

THE CONTRIBUTIONS OF INTOLERANCE OF UNCERTAINTY, RESILIENCE, AND  
COPING STRATEGIES ON EMERGING ADULTS' FUTURE CAREER ANXIETY AND  
TEST ANXIETY

A THESIS SUBMITTED TO  
THE GRADUATE SCHOOL OF SOCIAL SCIENCES  
OF  
OZYEGIN UNIVERSITY

DUYGU İNGEÇ

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR  
THE DEGREE OF MASTER OF ARTS  
IN  
THE DEPARTMENT OF PSYCHOLOGY

MAY 2022

Copyright © 2022 by Duygu İngeç

Özyeğin University  
Graduate School of Social Sciences

The thesis of Duygu İngeç  
has been approved by:

Assoc. Prof. Ayfer Dost Gözkan  
Jury Member  
(Thesis Advisor)

---

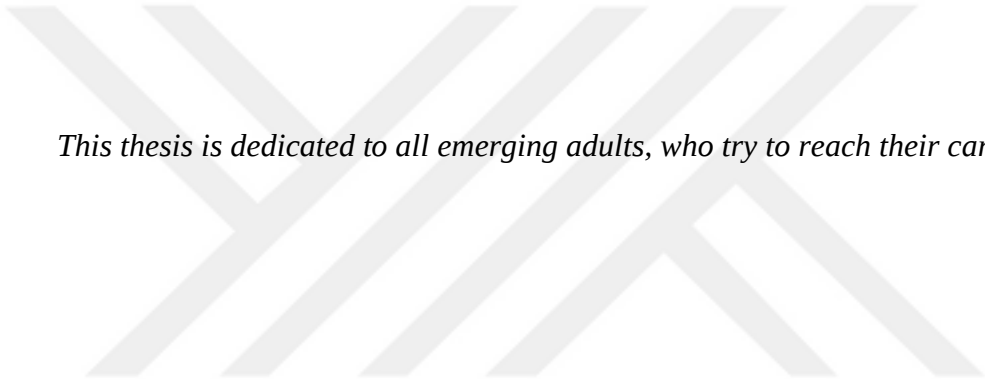
Assoc. Prof. İbrahim Hakkı Acar  
Jury Member

---

Assoc. Prof. Ceren Acartürk  
Jury Member  
(External Member)

---

May/2022



*This thesis is dedicated to all emerging adults, who try to reach their career goals.*

## ABSTRACT

The purpose of the current study was to examine the indirect effect of resilience and certain coping strategies (seeking social problem-solving solving coping, avoidance) on associations between emerging adults' intolerance of uncertainty, future career anxiety, and test anxiety in the COVID-19 pandemic. The sample consisted of 481 (357 female, 121 male, and 3 non-binary) emerging adults aged between 18 and 30 ( $M_{age} = 22.03$ ,  $SD = 2.62$ ). Participants completed the study questionnaire online. The indirect effects of resilience and coping strategies on association between intolerance of uncertainty, future career anxiety, and test anxiety were tested. Findings showed that intolerance of uncertainty was positively, resilience was negatively associated with future career anxiety and test anxiety. Moreover, problem-focused coping was positively associated with future career anxiety. Additionally, results showed that intolerance of uncertainty was indirectly linked with future career anxiety and test anxiety via resilience. Also, intolerance of uncertainty was indirectly linked with future career anxiety via problem-focused coping. Findings of the current study are discussed considering limitations and future directions.

*Keywords:* future career anxiety, test anxiety, intolerance of uncertainty, resilience, coping strategies, COVID-19

## ÖZET

Mevcut çalışmanın amacı, COVID-19 pandemisi sırasında genç yetişkinlerin sahip olduğu psikolojik direncin ve başa çıkma stratejilerinin (sosyal destek arama, problem çözme, kaçınma), belirsizliğe karşı tahammülsüzlük, ileriye yönelik kariyer kaygısı ve sınav kaygısı üzerindeki dolaylı etkisini incelemektir. Örneklem 18-30 yaşları arasında (Ort = 22.03, S = 2.62) toplam 481 genç yetişkinden oluşmaktadır (357 kadın, 121 erkek ve 3 diğer). Katılımcılar, ortalama 15 dakika süren çevrimiçi araştırma anketini internet üzerinden doldurdurmuştur. Yol analizi, belirsizliğe karşı tahammülsüzlükle, ileriye yönelik kariyer kaygısı ve sınav kaygısı arasında olumlu bir bağıntı olduğunu göstermiştir. Problem odaklı başa çıkma yöntemiyle, ileriye yönelik kariyer kaygısı arasında da olumlu bir bağıntı bulunmuştur. Ayrıca, psikolojik dirençle, ileriye yönelik kariyer kaygısı ve sınav kaygısı arasında olumsuz bir bağıntı olduğu görülmüştür. Bunlara ek olarak, belirsizliğe karşı tahammülsüzlüğün psikolojik direnç düzeyi aracılığı ile dolaylı olarak da kariyer kaygısı ve sınav kaygısı ile bağıntılı olduğu görülmüştür. Belirsizliğe karşı tahammülsüzlüğün problem odaklı başa çıkma düzeyi aracılığı ile dolaylı olarak, ileriye yönelik kariyer kaygısı ile bağıntılı olduğu bulunmuştur. Bulgular, mevcut çalışmanın sınırlılıkları ve gelecekteki çalışmaların hangi unsurlara dikkat etmesi esas alınarak tartışılmıştır.

*Anahtar Kelimeler:* ileriye yönelik kariyer kaygısı, sınav kaygısı, belirsizliğe karşı tahammülsüzlük, psikolojik direnç, başa çıkma stratejileri, COVID-19

## ACKNOWLEDGMENTS

My thesis writing journey has made me a stronger person with its ups and downs. First of all, I would like to show my special gratitude to my advisor, Associate Prof. Ayfer Dost Gözkan, who always helps me with her vast knowledge, and support for finalizing this research.

Also, I would like to thank my jury members, Associate Prof. İbrahim Hakkı Acar and Ceren Acartürk for sharing their valuable comments, opinions, and supports.

I would like to express my gratitude to my mother Sebahat İncec and my father Hasan İncec, who have always been by my side and supported me, always believing in me and making this process easier for me.

I would like to show my gratitude to my cohorts Şevval Çelebi, Şevval Nur Yağlı, and İrem Buselay Özer for their motivated attitude, support and guidance in this process. Also, I would like to give special thanks to all my relatives, friends, and others who in one way or another made this process less stressful.

Lastly, I would like to thank my participants who participated in this research because without their contribution, this thesis could not have been possible.

## TABLE OF CONTENTS

|                                                                                                                               |     |
|-------------------------------------------------------------------------------------------------------------------------------|-----|
| DEDICATION .....                                                                                                              | iii |
| ABSTRACT .....                                                                                                                | iv  |
| ÖZET .....                                                                                                                    | v   |
| ACKNOWLEDGMENTS .....                                                                                                         | vi  |
| TABLE OF CONTENTS .....                                                                                                       | vii |
| LIST OF TABLES .....                                                                                                          | x   |
| LIST OF FIGURES .....                                                                                                         | xi  |
| 1. CHAPTER 1 .....                                                                                                            | 1   |
| INTRODUCTION .....                                                                                                            | 1   |
| 2. CHAPTER 2 .....                                                                                                            | 4   |
| LITERATURE REVIEW .....                                                                                                       | 4   |
| 2.1 Theoretical Background: The Transactional Theory of Stress and Coping .....                                               | 4   |
| 2.2 The Importance of Emerging Adulthood Period in the Scope of COVID-19<br>pandemic .....                                    | 6   |
| 2.3 Definitions of Career Anxiety and Test Anxiety .....                                                                      | 7   |
| 2.3.1 Defining Career Anxiety .....                                                                                           | 7   |
| 2.3.2 Defining Test Anxiety .....                                                                                             | 8   |
| 2.4 The Predictors of Test Anxiety and Future Career Anxiety .....                                                            | 10  |
| 2.4.1 Intolerance of Uncertainty as a Predictor of Test Anxiety and Future<br>Career Anxiety .....                            | 10  |
| 2.4.2 Coping Strategies as Predictors of Test Anxiety and Future Career<br>Anxiety .....                                      | 12  |
| 2.4.3 Psychological Resilience as Predictor of Future Career Anxiety and<br>Test Anxiety .....                                | 14  |
| 2.5 Indirect Links .....                                                                                                      | 16  |
| 2.5.1 Indirect Effect of Coping on Links Between Intolerance of Uncertainty,<br>Test Anxiety, and Future Career Anxiety ..... | 16  |

|                                                                                                                                   |    |
|-----------------------------------------------------------------------------------------------------------------------------------|----|
| 2.5.2 Indirect Effect of Resilience on Links Between Intolerance of<br>Uncertainty, Future Career Anxiety, and Test Anxiety ..... | 18 |
| 2.6 The Present Study .....                                                                                                       | 18 |
| 3. CHAPTER 3 .....                                                                                                                | 22 |
| METHODS .....                                                                                                                     | 22 |
| 3.1 Participants .....                                                                                                            | 22 |
| 3.2 Data Collection Procedure .....                                                                                               | 27 |
| 3.3 Measures .....                                                                                                                | 27 |
| 3.3.1 Intolerance of Uncertainty - 12 (IUS-12) .....                                                                              | 27 |
| 3.3.2 Coping Strategies Scale .....                                                                                               | 28 |
| 3.3.3 The Brief Resilience Scale (BRS) .....                                                                                      | 28 |
| 3.3.4 Scale of Test Anxiety .....                                                                                                 | 29 |
| 3.3.5 Scale of Future Career Anxiety .....                                                                                        | 29 |
| 3.4 Data Analytical Approach .....                                                                                                | 30 |
| 3.4.1 Data Screening and Analytical Approach .....                                                                                | 30 |
| 4. CHAPTER 4 .....                                                                                                                | 34 |
| RESULTS .....                                                                                                                     | 34 |
| 4.1 Bivariate Correlations .....                                                                                                  | 34 |
| 4.2 Confirmatory Factor Analyses .....                                                                                            | 37 |
| 4.2.1 Intolerance of Uncertainty - 12 (IUS-12) .....                                                                              | 37 |
| 4.2.2 Scale of Future Career Anxiety .....                                                                                        | 37 |
| 4.2.3 4 Scale of Test Anxiety.....                                                                                                | 37 |
| 4.2.4 Coping Strategies Scale .....                                                                                               | 38 |
| 4.2.5 The Brief Resilience Scale (BRS) .....                                                                                      | 38 |
| 4.3 Multivariate Analyses .....                                                                                                   | 41 |
| 4.3.1 Hypothesized Model .....                                                                                                    | 41 |
| 4.3.2 Direct Associations .....                                                                                                   | 41 |
| 4.3.3 Indirect Associations .....                                                                                                 | 42 |
| CHAPTER 5.....                                                                                                                    | 45 |
| DISCUSSION.....                                                                                                                   | 45 |
| 5.1 The Direct Links between Intolerance of Uncertainty, Test Anxiety, and                                                        |    |

|                                                                                                                                                |    |
|------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Future Career Anxiety .....                                                                                                                    | 46 |
| 5.2 The Direct Links between Resilience, Coping Strategies, Future Career<br>anxiety, and Test Anxiety .....                                   | 47 |
| 5.3 Indirect Effect of Intolerance of Uncertainty on Future Career Anxiety,<br>and Test Anxiety through Resilience and Coping Strategies ..... | 50 |
| 5.4 Limitations and Future Directions .....                                                                                                    | 53 |
| APPENDIX A .....                                                                                                                               | 56 |
| APPENDIX B .....                                                                                                                               | 59 |
| APPENDIX C .....                                                                                                                               | 60 |
| APPENDIX D .....                                                                                                                               | 62 |
| APPENDIX E .....                                                                                                                               | 63 |
| APPENDIX F .....                                                                                                                               | 65 |
| REFERENCES .....                                                                                                                               | 66 |

## LIST OF TABLES

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| Table 1. Participants' Demographic Information .....                      | 24 |
| Table 2. Descriptive Statistics for Demographic and Study Variables ..... | 33 |
| Table 3. The Pearson Correlation of the Study Variables .....             | 36 |
| Table 4. Summary of Confirmatory Factor Analyses for all the scales ..... | 40 |



## LIST OF FIGURES

|                                                                                                                                |    |
|--------------------------------------------------------------------------------------------------------------------------------|----|
| Figure 1. Hypothesize Model .....                                                                                              | 21 |
| Figure 2. Intolerance of Uncertainty, Future Career Anxiety and Test Anxiety<br>through Resilience and Coping Strategies. .... | 44 |



## CHAPTER 1

### INTRODUCTION

A new type of contagious disease named Coronavirus (COVID-19) which first appeared in China in December 2019 has spread rapidly across the world (Ministry of Health, 2020; World Health Organization (WHO), 2020). After the declaration of the pandemic by WHO in March 2020, in most of the countries governments implemented restrictions (such as travel restrictions and lockdown in-home) to slow down the spread of the virus and to decrease the mortality rates (Shereen et al., 2020). Due to the unexpectedly changing circumstances most of the individuals have been experiencing insecurity, instability, uncertainty, as well as decreased self-directedness and autonomy during COVID-19 pandemic (Ornell et al., 2020).

The uncertainty that the pandemic conditions have influenced people's lives both physically and psychologically across the globe (Kujawa et al., 2020). This may be especially the case among emerging adults because as to the very nature of this developmental period, emerging adults have already been experiencing instability and uncertainty (Arnett, 1994). Most of the emerging adults have been trying to reach financial independence by searching for a full-time job, but with the pandemic, they found themselves unemployed (Achdut & Refaeli, 2020). Moreover, those who were students had to continue their education online without socializing on campus (Konstantopoulou & Raikou, 2020). Those changes have forced emerging adults to lock down home with their family in a developmental period in which they need to explore themselves and their life options in various domains including romance, worldview, and career paths.

Jeffrey Arnett introduced the concept of emerging adulthood as a distinct developmental period covering ages between 18 and 29 (Arnett, 2000; Arnett et al., 2014). During this developmental period, young people try to settle down into adult roles such as commitment to full-time work, marriage, and parenthood (Arnett, 2006). Social relationships, income, and career plans are the main domains of the changes emerging adults experience and about which they make decisions (Nelson & Barry, 2005). Researchers found that career-related goals and education have a crucial place in emerging adulthood. Romantic relationships were found to be the third significant goal after the educational and career-related goals in emerging adulthood (Murphy et al., 2010; Ranta et al., 2014). Hence, it is crucial to study emerging adulthood in the domain of educational and career purposes, especially in the context of COVID-19 as educational and job-related opportunities have been negatively affected by the conditions of the pandemic.

Tests and exams are significant indicators of an individual's ability and knowledge in both educational and career domains across the world (Whitbourne, 1976). Each country has different testing systems for admission to schools and jobs. For instance, in Turkey, an individual willing to continue postgraduate education needs to succeed in ALES (Academic Personnel and Postgraduate Admission Exam), English proficiency exams (Karataş et al., 2013), and tests and/or/or interviews given by individual graduate programs. KPSS (Public Personnel Selection Examination) is another central exam that is used to select employees for public positions (Çetin, 2013). Emerging adults have to prove themselves and perform well in these examinations to get admission to highly competitive postgraduate programs (Dan & Raz, 2012) or to be recruited in public positions

(Tümkeya et al., 2007). The necessity of going through selection processes that involve tests and exams highlights the importance of the extent emerging adults may feel anxiety about exams which involve physiological and cognitive reactions in demonstrating one's ability on tests (Dan et al., 2014). Today, higher education is the optimal way to reach a desirable career path. Therefore, test anxiety and career anxiety may be highly interrelated constructs that may have a prominent place for emerging adults who pursue their career path.

Intolerance to uncertainty (IU), which has been described as an inclination to be fearful of ordinary uncertain situations and the tendency to appraise each equivocalness as frustrating and stressful, have a negative impact on young adults' educational life, academic achievement, and career paths (Nekic & Mamic, 2019). Rettie and Daniels (2021) examined the relationship between IU and coping with distress and found that coping responses moderately mediated the association between IU and psychological distress in the pandemic. Resilience was also found to be another crucial skill that is related to young adults' academic life and anxiety levels (Romano et al., 2019).

COVID-19 outbreak causes uncertainty in every domain of life including education and career development, which are crucial in emerging adults' lives. Therefore, the factors that are related to career anxiety and test anxiety are important to examine in emerging adulthood during the pandemic. The present study aimed to examine the indirect effect of coping strategies and resilience on the relationship between the intolerance of uncertainty, and test anxiety and future career anxiety.

## CHAPTER 2

### LITERATURE REVIEW

#### **2.1 Theoretical Background: The Transactional Theory of Stress and Coping**

Taking into account the main focus of present research, that is, the indirect effect of resilience and coping strategies on the relationship between intolerance of uncertainty and future career anxiety and exam anxiety, this study framed these relations based on Lazarus and Folkman's (1984) "Transactional Theory of Stress and Coping" (TTSC). TTSC claims that stress is not explained as only stimuli or response, however, it is a process of interaction among stress, environment, and person (Cloninger, 1986) and, this evaluation process has two main components which are primary appraisals and secondary appraisals.

Primary appraisals are the first component of TTSC. Lazarus and Folkman (1984) defined primary appraisals as a cognitive process that takes place when a person evaluates whether a present or prospective situation is stressful and/or related to them. In other words, when a person was exposed to a stressful life event, he/she decides whether the situation presents a challenge, includes threat, or induces harm or loss. When a person evaluates the source of stress as a threat or harm, he/she experiences a negative emotional reaction; when the stressor was evaluated as a challenge, however, then he/she experiences a positive emotional reaction.

