughout my thesis process and always made me feel her support and belief,

my dear sister Dilara Zorlutuna and my precious İdil Artan, who always made me feel their support during my thesis process,

my dear mother Kaniye Artan and my father Mehmet Artan, who always supported me with their unconditional love,

my precious Artan and Zorlutuna families, whose support I have always feel,

my dear other half Alp Zorlutuna ,who was with me during my thesis process as always.

TEŞEKKÜR

Tez sürecim boyunca bilgi birikimi ve tecrübesiyle bana yol gösteren, desteğini ve inancını her zaman hissettiren yüksek lisans tez danışmanım Dr. Öğretim Üyesi Berke Kırıkkanat'a

Tez sürecimde desteğini her zaman hissettiren sevgili ablam Dilara Zorlutuna ve kıymetlim İdil Artan'a

Koşulsuz sevgileriyle, her zaman yanımda olarak beni destekleyen sevgili annem Kaniye Artan ve babam Mehmet Artan'a

Desteklerini her zaman hissettiğim Artan ve Zorlutuna Aileleri'ne

Her zaman olduğu gibi tez sürecimde de yanımda olan sevgili diğer yarım Alp Zorlutuna'ya teşekkürü borç bilirim.

ABSTRACT

This study was examined the relationship among intolerance toward uncertainty, mindfulness levels and coping with stress strategies of senior undergraduate students. In this research, convenient and criterion sampling method was utilized to determine the sample group consisting of senior undergraduate students (n=352) studying at Yeditepe University in the 2020-2021 academic year. Personal Information Form, Intolerance of Uncertainty Scale-Short Form, Mindful Attention Awareness Scale and Coping Styles Inventory were utilized to collect data from the sample group. The analysis of all the data in this research was obtained by using the Spss 25.0 program.

In line with the analysis results, while it has been found out that there is a significant relationship between the intolerance toward uncertainty and the helpless approach sub-dimension, one of the coping with stress strategies. It was found between no significant relationship the levels of mindfulness and the helpless, the submissive, the optimistic and the to seeking social support approaches sub-dimension, one of the strategies of coping with stress. It was found out that there is a significant relationship between mindfulness levels and the self-confident approach sub-dimension, which is one of the coping with stress strategies. No significant relationship was found between the levels of mindfulness and intolerance toward uncertainty. There was no significant difference among intolerance toward uncertainty, mindfulness levels and coping with stress strategies, with respect to the age of the students, the program they studied, whether they did research on the fields they were educated or not, and their overall grade point averages. It was not observed significant difference between intolerance toward uncertainty, mindfulness levels, and self-confident, helpless, optimistic, and seeking social support approach sub-dimension, one of the coping with stress strategies with respect to gender. The submissive approach sub-dimension, one of the coping

with stress strategies, demonstrated a significant difference with respect to gender, and it was found that the submissive approach levels of male participants were higher than female participants.

The research findings and limitations discussed in the relevant literature are presented as suggestion for future researches.

Keywords: Intolerance toward Uncertainty, Mindfulness, Coping with Stress, University Students.



ÖZET

Bu araştırma, üniversite son sınıf öğrencilerinin belirsizliğe karşı tahammülsüzlük, bilinçli farkındalık düzeyleri ve stresle başa çıkma stratejileri arasındaki ilişkiyi inceleme amacıyla gerçekleştirilmiştir. Bu çalışmada 2020-2021 akademik yılında Yeditepe Üniversitesi'nde öğrenim gören lisans son sınıf öğrencilerinden (n=352) oluşan örneklem grubunu belirlemek için uygun ve ölçüt örnekleme yöntemi kullanılmıştır. Örneklem grubundan veri toplamak için Kişisel Bilgi Formu, Belirsizliğe Tahammülsüzlük Kısa Formu, Bilinçli farkındalık Ölçeği ve Stresle Başa Çıkma Tarzları ölçeği kullanılmıştır. Bu çalışmadaki tüm verilerin analizi SPSS 25.0 programı kullanılarak elde edilmiştir.

Yapılan analiz sonuçlarına göre, belirsizliğe karşı tahammülsüzlük ile stresle başa çıkma stratejilerinden çaresiz yaklaşım alt boyutu arasında anlamlı bir ilişki olduğu keşfedilmiştir. Stresle başa çıkma stratejilerinden çaresiz, boyun eğici, iyimser ve sosyal destek arama yaklaşımları alt boyutu ile bilinçli farkındalık düzeyleri arasında anlamlı bir ilişki bulunamamıştır. Bilinçli farkındalık düzeyleri ile stresle başa çıkma stratejilerinden kendine güvenli yaklaşım alt boyutu arasında anlamlı bir ilişki olduğu keşfedilmiştir. Bilinçli farkındalık düzeyleri ile belirsizliğe karşı tahammülsüzlük düzeyleri arasında anlamlı bir ilişki bulunamamıştır. Belirsizliğe karşı tahammülsüzlük, bilinçli farkındalık düzeyi ve stresle başa çıkma stratejileri arasında öğrencilerin yaşlarına, eğitim gördükleri programa, eğitim gördükleri alanlarla ilgili araştırma yapıp yapmamalarına ve genel not ortalamalarına göre anlamlı bir farklılık bulunamamıştır. Cinsiyete göre, belirsizliğe karşı tahammülsüzlük, bilinçli farkındalık düzeyi ile kendine güvenen, çaresiz, iyimser ve sosyal destek arama gibi stresle başa çıkma stratejileri arasında anlamlı farklılık gözlemlenmemiştir. Stresle başa çıkma stratejilerinden boyun eğici yaklaşım alt boyutu cinsiyete göre anlamlı bir farklılık göstermiş,

erkek katılımcıların boyun eğici yaklaşım düzeylerinin kadın katılımcılara göre daha yüksek olduğu bulunmuştur.

İlgili literatürde tartışılan araştırma bulguları ve sınırlılıklar ileride yapılacak araştırmalar için öneri olarak sunulmuştur.

Anahtar Kelimeler: Belirsizliğe Karşı Tahammülsüzlük, Bilinçli Farkındalık, Stresle Başa Çıkma, Üniversite Öğrencileri.



TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
TEŞEKKÜR.....	iv
ABSTRACT	v
ÖZET.....	vii
TABLE OF CONTENTS	ix
LIST OF TABLES	xii
1. INTRODUCTION.....	1
1.1. PROBLEM STATEMENT	1
1.2. PURPOSE OF THE RESEARCH.....	4
1.3. POSTULATES OF THE RESEARCH.....	5
1.4. LIMITATIONS OF THE RESEARCH	6
1.5. DEFINITIONS.....	6
2. LITERATURE REVIEW.....	7
2.1. INTOLERANCE TOWARD UNCERTAINTY	7
2.1.1. INTOLERANCE TOWARD UNCERTAINTY AND INTOLERANCE TOWARD AMBIGUITY	13
2.1.2. RESEARCHES ON THE CONCEPT OF INTOLERANCE TOWARD UNCERTAINTY	14
2.2. MINDFULNESS LEVELS	16
2.2.1. RESEARCHES ON THE CONCEPT OF MINDFULNESS LEVELS	28
2.3. COPING WITH STRESS STRATEGIES.....	30
2.3.1. RESEARCHES ON THE CONCEPT OF COPING WITH STRESS STRATEGIES	34
3. RESEARCH METHOD	39
3.1. RESEARCH MODEL	39
3.2. POPULATION AND SAMPLE	39

3.3.	DATA COLLECTION INSTRUMENTS	40
3.4.	PERSONAL INFORMATION FORM.....	40
3.5.	INTOLERANCE OF UNCERTAINTY SCALE –SHORT FORM (IUS-12)	41
3.6.	MINDFUL ATTENTION AWARENESS SCALE (MAAS)	42
3.7.	COPING STYLES INVENTORY	43
3.8.	DATA COLLECTION PROCESS	45
3.9.	ANALYSIS PROCESS.....	45
4.	FINDINGS	47
4.1.	PRELIMINARY ANALYSIS.....	47
4.2.	MAIN ANALYSIS.....	48
4.2.1.	<i>The Correlation Between the Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies of the Senior Undergraduate Students.....</i>	<i>48</i>
4.2.2.	<i>Examination of Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to Gender of the Senior Undergraduate Students</i>	<i>49</i>
4.2.3.	<i>Examination of Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to Age of the Senior Undergraduate Students.....</i>	<i>51</i>
4.2.4.	<i>Examination of Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to the Program Types of the Senior Undergraduate Students.....</i>	<i>53</i>
4.2.5.	<i>Examination of the Relationship Among Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to Whether They Have Done Research on the Field of Education of the Senior Undergraduate Students or not.</i>	<i>55</i>
4.2.6.	<i>Examination of Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to the GPA (Grade Point Average) of the Senior Undergraduate Students</i>	<i>56</i>
5.	DISCUSSION	60
6.	CONCLUSION.....	66
7.	SUGGESTIONS	68

REFERENCES.....	69
APENDICES	89
Appendix A Personal Information Form.....	89
Appendix B Intolerance of Uncertainty Scale - Short Form.....	90
Appendix C Mindful Attention Awareness Scale	91
Appendix D Coping Styles Inventory	92
Appendix E Intolerance of Uncertainty Scale - Short Form Permission Documents	93
Appendix F Mindful Attention Awareness Scale Permission Documents	94
Appendix G Coping Styles Inventory Permission Documents	95
Appendix H Ethics Committee Thesis Approval.....	96
Appendix I Turnitin Report.....	97

LIST OF TABLES

Table 1. Characteristics of the Participants	40
Table 2. Descriptive Statistics and The Normality Analyze	47
Table 3. Pearson Correlation Coefficients Consequences	48
Table 4. Consequences of Independent Samples t Test	49
Table 5. Consequences of One-Way ANOVA.....	51
Table 6. Consequences of One-Way ANOVA.....	53
Table 7. Consequences of Independent Samples t Test	55
Table 8. Consequences of One-Way ANOVA.....	56

1. INTRODUCTION

1.1. Problem Statement

The university years, which begin in early adulthood, are one of the important turning points in the lives of persons (Çakmak & Havedanlı, 2005). These young people, who are in early adulthood, encounter many different situations while trying to adapt to the academic and social life of university life (Gizir, 2005). Especially in this period when they gain professional expertise, individuals invest in their future professions by fulfilling their academic expectations. At the same time, this period contains many uncertainties (Çakmak & Havedanlı, 2005). Subjects such as future goals, career choice, and romantic partner choice are uncertain in the lives of university students (Liao & Wei, 2011). Especially students who are in the last year of university education will graduate and they will either have a job or experience unemployment in the future (Çakmak & Havedanlı, 2005). The 2020 unemployment figures of the Turkish Statistical Institute showed that the number of unemployed people aged 15 and over is 4 million 227 thousand people in Turkey (TÜİK, 2020). For this reason, senior undergraduate students are left alone with some uncertainties about the future.

By nature, human beings want to be sure of their future life (Budner, 1962). The concept of uncertainty, which is defined as the inability to have an idea about the future lives of undergraduate senior students, in other words, the uncertainty of the future of individuals negatively affects their psychology (Sarıçam, Erguvan, Akın & Akça, 2014). When the literature is examined, the effect of uncertainty on human psychology is defined as intolerance. Intolerance toward uncertainty is the tendency to react negatively emotionally, cognitively, and behaviorally in the face of uncertain affairs. As Carleto (2016) puts it, intolerance of uncertainty is the inadequacy of one's capacity to withstand the reaction arising from the perception of uncertainty. (Buhr & Dugas, 2002). According to Carleton (2016),

intolerance toward uncertainty is the insufficient capacity of the person to endure the reaction arising from the perception of uncertainty.

Studies (Steketee, Frost & Cohen, 1998; Dugas, Gosselin & Ladouceur, 2001; Buhr & Dugas, 2002; Carleton, Colimore & Asmundson, 2010; Barahmand & Haji, 2014) have shown that intolerance toward uncertainty is the cognitive dimension of anxiety and mood disorders. Accordingly, intolerance toward uncertainty has been accepted as a cognitive distortion that affects perceptions, reactions, and assumptions against uncertainty. Particularly, people who cannot tolerate uncertainty experience negative emotional states and they see uncertainty as a source of stress or anxiety. Therefore, these people develop a belief that uncertainty is a situation that should be avoided (Liao & Wei, 2011). The functionality of individuals who escape from the state of uncertainty in order not to experience the negative mood again begins to deteriorate (Buhr & Dugas, 2002).

Intolerance toward uncertainty refers to senior undergraduate students' negative emotional, cognitive, and behavioral attitude to the uncertainty they experience about the future (Buhr & Dugas, 2009). Constructively, taking rational steps toward problems, escaping from problems, and increasing self-confidence by collecting information in the face of uncertainty reduce the stress they are experiencing in a state of uncertainty (Buhr & Dugas, 2002; Özyeşil, 2011a; Tekinalp & Terzi, 2013).

An important practice that plays a role in tolerating uncertainty is mindfulness which refers to paying attention and is based on Eastern meditation. The related technique has been one of the research areas of psychology since the 20th century (Kabat-Zinn, 1990). Different cultures have defined the concept of mindfulness based on philosophical or religious views in order to cope with similar psychological difficulties (Siegel, 2010). Mindfulness, which is developed by nurturing the meditation practices and philosophy of Buddhism, is more than

just meditation practice. With its most common definition, mindfulness is the state of carefully awareness of events and situations that occur here and now (Brown & Ryan, 2003; Hanh, 1976). Conscious awareness is the state of staying neutral with all positive and negative experiences. When we are consciously aware of what is happening now, it is to experience the present moment completely without directing our attention to the past or the future (Germer, 2009).

Another factor that emerges as a significant factor in university students' development of tolerance toward uncertainty is the coping strategies of individuals with stress. Lazarus (1993a) defined the concept of coping with stress as the process of managing stress. This process includes behavioral and cognitive responses (Krohne, 2002). Two types of coping styles are defined in the literature: In problem-focused coping, the individual evaluates that a change can occur against the stressful situation, while in emotion-focused coping, the results cannot be changed in the face of the stressful situation (Lazarus & Folkman, 1988). Türküm (1999) defines coping with stress as people's ways of coping by reacting to the difficult life events they encounter throughout their lives. According to Şahin (1994), keeping the effects of stress at a positive level is stated as coping with stress. Pearlin and Schooler (1978) expressed coping with stress as reactions to avoid life events that would harm the person.

When cognitive-behavioral theories are examined, the way of thinking that individuals in early adulthood adopt while preparing themselves for life is a determining factor that affects their behaviors and emotions (Freeston, Rhéaume, Letarte, Dugas & Ladouceur, 1994). In this direction, when the thinking styles used by senior undergraduate students in their current mental processes are examined, it is think that those with a high level of intolerance toward uncertainty will have difficulties in coping with stress, and they are not present in the here or now, but they trouble themselves either with the regrets of the past or with the worries of the future (Buhr & Dugas, 2002; Özyeşil, 2011b).

When we look at the local and international studies conducted with senior undergraduate students, it has been observed that emotion-focused coping strategies were preferred more by students with high intolerance toward uncertainty. (Lazarus & Folkman, 1984; Steptoe, 1991; Akbağ, 2000). It was observed that students with high awareness levels use the problem-focused coping strategy more effectively (Shapiro, Schwartz & Bonner, 1998). It is stated that the tolerance toward uncertainty of senior undergraduate students can be increased with mindfulness (Kraemer, O'Bryan & McLeish, 2016). It has been determined that individuals who are able to stay in the here and now with mindfulness will exhibit a stronger attitude against the possible uncertainties of the future (Aktepe & Tolan, 2020).

As a result, when the local and international literature is examined, no research hasn't been seen yet that examines the relationship between intolerance toward uncertainty, mindfulness levels, and coping with stress strategies among senior undergraduate students. Research focusing on the mentioned variables will provide a roadmap for career counselors and educational psychologists to show what is necessary for university students to strengthen their psychological resources and to deal with the stress brought by the uncertainty of the future of the concerned students in a healthy way. Hence, the problem statement of this research can be summarized as “Is there a significant relationship among senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies?”

1.2. Purpose of the Research

The main purpose of this research is to examine the relationship among senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies. In line with these main objectives, the sub-objectives are as follows:

- a) Is there a significant relationship among senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies?

- b) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies show a significant difference with respect to gender?
- c) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies show a significant difference with respect to age?
- d) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies show a significant difference with respect to the department they are studying at?
- e) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies show a significant difference depending on whether they did research on the fields they study in or not?
- f) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies show a significant difference with respect to their grade point averages (GPA)?

1.3. Postulates of the Research

The findings in this study are based on some assumptions. These are, respectively, as follows:

1. It is assumed that the participants responded sincerely to the data collection tools.
2. It is assumed that senior undergraduate students participating in the survey process voluntarily participate in the research.
3. It is assumed that the data collection tools utilized in the study are valid and reliable.
4. It is assumed that the senior undergraduate students of Yeditepe University, the sample of the research, represent the universe.

1.4. Limitations of the Research

This research has some limitations. These are,

1. Data collection tools utilized in the research are limited to the Personal Information Form, Intolerance of Uncertainty Scale - Short Form (IUS-12), Mindful Attention Awareness Scale, and Coping Styles Inventory.
2. The variables examined in the study are limited to the intolerance toward uncertainty, mindfulness levels, and coping with stress strategies.
3. The research sample is limited to senior undergraduate students studying at Yeditepe University in 2020-2021.

1.5. Definitions

Intolerance toward Uncertainty: It is the tendency of a person to interpret an unacceptable negative event by ignoring its possibility and to react negatively emotionally, cognitively, and behaviorally to it (Buhr & Dugas, 2002; Carleton, Norton & Asmundson, 2007).

Mindfulness: Mindfulness is the state of being aware by giving full attention to what is happening here and now (Brown & Ryan, 2003). It is a special attitude that we associate our good and bad experiences with life (Siegel, 2010).

Coping with Stress Strategies: Reducing stress by solving stressful problems using realistic and flexible thoughts and actions. While reducing stress, the person perceives his relationship with his environment and focuses on ways of thinking (Lazarus & Folkman, 1984).

2. LITERATURE REVIEW

Theoretical information about the concepts that are the subject of the research is presented in this section.

2.1. Intolerance toward Uncertainty

The concept of uncertainty is described in English with two different words, ambiguity and uncertainty. Ambiguity means complexity due to the fact that a situation has more than one meaning, while uncertainty refers to the unknown and the unpredictable (Erguvan, 2015). In this context, the word ambiguity focuses on current uncertain stimuli, while the word uncertainty focuses on future events that are perceived as threats (Carleton, 2012). Sarı (2007) defines the notion of uncertainty as not knowing the result of any event, situation or behavior. In other words, uncertainty is the inability to predict, understand and define the outcome of an event, situation, or behavior (Küçükkömürler, 2017). Kasperson (2008) also defines uncertainty as the inability to make predictions about the consequences despite knowing the direction of the change.

