

WAYS OF COPING IN EMERGING ADULTHOOD: THE ROLE OF POSITIVE
DEVELOPMENT INDICATORS AND BASIC PSYCHOLOGICAL NEED
SATISFACTION

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

BY

MERVE FİDAN

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

May 2020

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Approved by:

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To all emerging adults who feel in between

ABSTRACT

The aim of the present study was to examine the relationship between coping resources that emerging adults have and their coping strategies as mediated by their stress appraisals. A path model was tested which links emerging adults' perception of both basic psychological needs satisfaction and frustration (autonomy, relatedness, competence), from their characteristics of positive youth development (confidence, competence, character, connection, care) to coping strategies (fatalistic, optimistic, problem-solving, helplessness) as through stress appraisals (threat, challenge, uncontrollability, control-by-self, control-by-other). A total of 466 emerging adults (359 females, 105 males, 2 other) aged between 18 and 30 ($M_{age} = 22.7$, $SD = 2.89$) completed a computer-assisted questionnaire. The path analysis indicated that emerging adults' control-by-self appraisal mediated the relationship between need satisfaction and three of the four coping strategies (i.e., optimistic, problem-solving and helplessness). Control-by-self appraisal mediated the relationship between need frustration and problem solving strategy, and the relationship between positive development and optimistic and problem-solving coping strategies. While uncontrollability appraisal mediated the link between need frustration and optimistic and problem-solving coping strategies, threat appraisal mediated the relationship between need frustration and helplessness coping strategy. The findings of this study identified important facilitators and frustrators of emerging adults' coping strategies.

Keywords: Emerging adulthood, need satisfaction, need frustration, positive youth development, stress appraisal, coping strategies

ÖZET

Bu çalışmanın amacı, genç yetişkinlerin başa çıkma kaynakları ve baş etme yöntemleri arasındaki stresi değerlendirme aracılığıyla olan ilişkiyi incelemektir. Genç yetişkinlerin temel psikolojik ihtiyaçlarının tatmin edilme ve engellenme (özerklik, ilişkisellik, yeterlilik) algılarını ve pozitif gelişim özelliklerini (kendin-güven, yeterlilik, karakter, ilişkileri ilgililik), stresi (bilişsel) değerlendirme (tehdit edici, kişilik gelişimi için fırsat, kontrol-dışı, kendilik kontrolü, diğerleri tarafından sağlanacak katkı ile kontrol edilebilir algılama) aracılığıyla başa çıkma yöntemlerine (kaderci, iyimser, problem-çözücü, çaresizlik) bağlayan bir yol modeli varsayılmıştır. Toplamda 466 (359 kadın, 105 erkek, 2 diğer) genç yetişkinin katıldığı bu çalışmada (ortalama yaş =22.7, SS= 2.89, ranj=18-30), katılımcılar bilgisayar-destekli anket formunu doldurmuşlardır. Yol analizi, genç yetişkinlerin “kendilik kontrolü” değerlendirmesinin, ihtiyaç tatmini ve dört başa çıkma stratejisinin üçü (iyimser, problem-çözücü, çaresizlik) arasındaki ilişkiye aracılık ettiğini göstermiştir. “Kendilik kontrolü” değerlendirmesi, ihtiyaç engellenmesi ve problem-çözücü baş etme arasındaki ilişkiye ve pozitif gelişim özellikleri ve iyimser ve problem-çözücü baş etme arasındaki ilişkiye aracılık etmiştir. “Kontrol-dışı” değerlendirmesi ihtiyaç engellenmesi ve iyimser ve problem-çözücü baş etme arasındaki ilişkiye aracılık ederken, “tehdit edici” değerlendirme, ihtiyaç engellenmesi ve çaresizlik baş etme arasındaki ilişkiye aracılık etmiştir. Bu çalışmanın bulguları, genç yetişkinlerin baş etme yöntemlerinin önemli destekleyicilerini ve engelleyicilerini tespit etmiştir.

Anahtar Kelimeler: Beliren yetişkinlik, ihtiyaç tatmini, ihtiyaç engellenmesi, olumlu genç gelişimi, stresin değerlendirilmesi, baş etme yöntemleri

ACKNOWLEDGMENTS

Throughout this thesis process, I had been dreaming to write this part. It was a long and tough journey with ups and downs. Fortunately, I had people around me that made this process easier to cope with and I owe all these people a great debt of thanks and gratitude.