The secondary appraisal process of TTSC is related to the situational appraisal of control. After the stressor is evaluated as significant and/or relevant to the person, the person evaluates the his/her coping resources (e.g., seeking social support, avoidance). The relationship between both primary and secondary

appraisals process have an equal amount of significance and also they contribute to the coping strategies of a person.

According to TTSC, anxiety is also explained as a form of transaction between the individual and the external environment that is qualified by interpreting one's being overwhelmed with stressful situations and ambiguity or uncertainty across the optimum coping strategy. Internal dynamics are determined by self-regulation models, which may define how feedback signals regulate individuals' goal-oriented behavior. While accomplishing a personal goal, individuals might experience anxiety which signals that personal goals are under threat (Lazarus & Folkman, 1984). Therefore, anxiety depends not only on the external environment but also on how a person appraises the events and copes with them (Hunsley, 1985).

Because of COVID-19 pandemic condition itself is quite uncertainty-provoking, it is worth examining the relationship between intolerance of uncertainty and anxiety under such an uncertain circumstance. According to the TTSC, the evaluation of the possible threat is strongly related to both individual characteristics of a person and environmental factors (Lazarus & Folkman, 1984). For instance, individuals with higher psychological resilience tended to give a positive signal and decrease anxiety under threatening situations (Zeidner & Matthews, 2010, p. 159).

Future career anxiety and test anxiety could be seen as potential threats by individuals who have these concerns. However, although these anxiety-provoking situations could be appraised as a threat, coping mechanisms and individual resources such as resilience might have a significant role in relations of intolerance of uncertainty, future career anxiety, and test anxiety during a pandemic.

## 2.2 The Importance of Emerging Adulthood Period in the Scope of COVID-19 Pandemic

Uncertainty and anxiety are two fundamental constructs that are experienced by individuals during the COVID-19 pandemic; it is especially pronounced for emerging adults who are facing the challenge of transitioning to adulthood (Germani et al., 2020; Son et al., 2020). Emerging adulthood has been characterized by five main features: *identity exploration* which involves searching out possibilities of various work, worldview and romantic relationship options, eventually making decisions about these options and pursuing them; *instability* which is characterized by frequent changes of work, education, residence, and romantic partnership; *being self-focused* is characterized by improving one's abilities, knowledge, and self-understanding that is needed for their adult life; *feeling in-between* was characterized by feeling neither adolescent nor adult, and finally *the age of possibilities* was characterized as having a variety of choices and opportunities in pursuit of one's identity. Later, Arnett extended the age window of emerging adulthood from 18 to 29 since these five features are being experienced until the late '20s (Arnett & Mitra, 2018; Reio & Sanders- Reio, 2020). According to Atak et al. (2016), in the urban areas of Turkey, the age of marriage and parenthood increased due to prolonged education (i.e., pursuing higher education), which led young people to experience emerging adulthood in Turkey as well.

One prominent characteristic of emerging adulthood is to try to establish economic independence from the family and maintain higher education (Hammarström & Virtanen, 2019). The ambiguity of the financial conditions has a strong influence on emerging adults worldwide because in this critical period they

want to reach financial independence (Arnett, 2006; Buchmann & Kriesi, 2011). With the COVID-19 outbreak, the world economy has been shattered, and this has had a negative impact on emerging adults' life in aspects of career development (Ranta et al., 2020). Moreover, Czeisler et al. (2020) found that the stress and anxiety levels were high among younger participants (18-29) as compared to older participants during a pandemic. Research showed that a high number of emerging adults in Italy had an increased level of anxiety that was associated with a decrease in protective factors (e.g., interdependence, sociability, and sharing common goals) and general health in pandemics (Germani et al., 2020). Also, a study conducted with college students demonstrated that the fear of COVID-19 was positively and mildly predicted intolerance of uncertainty (Duman, 2020). Moreover, the fear of COVID-19 was found to be positively linked with higher level of anxiety and stress (Satici et al., 2020). These research pinpoint that emerging adulthood needs to be examined in aspects of both educational and career domains by considering indicators of anxiety and uncertainty.

## **2.3 Definitions of Career Anxiety and Test Anxiety**

### **2.3.1 Defining Career Anxiety**

As it was mentioned before, one of the developmental tasks of emerging adults is to reach financial independence. Therefore, emerging adults have concerns about finding a new job or maintaining their existing jobs. These concerns might turn into career-related anxiety and stress (Lee et al., 2020). Germeijs et al. (2006) described career anxiety as emotional and physiological distress linked to individuals' immediate career decision. Career anxiety not only includes career decision, fear of making mistake in that decision, but it also includes fear of

unemployment, fear of not succeeding in one's jobs and not securing one's full-time job (Vignoli, 2015). It was found that career anxiety consists of fear of disappointing one's family, fear of alienation from one's family due to the career or academic necessity, and fear of experiencing anxiety in the career process (Vignoli et al., 2005).

Mahmud et al. (2020) found that there were strong and direct associations between the fear of COVID-19 and future career anxiety. Another research demonstrated that career stress predicted the psychological well-being and optimism (Günay & Çelik, 2019). General anxiety is positively related to the career anxiety. In addition, when the intolerance of uncertainty increases the general anxiety level increases, and hence there is increase in career anxiety (Psarik et al., 2017).

### ***2.3.2 Defining Test Anxiety***

Test anxiety is a crucial and continuous problem for both college students and students at all education levels (Akinsola & Nwajei, 2013; Gibson, 2014). The concept of test anxiety was introduced by Spielberger in 1970 (Spielberger, Gorsuch, & Lushene, 1970). However, Spielberger did not use the term "test anxiety" to define anxiety-provoking characteristics of exams; instead, he stated that anxious students are more prone to experiencing difficulty in reading and interpreting test questions than non-anxious students (Spielberger, 1980). Test anxiety was later defined as a group of physiological, behavioral, and phenomenological reactions that affiliate with apprehension about peradventure negative results of not succeeding in an exam (Goetz et al., 2008).

Test anxiety has three major components: the affective component, the cognitive component, and the behavioral component (Zeidner, 1998). The affective

component is defined as perceiving the physiological component of test anxiety which shows itself as shaking, sweating, muscle tension, and elevated heart rate. The cognitive component refers to uncontrollable, unwanted, and unlikable cognitive activity correlated with emotional discomfort, and negative thoughts (McDonald, 2001; Stoeber, 2004). The behavioral component reveals as test anxious individuals experienced deficiencies in study ability which lead them to keep away from work-related responsibilities (Zeidner, 1998). These three components have also been categorized as two dimensions: worry and emotionality. While negative thoughts about the exam and exam-related situation create worry, physiological symptoms like sweating or avoiding studying create emotionality (Brooks et al., 2015).

While having an optimal level of anxiety for academic tasks aids the learning process of students (Cizek & Burg, 2006), when the anxiety level exceeds the optimal level, it has a negative impact on recalling the accurate knowledge and leads to poor performance in the test (Gibson, 2014). Test anxiety has been shown to have a significant impact on emerging adults' academic achievement and career path (Khalaila, 2015). The prevalence of test anxiety is approximately 20-25% among college students (Saravanan, Kingston, & Gin, 2014) and it is correlated with low performance in exams and poor mental health (Richardson, Abraham, & Bond, 2012). Also, a high level of test anxiety is related to drop-out from college (Neuderth et al., 2009). Alsaady (2020) highlighted that the level of test anxiety was higher among young adults in higher education in the COVID-19 pandemic. This demonstrates that emerging adults might be a fragile group that has been influenced negatively by the pandemic in the aspect of experiencing test anxiety. Furthermore,

test anxiety is correlated with the dysfunctional career thoughts and achievement motivation of undergraduate students in Pakistani (Sud & Kumar, 2006). These findings demonstrated that test anxiety has an important role in pursuing a successful career path in emerging adulthood and it might be related to career anxiety.

## **2.4 The Predictors of Test Anxiety and Future Career Anxiety**

This part of the literature briefly reviewed the predictors of test anxiety and future career anxiety.

### ***2.4.1 Intolerance of Uncertainty as a Predictor of Test Anxiety and Future Career Anxiety***

Individuals have a desire of understanding the present threatening situation and having control over it (Gigerenzer & Garcia-Retamero, 2017). In this respect, the uncertainty during a pandemic might be considered as a negative factor influencing the psychological well-being of individuals.

“Intolerance to Uncertainty” (IU) or “Uncertainty Intolerance” is defined as the inclination to be fearful of ordinary uncertain situations and to appraise each equivocalness as frustrating and stressful (Nekic & Mamic, 2019). Intolerance is the “incapacity or indisposition to bear or endure” and uncertainty is described as experiencing an unknown (Carleton, 2016). Recently, IU was defined as “an individual’s dispositional incapacity to endure the aversive response triggered by the perceived absence of salient, key, or sufficient information, and sustained by the associated perception of uncertainty” (Carleton, 2016, p. 31).

Głowacz and Schmits (2020) argued that during the COVID-19 pandemic a significant percentage of the population has shown anxiety and depressive

symptoms that might be explained by intolerance of uncertainty regardless of the age of participants. They also found that especially younger participants have higher levels of anxiety and intolerance of certainty as compared to older participants (Glowacz & Schmits, 2020). Parola (2020) studied the effect of the COVID-19 outbreak on the Italian university graduates' career development; the narrative analysis showed that young Italians felt that they were stuck in the current time and that even if they knew their abilities, they could not find how to direct these strengths to their career paths. Moreover, young Italians indicated that they have no control over pandemics which turn to feelings of uncertainty, boredom, discomfort, and desperation.

Huntley et al. (2020) studied the relation between the intolerance of uncertainty and test anxiety with college students in the UK. Intolerance of uncertainty scores of participants positively correlated with both state and trait test anxiety. Xu and Adams (2020) examined a 3 waves longitudinal mediation model examining the relation between ambiguity aversion, career outcomes, and trait anxiety. Findings showed that uncertainty aversion was positively associated with career outcomes and this relationship was mediated by trait anxiety. There was a negative association between uncertainty aversion in the first wave (beginning of the college) and job search self-efficacy at the third wave (at the end of the college). Furthermore, it was found that trait anxiety in the second wave (at the end of the first semester) mediated the correlation between uncertainty aversion and job search self-efficacy. These associations indicated that intolerance of uncertainty would be a significant predictor of both test anxiety and career anxiety in emerging adulthood. Additionally, the uncertainty involved in the very experience of emerging

adulthood, as well as uncertainty brought by the COVID-19 outbreak, might be additive and strengthen these correlations.

#### ***2.4.2 Coping Strategies as Predictors of Test Anxiety and Future Career Anxiety***

Folkman and Lazarus (1988) defined the concept of coping as the behavioral and cognitive responses, which are used to manage or tolerate stressful demands perceived as exceeding personal skills. Coping can be organized into two main categories: “coping activities that engage the individual with, and coping activities that disengage the individual from, the stressful situation” (Tobin et al., 1989, p. 355). Moreover, Tobin et al. (1989) divided coping strategies into four specific subcategories: expressing emotions, cognitive restructuring, problem-solving, and social support. In more recent categorization, while adaptive coping strategies have been considered active and engaged strategies, maladaptive coping has been framed as avoidance and disengaged coping strategies (Vizoso, Rodriquez, & Gundin, 2018).

Coping strategies have a crucial place in test anxiety studies since the ability to engage optimal coping strategies (e.g., problem-focused coping) aid to deal with having anxiety and stress in examination conditions such as test-taking or job interview and also it might help to encourage adaptive functioning (Folkman & Lazarus, 1985, Raffety et al., 1997). There is a considerable number of studies that examine the association between test anxiety and coping behavior. These studies highlight that individuals with an increased level of test anxiety tend to engage in maladaptive coping strategies such as emotion-focused and avoidance coping strategies (Aysan et al., 2001). On the other hand, students with a low level of test anxiety tend to choose more adaptive coping mechanisms such as problem-focused

and proactive coping strategies (Blankstein et al., 1992; Zeidner, 1998). Moreover, in research that was conducted in the United States with undergraduate students, it was found that students with higher cognitive test anxiety moderately engage in an increased level of emotion-focused coping strategies. Also, engaging in emotional-focused coping strategies and having an increased level of cognitive strategies correlated with a low level of four-year GPA (Thomas et al., 2017). This means that when undergraduate students engage in adaptive coping mechanisms, they tend to have a low level of test anxiety that leads to better academic success. Furthermore, Arora et al. (2021) found that the coping strategies have moderating role between the online exam anxiety and self-efficacy during the COVID-19 pandemic. The current study examined the relation of coping strategies and test anxiety in emerging adults and replicated the results with a Turkish sample.

Another significant subject that needs attention during the COVID-19 pandemic is career anxiety because career expectancies might cause anxiety in young adults who are continuing their education or newly graduated. However, there were a limited number of studies that examined the direct relationship between coping strategies and career/employment anxiety. It was known that coping strategies have a significant role in facilitating or diminishing career-related anxiety in emerging adults (Miles et al., 2018; O'Hare & Tamburri, 1986; Weinstein et al., 2002). For instance, Weinstein et al. (2002) examined the moderating effect of perceived control on the relationship between coping strategies, career indecision, and career choice anxiety and found that coping mechanisms are associated with career choice anxiety and career indecision. Furthermore, coping also has a moderating effect on the correlation between anxiety and career decision-making

(O'Hare & Tamburri, 1986). Specifically, it was found that students with a high level of trait anxiety and low level of Type II coping (self-efficacy behavior across stressful life conditions), were likely to have a low score in career decision-making and a high score in state anxiety (O'Hare & Tamburri, 1986). Additionally, in a study that explored the relations between coping skills, positive youth development, anxiety, and career satisfaction from age of 21 to 27, it was found that using adaptive coping strategies and also engaging in autonomy and relatedness behaviors with the mothers and best friends were related with having a high level of career satisfaction and low level of anxiety (Miles et al., 2018). Although anxiety might prevent reaching career satisfaction, positive youth development and functional coping mechanism could help to reduce anxiety and aid to reach career satisfaction in the emerging adulthood period (Miles et al., 2018). These study results highlight the significance of examining the relationship between coping strategies and career-related anxiety in emerging adults during the pandemic, The present study aimed to contribute to related literature by examining the relationship between coping mechanisms (problem-focused coping, avoidance, and seeking social support) and future career anxiety directly and indirectly via intolerance of uncertainty, resilience, and exam anxiety.

#### ***2.4.3 Psychological Resilience as Predictor of Future Career Anxiety and Test Anxiety***

Psychological resilience has a significant role in eliminating the maladaptive impacts of stressful situations in individuals' life (Cicchetti, 2010). Psychological resilience was defined as an active mechanism or process in which a person shows positive skill or adaptation (engaging personal abilities and disposable support

systems) to resume and retrieve mental well-being in challenging life conditions (Fletcher & Sarkar, 2013; Jacelon, 1997). Considering that exams (e.g. taking tests, and participating in job interviews), and deciding how to pursue one's career path (e.g. career choice) can be stressful conditions, especially for emerging adults (Cassidy, 2012; Hernandez et al., 2019; Luecken & Gress, 2010), resilience can be hypothesized to be a buffer against these challenging circumstances.

Research demonstrated that students with a high level of resilience were better-facing challenging and negative situations by engaging in adaptive coping mechanisms in which helped to sustain their life satisfaction (Cohn et al., 2009; Tugade & Fredrickson, 2007). Moreover, resilience about academic concerns is negatively associated with anxiety and positively associated with better GPA and school satisfaction (Martin & Marsh, 2006). Hernandez et al. (2019) found that an increased level of academic stress predicted a lower level of psychological resilience. Studies that examined the role of resilience in career-related goals showed that resilient emerging adults are successful at having the motivation to pursue their career goals and plans and also they are better at finding a better solution and engaging in optimal coping strategies to achieve their career goals (Etherton et al., 2020). Also, resilience predicted job satisfaction, locus of control, and purpose in life (Etherton et al., 2020).

Research conducted during pandemic showed that resilience and approach coping strategies (e.g. seeking social support or problem seeking) were positively related to academic well-being, while avoidant coping strategies negatively predicted academic well-being among college students (Valladolid, 2021). Furthermore, Hayat et al. (2021) found that resilience negatively predicted test

anxiety among medical students in the time of the COVID-19 pandemic. These results highlighted that resilience is a strong predictor for both test anxiety and career-related anxiety. Therefore, present study tried to extend related literature by examining the association between emerging adults' psychological resilience, test anxiety, and future career anxiety.

## **2.5 Indirect Links**

### ***2.5.1 Indirect Effect of Coping on Links Between Intolerance of Uncertainty, Test Anxiety, and Future Career Anxiety***

Coping strategies are useful for reducing or eliminating both trait and state test anxiety levels of individuals (Spielberger & Vagg, 1995). Research has examined the indirect effect of coping strategies on the association between test anxiety and perfectionism (Weiner & Carton, 2012). Findings revealed that only avoidant coping (disengagement, denial, behavior) had a mediating role in the association between evaluative concerns perfectionism (doubts about actions, and concern over mistakes), and test anxiety (Weiner & Carton, 2012). In addition, Vanstone and Hicks (2019) studied the links between perfectionism and test anxiety as mediated by coping strategies among Australian college students and found that avoidant (emotion-focused) coping mediated the relationship between perfectionism and test anxiety.

Furthermore, coping mechanisms have a significant effect on intolerance of uncertainty (Einstein, 2014) and employment anxiety (Belle et al., 2021). Weinstein et al., (2002) examined the relationship between perceived control (personal control in career decisions of the participants), coping strategies (problem-focused coping and emotional-focused coping strategies), and career indecision and career choice

anxiety. Specifically, participants who demonstrated high trait anxiety were less likely to use Type II coping strategies (e.g., determining one's purposes and priorities in career decision making) and had increased levels of state anxiety, and tended not to be able to make a career decision (O'Hare & Tamburri, 1986).