Uncertainty prevails over every event and situation experienced in every period of human life, and it continues to exist continuously in every moment of life. The lack of sufficient information about the situation and event causes uncertainty (Rosser, 2019). Budner (1962) defines uncertainty as a situation that cannot be sufficiently structured or categorized by the individual due to the insufficient clues. Uncertainty arises for three different reasons. Firstly, the individual encounters a new situation that does not contain any clues. Secondly, although the situation that the individual will encounter contains many clues, it has a complex structure. The third is the inconsistency between the clues that the individual has about the situation and the situation encountered (Budner, 1962).

The state of uncertainty, which is generally perceived as negative by the individual, triggers anxiety and worry in the individual (Uzun & Karataş, 2018). Uncertainty, which is

also an important source of stress for the individual, significantly affects the quality of life of the individual as it is perceived as complex, threatening and unpredictable. The reason for this is that the individual wants to have information about his/her future (Buhr & Dugas, 2002; Sarıçam, 2014; Geçgin & Sahranç, 2017). In order for an individual to make the right decision in a time of uncertainty, he or she must either use the information obtained from his/her personal experiences or know beforehand the results he/she will encounter (Ersanlı & Uysal, 2015; Küçükkömürler, 2017).

Frenkel Brunswick (1949), who was the first to define intolerance toward uncertainty, defined the related concept as a personality trait. He defined it as a state in which an individual feels uncomfortable and avoids new, complex, and unresolved situations. According to Budner, (1962), intolerance toward uncertainty is a person's effort to understand the truth.

Freeston et al. (1994), who define the concept of intolerance toward uncertainty, which is defined in many different ways throughout history, in a way that will be accepted in the literature define it as cognitive, sensory and behavioral reactions that are difficult to cope with, consisting of threats and prejudices. According to Dugas, Schwartz, and Francis (2004), who make a similar definition of intolerance toward uncertainty, intolerance of uncertainty is considered at the cognitive, emotional, and behavioral levels as the cognitive capacity of the individual to perceive, interpret and respond to uncertain situations. Liao and Wei (2011) defined it as an individual's proness to react emotionally, cognitively, and behaviorally highly negatively in the face of uncertain situations and events.

Hofstede (2001) also expressed an individual's uneasiness when faced with uncertainty as intolerance toward uncertainty. In other words, intolerance toward uncertainty is the feeling of uneasiness experienced by an individual in the face of an unpredictable situation (Granier,

Barrette & Ladouceur, 2005). Individual, who cannot tolerate uncertainty, experiences stress and sadness in the face of situations that cause uncertainty and uneasiness, and their daily life becomes difficult (Dugas, Buhr & Ladouceur, 2004).

According to Carleton, Norton, and Asmundson (2007), intolerance toward uncertainty is an individual's perception of evaluating the event or situation as negative and unacceptable, regardless of its possibility. Buhr and Dugas (2002) defined four factors of uncertainty in the scale study they developed to determine individuals' perceptions of intolerance toward uncertainty. These factors are as follows:

- 1- Uncertainty is a source of sadness and creates stress.
- 2- Uncertainty contains negativity and should be avoided.
- 3- Being uncertain is unjust.
- 4- Uncertainty hinders action.

According to Koerner and Dugas (2008), intolerance toward uncertainty is a personality trait. The individual has negative beliefs regarding uncertainty and its consequences, which is a personal tendency that causes uncertainty to be perceived as a threat. The individual who has this tendency towards uncertainty develops a high level of negative attitudes and behaviors. The individual's perception of uncertainty as a threat causes him to experience anxiety, and as a result, the individual perceives that his problem-solving skills are insufficient and remains inactive in the face of the problem (Dugas, Freeston & Ladoceur, 1997). Thinking that they cannot control uncertain situations and perceiving uncertain situations as a threat are the characteristics of individuals with high intolerance to uncertainty. This situation prevents individuals from using their problem-solving skills effectively in the face of uncertainty (Chen & Hong, 2010). The individual, who cannot use

his problem-solving skills in the face of uncertain situations, tends to procrastinate by remaining inactive in the face of uncertainty (Fourtounas & Thomas, 2016).

Carleton (2016) defined the concepts of uncertainty and intolerance by separating them from each other. He defined uncertainty as the perception of ambiguity resulting from lack of knowledge. He defined intolerance as the inability of the individual to come to distress and to have insufficient capacity to withstand an uncomfortable situation. In line with these definitions, he defined intolerance toward uncertainty as the low capacity to endure uncertain situations that arise as a consequence of the lack of information necessary for the individual. Based on this clarification, cognitive, emotional, and behavioral reflections of intolerance can be differentiated. The unknown, which is accepted as the lack of knowledge perceived at the conscious level, and the fear of the unknown, which is created by this unknown, form the basis of intolerance toward uncertainty.

There are two sub-dimensions of intolerance toward uncertainty, cognitive and behavioral. In the cognitive sub-dimension, the individual thinks that sudden and unpredictable experiences will upset him, while in the behavioral sub-dimension, he thinks that his anxiety will prevent his actions and limit his actions (McEvoy & Mahoney, 2011). In particular, the cognitive sub-dimension of intolerance toward uncertainty is related to anxiety, while the behavioral sub-dimension is related to social anxiety, panic disorder, and depression (Yıldız, 2017). The individual wants to take control of his future experiences but when he is unable to do so this leads to negative emotions such as anxiety, worry, fear, sadness, and helplessness (Buhr & Dugas, 2006). Buhr and Dugas (2006) stated in their study that the strongest emotion experienced by the individual in case of intolerance toward uncertainty is anxiety. Faced with uncertainty, the individual evaluates uncertainty as unacceptable and has a strong feeling, and thus the individual experiences anxiety as a consequence of intolerance toward uncertainty (Buhr & Dugas, 2002). Freeston et al. (1994)

stated that intolerance to uncertainty directly or indirectly causes anxiety to occur and this anxiety continues, and explained the relationship between intolerance of uncertainty and anxiety. While the direct effects of intolerance to uncertainty arise as a result of the prejudiced use of threat and coping information, the negative mood of the individual as a result of biased information processing reveals indirect effects. The direct and indirect effects of intolerance toward uncertainty create various cognitive, emotional, and behavioral consequences on the individual, and thus the individual has unrealistic concerns in the face of uncertain situations. As a result, the direct and indirect impacts of intolerance toward uncertainty contribute to the activation of anxiety symptoms in the individual in various ways. (Oglesby & Schmidt, 2017).

Uncertainty reinforces the emotional reactions of the individual against positive and negative life events (Bar-Anan, Wilson & Gilbert, 2009). In anxiety-related disorders, the individual thinks that his feelings of inadequacy arise from his inability to cope with unpredictable and difficult-to-control events (Barlow, 2000). The individual perceives situations involving uncertainty as an exaggerated danger and shows low tolerance toward uncertainty (Ladouceur et al., 1997). According to Carleton et al. (2007), an individual who tends to evaluate the event as unacceptable, regardless of the possibility of being positive or negative, is intolerant toward uncertainty. According to the aforementioned researchers, intolerance toward uncertainty consists of two dimensions. These two dimensions are prospective and inhibitory anxiety (Carleton et al, 2007; Jacoby, 2020). Prospective anxiety means the anxiety about uncertain situations in the future, the will to know what will occur in the future, and the effort to reach precise information about the future. Inhibitory anxiety, on the other hand, refers to the behavioral dimension aimed at avoiding uncertainty (Jacoby, 2020).

The individual may encounter many uncertain situations or events in everyday and may need to make choices or decisions about them. In this process, the individual with a high

level of intolerance toward uncertainty experiences less stress and has less difficulty in the face of life events (Tantan Ulu & Yaka, 2020). The individual who wants to frame his life under his control needs information about his future (Öz, 2001). Universities are areas where the individual builds his future, acquires a profession, and adapts to a new social environment. The individual encounters uncertainties in this new and different environment that he/she enters with the start of university life (Yıldız & Güllü, 2019). The uncertainty experienced by the individual regarding the academic process causes anxiety and stressful experiences (Kilit, Dönmezler, Erensoy & Berkol, 2020). In addition, the uncertainty experienced by the individual who is at the graduation stage about finding a job will cause an increase in anxiety and stress (Yıldız & Güllü, 2019). The individual who is in the decision-making stage about his future will face many different problems and situations. The level of intolerance toward uncertainty will be effective in the individual's careful behavior in the face of problems, the correct usage of coping skills, and a solution-oriented attitude to problems (Bayram, Özkamalı & Çiftçi, 2021).

Individuals who do not question authority, adhere to rules and traditions, are uncomfortable with the increase in criteria and options, prefer structured components in the teaching process, focus on a single solution, and close themselves to new and different solutions by ignoring uncertainty, denying it, and have difficulty in coping with difficult situations experience intolerance of uncertainty (Budner, 1962; Bennett, Herold & Ashford, 1990; Furnham, 1994; Taylor, 2000; Sallot et al, 2003). Individuals who do not tolerate uncertainty perceive uncertainty as a risk and experience anxiety and stress in the face of uncertainty (Budner, 1962; Bennett et al., 1990). The reason for this is that the individual has the idea that he should always know what will happen to him, that is, the desire to predict uncertainty and the individual's inability to act against uncertainty (Birrell, Meares, Wilkinson & Freeston, 2011). Life events for the individual who is intolerant toward uncertainty are

generally classified as black or white because the individual focuses on the uncertainty of the situation in the problems he encounters in daily life, cannot produce solutions and therefore cannot use his skills to cope with difficult situations. That is, they evaluate life events with negative attitudes and include cognitive distortions in these evaluations (Dugas & Robichaud, 2007; Fidan, 2017).

The difficulty and stress experienced by the individual in the face of uncertainty can be tolerated through mindfulness. Thanks to mindfulness, the individual stays in the moment, develops a calm and non-judgmental attitude towards uncertainty, and exhibits neutral and acceptable behaviors. The individual experiences stress by thinking that he cannot keep control in the face of uncertain situations, and in this process, mindfulness helps the individual to cope with uncertainty or the unknown in a healthy way (Tilahun, 2018).

Individuals who tolerate uncertainty are people who have high conscious awareness, can provide self-control, are not afraid to take risks and can easily tolerate failure (Blau, 2003; Beitel, Ferrer & Cecero, 2004). Since these individuals are open to different thoughts, they can easily adapt to new situations and events; they exhibit a constructive, creative, reflective, entrepreneurial, adaptive and innovative attitude (Budner, 1962; DeRoma, Martin & Kesler, 2003; Lane & Klenke, 2004). Individuals who tolerate uncertainty have a low level of anxiety and high self-confidence, so they can easily cope with difficult experiences and are open to new experiences, which shows that they are individuals who are open to development and progress in their daily lives (Taylor, 2000; Stoycheva, 2003).

2.1.1. Intolerance toward Uncertainty and Intolerance toward Ambiguity

In the literature, the concept of “Intolerance toward Ambiguity” defined by Frenkel-Brunswick has been used instead of the concept of intolerance toward uncertainty for many years (Grenier, Barret, & Ladouceur, 2005). Grenier et al. (2005) explained the similarities

and differences between the concepts of intolerance toward ambiguity and intolerance toward uncertainty in their study. Intolerance toward ambiguity is a static component that relates to the present. The individual who is intolerant toward ambiguity is concerned about the current situation, perceiving the current situation as a threat. Intolerance toward uncertainty is associated with uncertainty about the future (Grenier, Barret & Ladouceur, 2005). The major difference between these two notions is that intolerance toward uncertainty focuses on the interpretation of a future situation, while intolerance toward ambiguity focuses on the interpretation of an ambiguous event experienced here and now (Starcevic & Berle, 2006). The most similar aspect of the two concepts is that the individual will show cognitive, emotional, and behavioral reactions against uncertain situations (Rosen, Ivanova & Knäuper, 2014).

2.1.2. Researches on the Concept of Intolerance toward Uncertainty

In his study with 316 university students, Sariçam (2014) examined the relationship between university students' levels of intolerance of uncertainty and their happiness levels. Intolerance of Uncertainty Scale (IUS-12) and the Oxford Happiness Questionnaire Short Form were used as scales for data collection in the study. According to the outcomes of the research, as the happiness levels of university students decreased, their anxiety levels for the future increased. It was resolved that students' levels of intolerance of uncertainty affected happiness negatively, especially their future anxiety levels had a significant impact on intolerance levels of uncertainty and happiness.

Tantan Ulu and Yaka (2019), in their study with 105 university students, examined the relationship among students' trait anxiety levels, intolerance to uncertainty, and decision-making behaviors. In line with this purpose, Personal Information Form, Trait Anxiety Inventory, Intolerance of Uncertainty Scale and Iowa Gambling Task were used to collect data. In consequence of this study, it was determined that there was a crucial relationship

between university students' the levels of trait anxiety and intolerance of uncertainty , but there was no crucial relationship among the levels of trait anxiety and intolerance of uncertainty and their decision making behaviors.

In the study conducted by Kiran, Bozkur and Cengiz (2020), they strived to examine university students' future anxieties, intolerance of uncertainty, general self-efficacy, and beliefs in the matter of finding a job in the future. 636 university students studying at various faculties participated in the research. Data collection tools of the study are Intolerance of Uncertainty Scale - Short Form, Beck Hopelessness Scale and General Self-Efficacy Scale. Pearson product-moment correlation coefficient, multiple regression analysis, and t-test were used in the analysis of the data. In consequence of this research, it has been seen that there was a crucial inverse relationship between students' hopelessness level and general self-efficacy, and a positive significant relationship with intolerance of uncertainty levels. Furthermore, students' hopelessness levels were predicted by general self-efficacy, intolerance of uncertainty, and perception variables about the belief about finding a job in the future.

Akdemir (2021) aimed to research the relationship between university students' career adaptability, their level of intolerance of uncertainty, and their anxiety about finding a job. In the research conducted with 1241 university students, the Intolerance of Uncertainty Scale, Career Adaptability Scale, and Job Anxiety Scale were used as data collection tools. According to result of the study, it was determined that the career adaptability of university students had a significant impact of intolerance of uncertainty and job anxiety and that there was a significant and positive relationship between these variables. It has been seen that there is a significant and positive relationship between university students' intolerance to uncertainty levels and their anxiety about finding a job. In the dimension of intolerance of uncertainty, which has the greatest effect on job anxiety, it was concluded that uncertainty is stressful and upsetting.

Coşkun (2019) examined the effects of emotional intelligence and intolerance toward uncertainty on coping with stress styles. The data collection tools of the research are Demografic Information Form, Schutte Emotional Intelligence Scale, Intolerance of Uncertainty Scale and Stress Coping Styles Scale. 349 university students answered the questions in the data collection tools. In consequence of the research findings, there is a significant relationship among emotional intelligence, intolerance toward uncertainty and styles of coping with stress. Moreover, it was found that emotional intelligence positively affected problem-focused coping methods, while intolerance of uncertainty affected emotion-focused coping methods. It was ended up that female students' emotional intelligence levels and intolerance of uncertainty levels were significantly higher than male students.

2.2. Mindfulness Levels

Various descriptions of mindfulness have been reached in the literature, in the descriptions, it is mentioned how mindful awareness is transformed into practice as well as what it is (Atalay,2019). Mindfulness, as a body and mind practice, includes focusing attention on what is experienced in the present moment and observing the inner journey of what is experienced in the present moment (Kabat-Zinn, 2003). Nyanaponika-Thera (1972) defines mindfulness as “the state of being clearly aware and focused only on what is happening in us and our inner world in successive moments”. Kabat-Zinn (1994) defined mindfulness as the individual's conscious and non-judgmental attention to what is happening in the present moment. Mindfulness practice, which is adapted from Buddhism, which is the Eastern meditation tradition, is to stay wisely and consciously aware in daily life (Kabat-Zinn, 1994). The word “sati” in Pali is used to mean remembering, but in Buddhist practices, it means awareness and attention (Germer, Siegel & Fulton, 2005; Nyanaponika Thera, 1972). Marlatt & Kristeller (1999) explained mindfulness as an individual paying total attention to the experience or experiences happening in the present moment with acceptance and

compassion. In other words, mindfulness is to direct the focus of attention to the experience of the present moment with open curiosity, with unconditional acceptance (Bishop et al., 2004). Brown and Ryan (2003) define mindfulness with its most common and well-known definition as the state of being attentively aware of events in the present.

Mindfulness is the way of being in contact with everything about our life with a certain attitude and awareness towards all the situations and experiences that induce pain and at the same time make us feel happy, and make our life rich and meaningful (Atalay,2019; Özyeşil,2011a). Contact with life experiences, being consciously aware of relevant experiences, is realized by understanding how our mind creates unnecessary anxieties, enabling us to gain insight (Atalay,2019; Siegel, 2010). Mindfulness is the balanced acceptance of painful feelings and thoughts, coming from within the individual, and accepting what is occurring in the present moment as it is. Acceptance is not accepting the pain and the inappropriate, but letting the events flow and reaching mindfulness (Germer et al., 2005; Germer, 2009).

The situation that occurs when we cannot experience mindfulness is the state of over-identification (Germer, 2009). Identification is the process of suppressing the negative feelings of the individual arising from the characteristics that he does not like or the situations experienced, and adopting the characteristics of the individual with the features he wants to have and making him a part of his self (İkiz, 2016; Yazgan-İnanç & Yerlikaya, 2016). Identification occurs when we lose ourselves in emotional reactivity. Emotions that cause us pain limit our perception, and it is difficult for us to recognize when we are suffering and when we are self-critical. Mindfulness provides us with an awareness of the emotions and behaviors we experience while suffering and shows us the way out (Germer, 2009).

Mindfulness is the state of observing internal and external stimuli in the present moment without judgment in the psychotherapy literature (Baer, 2003). Accepting

experiences without judgment nurtures our coping skills in challenging physical and mental situations because it enables us to see our experiences as they are by staying in the moment (Germer et al., 2005). The acceptance involved in the judgment process is letting go of whatever is happening at the moment that hurts or makes us happy. Acceptance is not approving what is inappropriate, it is a necessity to alter behavior and adapt to the process of change (Germer, 2009). Mindfulness also includes the use of attention regulation skills in the process of accepting lived experiences (Siegel, 2010). For the individual to fully experience the state of mindfulness, it is necessary to be aware, to be in the moment, and to have acceptance factors together (Germer et al., 2005).