First of all, I would like to express my gratitude to my advisor Asst. Prof. Ayfer Dost-Gözkan for her consistent guidance, support and patience since the beginning of this journey. It was such a pleasure and a fortune to work with her and be enlightened by her vision and knowledge. I also would like to thank to my committee members, Asst. Prof. Celia Naviar Şen and Asst. Prof. Ceren Acartürk for accepting being in my committee and sharing their ideas to make this study better.

My friends who are family for me; Ayşe Kıranoglu, İpek Öztürk, Selma Esen, Ezgi Sarızeybek, Gizem Erkol, Özge Çakmak, Mert Güven, Ozan Özkan, Eray Mungan and my loved one, Hazar Şaliş. Also my cohort; Ajla Hamza, Afra Taşdelen, Bengi Saral, Cansu Gökbalkon, Çağla Ünal, Pelda Çoko and Sena Kuzgun. I want to thank them all for believing in me more than I believe in myself. They were always all there whenever I needed. I came to the end with their consistent love and support.

My special thanks belong to my lovely family; Emine Fidan and Necdet Fidan, my one and only grandmother Rüveyde Kocaimamoğlu and my extended family. I always felt lucky to have them. They supported me with their unconditional love and patience. They always believed in me and encouraged me to follow my dreams.

Finally, I would like to thank to all emerging adults who participated in this study. This thesis could not have been possible without their participation.

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CHAPTER 1

INTRODUCTION

The road from adolescence to adulthood is a crucial road, and it might be challenging to cope because of changing social and contextual situations (Arnett, 2004). This road is called “Emerging adulthood” and it was stated that some emerging adults may struggle more in this period (Arnett, 2007). Identity explorations, stress of both economic and social changes, and worries about unemployment coupled with expectations of new qualifications for employment may make this road frustrating (Seiffge-Krenke & Haid, 2012). At that point, the present study posited that examining the coping strategies of emerging adults might be crucial to foster emerging adults in this period. Adapting the perspectives of positive youth development (PYD) (Lerner et al., 2005) and self-determination theory (SDT) (Ryan & Deci, 2017), the present study aimed to examine the facilitators and frustrators of emerging adults’ coping strategies.

Previous research on coping has shown the significant links between stress appraisals, coping strategies, and positive outcomes (e.g. posttraumatic growth, adjustment, psychopathology) (Bigatti et al., 2012; Gomes et al., 2016; Göral et al., 2006). The present study aims to contribute to the literature by examining the extent emerging adults’ resources involving perceived gratification of basic psychological needs (autonomy, relatedness, competence) and indices of positive development (competence, confidence, character, caring, and connection) are linked with specific stress appraisals and coping strategies. The proposed model also examined to what extent basic needs frustration was associated with stress appraisals and coping strategies.

Stress is experienced at every age, starting before birth and continuing till death, and individuals at all ages try to cope with it. From a developmental perspective, coping is a lifelong process. Lazarus and Folkman (1984, p. 141) describe coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." Lazarus (1991) explains coping under Transactional Theory of Coping which focuses on the person-environment interaction. The theory underscores the relationship between demands, constraints, resources, emotions, appraisals, coping strategies, and positive outcomes. According to the coping theory, when a person experiences a stressful situation, she/he evaluates the situation which is called *appraisal*. The appraisal process involves evaluation of whether the situation is dangerous and significant or not for well-being (threat, harm, benign), whether the stress is controllable (control-by-self, control-by-others, uncontrollability), and if there are enough resources to cope. Thus, coping strategies are highly associated with the appraisal of the situation. In other words, different appraisals are related to different coping strategies (Peacock, et al.1993). Lazarus and Folkman (1984) divided *coping strategies* into two categories: problem-focused coping and emotion-focused coping. While problem-focused coping focuses on changing the situation, emotion-focused coping is used to regulate the distress created by the stressful situation which is not perceived as changeable.