Moreover, Belle et al., (2021) examined the indirect effect of coping mechanisms on the association between motivation driving force of positive psychological capital that includes dimensions of individuals' hope, efficacy, resiliency, and optimism (PsyCap) and employment anxiety based on self-determination theory in emerging adults. They found that PsyCap was positively associated with the positive coping style, and negatively associated with the negative coping style, in turn, the positive coping style was negatively associated with employment anxiety and the negative coping style was positively associated with employment anxiety (Belle et al., 2021).

Einstein's (2014) model of IU highlighted that a person's skills to tolerate uncertainty will presumably impact the way they respond and cope with distress. In the UK, during the lockdown in the COVID-19 pandemic, Rettie and Daniels (2021) examined the relationship between IU, coping responses, depression, anxiety, and health anxiety, and found that coping responses moderately mediated the association between IU and psychological distress (Rettie & Daniels, 2021). Research shows that coping strategies might have a crucial place in studying the relations of intolerance of uncertainty, future career anxiety, and exam anxiety. Therefore, our study examined the indirect effect of coping strategies on the relationship between intolerance of uncertainty, future career anxiety, and test anxiety during the pandemic.

### ***2.5.2 Indirect Effect of Resilience on Links Between Intolerance of Uncertainty, Future Career Anxiety, and Test Anxiety***

A contemporary model of resilience defines resilience as a process of adapting well in the face of adverse life situations such as the death of a loved one (Leipold, Munz, & Michele-Malkowsky, 2018), hence it has been examined as a mediator as it in recent formulations of the term, it was defined as an ability rather than a personality trait. For instance, Khan et al., (2020) found that positive psychological strengths (resiliency, hope, optimism, and self-efficacy) have a mediating role in the relationship between study skills and examination anxiety in Nigerian college students. Additionally, Fiorilli et al. (2020) examined the mediating role of resilience and academic anxiety on the relations between emotional intelligence and school burnout and found that there was a negative correlation between resilience and academic anxiety of students. Moreover, it was known that intolerance of uncertainty negatively predicted individuals' level of psychological resilience and hope during the COVID-19 pandemic in Turkey (Karataş & Tagay, 2021). On the other hand, there is no research that examined the mediating role of resilience between intolerance of uncertainty to any other variable. Therefore, our research examined the indirect effect of resilience on the association between IU, future career anxiety, and test anxiety for the first time.

### **2.6 The Present Study**

In the light of the existing literature, it was known that IU, coping mechanism, resilience predicted career-related concerns, and also coping strategies and resilience mediate relevant variables. On the other hand, no research in the literature aimed to examine the indirect effect of coping and resilience on the

relationships between the intolerance of uncertainty, test anxiety, and future career anxiety (The model is presented in Figure 1). Hence, the present study aimed to examine the relationships between intolerance of uncertainty and future career anxiety and test anxiety in the COVID-19 pandemic, directly and indirectly through resilience and coping strategies. The research questions and hypotheses are as follows:

Research Question 1: Do emerging adults' intolerance of uncertainty associate with resilience, coping strategies (seeking social support, problem-focused coping, and avoidance), future career anxiety, and test anxiety?

Hypothesis 1.1: Emerging adults' intolerance of uncertainty was expected to be positively associated with avoidance coping, future career anxiety, and test anxiety.

Hypothesis 1.2: Emerging adults' intolerance of uncertainty was expected to be negatively associated with resilience, seeking social support, and problem-focused coping.

Research Question 2: Do psychological resilience and coping strategies (seeking social support, problem-focused coping, and avoidance) associate with emerging adults' future career anxiety and test anxiety?

Hypothesis 2.1: Psychological resilience was expected to be negatively associated with future career anxiety and test anxiety.

Hypothesis 2.2: Seeking social support and problem-focused coping were expected to be negatively associated with future career anxiety and test anxiety.

Hypothesis 2.3: Avoidance is expected to be positively associated with future career anxiety and test anxiety.

Research Question 3: Do emerging adults' psychological resilience and coping strategies (seeking social support, problem-focused coping, and avoidance) have indirect effect on the relationship between intolerance of uncertainty, future career anxiety, and test anxiety?

Hypothesis 3.1: Intolerance of uncertainty was expected to be negatively associated with resilience which in turn, was expected to be negatively correlated with future career anxiety and test anxiety.

Hypothesis 3.2: Intolerance of uncertainty is expected to be negatively related to seeking social support and problem-focused coping strategies which were expected to be negatively related to future career anxiety and test anxiety.

Hypothesis 3.3: Intolerance of uncertainty was expected to be positively associated with avoidance coping strategy which was expected to be positively associated with future career anxiety and test anxiety.

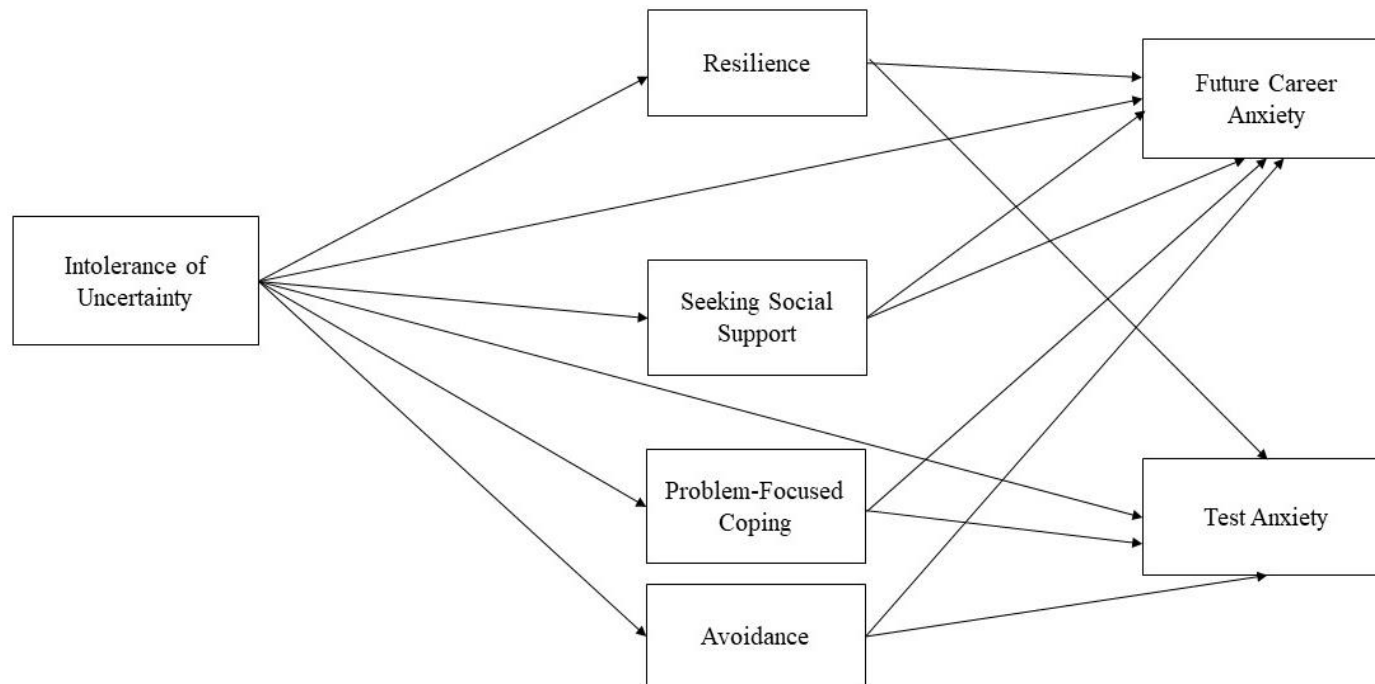


Figure 1. Hypothesized Model

## CHAPTER 3

### METHODS

#### 3.1 Participants

A total of 599 participants' responses were collected for the present study. After the data screening, participants ( $N = 111$ ) who did not complete more than half of the battery of questionnaires were excluded. Furthermore, because the data was only collected from emerging adults (18 to 30 years old), four participants aged 50 ( $N = 1$ ), and 17 ( $N = 3$ ) were deleted. Multivariate outliers ( $N = 3$ ) also were deleted from the data of the current study. Further analyses were conducted with 481 (357 (74.2) female, 121 (25.2) male, and 3 (.6) non-binary) emerging adults aged between 18 and 30 ( $M = 22.03$ ,  $SD = 2.62$ ). Because non-binary participants were only 3, we could not include them in the analysis that examined the relationship between gender and study variables. Mother education level consisted of 1.2% illiterate, 1.0% literate, 12.8% primary school, 11.8% secondary school, 29.8% high school, 3.9% vocational school for higher education, 32.6% university, and 6.4% master/doctorate at the time of data collection. Additionally, father education level consisted of 0.2% illiterate, 0.6% literate, 9.1% primary school, 11.0% secondary school, 25.2% high school, 3.9% vocational school for higher education, 40.1% university, and 9.9% master/doctorate degree at the time of data collection. Because of the data collected during the COVID-19 pandemic, participants' perceived income levels were asked both before and after the pandemic. Before the pandemic, 7.2% of participants indicated that their income level was low, 69.8% of participants indicated that their income level was middle, and 22.5% of participants indicated that their income level was high. After the

pandemic has started, 15.1% of participants stated that their income level was low, 67.1% of participants stated that their income level was middle, and 17.6 of participants indicated that their income level was high after the pandemic has started. A composite score for total family socioeconomic status (SES) score was generated by averaging standardized (z-scores) of emerging adults' perceived income level (before and after pandemic), and their parental education level. Further details of the sample characteristics can be found in Table 1.



Table 1

*Participants' Demographic Information*

|                                               | n (%)      | M     | SD   | Range |
|-----------------------------------------------|------------|-------|------|-------|
| <b>Participants' Sex</b>                      | 484        |       |      |       |
| Female                                        | 357 (74.2) |       |      |       |
| Male                                          | 121 (25.2) |       |      |       |
| Other                                         | 3 (.6)     |       |      |       |
| <b>Age</b>                                    | 481        | 22.03 | 2.62 | 18-30 |
| <b>Are you a student?</b>                     | 484        |       |      |       |
| Student                                       | 429 (88.6) |       |      |       |
| Graduate                                      | 55 (11.4)  |       |      |       |
| <b>Education Level (if a graduate)</b>        | 484        |       |      |       |
| Primary School                                | 1 (.2)     |       |      |       |
| Secondary School                              | 7 (1.4)    |       |      |       |
| High School                                   | 382 (78.9) |       |      |       |
| Vocational School                             | 11 (2.3)   |       |      |       |
| University                                    | 73 (15.1)  |       |      |       |
| Master/Doctorate Degree                       | 10 (2.1)   |       |      |       |
| <b>Current Education Level (if a student)</b> | 484        |       |      |       |
| Prep School Student                           | 8 (1.7)    |       |      |       |
| Associate Degree Student                      | 10 (2.1)   |       |      |       |
| Bachelor's Degree Student                     | 381 (78.7) |       |      |       |
| Scientific Prep. Student                      | 1 (.2)     |       |      |       |
| Master Degree Student                         | 18 (3.7)   |       |      |       |
| Doctorate Degree Student                      | 0 (0.0)    |       |      |       |
| <b>University type (if a student)</b>         | 415        |       |      |       |
| State University                              | 36 (7.4)   |       |      |       |
| Private University                            | 374 (77.3) |       |      |       |
| Distance Education                            | 5 (1.0)    |       |      |       |
| Missing                                       | 69 (14.3)  |       |      |       |
| <b>Current Grade</b>                          | 411        |       |      |       |
| Prep                                          | 6 (1.2)    |       |      |       |
| Freshman                                      | 86 (17.8)  |       |      |       |
| Sophomore                                     | 117 (24.2) |       |      |       |
| Junior                                        | 91 (18.8)  |       |      |       |
| Missing                                       | 73 (15.1)  |       |      |       |
| <b>Current GPA</b>                            | 395        | 2.92  | .59  | 3.40  |
| Missing                                       | 40 (10.1)  |       |      |       |
| <b>Graduation GPA</b>                         | 46         | 2.99  | .48  | 2.16  |
| Missing                                       | 9 (19.5)   |       |      |       |
| <b>You are graduated from?</b>                | 484        |       |      |       |

|                                |            |
|--------------------------------|------------|
| Prep                           | 32 (6.6)   |
| Private University             | 14 (2.9)   |
| Distance Education             | 1 (0.2)    |
| Missing                        | 437        |
| <b>Employment Status</b>       | 484        |
| Intern                         | 17 (3.5)   |
| Part-time                      | 31 (6.4)   |
| Full-time                      | 54 (11.2)  |
| Unemployed                     | 382 (78.9) |
| <b>Your Marital Status</b>     | 484        |
| Unmarried                      | 458 (94.6) |
| Engaged                        | 4 (.8)     |
| Married                        | 12 (2.5)   |
| Divorced                       | 0 (0.0)    |
| Other                          | 10 (2.1)   |
| <b>Mother Education Level</b>  | 484        |
| Illiterate                     | 6 (1.2)    |
| Literate                       | 5 (1.0)    |
| Primary School                 | 62 (12.8)  |
| Secondary School               | 57 (11.8)  |
| High School                    | 144 (29.8) |
| Vocational School              | 19 (3.9)   |
| University                     | 158 (32.6) |
| Master/Doctorate Degree        | 31 (6.4)   |
| Missing                        | 2 (.4)     |
| <b>Father Education Level</b>  | 484        |
| Illiterate                     | 1 (0.2)    |
| Literate                       | 3 (0.6)    |
| Primary School                 | 44 (9.1)   |
| Secondary School               | 53 (11.0)  |
| High School                    | 122 (25.2) |
| Vocational School              | 19 (3.9)   |
| University                     | 194 (40.1) |
| Master/Doctorate Degree        | 48 (9.9)   |
| <b>Income before COVID-19</b>  | 484        |
| Low                            | 35 (7.2)   |
| Middle                         | 338 (69.8) |
| High                           | 109 (22.5) |
| Missing                        | 2 (.4)     |
| <b>Income after COVID-19</b>   | 484        |
| Low                            | 73 (15.1)  |
| Middle                         | 325 (67.1) |
| High                           | 85 (17.6)  |
| Missing                        | 1 (.2)     |
| <b>Housing before COVID-19</b> | 484        |
| Dormitory                      | 124 (25.6) |

|                               |            |
|-------------------------------|------------|
| Alone                         | 74 (15.3)  |
| With Family/Relatives         | 269 (55.6) |
| Others                        | 17 (3.5)   |
| <b>Housing after COVID-19</b> | 484        |
| Dormitory                     | 7 (1.4)    |
| Alone                         | 52 (10.7)  |
| With Family/Relatives         | 416 (86.0) |
| Others                        | 9 (1.9)    |

*M = Mean, SD = Standard Deviation*



### 3.2 Data Collection Procedure

Before starting to collect data for the current study, research ethics committee approval was obtained from the Ethics Committee of Özyeğin University. Then, the data gathering process started via an online questionnaire by using Qualtrics (Qualtrics, Provo, UT). Participants' responses for the online questionnaire were collected via Özyeğin University Research and Participation system (SONA), and social media platforms (e.g., Facebook, Instagram). Participants' consent for the research was received and details of the study were given to them before starting to fill out the questionnaires. Students who attended the current study by using the SONA system gathered one extra credit point. The participation process of the study lasted approximately 10-15 minutes. The data collection process started in March 2021 and finished in July 2021.

### 3.3 Measures

#### 3.3.1 *Intolerance of Uncertainty - 12 (IUS-12)*

Carleton et al., (2007) created the short version of the Intolerance of Uncertainty-12 (IUS-12) scale to assess participants' level of intolerance of uncertainty. It is a 5-point Likert scale ranging from 1 (*"Not at all characteristic of me"*) to 5 (*"Very Characteristic of me"*) which consists of two subscales and 12 items: Prospective IU (e.g. "I can't stand being taken by surprise.") and Inhibitory IU (e.g. "Uncertainty keeps me from living a full life."). The IUS-12 has good internal reliability (Cronbach's alpha for each subscale is .85). Sarıçam et al., (2014) adapted to Turkish and the Turkish version of scale also has good internal reliability (for Prospective IU the Cronbach alpha is .84, and the Inhibitory IU Cronbach alpha is .77; the total scale has a Cronbach's alpha of .88) (Sarıçam et al., 2014). The

Cronbach's alpha internal reliability coefficients for Prospective IU was .81 for Inhibitory IU was .88 and for the total IU was .89 for the present study (see Table 2).

### **3.3.2 Coping Strategies Scale**

Coping Strategies Scale is a 5 point Likert scale (1 = *Not at all characteristic of me*, 5 = *Very Characteristic of me*) developed for measuring the ways of coping with stress based on Folkman and Lazarus's transactional model of stress and anxiety (1980) with a sample of university students (Türküm, 2002). The scale consisted of three subscales and 23 items: seeking social support (7 items) (e.g., "kept others from knowing how bad things were"), problem-focused coping (8 items) (e.g. "I made a plan of action and followed it"), and avoidance (8 items) (e.g. "found new faith"). Items 10, 17, and 20 are negatively coded. Subscales scores range from 7 to 35 for 'Seeking Social Support', and 8 to 40 for both 'Problem-Focused Coping', and 'Avoidance' with higher scores obtained from each subscale demonstrating related coping strategy. Internal consistencies of the scale were good (subscales Cronbach alpha for Seeking Social Support was .84, for Problem-Focused Coping was .82, and for Avoidance was .66. The scale also has good internal consistency for the current study (Cronbach's alpha levels .85, .82, and .66 respectively) (See Table 2).