Mindfulness exists thanks to three basic components that consist of attention, intention, and attitude (Atalay, 2019). We can't notice something that we cannot pay attention to, therefore, for mindfulness, we must first voluntarily focus our attention on our experience at that moment (Hick, 2008). An individual's thoughts about the world and himself lead him to selective attention. For example, if you think that people are untrustworthy, mean-spirited, and approach your surroundings with this intention, then your attention will be directed to the bad and unreliable people around you. At this point, attention alone will not be enough for mindfulness, what our intention is also carries importance (Atalay, 2019). The individual needs some attitudes to stay in the moment, accept the experiences as they are, and pay attention to the lived experiences (Kabat-Zinn, 2009).

The 7 basic attitudes of mindfulness are respectively: (1) Non-judging, to accompany the experiences of the individual without judgment (Kabat-Zinn, 2009). The human mind tends to categorize its experiences, and often categorizes them as two-pronged: good-bad, right-wrong, like-dislike. Although it is easier for us to perceive our experiences with this classification, we tend to give automatic reactions in our judgments (Atalay, 2019). Automated reactions and the classification process constantly occupy the mind, increasing stress and

preventing the state of awareness (Kabat-Zinn, 2009). Non-judging is the state of being aware of our reactions with being aware of the content of the experiences we judge and the content of our judgments (Atalay,2019; Germer,2009). (2) Patience, to be aware of the fact that everything has a time in life, to accept it, and to know and understand that nothing will exist and develop before its time (Özyeşil, 2011b). Being patient is the state of tolerating uncertainty, being aware that change and development cannot happen quickly (Kabat-Zinn, 2009). (3) Beginner's mind, to be willing and aware as if seeing and experiencing everything for the first time (Kabat-Zinn, 2009). (4) Compassion occurs when in pain. It is wishing to understand the pain, to stay with it, to get rid of the suffering, and to be liberated (Germer, 2009). To be compassionate, it is necessary to understand pain. Transforming pain is not compassion. It is the ability to accept the situation that causes pain and suffering to the individual and those around him, without suppressing compelling emotions and thoughts (Atalay,2019). (5) Non-striving, to stay in the present moment, to stay in the lived, experienced moment, to gently bring our attention to the present moment. Most of the time, our minds are on autopilot when we're neutral, and we spend the present moment thinking about another moment, like planning dinner while walking down the street, and what clothes to wear while showering. The important thing is to realize that we are on autopilot in such times and bring our attention to the present moment (Atalay,2019; Özyeşil,2011b). (6) Acceptance is the individual accepting their experiences with compassion and sincerity, regardless of whether they are positive or negative. It is the state of being aware of the experiences in every way (Atalay,2019). (7) Letting go is the individual giving himself completely to the experience that enables him to hold on to life, integrating with this experience, and noticing the experience in all its aspects (Pintrich & Schunk, 1996). The most basic requirement of being able to stay in flow is to focus on the present moment and direct

our attention to the flow in the present moment without thinking about our experience (Atalay,2019).

While the concept of mindfulness (Germer, 2009), which has a history of approximately 2500 years, is tried to be explained with different definitions in the literature, it is also fed by different theories. The concept of mindfulness has been shaped based on especially behaviorism, positive psychology, 3rd generation therapy approaches, and the views of fields such as medicine, morality, mind, and religion (Aktepe and Tolan, 2020; Germer, 2009) and is one of the techniques and exercises many psychological counseling theories propose today (Sharf, 2014).

The cognitive-behavioral approach states that our emotions and behaviors have a major role in the functioning of the cognitive process (Işık & Ergüner-Tekinalp, 2019). Cognitive-behavioral approaches state that the reason why individuals' emotions and behaviors are different in the face of the same or similar situations is that each individual's perception and interpretation processes work differently (Türkçapar,2018). Cognitive schemas occur in the perception and interpretation processes of the individual. Schemas are triggered by environmental stressors and cause the individual to resist change (Segal, Williams & Teasdale, 2002). Schemas that cause the individual to interpret his/her experiences negatively and incorrectly cause the individual to adopt negative views about his/her future (Işık & Ergüner-Tekinalp, 2019).

Mindfulness is the individual's recognizing their schemas and being aware of their schemas and knowing to what extent maladaptive schemas affect their life. In other words, the person directs his attention to his cognitive processes with mindful awareness (Türkçapar,2018; Işık & Ergüner-Tekinalp, 2019). In this way, the person has the opportunity to understand how his current schemas direct and affect his life. Although the way cognitive-behavioral approaches explain mindfulness is summarized in this way, cognitive-behavioral

approaches digress when it comes to the acceptance process of mindfulness because these approaches aim to change the individual's maladaptive schemas and rationalize their irrational thoughts. In the mindfulness approach, the content of the individual's thoughts is not important, and it is not intended to replace his thoughts with the appropriate one (Cayoun, 2011; Çatak & Ögel, 2010). Mindfulness includes understanding that it is just a thought without focusing on the content of the thought, accepting it, and focusing on the change that comes with acceptance (Cayoun, 2011). Therefore, cognitive-behavioral approaches emphasize only the attention element of the concept of mindfulness.

There are four different mindfulness-based therapies, gathered under the heading of cognitive therapies, which try to explain the concept of mindfulness (Corey, 2015). (1) Mindfulness-based stress reduction program (Kabat-Zinn, 1982). (2) Dialectical behavioral therapy (Linehan, 1993a). (3) Mindfulness-based cognitive therapy (Segal, Williams & Teasdale 2002). (4) Acceptance and commitment therapy (Hayes, Strosahl & Houts, 2005).

Mindfulness-based stress reduction program was created by Prof. Dr. John Kabat-Zinn to increase awareness via meditation and yoga teachings. (Atalay;2019; Corey,2015). MBSR was developed as a mindfulness approach to reduce the stress experienced by patients and clients with various physical and mental medical diseases (Atalay,2019; İkiz,2016). The mindfulness-based stress reduction program aims to enable the individual to use his/her self-regulatory approach at the maximum level by using mindfulness skills in reducing stress, coping with challenging life events, and emotion management (Bishop, 2002).

MBSR practices consist of body and mind scans and practices based on ancient Buddhist teachings of insight and meditation. It includes practices in which the individual directs his attention to his body, realizes the senses coming from all parts of the body from the feet to the head with body scanning exercises, focuses on the moment with breathing

exercises, and becomes aware of daily physical activities such as eating and walking.

Relevant practices are included in the process, as well as the homework and practices that the group members are expected to do every day (Kabat-Zinn, 1982). During the application, firstly, attention is brought to the observed object, this object can be a part of the body or the breath. The attention and sensations directed to the object are noticed by staying in the here and now, at the moment. At this point, one should gently direct one's thoughts to the here and now, to the object he is observing. While the person is observing the object some strong feelings can be felt such as fear, anger, pain, and anxiety. By directing his attention to the emotion he feels, the individual observes his emotions without judgment. While observing the emotion, he forms some thoughts and comments on his observation. In the relevant application, the important thing is that the individual can distinguish between the relevant thoughts and comments. When he directs the observation to the thoughts, he should not focus on the content of the thoughts by realizing that the thoughts are not absolute truths and that they are temporary. Thoughts can be positive or negative, they can be stressful thoughts that are difficult to deal with. It should neither be accepted as absolute truth nor rejected by accepting all thoughts equally (Atalay,2019; Kabat-Zinn,1982).

Mindfulness, which develops with regular and repetitive practices, helps the individual to experience negative emotions and thoughts that are sources of stress by staying calm and without judgment (Shapiro, Carlson, Astin & Freedman, 2006). As meditation and practices are done regularly and decisively, skills that require mindfulness such as judging feelings and thoughts, accepting, releasing, and showing patience are mastered. In this way, it is possible to observe, evaluate and restructure emotions and thoughts without judgment (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Germer;2009). In the program, the intended aim is to respond to stressful situations instead of reacting and to use awareness skills by developing them (Reibel & McCown, 2019; Lehrhaupt & Meibert, 2017; Stahl & Goldstein, 2019).

The 8-week MBSR program consists of group sessions. MBSR is a psycho-education and group program with skill-based content derived from meditation practices that include experiencing these and discussing various mindfulness techniques within the group (Işık & Ergüner-Tekinalp, 2019). The members who will participate in the program are determined by the preliminary interview made by the practitioner who has passed the certification and formation process. In the program, which lasts for 2.5 hours every week for 8 weeks, the different themes of each week, homework, and exercises are discussed as well as shared within the group and the homework given is aimed to integrate the concept of mindfulness with daily life (Atalay, 2019). The aim of the program, in which mindfulness is experienced systematically, is to experience the state of being conscious in all areas of life (Atalay,2019). The program, which was at first created for the treatment of patients with chronic pain, has later been broadly used to cope with stress, challenging life events, and emotions (Atalay,2019). Adapting the concept of mindfulness to our daily lives provides us with resources to cope with challenging life events and emotions (Kabat-Zinn, 1994).

Dialectical behavioral therapy (DBT), developed by Linehan(1993a) for the treatment of individuals diagnosed with a borderline personality disorder, is a mindfulness-based therapy that includes broad cognitive-behavioral based and mindfulness practices. (Dimeff & Koerner,2007; Feigenbaum,2007; Işık & Ergüner-Tekinalp, 2019). DBT includes the cognitive-behavioral school's understanding of change, the mindfulness approach's applications based on acceptance and awareness of the moment (Swales, 2009). According to dialectical behavioral therapy, some people experience extreme emotions compared to others. In this high affective state, individuals tend to avoid stressors that cause these intense emotions (Linehan, 1993a). Dialectical behavioral therapy tries to help individuals get rid of the effects of intense emotions by teaching them the skills to cope with compelling emotions (Koerner, 2012).

The basic assumption of DBT is to aid the change process by accepting the client's feelings and behaviors as they are (Swales, 2009). In mindfulness-based approaches, the counselor approaches the client without judgment and forms the basis of his relationship with the client with radical acceptance (Linehan, 1993a). Radical acceptance is the psychological counselor observing the client, accepting the facts in any case of whether they are positive or negative, and directing the client to change by teaching him to accept himself radically (Işık & Ergüner-Tekinalp, 2019). Individuals who experience their emotions intensely exhibit instant and reactive behaviors without thinking (Linehan, 1993a). Dialectical behavioral therapy aims to make the individual understand the emotional reactions and experiences in a state of mindfulness, to approach them without judgment, and to determine what to focus on and accept these (Işık & Ergüner-Tekinalp, 2019). This acceptance causes the individual to seek a solution to his problems and to change (Feigenbaum, 2007; Linehan, 1993b).

Another therapeutic method that tries to explain the concept of mindfulness apart from DDT is MBCT. Mindfulness-based cognitive therapy (MBCT), was developed by Segal et al. (2002). In addition to the cognitive-behavioral approach, it includes practices and meditation practices such as mindfulness-based practices such as directing attention (openness) and non-judgment. This approach is a group counseling program that includes 8 weeks of mindfulness training, which was created to prevent depressed individuals from having depression again (Segal et al., 2002). The purpose of the program, which includes meditation practices to increase the level of awareness, is to ensure that the individual gains insight by paying attention to his feelings, thoughts, and bodily sensations without judgment with the principle of here and now (Vatan, 2016). The sessions, which last 2 hours a week for 8 weeks, focus on body awareness, wandering mind, focusing on the here and now, mindful eating, sitting meditation, autopilot, while mindfulness-based thinking, emotion, and breathing exercises are also included (Surawy, McManus, Muse, and Williams, 2015).

In acceptance and commitment therapy, which is one of the third wave therapies, the concept of mindfulness is considered on an acceptance basis. The main purpose of acceptance and commitment therapy is to transform the relationship between the compulsive thoughts and emotions of the individual, that cause symptoms, through language and cognitive flexibility and to give a new frame to thoughts and emotions (Harris 2006; Hayes, 2004). The main aim of this new frame formed is to get closer and focus on observing the compelling emotions and thoughts that cause symptoms. Therefore, the disappearance of symptoms is the secondary outcome/by-product of focused observation (Harris 2006). In order for an individual to be happy and peaceful, instead of changing his feelings, it is possible to change his feelings by observing and focusing on his experiences, and his perspective on the problems he has experienced (Harris, 2008). Seeing one's thoughts as the real experience is the main source of problems. If individuals say "I think I have stressful thoughts" instead of saying "I am stressed", they will have started the change at the level of language and cognitive flexibility (Cloud, 2006).

According to the acceptance and commitment theory, there are six concepts that are the main source of psychological disorders. These six concepts represent psychological rigidity; experiential avoidance, cognitive fusion, conceptual self-attachment, useless action, unawareness, limited self-awareness. In the approach that aims to gain psychological flexibility in response to these rigidities, we come across six phases comprise of acceptance, cognitive defusion, contacting the present moment, self-as-context (work with the observing self), valuing, and committed action (Hayes, Strosahl & Wilson, 1999).

1. Acceptance is the individual's conscious embrace of experiences, thoughts, and feelings, as they are, without intervening (Deane, Ciarrochi, & Blackledge, 2009).

2. Being in the moment; being the experiencer of the individual's feelings, thoughts and sensations here and now (Harris, 2009).
3. Contacting the present moment is to change the unwanted functions of thoughts (Hayes and Smith, 2005). It focuses on perceiving what feelings, thoughts, and experiences are (Hayes et al. 1999).
4. Self as context refers to the ideas that form the basis of the problems. It is accepting the truth of our thoughts with self-awareness and letting them flow (Harris, 2009).
5. Valuing is the discovery of the ideal self that determines the life aspects of the individual (Bach & Moran, 2008; Hayes et al. 1999).
6. Committed action is the implementation of the goals determined in accordance with personal values by taking responsibility (Hayes et al. 1999).

The psychoanalytic approach has examined the characteristics of the human mind by dividing it into various layers. In this way, the concepts of consciousness, preconscious and unconscious have entered the literature (Freud, 1953; İköz, 2016). According to this theory, it is the mediator consciousness that provides the awareness of the individual's connection with the real world and the outside world. Being conscious is the state of being aware (İköz, 2016). According to psychoanalytic theory, the individual is unaware of most of the internal and external stimuli. He often notices these stimuli by giving his attention intensely or observes the reflections of subconscious symbols in daily life with various clues (Freud, 1953). Dejavu, slips of the tongue, and transference are symbols of the subconscious. The primary purpose of psychoanalysis is to enable the individual to realize the information in the subconscious by gaining insight and raising them to the level of consciousness (İköz, 2016;

Freud,1953; Freud,1963). The insight gained in psychoanalysis is associated with mindfulness.

According to the Gestalt therapy approach, the individual has a more meaningful system than the whole composed of interconnected parts. Body, sensations, emotions, perceptions, environment, internal and external stimuli are the parts that make up the individual. The individual has the capacity to realize all these parts. Thanks to this awareness capacity, he can make a choice (İkiz, 2016; Perls, 1969). Thanks to the here and now principle, the individual gains awareness of the parts he has by bringing them into a whole (İkiz,2016). The concept of awareness has a significant place in the process of Gestalt therapy. The aim is for the individual to gain a holistic awareness of internal and external stimuli, body, emotions, and sensations (Perls, 1969). While the individual is in the moment of mindfulness, he observes his body, emotions, and sensations. In Gestalt therapy, the individual stays in the here and now, observing and realizing the whole formed by the parts (Levine,Bar &Levine ,2012).

According to the existential approach, people should know themselves, make sense of the life they live, take responsibility for their own choices, and comprehend what it means to disappear (not exist) in order to understand the meaning of existence (May, 1958; May and Yalom, 1989). The individual who cannot comprehend non-existence experiences the fear of death, and this fear causes the individual to choose a more sheltered lifestyle and to live life without being aware of all its aspects. The individual living without being aware of it loses his self-awareness and experiences feelings of emptiness and hopelessness (May, 1991; Yazgan-İnanç & Yerlikaya, 2016). According to the existential approach, events in the past cannot be changed, the future is uncertain, and the only moment an individual has is the present moment. In this respect, the existential approach is similar to mindfulness. Both focus on the individual's current existence. In the existential approach, the individual pays attention to the

moment he is in. The individual pays attention to the present moment without judgment and makes a curious journey toward the individual's inner world and existence (Harris, 2013).

Therapies based on the humanistic approach focus on using our innate potential for development and progress (Yazgan-İnanç & Yerlikaya, 2016). The common feature of mindfulness and the humanistic approach is that they are interested in how the individual copes with existential situations (Germer, 2004). According to the humanistic approach, the cause of the pathology developed by the individual is the inhibition of his innate potential by external factors. In this situation, the individual's awareness of who he is and what he wants decreases (Yazgan-İnanç & Yerlikaya, 2016). The humanistic approach, which aims at personal development and transformation by accepting with mindfulness instead of reducing the symptoms that arise in the individual's situation, is based on the individual's discovery of emotions and thoughts without fear of criticism from the environment and accepting them with mindfulness (Dryden & Still, 2006).

2.2.1. Researches on the Concept of Mindfulness Levels

Ülev (2004) conducted a study with 414 university students. University students' mindfulness levels and their styles of coping with stress were examined as well as their relationship with depression, anxiety, and active stress. In consequence of the research, it was found that there is a positive and significant relationship between mindfulness and the optimistic, self-confident and the seeking social support approaches, which are the sub-dimensions of the style of coping with stress. It was decided that there was a negative significant relationship among mindfulness and the submissive and the self-blame approaches, which is one of the styles of coping with anxiety, depression, stress and passive stress.

Palmer and Rodger (2009) conducted a study with 135 college freshmen students living in residence in which they investigated the mindfulness, coping styles, and perceived

stress of the participants. In the study, researchers used various data collection tools such as General Demographic Form, Perceived Stress Scale, Coping Style Scale and Mindfulness Attention Awareness Scale. According to this study, the researchers found that there is a significant negative relationship between the perceived stress levels of individuals and mindfulness. In other words, the students with a high level of mindfulness have been observed to have lower levels of perceived stress. According to another result obtained from the research, students with lower levels of mindfulness were observed to use avoidant-escapist coping strategies.

Roemer, Lee, Pedneault, Erisman, Orsillo, Mennin (2009) in their study with 395 university students examined whether there is a difference between the levels of mindfulness of individuals with generalized anxiety disorder compared to university students without an anxiety disorder. The Anxiety Disorders Interview Schedule for DSM-IV was used as a data collection instrument in the study. According to the related research, it was determined that university students with a generalized anxiety disorder had significantly lower levels of mindfulness compared to university students without generalized anxiety disorders, and it was finalized that they had significantly higher difficulties in using their emotional regulation skills.

The study conducted by Özyeşil (2012) examined whether there is a significant difference between mindfulness and psychological needs of university students studying in the USA and Turkey, compared in the name of cross-cultural contexts. Innate psychological needs are defined in three sub-dimensions as autonomy, competence, and relatedness (Deci, et al., 2001). The Mindfulness Attention and Awareness Scale and The Basic Psychological Needs Scale were used in the study conducted with the participation of 444 Turkish and American students. In line with the results of the research obtained, it was found that the

mean scores of the American students in the sub-dimension of mindfulness and psychological needs were significantly higher than the average scores of the Turkish students.