As mentioned above, some researchers have examined the links between stress appraisals and coping strategies (Ferguson et al.,1999; Folkman & Lazarus, 1980). It is stated that when the stressor is perceived as a threat, it is related to emotion-focused coping strategies such as avoidance; and when it is appraised as a challenge, it is related to problem-focused coping strategies. Also, in a study, it was found that controllability appraisal was related to problem-focused coping, and uncontrollability appraisal was related to emotion-focused coping (Peacock et al., 1993). To date, regarding stress appraisals and coping

strategies, there are few recent pieces of evidence. For instance, while previous studies found the relationship between threat appraisal and coping strategies, a recent study revealed no relationship between them (Bigatti et al., 2012). Additionally, one evidence supported the link between feeling control over the situation and problem-focused coping. Also, feeling no control over the stress and emotion-focused coping were found related (Zakowski et al., 2001). However, a recent study found that there was no relationship between uncontrollability and coping strategies (Jordan & Vogt, 2017). Also, there are controversial findings about the relationship between perceiving stress as controllable by others and coping strategies. For example, while one study found the relationship between control-by-others and avoidance coping (Gan et al., 2009), another study revealed that it was related to planning and seeking social support (Newton & McIntosh, 2010)

Personal and environmental resources are important components of the coping process. The literature mentions some coping resources such as a sense of control, optimism, social support, denial, self-efficacy, autonomy, and neuroticism (Folkman, 1984; Taylor & Stanton, 2007). It was shown that more positive resources such as self-efficacy, internal locus of control and social support were related to problem-focused coping while more negative resources such as external locus of control, pessimism, and neuroticism were related to emotion-focused strategies (Terry, 1991). Nevertheless, some of these resources are about personality traits. At that point, the present study examined the satisfaction and frustration of three fundamental needs as resources (autonomy, relatedness, competence) that were assumed to be related to the coping process (Ntoumanis et al., 2009; Skinner & Edge, 2002). Additionally, positive development (competence, confidence, character, caring, connection) was examined as a resource in the current study although it has never been examined in coping research.

The present study aimed to test a mediational model in which positive youth development, and basic psychological need satisfaction and frustration were linked to coping strategies through stress appraisals. Until recently, the path between basic psychological needs, positive development, stress appraisal, and coping strategies have not been examined in one model. In this light, the present study aimed to test this model.

In the following section, the literature on emerging adulthood, the coping process, SDT, PYD, and their relationships are reviewed. The review ends by outlining the research aims and hypotheses of the present study. Then, the method section explains how the current study was conducted. The findings of the present study extended our knowledge on how emerging adults' coping resources and appraisals were linked to coping strategies; thus, we identified potential facilitators and frustrators of coping strategies to shed light on intervention programs that would foster youth strength for coping.

CHAPTER 2

LITERATURE REVIEW

2.1 Emerging Adulthood and Coping

In the coping literature, there are some studies that have been conducted with adolescent sample. One of the reasons would be that adolescents experience stressful situations because of their conflict with family, peers, romantic partners or themselves. Although these stressful situations begin in adolescence, they may last till early adulthood. Unfortunately, there are limited number of studies that investigate coping strategies in emerging adulthood. Emerging adulthood, which covers ages between 18 and 30, has been proposed as a new developmental period in modern industrial societies (Arnett, 2004). The emerging adulthood period has been characterized by not having stable adult roles and feeling in-between adolescence and adulthood (Arnett, 2004). According to Arnett, there are five developmental characteristics that make emerging adulthood distinct from adolescence and adulthood. These are identity explorations, instability, being self-focused, feeling in-between and being in an age of possibilities (Arnett, 2004). Arnett (2007) mentioned some studies which demonstrate improvement of well-being and decline in depressive symptoms in emerging adulthood. He interpreted this change by referring to the fact that because emerging adults may enjoy their self-focused age, they have fewer adult responsibilities and obligations. Also, they benefit from their social and cognitive maturity through which they understand themselves and the social world better than they did in adolescence. Arnett (2007) also stated that some emerging adults may struggle more in this period. Seiffge-Krenke and Haid (2012) also underlined that identity explorations continue during emerging adulthood and emerging adults may deal with the stress of economic and social changes and worry about unemployment or expectations of new qualifications that the job market demands. All these factors postpone finding professional identity in emerging adulthood. It may even be interpreted as an identity crisis

Erikson proposed for adolescence and now it may prolong to emerging adulthood (Arnett, 2007). Also, Arnett (2004) underscored that emerging adults have high expectations in their lives, but they are aware that it may take years to reach expectations, which may be a frustration that emerging adults need to cope with.