### **3.3.3 The Brief Resilience Scale (BRS)**

Smith et al. (2008) created The Brief Resilience Scale (BRS) for assessing participants' resilience level to stressful life events. It is-5 a point Likert scale (1 = *Strongly disagree*, 5 = *Strongly agree*) consisting of 6 items (e.g. "I have a hard time making it through stressful events.") which assess the level of resilience. The

scale score range from 6 to 30, and high scores obtained from each item indicated having a high level of resilience. Items 2, 4, and 6 are reversely coded. Doğan (2015) adapted the scale into Turkish. Smith et al., (2008) reported that the Cronbach's alpha coefficients of the subscales vary between .80 and .91. Doğan (2015) reported the Cronbach alpha of the Turkish version of the scale as .83. The Cronbach's alpha level was found .82 for the current study (See Table 2).

### ***3.3.4 Scale of Test Anxiety***

It was originally developed by Spielberg (1980) and was adapted to Turkish by Albayrak-Kaymak (1987) and Öner (1990). The scale consisted of 20 items that measure two dimensions of test anxiety: worry (e.g. "Thoughts of doing poorly interfere with my concentration on tests"), and emotionality (e.g. "I feel very jittery when taking an important test"). This is a 4-point Likert type scale (1: Almost never, 2: Sometimes, 3: Frequently, 4: Almost always). Subscales scores range from 8 to 32 for 'Worry', and 12 to 48 for 'Emotionality', with higher scores from subscales indicating a greater level of related test anxiety. High Internal consistencies of the both original scale and the adopted scale were good (subscale Cronbach's alpha ranging from .90 to .91, .90 to .70 respectively). The internal consistencies of scale were found relatively .88(Cronbach's  $\alpha$ ) for Worry, .92 for Emotionality, and .94 for the total test anxiety (see Table 2) in the present study.

### ***3.3.5 Scale of Future Career Anxiety***

The original scale, which includes 25 items, was developed to assess tourism and hospitality students' work-related anxiety (Tsai et al., 2017). Later, Mahmud et al. (2020) revised the scale for assessing future career anxiety at the time of the COVID-19 outbreak. The revised scale consisted of 5 items (e.g. "I worry about

future employment because of fierce competition in the job market due to the outbreak of COVID-19”). The scale is a 4-point Likert type (1 = *strongly disagree* and 4 = *strongly agree*). The scale score range from 5 to 25, and high scores obtained from each item indicated that having a high level of future career anxiety. The Cronbach’s alpha of the scale was .87. The Turkish adaptation of the scale was conducted for the present study. It has good internal consistency (.92(Cronbach’s  $\alpha$ )) (See Table 2).

### **3.4 Data Analytical Approach**

#### **3.4.1 Data Screening and Analytical Approach**

For the present study, it was used SPSS 27 Package Program (IBM Corp. Released 2020) to screen missing values, normality, and outliers. Descriptive analyses and bivariate correlations between variables and demographics were also conducted by SPSS. For testing confirmatory factor analyses and the mediation model which includes direct and indirect correlations among variables, it was used Mplus version 7.4 (Muthén & Muthén, 2012-2017) with a bootstrapping approach (with 2500 bootstrapped samples) with 95% confidence intervals since a 95% bias-corrected bootstrap method enable us to reach parsimonious results (MacKinnon et al., 2004). For model testing, the Root Mean Square Error of Approximation (RMSEA) which is less than .06 showed good fit, among .06-.08 shows acceptable values, and if it is above .10 shows the poor fit to the model (MacCallum et al., 1996). Further, CFI and TLI values should be above .90 and .95 indicate a good fit for the model (MacCallum et al., 1996). Finally, standardized root means square residual (SRMR) values of .08 or below indicates a good fit (Kline, 2011).

Primarily, confirmatory factor analyses were conducted to analyze the factor structure for each scale in the current study by using Mplus 7.4 (Muthén & Muthén, 2012-2017). Factor loadings are less than .40 (Brown, 2006) demonstrated poor loadings. After CFA analyses were conducted, composite scores were generated by averaging target items and it was found that there were missing values in a total of 5 variables. According to the results of Little's (1988) MCAR (Missing Completely at Random) test, missing values were not completely at random (MCAR),  $\chi^2 = 22, p = .002$ ). Further, it was detected that missing values were not higher than 5%, therefore, we did not impute any data point for the missing value since Tabachnick and Fidell (2006) stated that less than 5% of missing data points did not affect results.

For the next step, multivariate outliers were examined by using Mahalanobis Distance with  $p < .001$  (Tabachnick & Fidell, 2007). Three multivariate outliers were above the  $\chi^2$  value of 24.322, demonstrating a number of variables in the model (Tabachnick & Fidell, 2007). These multivariate outliers were excluded from the study and then, there was a total of 481 participants for further analyses. The normality of variables was tested by using skewness and kurtosis (skewness and kurtosis of  $\pm 2$ ; George & Mallery, 2019). Consequently, it was found that all of the variables were in the acceptable range for normality. That's why it was not applied to any transformation. See Table 2 for descriptive statistics of study variables. The last screening was conducted for detecting multicollinearity of the independent variables. According to Pallant's (2016) article, when the tolerance is below .10 and VIF is above 10, there was no multicollinearity. In the light of this interpretation of multicollinearity, results showed that VIF ranged from 1.074 to 1.376 and tolerance

ranged from .722 to .931. These results indicated that no multicollinearity was detected between the variables for the present study.



Table 2. Descriptive Statistics for Demographic and Study Variables (N = 481)

|                                   | Missing% | Min-Max   | M    | SD   | Skewness | Kurtosis | Cronbach's $\alpha$ |
|-----------------------------------|----------|-----------|------|------|----------|----------|---------------------|
| <b>Intolerance of Uncertainty</b> |          |           |      |      |          |          |                     |
| Prospective IU                    | 0.2%     | 1.00-5.00 | 3.43 | .735 | -.31     | .02      | .81                 |
| Inhibitory IU                     | 0.2%     | 1.00-5.00 | 3.19 | .971 | -.11     | -.57     | .88                 |
| Total IU                          | 0.2%     | 1.00-5.00 | 3.33 | .758 | -.27     | -.10     | .89                 |
| <b>Coping Strategies</b>          |          |           |      |      |          |          |                     |
| Seeking Social Support            | 0.2%     | 1.00-5.00 | 3.66 | .859 | -.54     | -.14     | .84                 |
| Problem-Focused                   | 0.2%     | 1.00-5.00 | 3.69 | .707 | -.45     | .14      | .82                 |
| Avoidance                         | 0.2%     | 1.00-5.00 | 3.16 | .820 | -.04     | -.04     | .66                 |
| <b>Test Anxiety</b>               |          |           |      |      |          |          |                     |
| Worry                             | 0.2%     | 1.00-4.00 | 2.08 | .688 | .63      | .00      | .88                 |
| Emotionality                      | 0.2%     | 1.00-4.00 | 2.39 | .723 | .23      | -.65     | .92                 |
| Total Test Anxiety                | 0.2%     | 1.05-4.00 | 2.27 | .674 | .38      | -.44     | .94                 |
| <b>Resilience</b>                 | 1.0%     | 1.00-4.83 | 3.04 | .789 | -.25     | .18      | .82                 |
| <b>Future Career Anxiety</b>      | 0.2%     | 1.00-5.00 | 4.00 | .974 | -.78     | -.21     | .92                 |

Min = Minimum, Max = Maximum, M = Mean, SD = Standard Deviation, IU = Intolerance of Uncertainty.

## CHAPTER 4

### RESULTS

#### 4.1 Bivariate Correlations

Bivariate correlation analysis was conducted to demonstrate the correlations among study variables (intolerance of uncertainty, resilience, seeking social support, problem-focused coping, avoidance, future career anxiety, and test anxiety) and demographics (age, sex, and SES). See Table 3 for association among all of the study variables and demographics.

Intolerance of uncertainty was significantly and positively correlated with avoidance ( $r(480) = .235, p < .001$ ), future career anxiety ( $r(480) = .317, p < .001$ ), test anxiety ( $r(479) = .495, p < .001$ ), and problem-focused coping ( $r(479) = .162, p < .001$ ). Intolerance of uncertainty negatively correlated with resilience ( $r(475) = -.389, p < .001$ ). There was no significant correlation between intolerance of uncertainty and seeking social support ( $r(479) = .029, p = .520$ ). Additionally, results showed that resilience significantly and negatively associated future career anxiety ( $r(476) = -.291, p < .001$ ) and test anxiety ( $r(475) = -.439, p < .001$ ).

The association between coping strategies, future career anxiety, and test anxiety showed that seeking social support ( $r(479) = -.009, p = .842$ ) and problem-focused coping ( $r(479) = .053, p = .247$ ) were not correlated with test anxiety. Seeking social support ( $r(480) = .114, p = .012$ ), problem-focused coping ( $r(480) = .169, p < .001$ ) and avoidance ( $r(481) = .145, p = .001$ ) were positively correlated with future career anxiety, and avoidance was coping positively correlated with test anxiety ( $r(480) = .189, p < .001$ ).

Lastly, age was negatively correlated with future career anxiety ( $r(481) = -.100, p = .028$ ) and test anxiety ( $r(480) = -.166, p < .001$ ). Gender negatively correlated with resilience ( $r(476) = -.196, p < .001$ ), and positively correlated with seeking social support ( $r(480) = .183, p < .001$ ), avoidance ( $r(481) = .131, p = .004$ ), future career anxiety ( $r(481) = .204, p < .001$ ), and test anxiety ( $r(480) = .244, p < .001$ ) indicating that female participants had lower level of resilience but, higher level of seeking social support, future career anxiety, and test anxiety than did male participants. Socioeconomic status was negatively correlated with intolerance of uncertainty ( $r(480) = -.100, p = .028$ ), and positively correlated with seeking social support ( $r(480) = .116, p = .011$ ).

Table 3

*The Pearson Correlations of the Study Variables*

| Variables                 | 1      | 2      | 3     | 4     | 5     | 6     | 7      | 8      | 9     | 10 |
|---------------------------|--------|--------|-------|-------|-------|-------|--------|--------|-------|----|
| 1. IU                     | -      |        |       |       |       |       |        |        |       |    |
| 2. Resilience             | -.39** | -      |       |       |       |       |        |        |       |    |
| 3. Seeking Social Support | .02    | -.00   | -     |       |       |       |        |        |       |    |
| 4. Problem-Focused Coping | .16**  | .24**  | .22** | -     |       |       |        |        |       |    |
| 5. Avoidance Coping       | .23**  | .04    | .02   | .38** | -     |       |        |        |       |    |
| 6. Future Career Anxiety  | .32**  | -.29** | .11*  | .17** | .14** | -     |        |        |       |    |
| 7. Test Anxiety           | .49**  | -.44** | -.01  | .05   | .19** | .32** | -      |        |       |    |
| 8. Age                    | -.04   | .05    | -.05  | .04   | -.00  | -.10* | -.16** | -      |       |    |
| 9. Sex                    | .04    | -.19** | .18** | .04   | .13** | .20   | .24**  | -.15** | -     |    |
| 10. SES                   | -.10*  | .01    | .11*  | -.01  | .00   | -.09  | .03    | -.23** | .12** | -  |

Note. \* $p < 0.05$  (2-tailed), \*\* $p < 0.01$  (2-tailed), Sex (Male=0, Female=1), IU = Intolerance of Uncertainty, SES = Socioeconomic status.

## 4.2 Confirmatory Factor Analyses

### 4.2.1 *Intolerance of Uncertainty Scale – 12 (IUS-12)*

The results of the confirmatory factor analysis indicated a good fit between the model and the data,  $\chi^2(53) = 182.640$ ,  $p < .001$ , Comparative Fit Index (CFI) = 0.93 (CFI > .90), and Tucker-Lewis index (TLI) = 0.91 (TLI > .90), Root Mean Square Error of Approximation (RMSEA) = .07 (90% C.I. [.06, .08] (RMSEA < .10) (MacCallum et al., 1996) (See Table 4). For prospective intolerance of uncertainty, standardized factor loadings ranged from .45 to .77, and for inhibitory intolerance of uncertainty range from 74 to 78.

### 4.2.2 *Scale of Future Career Anxiety*

The results of the confirmatory factor analysis indicated a good model fit  $\chi^2(5) = 4.196$ ,  $p < .001$ , Comparative Fit Index (CFI) = 1.00 (CFI > .90), and Tucker-Lewis index (TLI) = 1.00 (TLI > .90), Root Mean Square Error of Approximation (RMSEA) = .00 (90% C.I. [.00, 0.0] (RMSEA < .10) (See Table 4). Standardized factor loadings ranged from .80 to .88.

### 4.2.3 *Scale of Test Anxiety*

The results of the confirmatory factor analysis for test anxiety scale showed an adequate fit between the model and the data  $\chi^2(168) = 594.334$ ,  $p < .001$ , Comparative Fit Index (CFI) = 0.91 (CFI > .90), and Tucker-Lewis index (TLI) = 0.89 (TLI > .90), Root Mean Square Error of Approximation (RMSEA) = .07 (90% C.I. [.06, .07] (RMSEA < .10). Residuals of item 7 (“I feel nervous during an important exam”) and item 9 (“Even when I prepare very well for an exam, I feel very nervous”) were correlated to improve the model fit. Standardized factor

loadings of 'Worry' ranged from .55 to .77., and standardized factor loadings of 'Emotionality' ranged from .51 to .85 (See Table 4).

#### **4.2.4 Coping Strategies Scale**

The initial model of the scale consisting all of the items demonstrated poor model fit. To improve the fit indices, first, item 14, which is related to the avoidance subscale, was removed since its' factor loading was .19 (it should be above .4) (Brown, 2006). Item 15, item 29, and item 21 (factor loadings were .24, .27, .31 respectively) were also removed from the scale because their factor loadings were below .40. Lastly, item 10 (factor loading .33) was excluded from seeking social support. Then, for seeking social support, standardized factor loadings ranged from .59 to .1.18., for problem-focused coping ranged from 1.00 to 1.76, and for avoidance ranged from .74 to 1.22.

The final model of the confirmatory factor analysis indicated good fit to the data,  $\chi^2(129) = 368.353.$ ,  $p < .001$ , Comparative Fit Index (CFI) = 0.90 (CFI > .90), and Tucker-Lewis index (TLI) = 0.88 (TLI > .90), Root Mean Square Error of Approximation (RMSEA) = .06 (90% C.I. [.05, .07] (RMSEA <.10).

#### **4.2.5 The Brief Resilience Scale (BRS)**

The initial model indicated a poor model fit. In order to improve the model, fit, we correlated residuals of item 1 ("I tend to bounce back quickly after hard times") and item 3 ("It does not take me long to recover from a stressful event"). The final version of the scale indicated a good fit to the data  $\chi^2(8) = 40.312.$ ,  $p < .001$ , Comparative Fit Index (CFI) = 0.94 (CFI > .90), and Tucker-Lewis index (TLI) = .90 (TLI > .90), Root Mean Square Error of Approximation (RMSEA) = .09

(90% C.I. [.06, .12] (RMSEA <.10) (See Table 4). In the final model, standardized factor loadings ranged from .44 to .75.



Table 4. Summary of Confirmatory Factor Analyses for all the scales

| Scale                             | Subscale | Item | $\chi^2$ | df  | p      | $\chi^2 / df$ | CFI  | TLI  | RMSEA         |
|-----------------------------------|----------|------|----------|-----|--------|---------------|------|------|---------------|
| <b>Intolerance of Uncertainty</b> | 2        | 12   | 182.640  | 53  | < .001 | 3.44          | 0.93 | 0.91 | .07{.06 /.08} |
| <b>Future Career Anxiety</b>      | 1        | 5    | 4.196    | 5   | < .001 | 839,2         | 1.00 | 0.89 | .00{.00 /.00} |
| <b>Test Anxiety</b>               | 2        | 20   | 594.334  | 168 | < .001 | 3.53          | 0.91 | 0.90 | .07{.06 /.07} |
| <b>Coping Scale</b>               | 3        | 18   | 368.353  | 129 | < .001 | 2.85          | 0.90 | 0.88 | .06{.05 /.07} |
| <b>Resilience</b>                 | 1        | 6    | 40.312   | 8   | < .001 | 5.03          | 0.94 | 1.00 | .07{.06 /.08} |

### 4.3 Multivariate Analyses

#### 4.3.1 Hypothesized Model

The final path model using observed variables fit the data well,  $\chi^2(12) = 11.146$ ,  $p = .51$ , CFI = 1.00, TLI = 1.00, RMSEA = 0.00 [90% CI: 0.00–0.04], SRMR = .02, AIC (Akaike Information Criterion) = 7179.904, BIC (Bayesian Information Criterion) = 7363.642. Standardized coefficients were reported in the model to reflect the effect sizes (Durlak, 2009).

#### 4.3.2 Direct Associations

In the final model, intolerance of uncertainty was negatively associated with resilience ( $\beta = -0.38$ ,  $SE = 0.04$ ), while it was positively associated with future career anxiety ( $\beta = 0.17$ ,  $SE = 0.05$ ), test anxiety ( $\beta = 0.36$ ,  $SE = 0.04$ ), problem-focused coping ( $\beta = 0.16$ ,  $SE = 0.04$ ), and avoidance ( $\beta = 0.19$ ,  $SE = 0.04$ ).

Intolerance of uncertainty was not significantly associated with seeking social support ( $\beta = 0.06$ ,  $SE = 0.05$ ). Hypothesis 1.1 (Emerging adults' intolerance of uncertainty will positively associate with avoidance coping, future career anxiety, and test anxiety) and Hypothesis 1.2 (Emerging adults' intolerance of uncertainty will negatively associate with resilience, seeking social support, and problem-focused coping) were partially supported.

Test anxiety was negatively associated with resilience ( $\beta = -0.27$ ,  $SE = 0.04$ ). Test anxiety was not associated with seeking social support ( $\beta = -0.06$ ,  $SE = 0.04$ ), problem focused coping ( $\beta = 0.05$ ,  $SE = 0.05$ ), and avoidance ( $\beta = 0.04$ ,  $SE = 0.04$ ). Future career anxiety was negatively associated with resilience ( $\beta = -0.23$ ,  $SE = 0.05$ ), and positively associated with problem focused coping ( $\beta = 0.17$ ,  $SE = 0.06$ ).