The study conducted by Demir and Demir (2018) with 29 university students aimed to reduce the stress levels of university students by using mindfulness exercises and practices in a 90-minute program consisting of 8 sessions. Perceived Stress Scale was applied to determine the stress levels of the participants. According to the results of the research, a significant decrease was observed in the stress levels of the students with the help of the mindfulness-based therapy program applied.

In the study conducted by Hosseinzadeh-Asl, Emamvirdi, Çolakoğlu and Dölek (2020), it was targeted to investigate the stress and depression levels of university students during the COVID-19 pandemic period. A four-week online mindfulness yoga practice was conducted with 14 university students. Depression Anxiety Stress Scale-21 was carried out the students as a pre-test and post-test. As a result of the research, the pre-test and post-test findings of the four-week online mindfulness yoga practice were compared and it was determined that the psychological health of the university students significantly improved.

2.3. Coping with Stress Strategies

The concept of stress was first described scientifically by physicist Robert Hooke in the 1600s. Stress, which is defined as the area affected by the weight of the force applied to the object, is used in various definitions in many branches of science after physics (Lazarus, 1993). Lazarus and Folkman (1984) defined stress as a state of physical and psychological overstimulation when the individual has difficulty adapting to changes in his environment or himself and perceives the change as a threat. Baltaş and Baltaş (2008) define stress as the emotional state that an individual experiences when he/she thinks and feels that his/her physical and psychological boundaries are under threat. Cüceloğlu (2000) defines stress as a

state of psychological and physical effort beyond the limits of the individual due to the incompatible conditions in his environment.

Goldberger and Breznitz (1993) define stress as a state that occurs as a consequence of the relationship individual experiences with himself and his environment. When stress is at a sufficient level, it helps the individual to develop, but when it is very intense, it pushes the individual's psychological and physiological limits (Goldberger & Breznitz, 1993). According to Selye (1976), as long as the stress is at a certain level, it is necessary and beneficial because stress continues to exist in every moment and everywhere of human life and it is not possible to escape from stress. Colman (2008) defined stress as the physical and psychological tensions that arise due to life events that are difficult to correct. The idea that he created became widespread (Lazarus & Folkman, 1984). Looking at the definitions of stress since the 1960s, it has been stated that stress is an inevitable problem in an individual's life, and the idea that coping with stress makes a big difference in an individual's life has become widespread (Lazarus & Folkman, 1984).

Cannon (1926) named the individual's response to stress as the "Fight or Flight Response". When the individual facing danger believes that he cannot cope, he tends to run away, when he believes he can cope, he is more inclined to fight. Thus, the individual adapts to the new situation (Baltaş & Baltaş, 2018). With this reaction of the individual in the face of danger, the parasympathetic nervous system is involuntarily disabled and the sympathetic nervous system, which secretes the adrenaline hormone, prepares the individual to defend or flee so that he can continue his life (Cannon, 1994).

Another theory that explains stress, "General Adaptation Syndrome", explains the human body's response to stress gradually (Balcı, 2000). The response of the individual under stress occurs in three stages. These stages are alarm, resistance, and exhaustion (Balcı, 2000).

When the individual perceives the stimulus from the environment as a source of threat and stress, an alarm reaction occurs (Baltaş & Baltaş, 2018). In the alarm response, the individual's autonomic nervous system is activated due to stress, and this phase is similar to Cannon's (1932) "fight or flight" response (As cited in Selye, 1950). In the individual's resistance response, he tries to adapt to the source of stress. At this stage, the stress continues and if the individual cannot respond to the stress appropriately, the exhaustion reaction begins to occur. If the exhaustion response does not end, the individual passes into the phase of losing his vitality (Selye, 1950).

According to Lazarus (1966), who looks at the concept of stress from a different perspective, the occurrence of stress, which includes the interaction of the individual with the environment, is possible by interpreting the source of stress as stressful. The subjective evaluation of the individual, who evaluates the stimuli and stress sources in his environment, against the stimuli that threaten and endanger his psychological well-being, determines his stress response (Lazarus & Folkman, 1984). This cognitive process, which is based on the subjective evaluation of the individual, is explained with primary appraisal, secondary appraisal, and reappraisal stages (Lazarus, 1966). In the primary appraisal stage, the individual evaluates whether there is a potential danger to him and what he possesses. In the secondary appraisal stage, the individual evaluates his/her coping skills, asks "What can I do?" and seeks an answer to the question. Finally, in the third appraisal stage, the individual tries to decide on the appropriate coping method to cope with stress and starts to apply the appropriate coping method for the situation he is in (Basut, 2006).

Cognitive and behavioral efforts of the individual to maintain internal and external balance in the face of stressful situations are defined as coping with stress (Gonzalez & Seller, 2002). According to Folkman and Lazarus (1985), the concept of coping is an individual's emotional and behavioral effort to control, tolerate, or minimize external and internal

stressors. Sahler and Carr (2009) define coping with stress as our reactions to stressful situations. These reactions can make it easier for the individual to adapt to the environment as a result of change or make it difficult for the individual to adapt to the environment.

It is necessary to cope with stress, to protect mental and physical health, and maintain an effective and quality life experience. Coping with stress is not to completely eliminate the stress that negatively affects the life of the individual, but to reduce the emotional tension caused by stress and to strengthen the individual's behavioral and emotional responses to difficult life events (Yaşar, 2008). In the process of coping with stress, which expresses the ability of the individual to adapt to the stressful situation, the stress sources are controlled and emotions are regulated (Compas, Connor Smith, Saltzman, Thomsen & Wadsworth, 2001).

Emotion-focused and problem-focused coping are the two major functions of coping with stress. (Lazarus & Folkman, 1984). In emotion-focused coping, which includes a passive strategy, the individual regulates his emotions towards the source of stress and aims to eliminate the emotions that arise as a result of an undesired event. Problem-focused coping focuses on the source of stress. (Çoruhlu, 2001; Lazarus & Folkman, 1984). Problem-focused coping involves the individual taking control of himself, taking responsibility for his/her behaviors and choices, solving the problem in a planned way, and progressing positively on the problem. Whereas emotion-focused coping includes cognitive efforts such as cognitive defusion, social analogies, denial, escape-avoidance, and seeking social support (Lazarus & Folkman, 1984).

According to Bailey and Clarke (1989), coping with stress is the effort of the individual to reduce or eliminate the stress arising from the needs of the individual in the face of situations that he perceives as a threat. They explained all this effort of the individual with four different approaches:

1. According to the analytical approach, the individual protects his/herself by unconsciously using ego defense mechanisms.
2. In coping according to personality traits, the individual uses coping methods appropriate to his/her own personality traits in the face of each stress source.
3. According to the situation-specific coping approach, the individual's coping with stress is the use of situation-specific coping methods that he has formed on the basis of his cognitive functions and personality traits.
4. According to the phenomenological approach, the individual copes with stressful situations by using psychological and physical relaxation techniques (Folkman & Lazarus,1988; Bailey & Clarke,1989; Erözkan,2004).

2.3.1. Researches on the Concept of Coping with Stress Strategies

428 students participated in the study by Deniz and Yılmaz (2006) in which they examined the relationship between university students' emotional intelligence abilities and their styles of coping with stress. The Baron Emotional Quotient Inventory and the Coping with Stress Scale were used in the study. According to the results obtained from the research data, a positive significant relationship was found between university students' emotional intelligence, personal skills, interpersonal skills, adaptability, stress coping dimension and general mood dimension, and problem-focused coping, one of the stress coping styles. On the other hand, a negative significant relationship was found between the sub-dimension of avoiding dealing with the problem and the sub-dimension of personal skills. It was concluded that there is a positive significant relationship among interpersonal skills, general mood sub-dimension and social support seeking sub-dimension.

Campbell-Sills, Cohan, and Stein (2006) studied the relationship between personality, resilience, and coping with psychological symptoms in their study with 132 university students. Connor–Davidson Resilience Scale, NEO Five Factor Inventory, Coping Inventory

for Stressful Situations and Brief Symptom Inventory were used as data collection tools in the study. According to result of the research, it has been observed that there is a positive relationship between task-oriented coping strategy and resilience and that this coping strategy mediates the relationship between resilience and conscientiousness. It was concluded that emotion-focused coping strategies have a positive significant relationship with weak psychological flexibility.

Silkü, Saracaloğlu, and Özkütük (2009) targeted to determine the stress coping strategies of university students in their study with the participation of 273 students studying at the Faculty of Education. Data collection instrument of the research are Personal Information Form and Stress-Coping-Strategy Scale. In consequences of the research, it was decided that the stress-coping strategies of the university students did not differ significantly according to the university they studied at, age, gender, the type of high school they completed their education at, the education level of their mothers, their parents' occupations and socioeconomic levels. On the other side, it was determined that university students' strategies for coping with stress differed significantly according to the department they studied in, the department they studied in high school, the education level of their fathers, and the level of participation in the meeting about stress and coping with stress. In the study, the most used coping strategies of university student were problem solving, seeking social support, and avoidance strategies. It has been determined that female students use social support-seeking strategy more than male students. It was observed that while the problem-solving behaviors of university students were found at a sufficient level, their social seeking of social support and avoidance behaviors were at an average level.

In their study, Savcı and Aysan (2014) examined the relationship between university students' perceived stress levels and their strategies for coping with stress. The data collection instruments of the research are Perceived Stress Scale, Coping Styles Questionnaire and

Personal Information Form. According to the results of the study carried out with 302 university students, it was determined that the majority of university students had moderate stress and there was a positive low level relationship between perceived stress and coping strategies. Stress coping strategies differ according to the perceived stress levels of university students and it has been found that perceived stress levels and coping strategies differ according to gender. In particular, it was observed that the perceived stress level of female students was higher than the perceived stress level of male students. It has been determined that female students use more planful problem-solving and accepting responsibility strategies, which are among the coping with stress strategies, when compared with male students. However, it has been determined that the coping with stress strategies differ according to the specific department of Education. It was determined that the students of the Art Teaching Department used the planful problem-solving strategy more than the students of other departments in coping with stress. It has been determined that the strategies for coping with stress differ with respect to the perceived socioeconomic level, and it has been determined that the students who state their socioeconomic level as average level use the escape-avoidance style more than the students who state their socioeconomic level as high or low. Strategies for coping with stress were also found to differ according to the student's year of study. It was determined that university students close to graduation used the belief in the supernatural style more as a coping with stress strategies than other students.

In their research, Sagone and Caroli (2014) examined the relationship between psychological resilience, psychological well-being, and coping styles of university students studying in Medicine, Engineering, and Law faculties. A total of 183 university students studying at faculties of medicine, engineering and law participated in the study. Data collection instruments of the research are Dispositional Resilience Scale-II, Psychological Well-Being Scales, and COPE Inventory. According to the outcomes gained from the study

data, it was determined that the psychological resilience, psychological well-being, and styles of coping with stress of the students studying in different faculties did not differ significantly according to the faculties. It was concluded that the coping styles of female and male students differed significantly, the level of seeking social support of female students was notably higher than that of male students, and the levels of turning to humor and religion were significantly lower than male students.

Aşçı, Hazar, Kılıç, and Korkmaz (2015) investigated the causes of stress and coping styles of university students in their study. The research was implemented with the participation of 504 university students. Personal Information Form consisting of closed-ended questions and Coping with Stress Scale were used for data collection in the research. As a consequence of the data gained, it was determined that the first three situations that were declared to cause stress among students were benefit-oriented relations (90.5%), discrimination among students made by instructors (89.3%), and the intensity of courses (89.1%). The situations that caused the least stress were determined as the inadequacy of the sports facilities, activities (52.6%), and elective courses (39.1%) at the university. In the study, it was examined whether the situations that cause stress among students differ in terms of some sociodemographic variables and it was determined that there were differences between the causes of stress and the variables examined in terms of gender, and female students were notably more stressed than male students. In the study, the students got the highest score in the problem-focused coping dimension. This finding was interpreted as the students preferred the problem-focused coping style more in coping with stress. In the study, it was found that female students used problem-focused coping and avoidance methods at a similar level to male students in coping with stress, while it was concluded that female students were more prone to seek social support than male students in coping with stress.

The study, in which Zyl and Dhurup (2016) examined the relationship between university students' perceived stress and coping strategies, was conducted with the participation of 334 university students. Personal Information Form, Perceived Stress Scale-10 and Brief Coping Scale prepared by the researchers were used as data collection tools in the study. The results obtained showed that the prevalence of stress among university students was significantly high. In the exploratory factor analysis performed to determine the dimensions of stress and coping, it was seen that the two main dimensions of stress were defined as perceived helplessness and low self-efficacy. The coping strategies used by the students were (1) negativity and denial, (2) seeking emotional support, (3) introspection and respect, (4) substance abuse, and (5) humor. It was concluded that female students experienced significantly higher stress than male students. While female students experienced introspection and veneration in coping with stress, male students experienced substance abuse in coping with stress.

Doğan Laçın and Yalçın (2019) was examined that university students' cognitive flexibility levels'; examined whether it was significantly predicted by self-efficacy and coping strategies. 549 university students participated in the research. Cognitive Flexibility Inventory, General Self- Efficacy Scale, and Coping Styles Scale were used to obtain data in the study. According to the outcomes of the study, it was found that the cognitive flexibility levels of university students did not demonstrate a significant difference with respect to gender. According to result of multiple regression analysis in which cognitive flexibility was determined as the predicted variable, it was determined that participants' self-efficacy levels and self-confident approach, seeking of social support, submissive approach, and helpless style, which are sub-dimensions of coping styles, predict cognitive flexibility significantly.

3. RESEARCH METHOD

3.1. Research Model

This study is an exploratory correlational study with a relational screening model to examine the relationship among intolerance toward uncertainty, mindfulness levels, and coping with stress strategies of a group of senior undergraduate students. Studies that determine the connections between two or more variables and describe the relationship between these variables are Correlational studies. Exploratory correlational research, one of the types of correlational research, is research that works to make sense of the relationships between variables (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2019).

This research was designed as exploratory correlational research since it aimed to understand the relationship among intolerance toward uncertainty, mindfulness levels, and coping with stress strategies of senior undergraduate students.

3.2. Population and Sample

The population of this study comprise of undergraduate students in the last year of education at Yeditepe University in the 2020-2021 academic year. In order to determine the sample of this study, convenience and criterion sampling methods were used. Convenience sampling is a sampling method in which the researcher gathers from an easily accessible sample. Criterion sampling is a sampling method in which the researcher includes units that meet the criteria determined for the research (Büyüköztürk et al., 2019). The criterion of the research sample was determined as the fact that the participants were senior students at the university. The sample of the research comprised of the participants who were studying at the Social Sciences, Health Sciences and Science Departments at Yeditepe University in the last year of their undergraduate education in the 2020-2021 academic year and who accepted to participate voluntarily in the research.

Table 1. Characteristics of the Participants

Variables		<i>n</i>	<i>X</i>	<i>SD</i>	%
Age		352	22.72	1.18	100
Gender	Female	197			56.00
	Male	155			44.00
Program	Social Sciences	226			64.20
	Science	79			22.40
	Health Sciences	47			13.40

In Table 1, 352 participants were included in the study. 56 % of the participants were female ($n = 197$) and 44 % were male ($n = 155$). The departments where the participants studied were grouped under 3 main programs: Social sciences, Sciences and Health Sciences. 64.20 % of the participants were in the area of Social Sciences ($n=226$), 22.40 % of the participants were in the area of Science ($n=79$) and 13.40 % of the participants were in the area of Health Sciences ($n=47$).

3.3. Data Collection Instruments

Data collection instruments of the study are Personal Information Form, Intolerance of Uncertainty Scale - Short Form (IUS-12), Mindful Attention Awareness Scale (MAAS), and Coping Styles Inventory, respectively. Data collection tools are presented below in the same order.

3.4. Personal Information Form

This Form (Appendix-A) was constituted by the researcher in order to specify the demographic structure of the sample. This Form (Appendix-A) will be used to identify the

characteristics of the participants and whether they have done research on the field they specialize in or not. In this form, questions will be asked to determine the age, gender, department they are studying, their grade point averages, and whether they have done research in the field they specialize in or not.

3.5. Intolerance of Uncertainty Scale –Short Form (IUS-12)

The Intolerance of Uncertainty Scale - Short Form (Appendix-B) was advanced in English by Carleton, Norton, and Asmundson (2007) with reference to the 27-item Intolerance Uncertainty Scale. The validity and reliability studies of the scale were carried out with a total of 1102 university students by creating 2 independent data sets (Carleton et al., 2007). The scale consists of 12 items and 2 sub-dimensions and is a 5-point Likert type scale. The scores that can be obtained from the scale, which gives a total score, are between 12-60. A high score indicates a high level of intolerance of uncertainty. According to confirmatory factor analysis, the construct validity of the scale was $\chi^2/df=4.34$, RMSEA=.07, CFI=.96, SRMR=.04, ECVI=.35. The Cronbach's alpha internal consistency reliability coefficient obtained for the whole scale was .91, and .85 for both sub-dimensions of the scale. The correlation coefficient between the original 27-item form of the scale and the scale was found to be $r=.96$ (As cited in Akın,2019).

Sarıçam, Erguvan, Akın, and Akça (2014) conducted the Turkish adaptation of the Intolerance of Uncertainty Scale Short Form (IUS-12). The scale, which has a 5-point Likert type evaluation system (1 = Not suitable for me at all, 5 = Completely suitable for me) comprises of 12 items and 2 sub-dimensions. The sub-dimensions of the scale measure prospective anxiety (7 items) and inhibitory anxiety (5 items), and the scale both presents scores according to sub-dimensions and provides a total score (Akın,2019). The validity and reliability study of IUS-12 was carried out with 593 university students. In the IUS-12 reliability study, the Cronbach's alpha internal consistency reliability coefficient was found to

be .88 for the IUS-12 whole scale, .84 for the prospective anxiety sub-dimension, and .77 for the inhibitory anxiety sub-dimension. For test-retest reliability of IUS-12, this form was re-administered to 539 participants with an interval of 28 days. The correlation coefficient between the two applications was found to be .74 for the entire scale, .75 for the scale's prospective anxiety sub-dimension, and .71 for the inhibitory anxiety sub-dimension. (Sarıçam et al., 2014). The construct validity of the scale was calculated as $\chi^2(df=34)=192.88$, $RMSE=.065$, $CFI=.972$, $SRMR=.029$ in confirmatory factor analysis (Akın, 2019). The validity of the IUS-12 scale was determined by construct validity and similar scale validity. In line with the factor analysis, it was understood that the scale was compatible in two dimensions, and a similar scale validity study was carried out with the Intolerance of Uncertainty Scale (IUS-27). In the wake of the study, the Cronbach alpha coefficient for the whole IUS-27 scale was found .93, and the Cronbach alpha coefficient for the whole IUS-12 scale was .88. (Sarıçam et al., 2014). Consequently, with the findings of the validity and reliability studies of the Turkish adaptation of the 12-item Intolerance of Uncertainty Scale (IUS-12), it was found that it can be used to measure the level of intolerance of uncertainty of university students in a valid and reliable way (Sarıçam et al., 2014).