However, future career anxiety was not significantly associated with seeking social support ( $\beta = 0.04$ ,  $SE = 0.05$ ), and avoidance ( $\beta = 0.02$ ,  $SE = 0.05$ ).

Results showed that Hypothesis 2.1 (Psychological resilience will negatively associate with future career anxiety and test anxiety), Hypothesis 2.2 (Seeking social support and problem-focused coping will negatively associate with future career anxiety and test anxiety), and Hypothesis 2.3 (Avoidance will positively associate with future career anxiety and test anxiety) were also partially supported.

#### **4.3.3 Indirect Associations**

Results demonstrated that there was a significant indirect effect of intolerance of uncertainty ( $\beta = 0.09$ , [95% CI: 0.06–0.17] on future career anxiety via resilience. Also, there was a significant indirect effect of intolerance of uncertainty ( $\beta = 0.09$ , [95% CI: 0.06–0.13] on test anxiety via resilience. Finally, it was found that there was a significant indirect effect of intolerance of uncertainty ( $\beta = 0.03$ , [95% CI: 0.01–0.08] to future career anxiety via problem-focused coping.

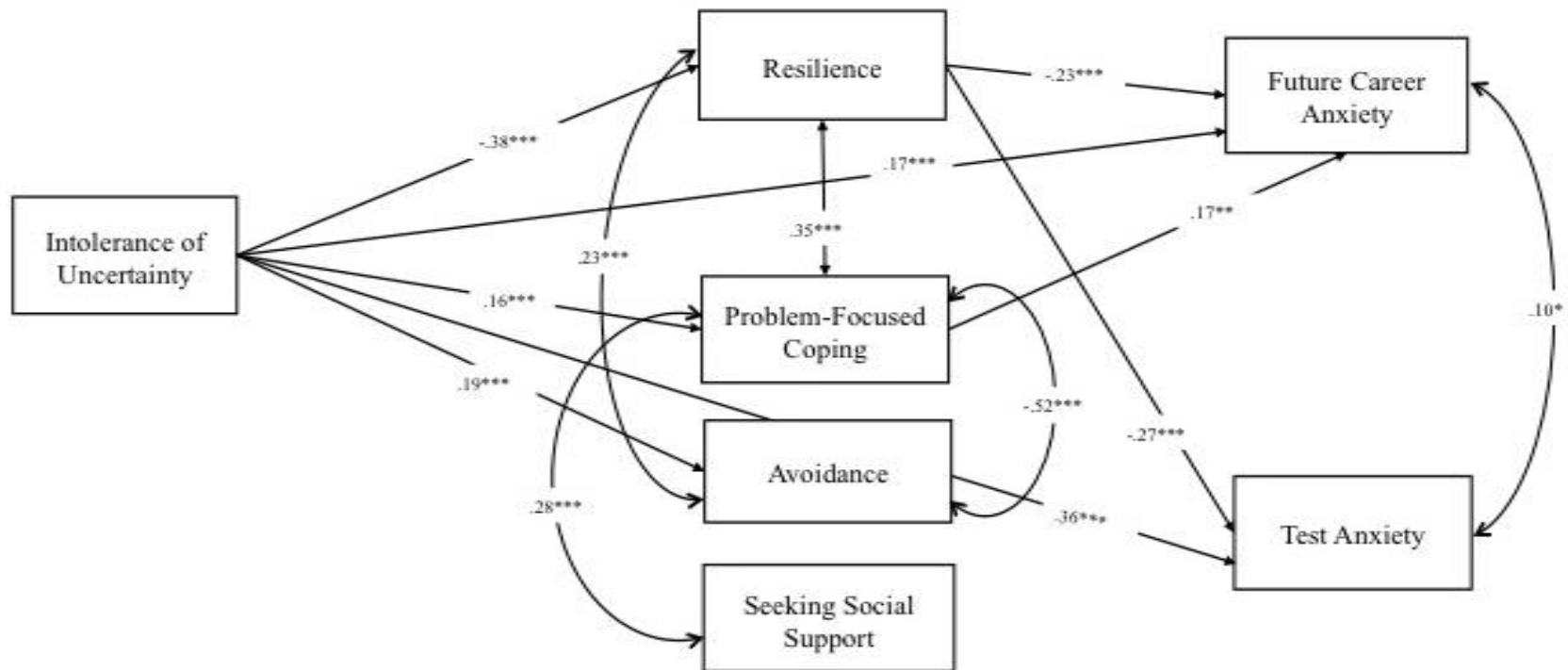
On the other hand, seeking social support and avoidance did not have an indirect effect on the association among intolerance of uncertainty, future career anxiety, and test anxiety. Also, problem-focused coping did not have an indirect effect on the association between intolerance of uncertainty and test anxiety.

The results showed that hypothesis 3.1 (Psychological resilience will mediate the relationships between intolerance of uncertainty, future career anxiety, and test anxiety) and Hypothesis 3.2 (Seeking social support, problem-focused, and avoidance coping strategies will mediate the relationship between intolerance of uncertainty, future career anxiety, and test anxiety) were partially supported. Agler and Beck (2017) highlighted that not using longitudinal data could be problematic

for testing pure mediational links. We use cross-sectional data, therefore significant findings in this research only demonstrated indirect associations instead of pure mediation.



Figure 2. *The Mediational Path Analysis Testing the Relationships between Intolerance of Uncertainty and Future Career Anxiety, and Test Anxiety through Resilience and Coping Strategies.*



Note. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . The standardized coefficient are shown for the significant paths. Covariate (CV) for Intolerance of Uncertainty: Emerging Adult's SES ( $\beta = -0.09$ ,  $p = .02$ ). CV for Future Career Anxiety: Emerging Adult's Sex ( $\beta = 0.13$ ,  $p = .00$ ), and Age ( $\beta = -0.09$ ,  $p = .05$ ). CV Test Anxiety: Emerging Adult's Sex ( $\beta = 0.16$ ,  $p = .00$ ) and Age ( $\beta = -0.11$ ,  $p = .00$ ).

## CHAPTER 5

### DISCUSSION

The current study aimed to examine the indirect effect of resilience and coping strategies on emerging adults' intolerance of uncertainty, future career anxiety, and test anxiety based on the transactional theory of stress and coping (TTSC) (Lazarus & Folkman, 1984). The findings showed that intolerance of uncertainty was positively associated with future career anxiety and test anxiety. Moreover, results demonstrated that there was a significant indirect effect of intolerance of uncertainty on future career anxiety and test anxiety via resilience. There was also a significant indirect effect of intolerance of uncertainty on future career anxiety via problem-focused coping.

TTSC proposed that anxiety is explained as a form of transaction between a person and the external environment that is qualified by appraising one's being overwhelmed with stressful situations and uncertainty across the optimum coping strategy (Lazarus & Folkman, 1984). TTSC can be used to explain the present findings. With the uncertain nature of the pandemic, emerging adults might have tended to appraise future career anxiety and test anxiety as an existing or possible threat. Individual characteristics of an individual (e.g., resilience and coping skills) and environmental factors are two components which have significant roles in evaluating the possible threat, which is related to the secondary appraisal component of the TTSC (Lazarus & Folkman, 1984). In the present study, resilience and problem-focused was found to be an as existing coping mechanism through which intolerance of uncertainty was indirectly linked with future career anxiety, and test

anxiety during the COVID-19 pandemic. In the scope of the present study, findings are discussed in the following sections.

### **5.1 The Direct Links between Intolerance of Uncertainty, Test Anxiety, and Future Career Anxiety**

The first research question of the current study aimed to examine the relationship between intolerance of uncertainty and future career anxiety and test anxiety. The findings of path analysis from the present study confirmed the first hypothesis by bringing out statistically significant associations among emerging adults' intolerance of uncertainty, future career anxiety, and test anxiety. The result of path analyses demonstrated that intolerance of uncertainty significantly, and positively predicts future career anxiety and test anxiety, indicating that the higher intolerance of uncertainty, the higher the future career anxiety, and test anxiety. These findings are consistent with the previous literature which shows that intolerance of uncertainty is positively associated with test anxiety (Huntley et al., 2022; Li et al., 2021) and career-related anxiety (Xu & Adams, 2020). In the time of uncertain situations, individuals often experience anxiety (Shihata et al., 2017), as individuals with high intolerance of uncertainty may not have helpful response resources and the problem-solving ability for coping with threatening situations. This may prevent them to generate actions and take decisions to solve problems; therefore, they are more prone to experience anxiety (Buhr & Dugas, 2002).

Emerging adulthood is a critical period for reaching economical independence, therefore continuing higher education, and working expectations and experiences have a crucial place in this period (Hammarström & Virtanen, 2019).

Furthermore, during the COVID-19 pandemic, most emerging adults have lacked protective factors (e.g., interdependence, and sociability) (Duman, 2020), and have an increased level of intolerance of uncertainty (Germani et al., 2020). When we consider the negative effects of pandemic and the tasks of emerging adulthood (e.g., continuing higher education, and pursuing career goals), emerging adults who have lower tolerance for uncertainty might become more prone to show both test anxiety and future career anxiety. The findings of the current study contributed to the existing literature by demonstrating the associations between emerging adults' intolerance of uncertainty, test anxiety, and career anxiety during the COVID-19 pandemic.

## **5.2 The Direct Links between Resilience, Coping Strategies, Future Career anxiety, and Test Anxiety**

The examination of the associations between, psychological resilience, coping strategies, future career anxiety, and test anxiety showed that resilience significantly and negatively predicted future career anxiety and test anxiety. This finding confirmed our hypothesis (2.1) showing that emerging adults who had lower levels of psychological resilience had an increased level of future career anxiety and test anxiety. Psychological resilience was known as a protective factor for reducing the negative effect of stressful situations (Fletcher & Sarkar, 2013; Toland & Carrigan, 2011). For instance, one of the findings of a recent study revealed that higher levels of resilience in emerging adults negatively predicted stress levels during the COVID-19 pandemic (Distor & Nicomedes, 2020). Most emerging adults have a great amount of stress and anxiety before and/or during an exam (Putwain &

Daly, 2014). Moreover, emerging adults are more prone to having stress and anxiety deciding how they can pursue their careers (Romano et al., 2019). Consistent with previous literature which shows negative associations between resilience and career-related anxiety (Romano et al., 2019), and test anxiety (Sakka et al., 2020), the present study also showed that psychological resilience in emerging adults could be an important protective factor for reducing future career anxiety and test anxiety during the pandemic.

In addition, path analysis showed that only problem-focused coping was positively associated with future career anxiety, but there was no association between problem-focused coping and test anxiety. Also, seeking social support and avoidance coping were not predicted future career anxiety and test anxiety in emerging adults. The COVID-19 pandemic might be the reason for the non-significant relationship between seeking social support, future career anxiety, and test anxiety. For instance, Baloch et al. (2021) examined the effect of coping strategies on COVID-19 anxiety in Pakistani students and found that seeking social support was the least preferred coping mechanism for reducing COVID-19-related anxiety. Our sample consisted of mostly undergraduate level students and also, and we have an increased amount of emerging adults who started to live in their families' or relatives' homes after the COVID-19 outbreak due to governmental restrictions. This may cause them not to socialize with their friends outside. Moreover, they might not want to share their educational and career-related concerns with their families and relatives with whom they had to share the same household due to Covid-related shut-down . Therefore, having no chance to share

their concerns about stressful situations might have a role in not choosing to seek social support coping during a pandemic as a strategy to cope with future career anxiety and test anxiety.

In addition, contrary to the hypotheses (2.2) which state that problem-solving coping would negatively predict future career anxiety (consistent with the findings of Chamandy et al., 2019; O'Hare & Tamburri, 1986) and test anxiety (consistent with the findings of Aysan, 2001; Blankstein, 1992; Zeidner, 1998) it was only related to future career anxiety and the direction of the relationship was positive. COVID-19 pandemic had a negative impact on the world economy (Ranta et al., 2020). The level of unemployment increased during the pandemic in Turkey (Bulut & Pinar, 2020). Reaching economical independence is one of the major tasks of emerging adults (Buchmann & Kriesi, 2011), so during the pandemic, they might have given more significance to their career planning, and this might have led to having less concerns about academic tasks (e.g., test-taking). This could be an explanation for the non-significant associations between problem-solving coping and test anxiety.

The finding showing a positive association between problem-focused coping and future career anxiety was unexpected. Although in the literature individuals with higher levels of problem-focused coping strategy have been shown to have lower levels of test anxiety (Folkman & Lazarus, 1985; Raffety et al., 1997; Thomas et al., 2017) and career-related anxiety (Chamandy et al., 2019; Gemejis et al., 2006; Larson et al., 1994; Stumpf et al., 1987), one study showed that "worry" component of test anxiety positively related with problem-focused coping (Stoeber, 2004) while

"emotionality" component of test anxiety negatively predicted test anxiety. Our scale for measuring emerging adults' future career anxiety included only the worry aspect, that's may be the reason why the present study found a positive association between problem-focused coping and future career anxiety in emerging adults. Borkovec (1985) stated that worry may function as a method of coping in case of an uncertain future and situations that can create stress. The worry process is insufficient for producing successful solutions or choosing effective coping methods, but it has a significant role in identifying problems which is the first component of a problem-solving coping mechanism (Borkovec, 1985). Additionally, Tallis et al. (1994) highlighted that worry might be considered a kind of problem-solving mechanism that encourages preparatory and analytical thinking. Therefore, the worry aspect of the future career anxiety might stimulate the emerging adults' problem-focused coping mechanism. In other words, emerging adults who were more worried about their future career anxiety might have tended to take more preparing actions and think analytically to eliminate their source of threat. Further investigations are necessary to better understand the association between problem-focused coping and future career anxiety in emerging adults.

### **5.3 Indirect Effect of Intolerance of Uncertainty on Future Career Anxiety, and Test Anxiety through Resilience and Coping Strategies**

The final aim of the present study was to examine the indirect effect of intolerance of uncertainty on future career anxiety, and test anxiety through resilience and coping strategies. Path analysis revealed that there was a significant indirect effect of intolerance of uncertainty on both future career anxiety, and test

anxiety via resilience. This finding supported our hypothesis which states that higher levels of intolerance of uncertainty would be associated with lower levels of resilience (consistent with the findings of Karataş & Tugay, 2021); and, lower levels of resilience would be associated with higher levels of future career anxiety (consistent with the findings of Üngüren & Kaçmaz, 2022), and test anxiety (consistent with the findings of Clipa et al., 2020; Hayat et al., 2021). Career anxiety rapidly increased during the COVID-19 pandemic (Mahmud et al., 2021) since pandemics have become a major source of stress for emerging adults who try to plan their future careers (Akkermans et al., 2020). Furthermore, test anxiety is another source of stress among emerging adults who continue higher education (Lowe, 2021) and the COVID-19 pandemic has a deteriorating influence on increasing stress of test anxiety in emerging adults (Hayat et al., 2021). Resilience has a crucial role in how to managing and adapting to difficult, threatening, and unpredictable situations (Bonanno, 2004; Mao et al., 2020). Therefore, individual resources of resilience might help to cope with emerging adults' future career anxiety and test anxiety during the pandemic.

Another result of the current study revealed that there was a significant indirect effect of problem-focused coping on the association between intolerance of uncertainty and future career anxiety such that emerging adults with higher levels of intolerance of uncertainty had higher levels of problem-solving coping, in turn, higher levels of problem-focused coping was associated with higher levels of future career anxiety. This finding was opposite to our hypothesis which stated that higher levels of intolerance of uncertainty would be associated with lower levels of

problem-solving coping, in turn, lower levels of problem-focused coping would be associated with higher levels of future career anxiety. Although it was known that adaptive coping mechanisms (e.g. problem solving, seeking social support) were negatively correlated with both IU (Taha et al., 2014) and career-related anxiety (Weinstein et al., 2002), Stoeber (2004) found unexpected associations between the worry aspect of test anxiety and problem-focused coping. Stoeber (2004) found that the worry dimension of test anxiety was positively related to problem-focused coping. The worry dimension of anxiety may have a role as a problem-focused coping strategy that triggers individuals' preparatory coping efforts to overcome threatening life situations (Tallis et al., 1994). Moreover, Yao et al. (2022) highlighted that future and problem-focused oriented worry is positively associated with intolerance of uncertainty and anxiety. We measured only the worry aspect of future career anxiety. Therefore, having an increased level of intolerance of uncertainty might initiate an increased level of problem-focused coping effort in emerging adults because they may want more prepared for uncertain life circumstances to decrease the uncertainty, in turn, they might be more worried about their future career goals because their mind tends to be always busy with the thoughts of how to pursue their career goals and how to overcome their future career anxiety.

In the present study, seeking social support and avoidance did not mediate the association between intolerance of uncertainty, and future career anxiety and test anxiety. Also, problem-focused coping did not mediate the association between intolerance of uncertainty and test anxiety. We collected our data when

governmental restrictions were still maintained for protecting individuals from getting infected by COVID-19 (Bulut & Pinar, 2020). That's why emerging adults do not have a chance to socialize outside and might not use seeking social support as an effective coping mechanism. Furthermore, with the uncertain nature of the COVID-19 pandemic, emerging adults might have chosen adaptive coping mechanisms instead of maladaptive coping mechanisms such as avoidance coping, since when the intolerance of uncertainty is added to the model, they tended to show more effort to overcome threatening life conditions. Therefore, this could explain why avoidance did not have an indirect effect on the relationship between intolerance of uncertainty, test anxiety, and future career anxiety. Lastly, problem-focused coping did not mediate the association between intolerance of uncertainty and test anxiety. With a negative pandemic effect on the world economy (Bulut & Pinar, 2020), emerging adults might have tended to give more significance to their future career anxiety instead of test anxiety while using problem-focused coping efforts.