3.6. Mindful Attention Awareness Scale (MAAS)

The Mindful Attention Awareness Scale was originally developed in English by Brown and Ryan (2003). It is aimed to measure the tendency of the individual to be aware of instant experiences in daily life and to be attentive to them. (Cited by Özyeşil, et al., 2011). The related scale gives a total score. A high score from the related scale indicates high level of mindfulness. MAAS was prepared on a 6-point Likert-type scale (1 = almost always, 6 = almost never). Exploratory and confirmatory factor analysis was carried out for the construct validity of the scale and in consequence of exploratory factor analysis, the scale showed a

single factor structure and factor percentages were found to vary between .27 and .78. In consequence of the confirmatory factor analysis, the fit indices verified that the scale had one factor. In line with the calculated reliability studies, the Cronbach alpha internal consistency coefficient of the scale is .82. It was stated that the item-total correlations of the scale varied between .25 and .72. In consequence of the test-retest application performed with an interval of four weeks, the relationship between the two applications was calculated as .81 (Brown & Ryan, 2003).

Turkish version of MAAS has been developed by Özyeşil and colleagues (2011). The scale is a 6-point Likert-type rating scale (1 = almost always, 6 = almost never) consisting of one dimension and 15 items. The scores obtained from the scale give the total score. In order to measure the Turkish equivalence of the scale, two different groups were formed and the study was carried out with a total of 160 students. The correlation coefficient ($r=.95, (p<.001)$) obtained from the first group whose language equivalence study was performed, and the correlation coefficient ($r=.96, (p<.001)$) obtained from the second group were found. In line with the studies, it has been observed that there is a very positive relationship between the Turkish and English forms. (Özyeşil et al., 2011).

3.7. Coping Styles Inventory

The Ways of Coping Inventory, which is frequently used in studies dealing with the issue of coping with stress, was created by Folkman and Lazarus. The Ways of Coping Inventory, which was developed as a process-oriented model, defined stress as the dynamic between people and their environment. According to the related study, coping behaviors differ in the face of situations experienced by each individual. The aim of this scale is to specify how the individual copes with the stressful situation on her own in the face of stressful situations. The Ways of Coping Inventory development studies were carried out by examining the stressful situations experienced by 100 people aged 45-64 for one year and the ways of coping

with these situations (Lazarus & Folkman, 1980). The scale comprises of 66 items and is a 4-point Likert scale. Although the scale is insufficient in terms of its psychometric properties, many researchers have used the related scale in their studies (Endler & Parker, 1990).

Şahin and Durak (1995) adapted the Coping Styles Inventory into Turkish. The Turkish language scale, which was used as an abbreviation of the Ways of Coping Inventory constituted by Lazarus and Folkman (1988), was renamed the Coping Styles Inventory (Şahin & Durak, 1995). Researchers adapted the scale as a 30-item short form with 5 sub-dimensions. These sub-dimensions are the self-confident (7 items), the optimistic (5 items), the submissive (8 items), the helpless (6 items) style, and the seeking of social support (4 items) approach. It is assumed that the higher the score from the sub-dimensions, the more the individual uses that style. High scores gained from the sub-dimensions of self-confidence, optimism, and seeking of social support are effective in coping with stress. High scores obtained from the helpless approach and submissive approach sub-dimensions show that they are insufficient in coping with stress (Güneri, 2017).

The validity and reliability studies of the Coping Styles Inventory were applied with 575 university students. Cronbach's alpha internal consistency coefficients were calculated for the sub-dimensions of the scale. In this direction, Cronbach alpha internal consistency coefficients for the sub-dimensions of the scale ranged from .62 to .80 for the self-confident approach, between .64 and .73 for the helpless approach, and between .49 and .68 for the optimistic approach. It was calculated that the subdimension changed between .47 and .72 for the submissive approach and between .45 and .47 for the seeking of social support approach. Studies show that the scale is a valid and reliable scale that can be used to measure the styles of coping with stress of university students (Güneri, 2017).

3.8. Data Collection Process

The ethics committee allowed (Appendix H) the relevant data to be collected from Yeditepe University according to convenient and criterion sampling method. Considering the pandemic conditions, data collection was carried out via Google Forms. For this reason, Informed Consent Form, Personal Information Form, Tolerance to Uncertainty Scale-Short Form, Mindful Attention Awareness Scale and Coping Styles Inventory were uploaded to Google Form and shared with Yeditepe University senior undergraduate students. After obtaining the necessary permissions, the participants were reached between March 2021 and October 2021. During the research process, which took place with the voluntary participation of the students, it took almost 40 minutes to fill out the existing forms.

3.9. Analysis Process

In this present research, the structural relationships between the related variables were controlled to explain the relationship among intolerance toward uncertainty, mindfulness levels and coping with stress strategies variables. All the answers from the participants were analyzed and it was checked whether the data obtained contains missing data. Since the participants answered all the questions in the scales, there was no missing value in the data obtained. No outliers were found in the data analyzed by Mahalanobis distance calculation. Therefore, descriptive statistics for variables and normality analyzes based on skewness and kurtosis coefficients of variables were tested. The distribution was accepted as the normal distribution because the values did not go outside the range of (-1.5, +1.5) (Genceli, 2007; Tabachnick, & Fidell, 2013). SPSS 25.0 was used to analyze the collected data. Since the data belonging to the sub-objectives of the research showed normal distribution, parametric analysis was performed.

- a) Is there a significant relationship among senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies? Pearson Correlation analysis was used to test this main-objective.
- b) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels and coping with stress strategies show a significant difference with respect to gender? Independent Samples T-test was used to test this sub-objective.
- c) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels and coping with stress strategies demonstrate a significant difference with respect to age? One-way ANOVA test was used to test this sub-objective.
- d) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels and coping with stress strategies show a significant difference with respect to the department they are studying in? One-way ANOVA test was used to test this sub-objective.
- e) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels and coping with stress strategies show a significant difference with respect to the frequency of research in the field they specialize in? Independent Samples T-test was used to test this sub-objective.
- f) Do senior undergraduate students' intolerance toward uncertainty, mindfulness levels and coping with stress strategies demonstrate a significant difference compared to their GPA? One-way ANOVA test was used to test this sub-objective.

4. FINDINGS

4.1. Preliminary Analysis

All the answers from the participants were analyzed and it was checked whether the collected data contained missing data. Since the participants answered all the questions in the form, there was no missing value in the data. Since there were no outliers in the data examined via Mahalanobis distance calculation, descriptive statistics for the intolerance toward uncertainty, mindfulness levels, and coping with stress strategies and normality analyzes based on the skewness and kurtosis coefficients of the intolerance toward uncertainty, mindfulness levels, and coping with stress strategies were tested. The results are shown in Table 2.

Table 2. Descriptive Statistics and The Normality Analyze

Variables	N	Mean	SD	Skewness	Kurtosis
Intolerance toward uncertainty	352	40.55	8.86	-0.126	-0.598
Mindfulness levels	352	58.30	12.92	-0.420	0.661
Coping with stress staretegies					
Self-confident approach	352	2.73	0.41	-0.010	-0.371
Helpless approach	352	2.64	0.38	-0.058	-0.306
Submissive approach	352	2.46	0.44	0.180	-0.287
Optimistic approach	352	2.47	0.50	0.186	0.141
Seeking social support	352	2.50	0.55	-0.124	-0.047

Table 2 shows that the mean value of participants' intolerance toward uncertainty levels is 40.55, and the standard deviation is 8.86. The skewness and kurtosis values are between -0.598 and -0.126. Accordingly, the data show a normal distribution (Tabachnick & Fidell, 2019). The mean of the mindfulness levels is 58.30, also its standard deviation is 12.92. The mindfulness levels scores are also normally distributed because the skewness - kurtosis

values range from -0.371 to -0.010 (Tabachnick & Fidell,2019). A total score could not be obtained from the inventory of coping with stress strategies. However, the mean, standard deviation and kurtosis-skewness values of the five sub-dimensions of the inventory were analyzed separately. The mean score of self-confident approach is 2.73; its standard deviation is 0.41. The mean of helpless approach is 2.64; its standart deviation is 0.38. The mean of the submissive approach is 2.46; its standart deviation is 0.44. The mean of optimistic approach is 2.47; its standart deviation is 0.50. The mean of seeking social support sub-dimension is 2.50; its standart deviation is 0.55. The skewness and kurtosis values of all sub-dimensions of the coping styles inventory were analyzed. As a result, all sub-dimensions' skewness and kurtosis values are between -0.371 and 0.186. These values mean that the data is normally distributed (Tabachnick & Fidell,2019).

4.2. Main Analysis

4.2.1. The Correlation Between the Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies of the Senior Undergraduate Students

The relationship between undergraduate senior students' intolerance toward uncertainty, mindfulness levels and coping with stress strategies inventory was analyzed by Pearson Correlation Analysis and the results are shown in Table 3.

Table 3. Pearson Correlation Coefficients Consequences

Scale and Sub-scales	1	2	3	4	5	6	7
Intolerance toward uncertainty	1						
Mindfulness Levels	-.02	1					
Self-confident approach	-.09	.12*	1				
Helpless approach	.12*	-.05	.06	1			

Submissive approach	.06	-.04	.20**	.14**	1		
Optimistic approach	-.12*	.07	.31**	-.02	.29**	1	
Seeking social support	-.07	.08	-.04	-.06	-.10	-.01	1

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

According to Table 3, there was a positive statistically significant relationship among intolerance toward uncertainty and helpless approach sub-dimension of coping with stress strategies inventory of the senior undergraduate students ($r = .12$; $p < .05$). The relationship between intolerance toward uncertainty levels and optimistic approach levels of the participants was negative and statistically significant ($r = -.12$; $p < .05$). On the other hand, the relationship between mindfulness levels and coping with stress strategies was examined and it was found that there was a positive relationship only in the dimension of self-confident approach ($r = .12$, $p < .05$). However, there was no significant relationship among mindfulness levels and helpless approach, submissive approach, optimistic approach and seeking social support of coping with stress strategies (respectively, $r = -.05$, $r = -.04$, $r = .07$, $r = .08$; $p > .05$). In addition, there was no significant relationship between levels of mindfulness, and intolerance toward uncertainty of the senior undergraduate students ($r = -.02$; $p > .05$).

4.2.2. Examination of Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to Gender of the Senior Undergraduate Students

Independent samples t-test was used to examine whether there was a difference in the levels of intolerance toward uncertainty, mindfulness levels and coping with stress strategies with respect to gender of the students. Findings of the Independent Samples t Test are given in Table 4.

Table 4. Consequences of Independent Samples t Test

Variables	Group	N	Mean	SD	df	t	p
	Male	155	39.96	9.32	350	-1.109	.27

Intolerance toward uncertainty	Female	197	41.02	8.47			
Mindfulness levels	Male	155	57.89	12.81	350	-0.532	.60
	Female	197	58.63	13.02			
Self-confident approach	Male	155	2.72	0.37	350	-0.305	.76
	Female	197	2.73	0.43			
Helpless approach	Male	155	2.63	0.38	350	-0.409	.68
	Female	197	2.65	0.39			
Submissive approach	Male	155	2.51	0.41	350	2.024	.04*
	Female	197	2.41	0.47			
Optimistic approach	Male	155	2.52	0.52	350	1.641	.10
	Female	197	2.43	0.49			
Seeking social support	Male	155	2.47	0.55	350	-1.039	.30
	Female	197	2.53	0.56			

* $p < .05$

Table 4 presents that the levels of intolerance toward uncertainty, mindfulness levels and all sub-dimensions of coping with stress strategies such as self-confident approach, helpless approach, optimistic approach, and seeking social support (except submissive approach dimension) did not differ based on the participants' gender (respectively, $t = -1.109$, $p > .05$; $t = -0.532$, $p > .05$; $t = -0.305$, $p > .05$; $t = -0.409$, $p > .05$; $t = 1.641$, $p > .05$; $t = -1.039$, $p > .05$). On the other side, submissive approach levels, which is sub-dimensions of the stress coping strategies inventory, differed in accordance with the participants' gender ($t = 2.024$, $p < .05$). Specifically male participants had higher scores on the submissive approach ($M = 2.51$, $SD = 0.41$) than the scores of female participants ($M = 2.41$, $SD = 0.47$).

Table 5. Consequences of One-Way ANOVA

Variables	<i>n, M, and SD values</i>				ANOVA Results					
	Group	<i>n</i>	<i>M</i>	<i>SD</i>		Sum of Squares	df	Mean Square	<i>F</i>	<i>p</i>
Intolerance toward uncertainty	21 and younger	36	39.03	8.73	Between Groups	152.683	3	50.894	0.647	.59
	22	130	40.41	8.30	Within Groups	27388.397	348	78.702		
	23	124	40.63	9.07	Total	27541.080	351			
	24 and older	62	41.58	9.69						
	Total	352	40.55	8.86						
Mindfulness levels	21 and younger	36	58.42	10.40	Between Groups	224.114	3	74.705	0.439	.73
	22	130	59.21	11.21	Within Groups	58330.360	348	167.616		
	23	124	57.33	14.57	Total	58554.474	351			
	24 and older	62	58.29	14.15						
	Total	352	58.30	12.92						
Self-confident approach	21 and younger	36	2.63	0.37	Between Groups	0.861	3	0.287	1.754	.16
	22	130	2.74	0.41	Within Groups	56.951	348	0.164		
	23	124	2.77	0.41	Total	57.818	351			
	24 and older	62	2.67	0.42						
	Total	352	2.73	0.41						

Helpless approach	21 and younger	36	2.71	0.31	Between Groups	0.741	3	0.247	1.960	.12
	22	130	2.59	0.38	Within Groups	50.926	348	0.146		
	23	124	2.66	0.43	Total	51.668	351			
	24 and older	62	2.69	0.33						
	Total	352	2.64	0.39						
Submissive approach	21 and younger	36	2.45	0.32	Between Groups	0.128	3	0.043	0.217	.89
	22	130	2.47	0.46	Within Groups	68.576	348	0.197		
	23	124	2.43	0.47	Total	68.704	351			
	24 and older	62	2.47	0.43						
	Total	352	2.46	0.44						
Optimistic approach	21 and younger	36	2.42	0.52	Between Groups	1.120	3	0.373	0.471	.22
	22	130	2.44	0.57	Within Groups	88.325	348	0.254		
	23	124	2.45	0.58	Total	89.444	351			
	24 and older	62	2.59	0.51						
	Total	352	2.47	0.55						
Seeking social support	21 and younger	36	2.39	0.52	Between Groups	0.844	3	0.281	0.917	.43
	22	130	2.49	0.56	Within Groups	106.843	348	0.307		
	23	124	2.55	0.58	Total	107.687	351			
	24 and older	62	2.49	0.51						
	Total	352	2.50	0.55						

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

While examining the analysis of variance in Table 5, the findings indicated that intolerance toward uncertainty ($F_{(3,351)}=0.647, p>.05$), mindfulness levels ($F_{(3,351)}=0.439, p>.05$), and all sub-dimensions of coping with stress strategies such as self-confident approach ($F_{(3,351)}=1.754, p>.05$), helpless approach ($F_{(3,351)}=1.960, p>.05$), submissive

approach ($F_{(3,351)}=0.217, p>.05$), optimistic approach ($F_{(3,351)}=0.471, p>.05$), seeking social support ($F_{(3,351)}=0.917, p>.05$) did not differ based on the ages of the senior undergraduate students.

4.2.4. Examination of Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to the Program Types of the Senior Undergraduate Students

One-way analysis of variance (ANOVA) was used to analyze whether there was a difference between the participants' intolerance toward uncertainty, mindfulness levels and coping with stress strategies with respect to the program types. Findings of one-way ANOVA are given in Table 6.

Table 6. Consequences of One-Way ANOVA

Variables	n, M, and SD values				ANOVA Results					
	Group	n	M	SD		Sum of	Mean			
						Squares	df	Square	F	p
Intolerance toward uncertainty	Science	79	40.35	9.41	Between Groups	66.72	2	33.358	0.424	.66
	Social science	226	40.39	2.89	Within Groups	27474.36	349	78.723		
	Health sciences	47	41.66	7.78	Total	27541.08	351			
	Total	352	40.55	8.86						
Mindfulness levels	Science	79	57.52	12.97	Between Groups	970.80	2	485.401	2.942	.054
	Social science	226	59.36	12.73	Within Groups	57583.67	349	164.996		
	Health sciences	47	54.53	13.21	Total	58554.47	351			
	Total	352	58.30	12.92						
Self-confident approach	Science	79	2.79	0.38	Between Groups	0.432	2	0.216	1.313	.27
	Social science	226	2.71	0.42	Within Groups	57.39	349	0.164		
	Health sciences	47	2.72	0.36	Total	57.82	351			
	Total	352	2.73	0.41						
	Science	79	2.67	0.34	Between Groups	0.422	2	0.211	1.436	.24

Helpless approach	Social science	226	2.65	0.39	Within Groups	51.25	349	0.147		
	Health sciences	47	2.56	0.40	Total	51.67	351			
	Total	352	2.64	0.38						
Submissive approach	Science	79	2.48	0.50	Between Groups	0.33	2	0.167	1.058	.35
	Social science	226	2.43	0.43	Within Groups	68.37	349	0.196		
	Health sciences	47	2.52	0.36	Total	68.70	351			
	Total	352	2.46	0.44						
Optimistic approach	Science	79	2.41	0.44	Between Groups	0.60	2	0.301	1.182	.31
	Social science	226	2.50	0.53	Within Groups	88.84	349	0.255		
	Health sciences	47	2.41	0.48	Total	89.44	351			
	Total	352	2.47	0.50						
Seeking social support	Science	79	2.52	0.54	Between Groups	0.224	2	0.112	0.363	.70
	Social science	226	2.48	0.54	Within Groups	107.46	349	0.308		
	Health sciences	47	2.55	0.65	Total	107.69	351			
	Total	352	2.50	0.55						

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

The results in analysis of variance in Table 6 showed that there was no significant differences among the levels of intolerance toward uncertainty ($F_{(2,351)}=0.424, p>.05$), mindfulness levels ($F_{(2,351)}=2.942, p>.05$), and all sub-dimensions of coping with stress strategies such as self-confident approach ($F_{(2,351)}=1.313, p>.05$), helpless approach ($F_{(2,351)}=1.436, p>.05$), submissive approach ($F_{(2,351)}= 1.058, p>.05$), optimistic approach $F_{(2,351)}=1.182, p>.05$), seeking social support ($F_{(2,351)}=0.363, p>.05$) in terms of the program types of the senior undergraduate students.

4.2.5. Examination of the Relationship Among Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to Whether They Have Done Research on the Field of Education of the Senior Undergraduate Students or not.

Independent samples *t* test was used to analyze whether there was a difference in the levels of intolerance toward uncertainty, mindfulness levels, and coping with stress strategies with respect to whether they did research on the field of education of students. Findings of the analysis are seen in Table 7.

Table 7. Consequences of Independent Samples *t* Test

Variables	Group	<i>N</i>	Mean	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>
Intolerance toward uncertainty	I do the research	179	40.54	8.62	350	-0.032	.98
	I do not the research	173	40.57	9.13			
Mindfulness levels	I do the research	179	58.65	12.88	350	0.508	.61
	I do not the research	173	57.95	12.98			
Self-confident approach	I do the research	179	2.74	0.42	350	0.552	.58
	I do not the research	173	2.72	0.39			
Helpless approach	I do the research	179	2.66	0.39	350	1.011	.31
	I do not the research	173	2.62	0.38			
Submissive approach	I do the research	179	2.43	0.45	350	-1.274	.20
	I do not the research	173	2.49	0.44			
Optimistic approach	I do the research	179	2.45	0.54	346.397	-0.656	0.51
	I do not the research	173	2.48	0.47			
	I do the research	179	2.48	0.55	350	-0.746	.47

Seeking social support	I do not the research	173	2.52	0.56
------------------------	-----------------------	-----	------	------

* $p < .05$

According to the Table 7, the levels of intolerance toward uncertainty ($t = -0.032$, $p > .05$), mindfulness levels ($t = 0.508$; $p > .05$), and all sub-dimensions of coping with stress strategies such as self-confident approach ($t = 0.552$, $p > .05$), helpless approach ($t = 1.011$, $p > .05$), submissive approach ($t = -1.274$, $p > .05$), optimistic approach ($t = -0.656$, $p > .05$), and seeking social support ($t = -0.746$, $p > .05$) did not differ according to whether the respondents did research on the field of education which they study.

4.2.6. Examination of Levels of Intolerance toward Uncertainty, Mindfulness Levels, and Coping with Stress Strategies with Respect to the GPA (Grade Point Average) of the Senior Undergraduate Students

One-way analysis of variance (ANOVA) was used to analyze whether there was a difference among levels of intolerance toward uncertainty, mindfulness levels, and coping with stress strategies with respect to the GPAs of the students. Findings of one-way ANOVA are given in Table 8.

Table 8. Consequences of One-Way ANOVA

Variables	n, M, and SD values				ANOVA Results				
	Group	n	M	SD		Sum of Squares	Mean		
							df	Square	F
Intolerance toward uncertainty	2.50 and less	88	41.11	8.66	Between Groups	46.32	2	23.160	0.294
	2.51 – 3.49	207	40.27	8.93	Within Groups	27494.76	34	78.782	.75

	3.50 and more	57	40.72	9.02	Total	27541.08	35			
							1			
	Total	352	40.55	8.86						
Mindfulness levels	2.50 and less	88	59.26	12.97	Between Groups	665.15	2	332.573	2.005	.14
	2.51 – 3.49	207	57.22	12.82	Within Groups	57889.33	34	165.872		
							9			
	3.50 and more	57	60.75	12.93	Total	58554.47	35			
							1			
	Total	352	58.30	12.92						
Self-confident approach	2.50 and less	88	2.78	0.43	Between Groups	0.63	2	0.314	1.917	.15
	2.51 – 3.49	207	2.69	0.39	Within Groups	57.19	34	0.164		
							9			
	3.50 and more	57	2.77	0.43	Total	57.82	35			
							1			
	Total	352	2.73	0.41						
Helpless approach	2.50 and less	88	2.62	0.39	Between Groups	0.195	2	0.097	0.661	.52
	2.51 – 3.49	207	2.64	0.39	Within Groups	51.47	34	0.147		
							9			
	3.50 and more	57	2.69	0.35	Total	51.67	35			
							1			
	Total	352	2.64	0.39						
	2.50 and less	88	2.52	0.45	Between Groups	0.89	2	0.446	2.298	.10

Submissive approach	2.51 – 3.49	207	2.45	0.43	Within Groups	67.81	34	0.194		
							9			
	3.50 and more	57	2.36	0.47	Total	68.70	35			
							1			
	Total	352	2.45	0.44						
Optimistic approach	2.50 and less	88	2.43	0.46	Between Groups	0.293	2	0.147	0.574	.56
	2.51 – 3.49	207	2.47	0.50	Within Groups	89.15	34	0.255		
							9			
	3.50 and more	57	2.52	0.60	Total	89.44	35			
							1			
	Total	352	2.47	0.50						
Seeking social support	2.50 and less	88	2.58	0.56	Between Groups	1.53	2	0.762	2.506	.08
	2.51 – 3.49	207	2.45	0.55	Within Groups	106.16	34	0.304		
							9			
	3.50 and more	57	2.58	0.57	Total	107.69	35			
							1			
	Total	352	2.50	0.55						

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

Table 8 indicates that there was no difference among the levels of intolerance toward uncertainty ($F_{(2,351)}=0.294, p>.05$), mindfulness level ($F_{(2,351)}=2.005, p>.05$), and all sub-dimensions of coping with stress strategies such as self-confident approach ($F_{(2,351)}=1.917, p>.05$), helpless approach ($F_{(2,351)}=0.661, p>.05$), submissive approach ($F_{(2,351)}=2.298, p>.05$), optimistic approach ($F_{(2,351)}=0.574, p>.05$), seeking social support ($F_{(2,351)}=2.506, p>.05$) in

terms of the GPA of the senior undergraduate students. In other words, according to the GPA of the senior undergraduate students, the mean scores of all variables did not differ.



5. DISCUSSION

In this study, firstly it was targeted to examine whether there is a significant relationship among senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies. In addition, it is among the sub-objectives to examine whether the relevant research variables differ significantly according to age, gender, department of education, whether participants did research on the fields they studied or not, and their GPA.

According to the research findings, it was concluded that there was a positive relationship among senior undergraduate students' intolerance toward uncertainty and the helpless approach, which is among one of the coping with stress strategies. Apart from this, the results showed that there was a negative relationship between senior undergraduate students' intolerance toward uncertainty with the optimistic approach sub-dimension, which belongs to one of the coping with stress strategies. In other words, as senior undergraduate students' level of intolerance toward uncertainty increased, the level of using the helpless approach when coping with stress increased whereas at the same time the level of the optimistic approach decreased.

When the concepts of intolerance toward uncertainty and coping with stress strategies are examined in the relevant literature, it is seen that there is not enough research examining these two concepts together, but there are studies that examine intolerance toward uncertainty and coping with stress strategies under different headings and have similar results. One can look at Tantan Ulu and Yaka's (2019) study examining university students' intolerance of uncertainty, trait anxiety and decision-making behaviors. The results of the study reached by the researchers of the aforementioned study are quite similar to the findings of the present study and the subsequent findings obtained. In Tantan Ulu and Yaka's (2019) study, the

researchers observed that trait anxiety increased as the intolerance of uncertainty increased. In another study done by the researchers Kıran, Bozkur, and Cengiz (2020) they strived to investigate and compare the concepts of hopelessness, future anxiety, general self-efficacy, intolerance of uncertainty, and belief of finding a job in the future. In the mentioned study, the researchers have found similar findings when compared with the current study. Specifically, the researchers have found out that as the level of hopelessness increased, the level of intolerance toward uncertainty also seemed to increase. This finding in the present study indicates that as the level of intolerance of uncertainty increases, senior undergraduate students feel more helpless and have a pessimistic outlook on the future.

While it was decided that there was no statistically significant relationship between mindfulness level, helpless, optimistic, and seeking of social support approaches, which are the sub-dimensions of coping with stress strategies, there was a positive significant relationship between mindfulness level and sub-dimension self-confident approach. When the literature is reviewed, research examining the concepts of mindfulness in tandem with coping with stress styles have been found, but no parallelism has been observed between the research encountered and the findings of this current research. In their study, Palmer and Rodger (2009) investigated the relationship among coping styles, mindfulness, and perceived stress. In line with the results, it was observed that as the level of mindfulness decreases, avoidant coping with stress strategies were used more. Ülev (2014) examined the relationship among mindfulness levels, coping with stress styles and depression, active stress, and anxiety. It was observed that there was no parallelism between the findings of the aforementioned study and the findings of the present study. In Ülev's (2014) study, it was observed that there was a positive significant relationship between mindfulness level and the optimistic approach, which is one of the sub-dimension of the coping with stress strategies. Moreover, the findings also pointed out that there was a positive significant relationship between mindfulness and level

the seeking of social support approach, which is another sub-dimension of the coping with stress strategies. On the other hand, the results of the present study showed that there was no significant relationship between mindfulness and the sub-dimensions seeking social support and optimism approach which are the coping with stress strategies. As a matter of fact, both in Ülev's (2014) research and in the present study, it was determined that there is a positive significant relationship between mindfulness and self-confident approach, which is a sub-dimension of the strategy of coping with stress. To put it differently, as the level of mindfulness of senior undergraduate students increased, their tendency to prefer the self-confident approach as a strategy for coping with stress also increased. About such a finding, it can be said that senior undergraduate students with a strong ability to stay in the moment, do not concern themselves with past experiences or future concerns, on the contrary, they stay in the current moment and they are more confident in their own abilities when coping with stress by observing the present moment without judgment.

According to the findings of this study, it was concluded that there is no significant relationship between the levels of mindfulness level and intolerance toward uncertainty of senior undergraduate students. In the relevant literature, no study has been found that examines these two concepts together. In this context, the present study is the first to examine the relationship between the mindfulness level and intolerance toward uncertainty. However, the lack of a significant relationship between the mindfulness levels and intolerance toward uncertainty is a finding contrary to the assumptions expressed by mindfulness theorists. The characteristics of the sample of the relevant study may have caused such a finding.

In consequence of the findings from the current study, the intolerance toward uncertainty, mindfulness levels, and all of the coping with stress strategies of senior undergraduate students did not show a statistically significant difference with respect to

gender. Results from the research showed that there was a statistically significant difference in the submissive approach, one of the coping with stress strategies with respect to gender. In this direction, it has been determined that the level of utilizing the submissive approach of men is higher than that of women. Moreover, in the literature review, studies were found supporting that these research variables show statistically significant differences in the context of gender. In this regard, Silkü, Saracaloğlu, and Özkütük's (2009) research supports the findings of the present research. In addition to this, according to the study conducted by Savcı and Aysan (2014) with university students, coping with stress strategies differ significantly according to gender. In this direction, it was determined that female students used planned problem solving and accepting responsibility strategies more than male students.

According to the findings of Sagone and Caroli's (2014) research, it was found that female students used the seeking of social support approach, one of the strategies for coping with stress, more than male students. In the aforementioned research, the researchers concluded that male students used the avoidance approach, one of the coping with stress strategies, more than female students. As a result, Sagone and Caroli's (2014) study also shows that strategies for coping with stress differ significantly when it comes to comparing them on the basis of gender. In addition to these studies, in their research, Aşçı, Hazar, Kılıç, and Korkmaz (2015) concluded that women use problem-focused coping strategies and avoidance-escape approaches in coping with stress at a similar level to men, while women use more seeking of social support approach to cope with stress than men. In line with the findings of the current study, it can be said that male students prefer the submissive approach when it comes to stressful situations compared to female students, and male students resort to dysfunctional ways of coping in the face of stressful problems.

No statistically significant difference was found between the intolerance toward uncertainty, mindfulness levels, and coping with stress strategies of senior undergraduate students when it comes to differences in age. In the literature, the studies of Silkü, Saracaloğlu and Özkütük (2009) and Aşçı, Hazar, Kılıç and Korkmaz (2015) support the findings of the current research as well. However, when the literature is examined, it has been seen that there are studies that do not overlap with the relevant research findings. For instance, one of these studies is Akdemir's (2021) study. Akdemir's (2001) aim in this study is to examine the relationship between university students' career adaptability, intolerance to uncertainty levels and job anxiety. According to study findings, in the context of age, the level of intolerance of uncertainty among the students aged between 24 and 30 had a statistically significantly higher level of intolerance of uncertainty when compared to the students aged between 18 and 24. Therefore, the findings in the current study may be due to the characteristics of the research sample.

No statistically significant difference was found in the senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies with respect to the department students are studying. The findings obtained in the research conducted by Sagone and Caroli (2014) support the relevant research findings. On the other hand, the findings of Akdemir's (2021) research contradict the relevant research findings. In Akdemir's (2021) study, it was determined that there was a statistically significant difference between the level of intolerance of uncertainty and the education program in which the participants were studying. In addition to these studies, Silkü, Saracaloğlu, and Özkütük (2009) found that there was a statistically significant difference between the avoidance approach which is one of the coping with stress strategies/styles, and the program in which university students were being educated when the study was conducted. The researchers have concluded that the students studying in the regular/form classroom teaching program

preferred the avoidance strategy more often than other departments when it comes to coping with stress. When this finding in the present study is examined, with both supporting and unsupporting research findings, it can be said that the intolerance of uncertainty, mindfulness and strategies for coping with stress have changed independently of the programs they have been educated in.

In line with the research findings, no significant difference was found in the intolerance toward uncertainty, mindfulness levels, and coping with stress strategies of senior undergraduate students, depending on whether the students did research on the fields in which they were educated in or not. The relevant literature was reviewed and there are no studies that examine the research variables in the context of whether university students conduct research on their fields of education. In this context, the current study is the first to examine the relevant demographic variable. With this finding in the study, it can be said that the students who have done research in their field and those who have not done research are overall the same in terms of intolerance of uncertainty, mindfulness, and coping with stress strategies.

In line with the research findings, no significant difference was found between the senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and all sub-dimensions of coping with stress strategies when it comes to comparing the scores based on the students' overall grade point averages (GPA). In addition, in the relevant literature review, there were no studies examining the research variables in the context of the students' overall grade point averages/GPA. In this context, it is fair to say that, the present study is the first to examine the relevant demographic variable. With this finding in the study, the high or low GPA of the students may not make a difference in the intolerance of uncertainty, mindfulness levels, and coping with stress strategies.

6. CONCLUSION

1. It was concluded that there is a significant relationship among the intolerance toward uncertainty and the helpless approach sub-dimension, one of the coping with stress strategies, of senior undergraduate undergraduate students.
2. As the level of intolerance toward uncertainty of senior undergraduate students increased, the helpless approach sub-dimension, one of the coping with stress strategies, also increased. However, as the level of intolerance toward uncertainty of senior undergraduate students increased, the optimistic approach sub-dimension, one of the coping with stress strategies decreased.
3. No significant relationship was found between the mindfulness levels of senior undergraduate students and the helpless, submissive, optimistic, and seeking of social support approaches, which are among the coping with stress strategies.
4. It was discovered that there is a significant relationship among the self-confident approach sub-dimension, which is one of the coping with stress strategies, and mindfulness levels of senior undergraduate students.
5. No significant relationship was found between the levels of mindfulness and intolerance toward uncertainty of senior undergraduate students.
6. Senior undergraduate students' intolerance toward uncertainty, mindfulness levels, and coping with stress strategies such as self-confident, helpless, optimistic, and seeking of social support approaches did not show a significant difference with respect to gender.
7. The submissive approach, one of the coping with stress strategies of senior undergraduate students, showed a significant difference with respect to gender. It was concluded that the submissive approach levels of male students were higher than that of female students.

8. No significant difference was found in the level of intolerance toward uncertainty, mindfulness levels, and coping with stress strategies of senior undergraduate students with respect to the age of the students.
9. There was no significant difference in the level of intolerance toward uncertainty, mindfulness levels, and coping with stress strategies of senior undergraduate students with respect to the department they are studying at.
10. There was no significant difference in the level of intolerance toward uncertainty, mindfulness levels, and coping with stress strategies of senior undergraduate students, depending on whether they did research on the fields they studied or not.
11. No significant difference was found between the senior undergraduate students' intolerance toward uncertainty, mindfulness levels and all sub-dimensions of coping with stress strategies, with respect to the students' grade point averages.

7. SUGGESTIONS

For Researchers:

- Even though the results obtained from this study are compatible with similar studies in the literature in many ways, there are also variables that differ. The fact that it was studied with a small sample group is one of the crucial limitations of this study. For this reason, the aforementioned research can be re-examined by including students from all grade levels studying at various universities in the sample group.
- A cross-sectional research design was used in this current research. In future research, using a longitudinal research design, intolerance toward uncertainty, mindfulness levels, and coping with stress strategies can be observed from year to year.
- In addition to the inventories used in the study, the Korean Career Stress Inventory adapted into Turkish by Özden, Sertel & Berk (2017) can be used to measure the relevant variables.
- In this research, no significant difference was educed in the related variables of senior undergraduate students, depending on whether they did research on the fields they studied or not. Therefore, related variables can be examined together with variables such as career indecision, career barriers, career beliefs, and problem-solving skills.

For Experts:

- Within the scope of current programs and course contents, education programs can be developed for university students on intolerance toward uncertainty, mindfulness levels and coping with stress strategies.
- Research variables can be studied by designing a counseling program with a group, and the strength of the program can be checked by applying pre- and post-tests to the participants by using scales measuring research variables.

REFERENCES

- Akbağ, M. (2000). *Stresle Başa Çıkma Tarzlarının Üniversite Öğrencilerinde Olumsuz Otomatik Düşünceler; Transaksijonel Analiz Ego Durumları ve Bazı Değişkenler Açısından İncelenmesi*. (Yayınlanmamış Doktora Tezi). Marmara Üniversitesi, İstanbul.
- Akdemir, H.,(2021). *Belirsizliğe Tahammülsüzlük Algısı ve Kariyer Uyum Yetenekleri Kısılacında İş Bulma Kaygısı*.(Yüksek Lisans Tezi). Burdur Mehmet Akif Ersoy Üniversitesi, Burdur.
- Akın, A. (2019). Bilişsel Psikoloji. In A. Akın(Ed.), *Psikolojide Kullanılan Güncel Ölçme Araçları* (p.327-328).Ankara:Nobel Akademi.
- Aktepe, İ. & Tolan, Ö . (2020). Bilinçli farkındalık: Güncel bir gözden geçirme . *Psikiyatride Güncel Yaklaşımlar*,12(4),534-561.doi: 10.18863/pgy.692250
- Aşçı,Ö.,Hazar,G.,Kılıç,E. & Korkmaz,A. (2015).Üniversite öğrencilerinde stress nedenlerinin ve stresle başa çıkma biçimlerinin belirlenmesi.*Uşak University Journal of Social Sciences*,8(4),213-231,
- Atalay, Z. (2019). *Mindfulness*. İstanbul: İnkilap Kitabevi.
- Bach, P.A. & Moran, D.J. (2008). *ACT in Practice : Case conceptualization in acceptance and commitment therapy*. Oakland: New Harbinger Pub.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical psychology: Science and practice*, 10(2), 125-143.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, 27– 45.
- Bailey, R. D.& Clarke, M. (1989). *Stress and coping in nursing*. Springer.