#### **5.4 Limitations, Future Directions, and Implications**

Discussing the current study's limitations has significance for interpreting the findings, and also helps to enlighten future studies. Primarily and importantly, we used a cross-sectional design, so this prevents understanding pure mediation links and making any causal associations. Hence, future studies need to use a longitudinal design to interpret and infer mediational links. Another limitation of the present study is that the number of participants who are undergraduate outweighed graduate-level participants. This might have an impact on the representative

population, therefore future studies need to consider the ratio of participants' education level. Finally, internal consistency of Avoidance subscale was low, so using another coping mechanism measure might increase internal consistency of Avoidance subscale.

Moreover, for further examination, it is needed to be considering both emotionality and "worry" components of the future career anxiety and test anxiety to better understand mediational role of resilience and coping mechanism on the relations between intolerance of uncertainty, and future career anxiety, and test anxiety. Finally, future studies need to consider other coping mechanisms in examining these associations.

Lastly, findings of the current study revealed that resilience had an indirect effect on the relationship between intolerance of uncertainty, and test anxiety. This finding support that intervention programs aimed to foster resilience, especially in the school environment have a crucial role in reducing the negative impacts of test anxiety and future anxiety levels of emerging adults (Ang et al., 2022). For example, the resilience and coping intervention (RCI) program were developed to boost emerging adults' resilience and coping mechanism (Houston et al., 2017). This program consisted of 45-minute sessions for about 3 weeks and participants' resilience, stress, anxiety, coping, and hope levels were assessed first and the last week. It was found that the RCI program significantly increased participants' resilience levels, and moderately decrease their stress and anxiety levels. Therefore, practitioners should conduct resilience-focused intervention programs for reducing emerging adults' test anxiety and future career anxiety. Lastly, when researchers

develop an intervention program that targeted to eliminate test anxiety and future career anxiety by boosting resilience, they should check their intolerance of uncertainty level because intolerance of uncertainty was a stronger predictor of test anxiety and future career.



## APPENDIX A

### DEMOGRAFİK BİLGİ FORMU

Aşağıda sizden demografik bazı bilgiler istenmektedir.

1. Bitirdiğiniz yaşınızı yazınız: \_\_\_\_\_

2. Cinsiyetiniz: Erkek (1) Kadın (2) Diğer (3) \_\_\_\_\_

3. En son mezun olduğunuz okulu yazınız:

İlkokul (1) Ortaokul (2) Lise (3) Meslek yüksek okulu (4) Üniversite (5) Yüksek lisans/Doktora (6)

4. Öğrenciliğe devam etmekte misiniz?

Evet (1) Hayır (2)

Öğrenci olmayan katılımcılar ... sorudan devam edebilir.

5. Öğrenci iseniz üniversitedeki statünüzü işaretleyiniz:

Hazırlık Öğrencisi ( ) / Beklemeli (remedial) Öğrenci ( ) / Önlisans Öğrencisi ( )

/Lisans Öğrencisi ( ) / Bilimsel Hazırlık Öğrencisi ( ) / Yüksek Lisans Öğrencisi ( ) /

Doktora Öğrencisi ( )

3. Öğrencisi olduğunuz üniversite

\* Devlet üniversitesi

\* Özel üniversite

\* Açık öğretim

4. Üniversitede öğrenci olduğunuz bölümü yazınız: \_\_\_\_\_

5. Genel not ortalamanızı yazınız (Hazırlık öğrencisi, bekleme öğrencisi ve bilimsel hazırlık öğrencisi doldurmayacak):

6. Kaçınıcı sınıfta öğrencisiniz?: Hazırlık 1. Sınıf / 2. Sınıf / 3. Sınıf / 4. Sınıf

7. Üniversitede öğrenci olduğunuz bölümü yazınız: \_\_\_\_\_
8. Mezun olduğunuz yılı yazınız. \_\_\_\_\_
9. Aşağıdaki sınavlardan hazırlanmakta olduklarınızı işaretleyiniz?
- 1) Kamu Personeli Seçme Sınavı (KPSS)
  - 2) Akademik Personel ve Lisansüstü Eğitimi Giriş Sınavı (ALES)
  - 4) Yüksek Öğretim Kurumuna Geçiş Sınavı (YKS)
  - 5) Dil Sınavları (örn. YDS/TOEFL/IELTS)
  - 6) Yüksek lisans/doktora giriş yazılı ve/veya sözlü bilim sınavları
  - 7.) Diğer \_\_\_\_\_
10. Çalışıyor musunuz? Evet (1) Hayır (2)
11. Çalışıyorsanız lütfen çalışma şeklinizi belirtiniz (1) Stajyer (2) Part-time (3) Full-time
12. Medeni durumunuz: Bekar (1) Sözlü/Nişanlı (2) Evli (3) Boşanmış (4) Diğer....
13. Anneniz ve babanız: Evli (1) Boşanmış (2) Diğer (belirtiniz)
- (3)\_\_\_\_\_
14. Annenizin eğitimi: Okuryazar değil (1) Okuryazar (2) İlkokul (3) Ortaokul (4) Lise (5) Meslek yüksek okulu (6) Üniversite (7) Yüksek lisans/Doktora (8)
15. Babanızın eğitimi : İlkokul (1) Ortaokul (2) Lise (3) Meslek yüksek okulu (4) Üniversite (5) Yüksek lisans/Doktora (6)
16. COVID-19 öncesinde algılanan gelir düzeyi: Düşük (1) Orta (2) Yüksek (3)
17. COVID-19 sonrasında algılanan gelir düzeyi: Düşük (1) Orta (2) Yüksek (3)
18. Covid-19 salgın öncesinde Yaşadığınız/Kaldığınız yer? a) Yurt/Apart b) Tek başıma c) Aile veya akraba ile d) Diğer \_\_\_\_\_

19. Covid-19 salgın döneminde Yaşadığınız/Kaldığınız yer? a) Yurt/Apart b) Tek başıma c) Evde Aile veya akraba ile d) Diğer \_\_\_\_\_

20. COVID-19 nedeniyle ailenizden veya yakın çevrenizden vefat eden kişi(ler) oldu mu? Hayır (1) Evet (2)

Eğer cevabınız evetse kaybınızı yakınlık derecesini belirtiniz: \_\_\_\_\_

21. COVID-19 nedeniyle kendiniz ya da ailenizdenden işini kaybeden biri oldu mu? Hayır (1) Evet (2)

22. COVID-19 döneminde girdiğiniz veya hazırlandığınız sınavlarla ilgili olarak sizde stres yaratan unsurlar nelerdir? Lütfen yazınız. \_\_\_\_\_

## APPENDIX B

## Intolerance of Uncertainty Scale-12 (IUS-12)

|                                                                                                                                                                                                                                                                                                              |   |   |   |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| Son bir yılı düşünerek 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 anlamına gelmektedir. |   |   |   |   |   |
| 1.Beklenmedik olaylar canımı çok sıkar.                                                                                                                                                                                                                                                                      | 1 | 2 | 3 | 4 | 5 |
| 2.Bir durumda ihtiyacım olan tüm bilgilere sahip değilsem sinirlerim bozulur.                                                                                                                                                                                                                                | 1 | 2 | 3 | 4 | 5 |
| 3.İnsan sürprizlerden kaçınmak için daima ileriye bakmalıdır.                                                                                                                                                                                                                                                | 1 | 2 | 3 | 4 | 5 |
| 4. En iyi planlamayı yapsam bile beklenmedik küçük bir olay her şeyi mahvedebilir.                                                                                                                                                                                                                           | 1 | 2 | 3 | 4 | 5 |
| 5.Geleceğin bana neler getireceğini her zaman bilmek isterim.                                                                                                                                                                                                                                                | 1 | 2 | 3 | 4 | 5 |
| 6.Bir duruma hazırlıksız yakalanmaya katlanamam.                                                                                                                                                                                                                                                             | 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.                                                                                                                                                                                                                                                     |   |   |   |   |   |
| 9.Harekete geçme zamanı geldiğinde, belirsizlik elimi kolumu bağlar.                                                                                                                                                                                                                                         | 1 | 2 | 3 | 4 | 5 |
| 10.Belirsizlik yaşadığımda pekiyi çalışmam.                                                                                                                                                                                                                                                                  |   |   |   |   |   |
| 11.En küçük bir şüphe bile hareket etmemi engeller.                                                                                                                                                                                                                                                          | 1 | 2 | 3 | 4 | 5 |
| 12.Tüm belirsiz durumlardan uzak durmak zorundayım.                                                                                                                                                                                                                                                          | 1 | 2 | 3 | 4 | 5 |

## APPENDIX C

### Ways of Coping Questionnaire

|                                                                                                                                                                                                                                                                                                                     |   |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| Son bir yılı düşünerek lütfen aşağıdaki maddelerin karşısında bulunan ve maddelere ne kadar katıldığınızı gösteren sayılardan size en uygun olanını işaretleyiniz. <b>(1) Bana hiç uygun değil, (2) Bana çok az uygun, (3) Bana biraz uygun, (4) Bana çok uygun ve (5) Bana tamamen uygun</b> anlamına gelmektedir. |   |   |   |   |   |
| 1. Dikkatimi sorundan uzaklaştırmaya çaba gösteririm                                                                                                                                                                                                                                                                | 1 | 2 | 3 | 4 | 5 |
| 2. Bütün olası çözümleri aklımdan geçiririm                                                                                                                                                                                                                                                                         | 1 | 2 | 3 | 4 | 5 |
| 3. Olabildiğince bu konu/durumdan uzak durmaya çabalarım                                                                                                                                                                                                                                                            | 1 | 2 | 3 | 4 | 5 |
| 4. Sıkıntılarımı paylaşacak birini ararım                                                                                                                                                                                                                                                                           | 1 | 2 | 3 | 4 | 5 |
| 5. Kendimi güçlü hissetmeye çabalarım                                                                                                                                                                                                                                                                               | 1 | 2 | 3 | 4 | 5 |
| 6. Sıkıntılarımı çözerken benzer durumların ortaya çıkmaması için de tedbirler alırım                                                                                                                                                                                                                               | 1 | 2 | 3 | 4 | 5 |
| 7. Kendime ödülleri vaad ederek mücadele gücü toplarım                                                                                                                                                                                                                                                              | 1 | 2 | 3 | 4 | 5 |
| 8. Problemin benim gücümle çözülebilecek yönlerini bulmaya çalışırım                                                                                                                                                                                                                                                |   |   |   |   |   |
| 9. Bu durumun üstesinden gelebileceğime ilişkin kendi kendimi inandırmaya çalışırım                                                                                                                                                                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 10. Sıkıntılarımı çevremdeki insanlardan gizlemeye çalışırım                                                                                                                                                                                                                                                        |   |   |   |   |   |
| 11. Kendimi güçlü hissetmeye çabalarım                                                                                                                                                                                                                                                                              | 1 | 2 | 3 | 4 | 5 |
| 12. Sıkıntılı olduğumda, kendimi iyi hissettirecek hayaller kurarım                                                                                                                                                                                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 13. Problemin nedenlerini bulmaya çalışırım                                                                                                                                                                                                                                                                         | 1 | 2 | 3 | 4 | 5 |
| 14. Fikirlerine güvendiğim kişilere danışırım                                                                                                                                                                                                                                                                       | 1 | 2 | 3 | 4 | 5 |
| 15. Dini inançlarımdan güç alırım                                                                                                                                                                                                                                                                                   | 1 | 2 | 3 | 4 | 5 |
| 16. Sorunun çözümüyle bağlantılı adaklar adarım                                                                                                                                                                                                                                                                     | 1 | 2 | 3 | 4 | 5 |
| 17. Yapabileceklerimi en kolaydan zora doğru sıralayarak, sıkıntılarımı çözmeye çalışırım                                                                                                                                                                                                                           | 1 | 2 | 3 | 4 | 5 |
| 18. Sıkıntılarımı içimde tutar, kimseye anlatmam                                                                                                                                                                                                                                                                    | 1 | 2 | 3 | 4 | 5 |

|                                                                                           |   |   |   |   |   |
|-------------------------------------------------------------------------------------------|---|---|---|---|---|
| 19. Dostlarımla dertleşirim                                                               | 1 | 2 | 3 | 4 | 5 |
| 20. Sıkıntılı bir durumla karşılaştığımda “beterin beteri var” deyip teselli bulurum      |   |   |   |   |   |
| 21. Yalnız kalmayı yeğlerim                                                               | 1 | 2 | 3 | 4 | 5 |
| 22. Kitap okuma, tv-sinema izleme, ev işi-spor yapma gibi uğraşlara yönelirim             |   |   |   |   |   |
| 23. Beni rahatsız eden konuyu aklıma hiç getirmemeye çalışırım                            | 1 | 2 | 3 | 4 | 5 |
| 24. Yapabileceklerimi en kolaydan zora doğru sıralayarak, sıkıntılarımı çözmeye çalışırım | 1 | 2 | 3 | 4 | 5 |

## APPENDIX D

### Resilience Scale

Aşağıda çeşitli durumlara ilişkin ifadeler bulunmaktadır. Son bir yılı düşünerek lütfen ifadeyi okuduktan sonra size uyma derecesini sağ taraftaki kutucuklardan birini işaretleyerek belirtiniz. **(1) Bana hiç uygun değil, (2) Bana çok az uygun, (3) Bana biraz uygun, (4) Bana çok uygun ve (5) Bana tamamen uygun** anlamına gelmektedir.

|                                                                       |   |   |   |   |   |
|-----------------------------------------------------------------------|---|---|---|---|---|
| 1. Sıkıntılı zamanlardan sonra kendimi çabucak toparlayabilirim.      | 1 | 2 | 3 | 4 | 5 |
| 2. Stresli olayların üstesinden gelmekte güçlük çekerim.*             | 1 | 2 | 3 | 4 | 5 |
| 3. Stresli durumlardan sonra kendime gelmem uzun zaman almaz.         | 1 | 2 | 3 | 4 | 5 |
| 4. Kötü bir şeyler olduğunda bunu atlatmak benim için zordur.*        | 1 | 2 | 3 | 4 | 5 |
| 5. Zor zamanları çok az sıkıntıyla atlatırım.                         | 1 | 2 | 3 | 4 | 5 |
| 6. Hayatımdaki olumsuzlukların etkisinden kurtulmam uzun zaman alır.* | 1 | 2 | 3 | 4 | 5 |

## APPENDIX E

### Test Anxiety Scale

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| <p>Aşağıda, insanların kendilerini tanımlamak için kullandıkları bir dizi ifade sıralanmıştır. Bunların her birini son bir yılı düşünerek okuyun ve genel olarak nasıl hissettiğinizi anlatan ifadenin sağındaki boşluklardan uygun olanı işaretleyin. Burada doğru yada yanlış yanıt yoktur. İfadelerin hiçbirisi üzerinde fazla zaman harcamadan yazılı ve sözlü sınavlarda genel olarak nasıl hissettiğinizi gösteren yanıtı işaretleyin. <b>Hiçbir zaman(1) Bazen(2) Sık sık(3) Her Zaman(4)</b></p> |   |   |   |   |
| 1. Sınav sırasında kendimi güvenli ve rahat hissederim.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 | 2 | 3 | 4 |
| 2. O dersten alacağım notu düşünmek, sınav sırasındaki başarıyı olumsuz yönde etkiler.                                                                                                                                                                                                                                                                                                                                                                                                                   | 1 | 2 | 3 | 4 |
| 3. Önemli sınavlarda donup kalırım.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 | 2 | 3 | 4 |
| 4. Sınavlar sırasında, bir gün okulu bitirip bitirmeyeceği mi düşünmekten kendimi alamam.                                                                                                                                                                                                                                                                                                                                                                                                                | 1 | 2 | 3 | 4 |
| 5. Bir sınav sırasında ne kadar çok uğraşırsam kafam o kadar çok karışık.                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 | 2 | 3 | 4 |
| 6. Sınavlarda kendimi huzursuz ve rahatsız hissederim.                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1 | 2 | 3 | 4 |
| 7. Önemli bir sınav sırasında kendimi sinirli hissederim.                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 | 2 | 3 | 4 |
| 8. Başarısız olma düşünceleri, dikkatimi sınav üzerinde toplamama engel olur..                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |   |   |
| 9. Bir sınava çok iyi hazırlandığım zamanlar bile kendimi oldukça sinirli hissederim.                                                                                                                                                                                                                                                                                                                                                                                                                    | 1 | 2 | 3 | 4 |
| 10. Önemli sınavlarda sinirlerim öylesine gerilir ki midem bulanır.                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 | 2 | 3 | 4 |
| 11. Bir sınav kağıdımı geri almadan hemen önce çok huzursuz olurum.                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 | 2 | 3 | 4 |
| 12. Önemli sınavlarda kendimi adeta yenilgiye iterim                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1 | 2 | 3 | 4 |
| 13. Sınavlar sırasında kendimi çok gergin hissederim.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1 | 2 | 3 | 4 |
| 14. Önemli bir sınav sırasında paniğe kapılırım.                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1 | 2 | 3 | 4 |
| 15. Sınavların beni bu kadar rahatsız etmemesini isterdim.                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1 | 2 | 3 | 4 |
| 16. Önemli bir sınava girmeden önce çok endişelenirim.                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1 | 2 | 3 | 4 |
| 17. Sınavlar sırasında başarısız olmanın sonuçlarını düşünmekten kendimi alamam.                                                                                                                                                                                                                                                                                                                                                                                                                         | 1 | 2 | 3 | 4 |
| 18. Önemli sınavlarda kalbimin çok hızlı attığını hissederim.                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1 | 2 | 3 | 4 |

|                                                                                           |   |   |   |   |
|-------------------------------------------------------------------------------------------|---|---|---|---|
| 19. Sınav sona erdikten sonra endişelenmemeye çalışır fakat yapamam.                      | 1 | 2 | 3 | 4 |
| 20. Sınavlar sırasında öylesine sinirli olurum ki aslında bildiğim şeyleri bile unuturum. | 1 | 2 | 3 | 4 |