- Balcı, A. (2000). *Öğretim elemanlarının iş stresi. İuram ve uygulama*. Ankara: Nobel Akademik Yayıncılık.
- Baltaş, Z. & Baltaş, A. (2008). *Stres ve başa çıkma yolları*. İstanbul: Remzi Kitabevi.
- Barahmand,U. & Haji, A. (2014). The impact of intolerance of uncertainty, worry and irritability on quality of life in persons with epilepsy: Irritability as mediator. *Epilepsy research*, 108(8), 1335-1344.
- Bar-Anan, Y., Wilson, T. D., & Gilbert, D. T. (2009). The feeling of uncertainty intensifies affective reactions. *Emotion*, 9(1), 123.
- Barlow, D. H. (2000). Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. *American Psychologist*, 55(11), 1247-1263.
- Basut, E. (2006). Stres, başa çıkma ve ergenlik. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, 13(1), 31 - 36.
- Bayram, F., Özkamalı, E. & Çiftçi S. (2021). Tercih sürecindeki üniversite adaylarının belirsizliğe tahammülsüzlük ve bilişsel esneklik düzeyleri arasındaki ilişkinin incelenmesi. *Elektronik Sosyal Bilimler Dergisi*, 20(77), 98-120.
- Beitel, M., Ferrer, E., & Cecero, J. J. (2004). Psychological mindedness and cognitive style. *Journal of clinical psychology*, 60(6), 567-582.
- Bennett, N., Herold, D. M., & Ashford, S. J. (1990). The effects of tolerance for ambiguity on feedback-seeking behaviour. *Journal of occupational psychology*, 63(4), 343-348.
- Birrell, J., Meares, K., Wilkinson, A., & Freeston, M. (2011). Toward a definition of intolerance of uncertainty: A review of factor analytical studies of the Intolerance of Uncertainty Scale. *Clinical psychology review*, 31(7), 1198-1208.

Bishop, S. R. (2002). What do we really know about mindfulness-based stress reduction?.

Psychosomatic Medicine, 64(1), 71-83.

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V.,

Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230-241.

Blau, G. (2003). Testing for a four-dimensional structure of occupational commitment.

Journal of Occupational and Organizational Psychology, 76, 469-488.

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.

Budner, S. (1962). Intolerance of ambiguity as a personality variable. *Journal of Personality*,

30(1), 29–50.

Buhr, K., & Dugas, M. J. (2002). The intolerance of uncertainty scale: Psychometric

properties of the English version. *Behavior Research and Therapy*, 40, 931-945.

Buhr, K., & Dugas, M. J. (2006). Investigating the construct validity of intolerance of

uncertainty and its unique relationship with worry. *Journal of Anxiety*

Disorders, 20(2), 222-236.

Buhr, K., & Dugas, M. J. (2009). The role of fear of anxiety and intolerance of uncertainty in

worry: An experimental manipulation. *Behaviour research and therapy*, 47(3), 215-223.

Büyüköztürk, Ş., Çakmak, E.K., Akgün, Ö.E., Karadeniz, Ş. & Demirel, F. (2019). *Bilimsel*

Araştırma Yöntemleri. (27. Baskı).Ankara:Pegem Akademi.

- Çakmak, Ö., & Hevedanlı, M. (2005). Eğitim ve fen-edebiyat fakülteleri biyoloji bölümü öğrencilerinin kaygı düzeylerinin çeşitli değişkenler açısından incelenmesi. *Elektronik Sosyal Bilimler Dergisi*, 4(14), 115-127.
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour research and therapy*, 44(4), 585-599.
- Cannon, W. B. (1926). *Physiological regulation of normal states: some tentative postulates concerning biological homeostatics*. Paris: Editions Medicales.
- Cannon, W.B. (1932). *The wisdom of the body*. New York: W W Norton & Co.
- Cannon, W.B. (1994). Walter Bradford Cannon: Reflections on the man and his contributions. *International Journal of Stress Management*, 1(2), 145-158.
- Carleton, R. N. (2016). Into the unknown: A review and synthesis of contemporary models involving uncertainty. *Journal of Anxiety Disorders*, 39, 30-43.
- Carleton, R. N., Collimore, K. C., & Asmundson, G. J. (2010). "It's not just the judgements- It's that I don't know": Intolerance of uncertainty as a predictor of social anxiety. *Journal of Anxiety Disorders*, 24(2), 189-195.
- Carleton, R.N. (2012). The intolerance of uncertainty construct in the context of anxiety disorders: Theoretical and practical perspectives. *Expert Reviews Neurother*, 12(8), 937-947
- Carleton, R.N., Norton, P.J. & Asmundson, G.J.G. (2007). Fearing the unknown: A short version of the intolerance of uncertainty scale. *Journal of Anxiety Disorders*, 21, 105-117.

- Çatak, P.D., & Ögel, K. (2010). Bir terapi yöntemi olarak farkındalık. *Nöropsikiyatri Arşivi*, 47, 69-73.
- Cayoun, B. A. (2011). *Mindfulness-integrated CBT: Principles and practice*. New Jersey: John Wiley & Sons.
- Chen, C., & Hong, R.Y. (2010). Intolerance of uncertainty moderates the relation between negative life events and anxiety. *Personality and Individual Differences*, 49, 49-53.
- Cloud, J. (2006). Happiness isn't normal. *Time*, 167, 58-67.
- Colman, A. (2008). *A Dictionary of Psychology*. Oxford: Oxford University Press.
- Compas, B. E. (1987). Coping with stress during childhood and adolescence. *Psychological bulletin*, 101(3), 393.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H. & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1), 87-127. doi:10.1037/0033-2909.127.1.87.
- Corey, G. (2015). *Psikolojik Danışma Kuram ve Uygulamaları* (T. Ergene, Çeviren). Ankara: Mentis Yayıncılık.
- Çoruhlu, E. (2001). Deprem bölgesinde yaşayan ilköğretim birinci kademe öğretmenlerinin stresle başa çıkma yolları, Yayımlanmamış Yüksek Lisans Tezi, Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.
- Coşkun, E., (2019). *Duygusal Zeka ve Belirsizliğe Tahammülsüzlüğün Stresle Başa Çıkma Tarzlarına Etkisinin İncelenmesi*. (Yüksek Lisans Tezi). Fatih Sultan Mehmet Vakıf Üniversitesi, İstanbul.

- Cüceloğlu, D. (2000). *İnsan ve davranışı*. (10. Basım). İstanbul: Remzi Kitapevi.
- Deane, F.P., Ciarrochi, J., & Blackledge, J.T. (2009). *Acceptance and Commitment Therapy: Contemporary Theory Research and Practice*. Australian Academic Press.
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and social psychology bulletin*, 27(8), 930-942.
- Demir, A., & Demir, V. (2018). Üniversite öğrencilerinde stres azaltmaya yönelik bir program : Bilinçli farkındalık. *Eğitim ve İnsani Bilimler Dergisi*. 9,(17) ,56-77.
- Deniz, M. E. ve Yılmaz, E. (2006). Üniversite öğrencilerinde duygusal zeka ve stresle başa çıkma stilleri arasındaki ilişkinin incelenmesi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3 (25), 17–26.
- DeRoma, V. M., Martin, K. M., & Kessler, M. L. (2003). The relationship between tolerance for ambiguity and need for course structure. *Journal of instructional psychology*, 30(2), 104.
- Dimeff, L.A. & Koerner, K. (2007). *Dialectical Behavior Therapy in Clinical Practice: Applications across Disorders and Settings*. New York : Guildford Press.
- Doğan Laçın, B. G. & Yalçın, İ. (2019). Üniversite öğrencilerinde öz-yeterlilik ve stresle başa çıkma stratejilerinin bilişsel esnekliği yordama düzeyleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 34(2), 358-371. doi: 10.16986/HUJE.2018037424
- Dryden, W., & Still, A. (2006). Historical aspects of mindfulness and self-acceptance in psychotherapy. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 24(1), 3.

- Dugas, M. J., & Robichaud, M. (2007). *Cognitive-behavioral treatment for generalized anxiety disorder: From science to practice*. Routledge/Taylor & Francis Group.
- Dugas, M. J., Buhr, K. ve Ladouceur, R. (2004). The role of intolerance of uncertainty in etiology and maintenance. In R. G. Heimberg, C. L. Turk ve D. S. Mennin (Eds.), *Generalized anxiety disorder: Advances in research and practice (p.142-163)*. New York, Guilford Press.
- Dugas, M. J., Freeston, M. H., & Ladouceur, R. (1997). Intolerance of uncertainty and problem orientation in worry. *Cognitive Therapy and Research*, 21(6), 593-606.
- Dugas, M. J., Gosselin, P., & Ladouceur, R. (2001). Intolerance of uncertainty and worry: Investigating specificity in a nonclinical sample. *Cognitive therapy and Research*, 25(5), 551-558.
- Dugas, M. J., Schwartz, A., & Francis, K. (2004). Brief report: Intolerance of uncertainty, worry, and depression. *Cognitive Therapy and Research*, 28(6), 835-842.
- Endler, N. S., & Parker, J. D. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of personality and social psychology*, 58(5), 844.
- Erguvan, F.M. (2015). *Üniversite öğrencilerinin belirsizliğe tahammülsüzlük düzeyleri ile psikolojik iyi olma düzeylerinin incelenmesi*. (Yayınlanmamış Yüksek Lisans Tezi). Sakarya Üniversitesi, Sakarya.
- Erözkan, A. (2004). Üniversite öğrencilerinin sınav kaygısı ve başa çıkma davranışları. *Muğla Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*(12), 13 - 38.
- Ersanlı, K., & Uysal, E. (2015). Belirsizliğe karşı tutum ölçeğinin geliştirilmesi. *Electronic Journal of Social Sciences*, 14(54),46-53.

Feigenbaum, J.(2007).Dialectical behavior therapy: An increasing evidence base. *Journal Of Mental Health*,16(1),51-68.

Fidan, S. Ş. (2017). *Belirsizliğe tahammülsüzlük ve psikolojik sermayenin değişime hazır bulunuşluk üzerindeki etkisi*. (Yayımlanmamış Yüksek Lisans Tezi). Yıldız Teknik Üniversitesi, İstanbul.

Folkman, S., & Lazarus, R.S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of college examination. *Journal of Personality and Social Psychology* 48, 150-170.

Fourtounas, A., & Thomas, S. J. (2016). Cognitive factors predicting checking, procrastination and other maladaptive behaviours: prospective versus inhibitory intolerance of uncertainty. *Journal of Obsessive-Compulsive and Related Disorders*, 9, 30-35.

Freeston, M. H., Rhéaume, J., Letarte, H., Dugas, M. J., & Ladouceur, R. (1994). Why do people worry?. *Personality and Individual Differences*, 17(6), 791-802.

Frenkel-Brunswick, E. (1949). Intolerance of ambiguity as emotional and perceptual personality disposition. *Journal of Personality*, 18, 103-143.

Freud, S. (1953). *On aphasia; a critical study*. International Universities Press.

Freud,S. (1963). Introductory lectures on psychoanalysis. *Standart Edition*, 15(16).

Furnham, A. (1994). A content, correlational and factor analytic study of four tolerance of ambiguity questionnaires. *Personality and Individual Differences*, 16(3), 403-410.

Geçgin, F. M., & Sahranç, Ü. (2017). Belirsizliğe Tahammülsüzlük ile Psikolojik İyi Oluş Arasındaki İlişki. *Sakarya University Journal of Education*, 7(4-özel sayı), 739-755.

Genceli, M. (2007). Kolmogorov-Smirnov lilliefors and shapiro-wilk tests for normality.

Journal of Engineering and Natural Sciences, 25(4), 306-328.

Germer, C. K. (2009). *The Mindful Path to Self-Compassion: Freeing Yourself From*

Destructive Thoughts and Emotions. Hove: Routledge.

Germer, C.K. (2004). What is mindfulness. *Insight Journal*, 22, 24-29.

Germer, C.K. (2009). *The Mindful Path of Self-Compassion*. Hove: Routledge.

Germer, C.K.(2005). Mindfulness: What is it ? What does it matter ? In C. K., Germer, R.

Siegel, & P. Fulton (eds.), *Mindfulness and Psychotherapy*. (pp.3-35).New York:

Guilford Press.

Gizir, C. A. (2005). Orta Doğu Teknik Üniversitesi son sınıf öğrencilerinin problemleri

üzerine bir çalışma. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 1(2), 196-213.

Goldberger, L., & Breznitz, S. (1993). *Handbook of Stress: Theoretical and Clinical*

Aspects.London: Free Pr.

Gonzalez, L. O, & Sellers, E. W. (2002). The effect of a stress-management program on self

concept, locus of control, and the acquisition of coping skills in school age children

diagnosed with attention deficit hyperactivity disorder. *Journal of Child and*

Adolescent Psychiatric Nursing, 15 (1),5-15.

Grenier, S., Barette, A. M., & Ladouceur, R. (2005). Intolerance of uncertainty and

intolerance of ambiguity: Similarities and differences. *Personality and Individual*

Differnces, 39, 593-600.

Güneri,E. (2017). *Psikolojide Kullanılan Ölçekler*. İstanbul: İstanbul Gelişim Üniversite

Yayınları.

Hanh, T. N. (1976). *The Miracle of Mindfulness: A Manual for Meditation*. Boston: Beacon.

- Harris, R. (2008). *The Happiness Trap: How to Stop Struggling and Start Living*. Trumpeter Publ.
- Harris, R., (2006). Embracing your demons: an overview of acceptance and commitment therapy. *Psychotherapy in Australia*, 12, 2– 8.
- Harris, R., (2009). *ACT Made Simple: An Easy to Read Primer on Acceptance and Commitment Therapy*. Oakland: New Harbinger Pub.
- Harris, W. (2013). Mindfulness-based existential therapy: Connecting mindfulness and existential therapy. *Journal of Creativity in Mental Health*, 8(4), 349-362.
- Hayes, S. C. (2004). Acceptance and Commitment Therapy, Relational Frame Theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, 35, 639-665.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and Commitment Nyanaponika Therapy: An Experiential Approach to Behavior Change*. New York: Guilford Press.
- Hayes, S.C. , Strosahl, K.D. & Houts, A. (2005). *A practical guide to acceptance and commitment therapy*. New York: Springer.
- Hayes,S.C. & Smith,S.(2005). *Get Out of Your Mind & Into Your Life: The New Acceptance and Commitment Therapy*. Oakland: New Harbinger Pub.
- Hick,S.F., (2008). *Mindfulness and the therapeutic relationship*. New York: Guilford Press.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, Sage.
- Hosseinzadeh-Asl,N.R., Emamvirdi,R., Çolakoğlu,F.F., & Dölek,K. (2020). Koronavirüs (COVID-19) pandemi döneminde dört haftalık online bilinçli farkındalık yoga uygulamasının üniversite öğrencilerinin psikolojik sağlığı üzerine etkisi. *Uluslararası Sosyal Araştırmalar Dergisi*. 13(72),1064-1069.

İkiz, F.E.(2016). *Psikolojik Danışma ve Psikoterapide Kuramlar ve Yenilikçi Yaklaşımlar*.

Ankara: Nobel.

Işık, Ş. & Ergüner-Tekinalp, B. (2019). *Psikolojik Danışmada Güncel Kuramlar*. Ankara:

Pegem Akademi.

Jacoby,J. (2020). Self-tracking as an act of self-care and its implications for patient agency: A designer's point of view. *Diabetes Complications*, 4(3), 1-6.

Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General hospital psychiatry*, 4(1), 33-47.

Kabat-Zinn, J. (1990). *Full Catastrophe Living: Using The Wisdom of Your Body and Mind to Face Stress, Pain, and Illness*. New York, Delacourte.

Kabat-Zinn, J. (1994). *Wherever you go there you are*. New York: Hyperion

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144-156.

Kabat-Zinn, J. (2009). *Full catastrophe living: Using the wisdom of your mind and body to face stress, pain, and illness*. New York: Delacorte.

Kasperson, R. E. (2012). Coping with deep uncertainty: challenges for environmental assessment and decision-making. In G.Bammer and M.Smithson(eds.), *Uncertainty and risk* (pp. 355-366).London, Routledge.

Kilit, Z., Dönmezler, S., Erensoy, H., & Berkol, T. (2020). Uncertainty intolerance, worry, and cognitive test anxiety in university students. *Ortadoğu Tıp Dergisi*, 12(2), 262-268.

- Kıran, B., Bozkur, B., & Cengiz, Ö. (2020). Üniversite Öğrencilerinin Umutsuzluk Düzeyleri, Belirsizliğe Tahammülsüzlük ve Özyeterliklerinin İncelenmesi. *Kastamonu Eğitim Dergisi*, 28(6), 2401-2409.
- Koerner, N., & Dugas, M.J. (2008). An investigation of appraisals in individuals vulnerable to excessive worry: the role of intolerance of uncertainty. *Cognitive Therapy and Research*, 32, 619–638.
- Koerner, K. (2012). *Doing dialectical behavior therapy: a practical guide*. New York: Guilford Press.
- Kraemer, K. M., O'Bryan, E. M., & McLeish, A. C. (2016). Intolerance of uncertainty as a mediator of the relationship between mindfulness and health anxiety. *Mindfulness*, 7(4), 859-865.
- Krohne, H. W. (2002). Stress and coping theories. *International Encyclopedia of the Social Behavioral Sciences*, 22, 15163-15170. doi:10.1016/B0-08-043076- 7/03817-1
- Küçükkömürler, S. (2017). Belirsizliğin psikolojik etkileri. *Nesne-Psikoloji Dergisi*, 5(10), 329-344. doi: 10.7816/nesne-05-10-07
- Ladouceur, R., Talbot, F., & Dugas, M. J. (1997). Behavioral expressions of intolerance of uncertainty in worry: Experimental findings. *Behavior Modification*, 21(3), 355-371.
- Lane, M. S., & Klenke, K. (2004). The ambiguity tolerance interface: A modified social cognitive model for leading under uncertainty. *Journal of Leadership & Organizational Studies*, 10(3), 69-81.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: Mc GrawHill.
- Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual review of psychology*, 44(1), 1-22.

- Lazarus, R. S. (1993a). Coping theory and research: past, present, and future. *Psychosomatic Medicine*, 55(3), 234-247. doi:10.1097/00006842-199305000-00002
- Lazarus, R. S., & Folkman, S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21,219-239
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer Publishing Company.
- Lazarus, R. S., & Folkman, S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54(3), 466.
- Lehrhaupt, L., & Meibert, P. (2017). *Mindfulness-based stress reduction: The MBSR program for enhancing health and vitality*. New World Library.
- Levine,J.,Bar,T., & Levine,Y.(2012) Gestalt therapy: Advances in theory and practice. In T.Bar & Y.Levine(eds.), *Gestalt in the new age*(pp.1-12).New York,Routledge.
- Liao, K. Y. & Wei, M. (2011). Intolerance of uncertainty, depression, and anxiety: the moderating and mediating roles of rumination. *Journal of Clinical Psychology*, 67(12), 1220-1239. doi:10.1002/jclp.20846
- Linehan, M.M., (1993a). *Cognitive- behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Linehan,M.M. (1993b). *Skills training manual for treating borderline personality disorder*. New York: The Guilford Press.
- Marlatt, G. A., & Kristeller, J. L. (1999). Mindfulness and meditation. In W. R. Miller (Ed.), *Integrating spirituality into treatment* (p. 67–84). Washington,DC:American Psychological Association.
- May, R., & Yalom, I. (1989). Existential psychotherapy. In R.J. Corsini and D.Wedding (eds.) *Current Psychotherapies*, (pp.363- 402).Itasca IL:F.E.Peacock.

- May,R. (1958). Contributions of existential psychotherapy. In.R.May, H.F.Ellenberg (eds.), *Existence:A nex dimension in psychiatry and psychology (pp.37-91)*,NewYork:Basic Books.
- May,R. (1991).*The cry for myth*. New York:Norton.
- McEvoy, P. M., & Mahoney, A. E. (2011). Achieving certainty about the structure of intolerance of uncertainty in a treatment-seeking sample with anxiety and depression. *Journal of Anxiety Disorders*, 25(1), 112-122.
- Nyanaponika–Thera, N. (1972). *The Power of Mindfulness*. San Francisco:Unity Press.
- Oglesby, M. E., & Schmidt, N. B. (2017). The role of threat level and intolerance of uncertainty (IU) in anxiety: An experimental test of IU theory. *Behavior therapy*, 48(4), 427-434.
- Öz, F. (2001). Hastalık yaşantısında belirsizlik. *Türk Psikiyatri Dergisi*, 12(1), 61-68.
- Özden, K. & Sertel-berk, Ö. (2017). Kariyer stresi ölçeği'nin (KSÖ) Türkçe'ye uyarlanması ve psikometrik özelliklerinin sınanması . *Psikoloji Çalışmaları* , 37 (1) , 35-51 .
- Özyeşil, Z. (2011a). *Üniversite öğrencilerinin öz-anlayış düzeylerinin bilinçli farkındalık kişilik özellikleri ve bazı değişkenler açısından incelenmesi* (Doktora Tezi). Selçuk Üniversitesi,Konya.
- Özyeşil, Z. (2011b). *Öz- Anlayış ve Bilinçli Farkındalık*. Ankara: Maya Akademi.
- Özyeşil,Z. (2012). Mindfulness and psychological needs: A cross-cultural comparison. *Elementary Education Online*, 11(1), 151-160, 2012
- Özyeşil,Z., Arslan,Ç., Kesici,Ş. & Deniz, M.E. (2011). Bilinçli farkındalık ölçeği'ni türkçeye uyarlama çalışması. *Eğitim ve Bilim*,36(160),224-235

- Palmer, A. & Rodger, S. (2009). Mindfulness, stress, and coping among university
- Pearlin, L. I. & Schooler, C. (1978). The structure of coping. *Journal of health and social behavior*, 2-21.
- Perls, F. S. (1969). *Gestalt therapy verbatim*. California: Real People Press.
- Pintrich, P. R. & Schunk, D. H. (1996). *Motivation in education: Theory, research and applications*. New Jersey: Merrill, Printice Hall.
- Reibel, D., & McCown, D. (2019). Mindfulness-Based Stress Reduction: Theory, practice and evidence base. In I. Itzvan (Ed.) *Handbook of Mindfulness-Based Programmes: Mindfulness interventions from Education to Health and Therapy*. New York: Routledge.
- Roemer, L., Lee, J. K., Salters-Pedneault, K., Erisman, S. M., Orsillo, S. M., & Mennin, D. S. (2009). Mindfulness and emotion regulation difficulties in generalized anxiety disorder: Preliminary evidence for independent and overlapping contributions. *Behavior therapy*, 40(2), 142-154.
- Rosen, N. O., Ivanova, E., & Knäuper, B. (2014). Differentiating intolerance of uncertainty from three related but distinct constructs. *Anxiety, Stress & Coping*, 27(1), 55-73.
- Rosser, B. A. (2019). Intolerance of uncertainty as a transdiagnostic mechanism of psychological difficulties: A systematic review of evidence pertaining to causality and temporal precedence. *Cognitive therapy and research*, 43(2), 438-463.
- Sagone E., & Caroli, M. E. (2014). A Correlational Study on Dispositional Resilience, Psychological Well-being, and Coping Strategies in University Students. *American Journal of Educational Research*, 2(7), 463-471.

- Şahin, N. H., & Durak, A. (1995). Stresle başa çıkma tarzları ölçeği: Üniversite öğrencileri için uyarlanması. *Türk Psikoloji Dergisi*, 10(34), 56-73.
- Şahin, Nesrin H. 1994. Stres nedir? Ne değildir?. In N.H.Şahin(Ed.),*Stresle Başa Çıkma Yolları: Olumlu Bir Yaklaşım*, (pp.1-16). İstanbul:Türk Psikologlar Derneği Yayınları.
- Sahler,O.J.Z.,&Carr,J.E. (2009) ,Coping Strategies.In Crocker, A. C., Elias, E. R., Feldman, H. M., Carey, W.B., & Coleman, W. L. (eds.), *Developmental-Behavioral Pediatrics* (pp.491 -496).Amsterdam:Elseiver.
- Sallot, L. M., Lyon, L. J., Acosta-Alzuru, C., & Ogata Jones, K. (2003). From aardvark to zebra: A new millennium analysis of theory development in public relations academic journals. *Journal of Public Relations Research*, 15(1), 27-90.
- Sarı, S. (2007). *Sürekli kaygının yordayıcıları olarak belirsizliğe tahammülsüzlük, endişe ile ilgili inançlar ve kontrol odağının incelenmesi* .(Yayımlanmamış Yüksek Lisans Tezi), Hacettepe Üniversitesi, Ankara.
- Sarıçam, H. (2014). Belirsizliğe tahammülsüzlüğün mutluluğa etkisi. *Sosyal Bilimler Dergisi*, 4(8), 1-12.
- Sarıçam, H., Erguvan, F.M., Akın, A. & Akça, M.Ş. (2014). Belirsizliğe tahammülsüzlük ölçeği (BTÖ-12) Türkçe formu: Geçerlik ve güvenirlik çalışması. *Route Educational and Social Science Journal*,1(3),148-157.
- [Savcı, M., & Aysan, F. \(2014\). Üniversite öğrencilerinde algılanan stres düzeyi ile stresle başa çıkma stratejileri arasındaki ilişki. *Uluslararası Türk Eğitim Bilimleri Dergisi*,\(3\), 44-56.](#)

- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive Nyanaponika Therapy for depression: A new approach to preventing relapse*. New York: Guilford.
- Selye, H. (1950). Stress and the general adaptation syndrome. *British Medical Journal*, 1, 1383-1392.
- Selye, H. (1976). The stress of life. *Child And Adolescent Social Work Journal*. 16(A). 227-290.
- Shapiro S. L., Schwartz, G. E., & Bonner, G.(1998). Effects of mindfulness- based stress reduction on medical and premedical students. *Journal of Behavioral Medicine*, 21(6), 581- 599.
- Shapiro, S. L., Carlson, L., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62, 373-386.
- Sharf,R.S. (2014). *Theories of Psychotherapy and Counseling Concepts and Cases*. Boston: Cengage Learning.
- Siegel, R. D. (2010). *The Mindfulness Solution: Everyday Practices for Everyday Problems*. New York: The Guilford Press.
- Silkü,H.A., Saracaloğlu,A.S. & Özkütük,N. (2009). Üniversite öğrencilerinin stresle başa çıkma stratejileri.*Yeni Düşünceler (4)*,53-66.
- Stahl, B., & Goldstein, E. (2019). *A mindfulness-based stress reduction workbook*. New Harbinger Publications.
- Starcevic, V., & Berle, D. (2006). Cognitive specificity of anxiety disorders: a review of selected key constructs. *Depression and anxiety*, 23(2), 51-61.

- Steketee, G., Frost, R. O., & Cohen, I. (1998). Beliefs in obsessive-compulsive disorder. *Journal of anxiety disorders*, 12(6), 525-537.
- Step toe, A. (1991). Psychological coping, individual differences and physiological stress responses. In C. L. Cooper ve R. Payne (Eds.), *Personality and stress: Individual differences in the stress process* (p. 205-233). Chichester: Wiley.
- Stoycheva, K. (2003). Talent, science and education: How do we cope with uncertainty and ambiguities? In P. Csermely ve L. Lederman (Ed.), *Science education: Talent recruitment and public understanding* (p.31- 43). Amsterdam: IOS Press.
- Students. *Canadian Journal of Counselling*, 43:3, 198-212.
- Surawy, C., McManus, F., Muse, K., & Williams, J. M. G. (2015). Mindfulness-based cognitive therapy (MBCT) for health anxiety (hypochondriasis): rationale, implementation and case illustration. *Mindfulness*, 6(2), 382-392.
- Swales, M.A. (2009). Dialectical behaviour therapy: Description, research and future directions. *International Journal of Behavioral Consultation and Therapy*, 5(2), 164-177.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Pearson India Education Services Pvt. Ltd.
- Tantan Ulu, Ş., & Yaka, B. (2019). Kaygı, belirsizliğe tahammülsüzlük ve karar verme arasındaki ilişkilerin incelenmesi. *Ege Eğitim Dergisi*, 21(1), 89-100.
- Taylor, C. (2000). Clinical problem solving in nursing: insights from literature. *Journal of Advanced Nursing*, 31, 842-849.
- Tekinalp, B. E., & Terzi, Ş. I. (2013). *Psikolojik Danışmada Güncel Kuramlar*. Ankara: Pegem Akademi.

Tilahun, B. (2018, 7 Haziran). Mindfulness to cope with uncertainty. [Web günlük postası]

Erişim adresi <https://consultqd.clevelandclinic.org/mindfulness-to-cope-with-uncertainty/>

Türkçapar, M.H. (2018). *Bilişsel Davranışçı Terapi Temel İlkeler ve Uygulama*. İstanbul: Epsilon Yayıncılık.

Türküm, A. Sibel. (1999). *Stresle Başa Çıkma ve İyimserlik*. Eskişehir: Anadolu Üniversitesi Yayınları.

Ülev, E. (2014). *Üniversite Öğrencilerinde Bilinçli Farkındalık Düzeyi ile Stresle Başa Çıkma Tarzının Depresyon, Kaygı ve Stres Belirtileriyle İlişkisi*. (Yayımlanmamış yüksek lisans tezi). Hacettepe Üniversitesi, Ankara.

Uzun, K., & Karataş, Z. (2018). Belirsizliğe tahammülsüzlüğün yordayıcısı olarak endişe ile ilgili olumlu ve olumsuz inançlar. *Kastamonu Eğitim Dergisi*, 26 (4) , 1267-1276. [doi: 10.24106/kefdergi.434169](https://doi.org/10.24106/kefdergi.434169)

Vatan, S. (2016). Bilişsel davranışçı terapilerde üçüncü kuşak yaklaşımlar. *Psikiyatride Güncel Yaklaşımlar*, 8(3), 190-203.

Yazgan-İnanç, B., & Yerlikaya, E.E., (2016). *Kişilik Kuramları*. Ankara: Pegem.

Yıldız, B. & Güllü, A. (2019). Duygu düzenleme süreçleri ve aleksitimi arasındaki ilişkide belirsizliğe tahammülsüzlüğün aracı rolü. *Elektronik Sosyal Bilimler Dergisi* , 18 (69) , 201-217. doi: 10.17755/esosder.425972.

Yıldız, B. (2017). Güvenli bağlanma stili kazandırma yönelimli psikoeğitim programının belirsizliğe tahammülsüzlük ve akademik erteleme üzerindeki etkisi. (Doktora Tezi). Sakarya Üniversitesi, Sakarya.

Zaleski, Z. (1996). Future anxiety: Concept, measurement, and preliminary research.

Personality and Individual Differences, 21(2), 165-174.

Zyl, Y. V. & Dhurup, M. (2016). When things get tough, the tough get going: University students perceived stress and coping mechanisms. *International Journal of Social Sciences and Humanity Studies*, 8(1), 218-23



APENDICES

Appendix A Personal Information Form

Değerli Öğrenciler,

Bu çalışma, üniversite son sınıf öğrencilerinin belirsizlikle başa çıkma stratejilerini araştırmaya yönelik yapılan bir yüksek lisans çalışmasıdır. Bu çalışmanın amacı doğrultusunda sizden bazı bilgiler istenmektedir. Sorulara vereceğiniz cevaplar sadece bu çalışmada kullanılacaktır. Verdiğiniz cevaplar toplu olarak değerlendirilecek ve gizlilik esas alınarak kesinlikle amaç dışı kullanılmayacaktır. Vereceğiniz samimi ve içten cevaplar için çok teşekkür ederim.

Gülce ZORLUTUNA

Yeditepe Üniversitesi
Eğitim Bilimleri Enstitüsü
Yüksek Lisans Öğrencisi

1. Yaşınız :
2. Cinsiyetiniz : Kız() Erkek()
3. Bölümünüz :
4. Kaçınca Sınıfsınız : 1() 2() 3() 4()
5. Genel Not Ortalamanız: ____ /4.00
6. Uzmanlaştığınız Alanda Araştırma Yapıyo musunuz? : Evet() Hayır()

Appendix B Intolerance of Uncertainty Scale - Short Form

Yönerge: Lütfen aşağıdaki maddelerin karşısında bulunan ve maddelere ne kadar katıldığınızı gösteren sayılardan size en uygun olanını işaretleyiniz.

(1) Bana hiç uygun değil, (2) Bana çok az uygun, (3) Bana biraz uygun, (4) Bana çok uygun ve (5) Bana tamamen uygun.

1	Beklenmedik olaylar canımı çok sıkar.	1	2	3	4	5
2	Bir durumda ihtiyacım olan tüm bilgilere sahip değilsem sınırlarım bozulur.	1	2	3	4	5
7	Her şeyi önceden ayrıntılı bir şekilde organize edebilmeliyim.	1	2	3	4	5
8	Belirsizlik beni hayatı dolu dolu yaşamaktan alıkoyar.	1	2	3	4	5
9	Harekete geçme zamanı geldiğinde, belirsizlik elimi kolumu bağlar.	1	2	3	4	5
10	Belirsizlik yaşadığımda pek iyi çalışamam.	1	2	3	4	5
12	Tüm belirsiz durumlardan uzak durmak zorundayım.	1	2	3	4	5

Appendix C Mindful Attention Awareness Scale

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

1	2	3	4	5	6
Hemen hemen her zaman	Çoğu zaman	Bazen	Nadiren	Oldukça Seyrek	Hemen hemen hiçbir zaman

1. Belli bir süre farkında olmadan bazı duyguları yaşayabilirim.	1	2	3	4	5	6
2. Eşyaları özensizlik, dikkat etmeme veya başka bir şeyleri düşündüğüm için kırarım veya dökerim.	1	2	3	4	5	6
3. Şu anda olana odaklanmakta zorlanırım.	1	2	3	4	5	6
4. Gideceğim yere, yolda olup bitenlere dikkat etmeksizin hızlıca yürüyerek gitmeyi tercih ederim.	1	2	3	4	5	6
5. Fiziksel gerginlik ya da rahatsızlık içeren duyguları, gerçekten dikkatimi çekene kadar fark etmeme eğilimim vardır.	1	2	3	4	5	6
6. Başarmak istediğim hedeflere öyle çok odaklanırım ki o hedeflere ulaşmak için şu an ne yapıyor olduğumun farkında olmam.	1	2	3	4	5	6
10. İşleri veya görevleri ne yaptığımın farkında olmaksızın otomatik olarak yaparım.	1	2	3	4	5	6
11. Kendimi bir kulağımla birini dinlerken; aynı zamanda başka bir şeyi de yaparken bulurum.	1	2	3	4	5	6
13. Kendimi gelecek veya geçmişle meşgul bulurum.	1	2	3	4	5	6
14. Kendimi yaptığım işlere dikkatimi vermemiş bulurum.	1	2	3	4	5	6
15. Ne yediğimin farkında olmaksızın atıştırıyorum.	1	2	3	4	5	6

Appendix D Coping Styles Inventory

Yönerge: Lütfen sizin için sıkıntı ya da stres oluşturan olayları düşünerek, bu sıkıntılarınızla başa çıkmak için GENELLİKLE NELER YAPTIĞINIZI hatırlayın ve aşağıdaki davranışların sizi tanımlama ya da size uygunluk derecesini işaretleyin. Herhangi bir davranış size uygun değilse %0'ın altına, çok uygun ise %100'ün altına, ya da tanımlama derecesine göre diğerlerinin altındaki boşluğa (X) işareti koyun.

<i>Bir sıkıntı olduğunda.....</i>	%0	%30	%70	%100
1- Kimsenin bilmesini istemem				
2- İyimser olmaya çalışırım				
3- Bir mucize olmasını beklerim				
11- Olayları kafama takıp, sürekli düşünmekten kendimi alamam				
12- Kendime karşı hoşgörülü olmaya çalışırım				
14- Mutlaka bir yol bulabileceğime inanır, bunun için uğraşırım				
21- Mücadeleden vazgeçerim				
22- Sorunun benden kaynaklandığını düşünürüm				
25- “keşke daha güçlü olsaydım” diye düşünürüm				
27- “Benim suçum ne” diye düşünürüm				
28-“Hep benim yüzümden oldu” diye düşünürüm				
30- Bana destek olabilecek kişilerin varlığını bilmek beni rahatlatır				

Appendix E Intolerance of Uncertainty Scale - Short Form Permission Documents

Appendix F Mindful Attention Awareness Scale Permission Documents

Appendix G Coping Styles Inventory Permission Documents

Appendix H Ethics Committee Thesis Approval

Appendix I Turnitin Report