## APPENDIX F

### Future Career Anxiety Scale

Gelecekteki istihdamınıza (işe girme, iş hayatında yer alma) ilişkin COVID-19 sebebiyle oluşabilecek aşağıdaki sebeplerden ne derecede endişeli olduğunuzu 5'li ölçeğe göre değerlendiriniz. **Hiçbir zaman (1) Bazen (2) Sık sık(3) Her Zaman(4)**  
COVID-19 koşullarında;

|                                                                                                   |   |   |   |   |
|---------------------------------------------------------------------------------------------------|---|---|---|---|
| 1. Yaşanan/yaşanabilecek ekonomik durgunluktan dolayı gelecekteki istihdamımdan endişeliyim.      | 1 | 2 | 3 | 4 |
| 2. İş piyasasında oluşan/oluşabilecek rekabetten dolayı gelecekteki istihdamımdan endişeliyim.    | 1 | 2 | 3 | 4 |
| 3. Hayal ettiğim kadar iyi maaş alamama ihtimali sebebiyle gelecekteki istihdamımdan endişeliyim. | 1 | 2 | 3 | 4 |
| 4. Artan işsizlik ve işten çıkarma durumlarından dolayı gelecekteki istihdamımdan endişeliyim.    | 1 | 2 | 3 | 4 |
| 5. İstedğim gibi bir iş bulamama olasılığından dolayı gelecekteki istihdamımdan endişeliyim.      | 1 | 2 | 3 | 4 |

## References

- Achdut, N., & Refaeli, T., (2020). Unemployment and Psychological Distress among Young People during the COVID-19 Pandemic: Psychological Resources and Risk Factors. *International Journal of Environmental Research and Public Health*, 17(19), 1-21. DOI: 10.3390/ijerph17197163
- Agler, R., & De Boeck, P. (2017). On the interpretation and use of mediation: Multiple perspectives on mediation analysis. *Frontiers in Psychology*, 8(1984), 1-11. DOI: 10.3389/fpsyg.2017.01984
- Akinsola, E. F., & Nwajei, A. D. (2013). Test anxiety, depression and academic performance: assessment and management using relaxation and cognitive restructuring techniques. *Psychology*, 4(06), 18-24. DOI: 10.4236/psych.2013.46A1003
- Akkermans, J., Richardson, J., & Kraimer, M. L. (2020). The COVID-19 crisis as a career shock: Implications for careers and vocational behavior. *Journal of Vocational Behavior*, 119, 1-5. DOI:10.1016/j.jvb.2020.103434
- Albayrak—Kaymak, D. (1987). Sınav kaygısı envanterinin Türkçe" formunun oluşturulması ve güvenirliği. *Psikoloji Dergisi*, 6(21), 55-62.
- Alsaady I., Gattan H., Zawawi, A., Alghanmi, M., & Zakai, H. (2020). Impact of COVID-19 Crisis on Exam Anxiety Levels among Bachelor Level University Students. *Mediterranean Journal of Social Sciences*, 11(5), 33-39. DOI: 10.36941/mjss-2020-0052

- Arbona, C., Fan, W., Phang, A., Olvera, N., & Dios, M. (2021). Intolerance of uncertainty, anxiety, and career indecision: a mediation model. *Journal of Career Assessment*, 29(4), 699-716. DOI:10.1177/10690727211002564
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. DOI: 10.1037/0003-066X.55.5.469
- Arnett, J. J. (2006). Emerging Adulthood: Understanding the New Way of Coming of Age. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 3–19). American Psychological Association. DOI: 10.1037/11381-001
- Arnett, J. J., & Mitra, D. (2018). Are the Features of Emerging Adulthood Developmentally Distinctive? A Comparison of Ages 18–60 in the United States. *Emerging Adulthood*, 8(5), 1-8. DOI:10.1177/2167696818810073
- Arnett, J.J. & Taber, S. (1994). Adolescence terminable and interminable-When does adolescence end? *Journal of Youth and Adolescence*, 23, 517–537. DOI: 10.1007/BF01537734
- Arnett, J. J., Žukauskienė, R. ve Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18–29 years: Implications for mental health, *The Lancet Psychiatry*, 1, 569-76. DOI:10.1016/S2215-0366(14)00080-7
- Ang, W. H. D., Lau, S. T., Cheng, L. J., Chew, H. S. J., Tan, J. H., Shorey, S., & Lau, Y. (2022). Effectiveness of resilience interventions for higher education students: A meta-analysis and metaregression. *Journal of Educational Psychology*. Advance online publication, 1-22. DOI:10.1037/edu0000719

- Arora, S., Chaudhary, P. and Singh, R.K. (2021). "Impact of coronavirus and online exam anxiety on self-efficacy: the moderating role of coping strategy", *Interactive Technology and Smart Education*, 18(3), 1-16. DOI:10.1108/ITSE-08-2020-0158
- Atak, H., Tatlı, C. E., Çokamay, G., Büyükpabuşcu, H., & Çok, F. (2016). Transition to Adulthood: A Theoretical Review in the Context of Demographic Criteria in Turkey. *Current Approaches in Psychiatry*, 8(3), 204-227. DOI: 10.18863/pgy.238184
- Aysan, F., Thompson, D., & Hamarat, E. (2001). Test anxiety, coping strategies, and perceived health in a group of high school students: A Turkish sample. *The Journal of genetic psychology*, 162(4), 402-411. DOI: 10.1080/00221320109597492
- Baloch, G. M., Kamaludin, K., Chinna, K., Sundarasan, S., Nurunnabi, M., Khoshaim, H. B., ... Baloch, L. G. (2021). Coping with COVID-19: The Strategies Adapted by Pakistani Students to Overcome Implications. *International Journal of Environmental Research and Public Health*, 18(4), 1-10. DOI:10.3390/ijerph18041799
- Belle, M. A., Antwi, C. O., Ntim, S. Y., Affum-Osei, E., & Ren, J. (2021). Am I Gonna Get a Job? Graduating Students' Psychological Capital, Coping Styles, and Employment Anxiety. *Journal of Career Development*, 1-15. DOI:10.1177/08948453211020124
- Blankstein, K. R., Flett, G. L., & Watson, M. S. (1992). Coping and academic problem-solving ability in test anxiety. *Journal of Clinical Psychology*,

48(1), 37–46. DOI: 10.1002/1097-4679(199201)48:1<37::AID-JCLP2270480105>3.0.CO;2-F

Brooks, B. D., Alshafei, D., & Taylor, L. A. (2015). Development of the Test and Examination Anxiety Measure (TEAM). *Psi Chi Journal of Psychological Research*, 20(1), 1-10. DOI: 10.24839/2164-8204.JN20.1.2

Brown, T. A. (2006) *Confirmatory Factor Analysis for Applied Research (2th ed.)*. Guilford publications.

Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human Capacity to thrive after extremely aversive events? *American Psychologist*, 59(1), 20–28. DOI: 10.1037/0003-066X.59.1.20

Borkovec, T. D. (1985). Worry: A potentially valuable concept. *Behaviour Research and Therapy*, 23(4), 481–482. DOI:10.1016/0005-7967(85)90178-0

Buchmann, M.C., & Kriesi, I. (2011), “Transition to adulthood in Europe”, *Annual Review of Sociology*, 31(1), 481-503. DOI: 10.1007/978-90-481-9063-8\_69

Buhr, K., & Dugas, M.J. (2002). The Intolerance of Uncertainty Scale: Psychometric properties of the English version. *Behaviour Research and Therapy*, 40(8), 931–946. DOI: 10.1016/S0005-7967(01)00092-4

Bulut, R., & Pınar, Ç. (2020). Covid-19 pandemisi döneminde Türkiye’de istihdam ve işsizlik. *Oğuzhan Sosyal Bilimler Dergisi*, 2(2), 217-225. DOI: <https://dergipark.org.tr/en/pub/oguzhan/issue/59350/839233>

Carleton, R. N. (2016). Fear of the unknown: One fear to rule them all? *Journal of Anxiety Disorders*, 41, 5–21. DOI: 10.1016/j.janxdis.2016.03.011

Carleton, R. N., Norton, M. A. P. J., & Asmundson, G. J. G. (2007). Fearing the

- unknown: A short version of the Intolerance of Uncertainty Scale. *Journal of Anxiety Disorders*, 21(1), 105–117. DOI: 10.1016/j.janxdis.2006.03.014
- Cassidy, S. (2012). Exploring individual differences as determining factors in student academic achievement in higher education. *Studies in Higher Education*, 37(7), 793–810. DOI: 10.1080/03075079.2010.545948
- Chamandy, M., & Gaudreau, P. (2019). Career doubt in a dual-domain model of coping and progress for academic and career goals. *Journal of Vocational Behavior*, 110, 155–167. DOI: 10.1016/j.jvb.2018.11.008
- Cicchetti, D. (2010). Resilience under conditions of extreme stress: a multilevel perspective. *World Psychiatry*, 9(3), 145–154. DOI:10.1002/j.2051-5545.2010.tb00297.x
- Cizek, G. J., & Burg, S. S. (2006). *Addressing test anxiety in a high-stakes environment: Strategies for classroom and schools*. Corwin Press.
- Clipa, O., Duca, D. S., & Padurariu, G. (2021). Test Anxiety and Student Resilience in the Context of School Assessment. *Revista Romaneasca Pentru Educatie Multidimensionala*, 13, 299–314. DOI:10.18662/rrem/13.1Sup1/397
- Cloninger, C. R. (1986). A unified biosocial theory of personality and its role in the development of anxiety states. *Psychiatric Developments*, 3(2), 167–226. DOI: 00463537d00f1ce42d000000
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, 9(3), 361–368. DOI: 10.1037/a0015952
- Czeisler, M.E., Lane, R.I., Petrosky, E., Wiley, J. F., Christensen, A., Njai, R.,

Weaver, M.D., Robbins, R., Facer-Childs, E.R., Barger, L.K., Czeisler, C.A., Howard, M.E. & Rajaratnam, S.M.W. (2020). “Mental health, substance use, and suicidal ideation during the COVID-19 pandemic”. *Morbidity and Mortality Weekly Report*, 69(32), 1049-1057.

DOI:10.15585/mmwr.mm6932a1

Çetin, Ş., (2013). Eğitim fakültesi öğrencilerinin kamu personeli seçme sınavına (KPSS) yönelik kaygılarının incelenmesi. *Milli Eğitim Dergisi*, 43(197), 158-168. DOI:

<https://dergipark.org.tr/en/pub/milliegitim/issue/36167/406565>

Dan, O., Bar Ilan, O., & Kurman, J. (2014). Attachment, self-esteem and test anxiety in adolescence and early adulthood. *Educational Psychology*, 34(6), 659–673. DOI: 10.1080/01443410.2013.814191

Dan, O., & Raz, S. (2012). The Relationships Among ADHD, Self-Esteem, and Test Anxiety in Young Adults. *Journal of Attention Disorders*, 19(3), 231–239. DOI: 10.1177/1087054712454571

Distor, J. M. S., & Nicomedes, C. J. C. (2020). Impact of Anxiety to Coping Under the Influence of Resilience of People Affiliated to State University During Enhanced Community Quarantine. *Unpublished manuscript*. DOI:10.13140/RG.2.2.19178.34247

Doğan, T. (2015). Kısa psikolojik sağlamlık ölçeğinin Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. *The Journal of Happiness ve Well-Being*, 1(3), 93-102. DOI: 10.17755/esosder.574101

- Duman, N., (2020). Covid-19 Fear and intolerance to uncertainty in university students. *The Journal of Social Science*, 4(8), 426-437. DOI: 10.30520/tjsosci.748404
- Durlak, J. A. (2009). How to select, calculate, and interpret effect sizes. *Journal of Pediatric Psychology*, 34(9), 917–928. DOI: 10.1093/jpepsy/jsp004.
- Einstein, D. A. (2014). Extension of the transdiagnostic model to focus on intolerance of uncertainty: A review of the literature and implications for treatment. *Clinical Psychology: Science and Practice*, 21(3), 280–300. DOI: 10.1111/cpsp.12077
- Etherton, K., Steele-Johnson, D., Salvano, K., & Kovacs, N. (2020). Resilience effects on student performance and well-being: the role of self-efficacy, self-set goals, and anxiety. *The Journal of general psychology*, 1-20. DOI: 10.1080/00221309.2020.1835800
- Fiorilli, C., Farina, E., Buonomo, I., Costa, S., Romano, L., Larcán, R., & Petrides, K. V. (2020). Trait emotional intelligence and school burnout: the mediating role of resilience and academic anxiety in high school. *International journal of environmental research and public health*, 17(9), 30-58. DOI: 10.3390/ijerph17093058
- Fletcher D, Sarkar M. (2013). Psychological Resilience: A Review and Critique of Definitions, Concepts, and Theory. *European Psychologist*, 18(1): 12-23. DOI:10.1027/1016-9040/a000124
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21(3), 219-239.

DOI: 10.2307/2136617

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.

Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48(1), 150-170. DOI: 10.1037/0022-3514.48.1.150

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54(3), 466–475. DOI: 10.1037/0022-3514.54.3.466

Germani A, Buratta L, Delvecchio E, Gizzi, G., & Mazzeschi, C. (2020). Anxiety severity, perceived risk of COVID-19 and individual functioning in emerging adults facing the pandemic. *Frontiers in Psychology*, 11, 3384. DOI:10.3389/fpsyg.2020.567505

Germeijs, V., Verschueren, K., & Soenens, B. (2006). Indecisiveness and high school students' career decision-making process: Longitudinal associations and the mediational role of anxiety. *Journal of Counseling Psychology*, 53(4), 397–410. DOI:10.1037/0022-0167.53.4.397

George, D. & Mallery, P. (2019). *IBM SPSS Statistics 25 Step by Step: A Simple Guide and Reference* (15th ed.). Routledge.

Gibson, H. A. (2014). Conceptual View of Test Anxiety. *Nursing Forum*, 49(4), 267–277. DOI:10.1111/nuf.12069

Gigerenzer, G., & Garcia-Retamero, R. (2017). Cassandra's regret: The psychology

of not wanting to know. *Psychological Review*, 124(2), 179–196. DOI: 10.1037/rev0000055.

Glowacz, F., & Schmits, E. (2020). Uncertainty and psychological distress during lockdown during the COVID-19 Pandemic: the young adults most at risk. *Psychiatry Research*, 293, 1-15. DOI: 10.1016/j.psychres.2020.113486

Goetz, T., Preckel, F., Zeidner, M., & Schleyer, E. (2008). Big fish in big ponds: A multilevel analysis of test anxiety and achievement in special gifted classes. *Anxiety, Stress & Coping*, 21(2), 185–198. DOI: 10.1080/10615800701628827

Günay, A., & Çelik, R. (2019). Kariyer stresinin psikolojik iyi oluş ve iyimserlik değişkenleriyle yordanması. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 2(33), 205-217. DOI: <https://Dergipark.Org.Tr/En/Download/Article-File/704550>

Hammarström, A., & Virtanen, P. (2019). The importance of financial recession for mental health among students: short-and long-term analyses from an ecosocial perspective. *Journal Of Public Health Research*, 8(2), 56-61. DOI: 10.4081/jphr.2019.1504

Hayat, A. A., Choupani, H., & Dehsorkhi, H. F. (2021). The mediating role of students' academic resilience in the relationship between self-efficacy and test anxiety. *Journal of Education and Health Promotion*, 10(1), 297. DOI: 20.4203/jehp.jehp\_35\_21

Hernández, A. L., González-Escobar, S., González, N. I., López-Fuentes, A., & Barcelata, B. E. (2019). Stress, self-efficacy, academic achievement and

- resilience in emerging adults. *Electronic Journal of Research in Educational Psychology*, 17 (1), 129-148. DOI: 10.25115/ejrep.v17i47.2226
- Houston, J. B., First, J., Spialek, M. L., Sorenson, M. E., Mills-Sandoval, T., Lockett, M., ... & Pfefferbaum, B. (2017). Randomized controlled trial of the Resilience and Coping Intervention (RCI) with undergraduate university students. *Journal of American College Health*, 65(1), 1-9.  
DOI:10.1080/07448481.2016.1227826
- Hunsley, J. (1985). Test anxiety, academic performance, and cognitive appraisals. *Journal of Educational Psychology*, 77(6), 678–682. DOI: 10.1037/0022-0663.77.6.678
- Huntley, C. D., Young, B., Tudur Smith, C., & Fisher, P. L. (2020). Uncertainty and test anxiety: Psychometric properties of the Intolerance of Uncertainty Scale – 12 (IUS-12) among university students. *International Journal of Educational Research*, 104, 1-9. DOI: 10.1016/j.ijer.2020.101672
- Huntley, C., Young, B., Tudur Smith, C., Jha, V., & Fisher, P. (2022). Testing times: the association of intolerance of uncertainty and metacognitive beliefs to test anxiety in college students. *BMC psychology*, 10(1), 1-7. DOI: 10.1007/s12144-020-00662-y
- Jacelon, C. S. (1997). The trait and process of resilience. *Journal of advanced nursing*, 25(1), 123-129. DOI:1046/j.1365-2648.1997.1997025123.x
- Karataş, Z., Tagay, Ö. (2021). The relationships between resilience of the adults affected by the covid pandemic in Turkey and Covid-19 fear, meaning in

life, life satisfaction, intolerance of uncertainty and hope. *Personality and Individual Differences*, 172, 1-7. DOI:10.1016/j.paid.2020.110592.

Karataş, H., Alcı, B., & Aydın, H. (2013). Correlation among high school senior students' test anxiety, academic performance and points of university entrance exam. *Educational Research and Reviews*, 8(13), 919-926. DOI: 10.5897/ERR2013.1462

Khalaila, R. (2015). The relationship between academic self-concept, intrinsic motivation, test anxiety, and academic achievement among nursing students: Mediating and moderating effects. *Nurse Education Today*, 35(3), 432–438. DOI: 10.1016/j.nedt.2014.11.001

Khan, A., Grema, M. A., & Latif, A. B. A. et al. (2020). Mediating Effect of Positive Psychological Strength and Study Skills on Examination Anxiety among Nigerian College Students. *Sustainability*, 12(4), 2-16. DOI: 10.3390/su12041479

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd.). New York: The Guilford Press.

Konstantopoulou, G., & Raikou, N. (2020). Clinical Evaluation Of Depression In University Students During Quarantine Due To Covid-19 Pandemic, *European Journal of Public Health Studies*, 3(1). 1-8. DOI: 10.46827/ejphs.v3i1.65

Kujawa, A., Green, H., Compas, B. E., Dickey, L., & Pegg, S. (2020). Exposure to COVID-19 pandemic stress: Associations with depression and anxiety in

emerging adults in the United States. *Depression and Anxiety*. 1-9. DOI:  
10.1002/da.23109

Larson, L. M., Toulouse, A. L., Ngumba, W. E., Fitzpatrick, L. A., & Heppner, P. P.  
(1994). The development and validation of coping with career  
indecision. *Journal of Career Assessment*, 2(2), 91-110. DOI:  
10.1177/106907279400200201

Lee, S. A., Jobe, M. C., & Mathis, A. A. (2020). Mental health characteristics  
associated with dysfunctional coronavirus anxiety. *Psychological Medicine*.  
1-2. DOI: 10.1017/ S003329172000121X

Leipold B, Munz M, & Michéle-Malkowsky A. (2019). Coping and Resilience in the  
Transition to Adulthood. *Emerging Adulthood*, 7(1), 12-20. DOI:  
10.1177/2167696817752950

Li, G., Zhou, J., Yang, G., Li, B., Deng, Q., & Guo, L. (2021). The impact of  
intolerance of uncertainty on test anxiety: student athletes during the  
COVID-19 pandemic. *Frontiers in Psychology*, 12, 1-10. DOI:  
<https://doi.org/10.3389/fpsyg.2021.658106>

Little, R. J. A. (1988). A Test of Missing Completely at Random for Multivariate  
Data with Missing Values. *Journal of the American Statistical Association*,  
83(404), 1198–1202. <https://doi.org/10.2307/2290157>

Lowe, P. A. (2021). Cross-National Comparisons between Canadian and US Higher  
Education Students on a New, Brief, Multidimensional Measure of Test  
Anxiety. *Journal of Psychoeducational Assessment*, 39(6), 665-679. DOI:  
10.1177/07342829211016933

- Luecken, L. J., & Gress, J. L. (2010). Early adversity and resilience in Emerging adulthood. In J. W. Reich, A. J. Zatura, & J. S. Hall (Eds.), *Handbook of Adult Resilience* (pp. 238– 257). New York: Guilford Press.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130–149. DOI: [10.1037/1082-989X.1.2.130](https://doi.org/10.1037/1082-989X.1.2.130)
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99-128. DOI: [10.1207/s15327906mbr3901\\_4](https://doi.org/10.1207/s15327906mbr3901_4)
- Mahmud, M. S., Rahman, M., Hasan, M., & Islam, A. (2021). Does ‘COVID-19 phobia’ stimulate career anxiety?: Experience from a developing country. *Heliyon*, 7(3), 1-8. <https://doi.org/10.1016/j.heliyon.2021.e06346>
- Mahmud, M. S., Talukder, M. U., & Rahman, S. M. (2020). Does “Fear of COVID-19” trigger future career anxiety? An empirical investigation considering depression from COVID-19 as a mediator. *International Journal of Social Psychiatry*, 00(0), 1-11. DOI: [10.1177/0020764020935488](https://doi.org/10.1177/0020764020935488)
- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43(3), 267-282. DOI: [10.1002/pits.20149](https://doi.org/10.1002/pits.20149)
- Mao, Y., He, J., Morrison, A. M., & Coca-Stefaniak, J. A. (2020). Effects of tourism CSR on employee psychological capital in the COVID-19 crisis: From the

- perspective of conservation of resources theory. *Current Issues in Tourism*, 24(19), 2716-2734. DOI :10.1080/13683500.2020.1770706
- McDonald, A. S. (2001). The prevalence and effects of test anxiety in school children. *Educational psychology*, 21(1), 89-101. DOI: 10.1080/01443410020019867
- Miles, M. M., Szwedo, D. E., & Allen, J. P. (2018). Learning to cope with anxiety: Long-term links from adolescence to adult career satisfaction. *Journal of adolescence*, 64, 1-12. DOI: 10.1016/j.adolescence.2018
- Murphy, K. A., Blustein, D. L., Bohlig, A. J., & Platt, M. G. (2010). The College-to-Career Transition: An Exploration of Emerging Adulthood. *Journal of Counseling & Development*, 88(2), 174–181. DOI: 10.1002/j.1556-6678.2010.tb00006.x
- Muthén, L. K., & Muthén, B. O. (2012). *Mplus Version 7 user's guide*. Los Angeles, CA: Muthén & Muthén.
- Nekić, M., & Mamić, S. (2019). Intolerance of Uncertainty and Mindfulness as Determinants of Anxiety and Depression in Female Students. *Behavioral Sciences*, 9(12), 2-9. DOI: 10.3390/bs9120135
- Nelson, L. J., & Barry, C. M. (2005). Distinguishing Features of Emerging Adulthood: The Role of Self-Classification as an Adult. *Journal of Adolescent Research*, 20(2), 242–262. DOI: 10.1177/0743558404273074
- Neuderth, S., Jabs, B., & Schmidtke, A. (2009). Strategies for reducing test anxiety and optimizing exam preparation in German university students: a

- prevention-oriented pilot project of the University of Wurzburg. *Journal of Neural Transmission*, 116(6), 785–790. DOI: 10.1007/s00702-008-0123-7
- O'Hare, M. M., & Tamburri, E. (1986). Coping as a moderator of the relation between anxiety and career decision making. *Journal of Counseling Psychology*, 33(3), 255–264. DOI: 10.1037/0022-0167.33.3.255
- Ornell F, Schuch J. B., Sordi A. O., Kessler F. H. P. (2020). "Pandemic fear" and COVID-19: mental health burden and strategies. *Brazilian Journal of Psychiatry*, 42(3), 232-235. DOI: 10.1590/1516-4446-2020-0008.
- Öner, N. (1990). *Sınav kaygısı envanteri el kitabı*. İstanbul: Yöret Yayınları.
- Pallant, J. (2016) *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS Program* (7th ed.). A&U Academic.
- Parola, A. (2020). Novel coronavirus outbreak and career development: A narrative approach into the meaning for Italian university graduates. *Frontiers in Psychology* 11, 22-55. DOI: 0.3389/fpsyg.2020.02255
- Pisarik, C. T., Rowell, P. C., & Thompson, L. K. (2017). A Phenomenological Study of Career Anxiety Among College Students. *The Career Development Quarterly*, 65(4), 339–352. DOI: 10.1002/cdq.12112
- Putwain, D., & Daly, A. L. (2014). Test anxiety prevalence and gender differences in a sample of English secondary school students. *Educational Studies*, 40(5), 554-570. DOI:10.1080/03055698.2014.953914
- Raffety, B.D., Smith, R.E., & Ptacek, J.T. (1997). Facilitating and debilitating trait anxiety, situational anxiety, and coping with an anticipated stressor: A

- process analysis. *Journal of Personality and Social Psychology*, 72(4), 892-906. DOI: 10.1037/0022-3514.72.4.892
- Ranta, M., Dietrich, J., & Salmela-Aro, K. (2014). Career and romantic relationship goals and concerns during emerging adulthood. *Emerging Adulthood*, 2(1), 17-26. DOI: 10.1177/2167696813515852
- Ranta, M., Silinskas, G., & Wilska, T. A. (2020). Young adults' personal concerns during the COVID-19 pandemic in Finland: an issue for social concern. *International Journal of Sociology and Social Policy*, 40(9-10), 1202-1219. DOI:10.1108/ijssp-07-2020-0267
- Reio, T. G., & Sanders-Reio, J. (2020). Curiosity and well-being in emerging adulthood. *New Horizons in Adult Education and Human Resource Development*, 32(1), 17–27. DOI:10.1002/nha3.20270
- Rettie, H., & Daniels, J. (2021). Coping and tolerance of uncertainty: Predictors and mediators of mental health during the COVID-19 pandemic. *American Psychologist*, 76(3), 427–437. DOI: 10.1037/amp0000710
- Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: a systematic review and meta-analysis. *Psychological Bulletin*, 138(2), 353–387. DOI: 10.1037/a0026838
- Romano, L., Buonomo, I., Callea, A., & Fiorilli, C. (2019). Alexithymia in Young people's academic career: The mediating role of anxiety and resilience. *The Journal of Genetic Psychology*, 180(4-5), 157-169. DOI:10.1080/00221325.2019.1620675

- Sakka, S., Nikopoulou, V.A., Bonti, E., Tatsiopoulou, P., Karamouzi, P., Giazkoulidou, A., Tsipropoulou, V., Parlapani, E., Holeva, V. and Diakogiannis, I., (2020). Assessing test anxiety and resilience among Greek adolescents during COVID-19 pandemic. *Journal of Mind and Medical Sciences*, 7(2), 173-178. DOI: 10.22543/7674.72.P173178
- Saravanan, C., Kingston, R., & Gin, M. (2014). Is test anxiety a problem among medical students: a cross sectional study on outcome of test anxiety among medical students? *International Journal of Psychological Studies*, 6(3), 24–31. DOI:10.5539/ijps.v6n3p24
- 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. DOI: 10.17121/ressjournal.109
- Satici, B., Gocet-Tekin, E., Deniz, M. E., & Satıcı, S. A. (2020). Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. *International Journal of Mental Health Addiction*, 1-9. DOI: <https://doi.org/10.1007/s11469-020-00294-0>
- Shereen, M. A., Khan, S., Kazmi, A., Bashir, N., & Siddique, R. (2020). COVID-19 infection: Emergence, transmission, and characteristics of human coronaviruses. *Journal of advanced research*, 24, 91-98. DOI: 10.1016/j.jare.2020.03.005
- Shihata, S., McEvoy, P. M., & Mullan, B. A. (2017). Pathways from uncertainty to anxiety: An evaluation of a hierarchical model of trait and disorder-specific

intolerance of uncertainty on anxiety disorder symptoms. *Journal of anxiety disorders*, 45, 72-79. DOI: 10.1016/j.janxdis.2016.12.001

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounceback. *International Journal of Behavioral Medicine*, 15(3), 194- 200. DOI:10.1080/10705500802222972

Son C, Hegde S, Smith A, Wang X, Sasangohar F., (2020). Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study. *Journal of Medical Internet Research* 2020, 22(9), 1-6. DOI: 10.2196/21279

Spielberger, C., Gorsuch, R. & Lushene, R. (1970). Manual for the State-Trait Anxiety Inventory. Palo Alto, California, Consulting Psychologist Press. (Adapt. Española, TEA, 1982).

Spielberger, C. D. (1980). *Test Anxiety Inventory: Preliminary professional manual*. Palo Alto, CA: Consulting Psychologist Press.

Spielberger, C. D., & Vagg, P. R. (1995). *Test anxiety: A transactional process model*. Philadelphia, PA: Taylor & Francis.

Stoeber, J. (2004). *Dimensions of test anxiety: Relations to ways of coping with pre-exam anxiety and uncertainty*. *Anxiety, Stress & Coping*, 17(3), 213–226. DOI:10.1080/10615800412331292615

Stumpf, S. A., Brief, A. P., & Hartman, K. (1987). Self-efficacy expectations and coping with career-related events. *Journal of Vocational Behavior*, 31(1), 91-108. DOI:10.1016/0001-8791(87)90037-6

- Sud, A., & Kumar, S. (2006). Dysfunctional Career Thoughts, Achievement motivation and Test Anxiety among University Students, *Pakistan Journal of Psychological Research*, 21(1-2), 41-51.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (6th ed.). Pearson.
- Taha, S., Matheson, K., Cronin, T., & Anisman, H. (2014). Intolerance of uncertainty, appraisals, coping, and anxiety: The case of the 2009 H1N1 pandemic. *British Journal of Health Psychology*, 19(3), 592–605. DOI: 10.1111/bjhp.12058
- Tallis, F., Davey, G. C. L., & Capuzzo, N. (1994). The phenomenology of non-pathological worry: A preliminary investigation. In G. C. L. Davey & F. Tallis (Eds.), *Worrying: Perspectives on theory, assessment and treatment* (pp. 61–89). John Wiley & Sons.
- Thomas, C. L., Cassady, J. C., & Heller, M. L. (2017). The influence of emotional intelligence, cognitive test anxiety, and coping strategies on undergraduate academic performance. *Learning and Individual Differences*, 55, 40-48. DOI: 10.1016/j.lindif.2017.03.001
- Toland, J., & Carrigan, D. (2011). Educational psychology and resilience: New concept, new opportunities. *School Psychology International*, 32(1), 95-106. DOI:10.1177/0143034310397284
- Tobin, D. L., Holroyd, K. A., Reynolds, R. V., & Wigal, J. K. (1989). The hierarchical factor structure of the Coping Strategies Inventory. *Cognitive therapy and research*, 13(4), 343-361. DOI: 10.1007/BF01173478

- Tsai, C.-T., Hsu, H., & Hsu, Y. C. (2017). Tourism and hospitality college sStudents' career anxiety: Scale development and validation. *Journal of Hospitality & Tourism Education*, 29(4), 158-165. DOI: 10.1080/10963758.2017.1382365
- Tugade, M. M., & Fredrickson, B. L. (2007). Regulation of positive emotions: Emotion regulation strategies that promote resilience. *Journal of Happiness Studies*, 8(3), 311-333. DOI: 10.1007/s10902-006-905-4
- Tümkiye, S., Aybek, B., & Çelik, M. (2007). A Prediction of Hopelessness and State-Trait Anxiety Levels among Teacher Candidates before the KPSS Exam. *Kuram Ve Uygulamada Eğitim Bilimleri*, 7, 967-974.
- Türküm, A. (2002). Stresle Başa Çıkma Ölçeğinin Geliştirilmesi: Geçerlik ve Güvenilirlik Çalışmaları . *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 2(18), 25-34. <https://dergipark.org.tr/tr/pub/tpdrd/issue/21438/229810>
- Üngüren, E., & Kaçmaz, Y. Y. (2022). Does COVID-19 pandemic trigger career anxiety in tourism students? Exploring the role of psychological resilience. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 30, 1-12. DOI: 10.1016/j.jhlste.2022.100369
- Valladolid, V. C. (2021). The Role of Coping Strategies in the Resilience and Well-Being of College Students during COVID-19 Pandemic. *Philippine Social Science Journal*, 4(2), 30-42. DOI: 10.52006/main.v4i2.342
- Vanstone, D. M., & Hicks, R. E. (2019). Transitioning to university: Coping styles as mediators between adaptive-maladaptive perfectionism and test anxiety. *Personality and Individual Differences*, 141, 68–75. DOI: 10.1016/j.paid.2018.12.026

- Vignoli, E. (2015). Career indecision and career exploration among older French adolescents: The specific role of general trait anxiety and future school and career anxiety. *Journal of Vocational Behavior*, 89, 182-191. DOI: 10.1016/j.jvb.2015.06.005
- Vignoli, E., Croity-Belz, S., Chapeland, V., de Fillipis, A., & Garcia, M. (2005). Career exploration in adolescents: The role of anxiety, attachment, and parenting style. *Journal of Vocational Behavior*, 67(2), 153-168. DOI: 10.1016/j.jvb.2004.08.006
- Vizoso, C., Rodríguez, C., & Arias-Gundín, O. (2018). Coping, academic engagement and performance in university students. *Higher Education Research & Development*, 37(7), 1515-1529. DOI: 10.1080/07294360.2018.1504006
- Weiner, B. A., & Carton, J. S. (2012). Avoidance coping: A mediator of maladaptive perfectionism and test anxiety, *Personality and Individual Differences*, 52, 632–636. DOI: 10.1016/j.paid.2011.12.009.
- Weinstein, F. M., Healy, C. C., & Ender, P. B. (2002). Career choice anxiety, coping, and perceived control. *The Career Development Quarterly*, 50(4), 339-349. DOI: 10.1002/j.2161-0045.2002.tb00582.x
- Whitbourne, S. K., (1976). Test anxiety in elderly and young adults. *The International Journal of Aging and Human Development*, 7(3), 201-210. DOI: 10.2190/8HA7-Q3LE-3VVT-P227

- World Health Organization. (2020). *Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020* (No. WHO/2019-nCoV/MentalHealth/2020.1). World Health Organization.
- Xu, H., & Adams, P. (2020). Ambiguity aversion in career decision-making: Its longitudinal prediction for college career outcomes. *Journal of Counseling Psychology*, 67(2), 232–240. DOI: 10.1037/cou0000379
- Zeidner, M. (1998). *Test anxiety: The state of the art*. New York: Plenum.
- Zeidner, M., & Matthews, G. (2010). *Anxiety 101*. Springer Publishing Company.
- Yao, N., Yang, Y., Jiang, Y. et al. (2022). Intolerance of Uncertainty Relates to Anxiety and Depression Through Negative Coping and Worry: Evidence from a Repeated-Measures Study. *Journal Cognitive Therapy* 15, 42–56. DOI: 10.1007/s41811-021-00130-w