Studies in emerging adulthood in Turkey started in early 2000's. Researchers demonstrated that the emerging adulthood period exists in Turkey. Similarly with the Western countries, industrialization and globalization postpone adulthood to three or four years than before. Similarly, emerging adulthood shows characteristics such as identity explorations, instability with adult roles and feeling in between. As distinct from the Western societies, studies have demonstrated that emerging adulthood exists ages between 19-26 and exists for urban educated population of Turkey, but not for the rural population in Turkey. Urban young people feel in between and not as an adult more than rural young individuals (Atak, 2011; Atak et al., 2016; Atak & Çok 2010; Çok & Atak, 2015; Doğan & Cebioğlu, 2011).

Research with adolescents have underscored the importance of cognitive, social and behavioral development in coping behavior. As cross-sectional and longitudinal studies have showed active and internal coping increases with age. For instance, while active coping (approaching and solving the problem) is highest during early adolescence, internal coping (considering about the problem and thinking about possible solutions) is highest in late adolescence and coping through withdrawal (withdrawing and searching for distractions) peaks in mid-adolescence (Gelhaar et al., 2007; Seiffge-Krenke, 1995; Seiffge-Krenke et al., 2009). In addition to the age-related changes, coping strategies of adolescents can change with respect to the stressful situation and gender. For example, while adolescents use active coping strategies for stressful situations with peer relations, they can use internal or withdrawal coping strategies in stressful situations with their family and in school. Additionally, the studies have found that girls use active coping such as support-seeking strategies more than

boys, while boys use more recreational or physical strategies to deal with stress (Gelhaar et al., 2007; Seiffge-Krenke et al., 2009).

As mentioned above, coping behaviors are expected to get more mature from adolescence to early adulthood. The general expectation is an increase in problem-focused coping and support-seeking. Leipold et al. (2019) studied age differences in coping in a sample of adolescents and young adults (ages between 14 and 30). The results showed that problem-focused coping and support-seeking strategies increased by age. Also, a 4-year longitudinal study with university students showed that while the coping style of avoidance decreases, coping with approach and social-support seeking remains stable (Jenzer et al., 2018). Brougham et al. (2009) demonstrated that university students from different levels use more emotion-focused coping over problem-focused coping strategies. Similar to the findings from adolescent samples, male and female university students significantly differ in social support seeking strategies: Women use more self-help and approach coping strategies. However, they do not differ significantly in their approach and avoidance coping styles (Jenzer et al., 2018). Regarding gender differences, the study pointed out that gender differences may change with situation-specific stressors. For instance, while women use self-punishment as a general response, men use self-punishment with family-related stressful situations. Also, men use accommodation strategies for financial stressors and self-help for social stressors. Yet, women and men use avoidance strategies for daily hassles (Brougham et al., 2009).

Coping strategies are not independent from culture. Culture may shape how we cope with the stressors (Gelhaar et al., 2007). However, coping strategies may reveal similarities across cultures. For instance, one cross-cultural study examined the coping strategies of adolescents from German, Italian and Turkish population. The findings showed that coping strategies for identity-related and future-related stressors were similar among three samples.

Specifically, the adolescents from three culture used more active coping for future related-stressors and withdrawal coping for identity-related stressors (Haid et al., 2010). Coping studies with Turkish sample lacks how coping changes in transition to adulthood. However, most of the studies demonstrate how coping strategies affect well-being outcomes such as posttraumatic-growth, stress-related growth (Arıkan & Karancı, 2012; Kesimci et al.,2005; Malkoç, 2011). The findings from Turkish sample revealed problem-solving (e.g.generating solutions), optimistic coping (e.g.finding positive aspect of the situation), fatalistic coping (e.g.beliving fate and God's control over the situation) and helplessness coping strategies (e.g.blaming yourself). Studies with Turkish university students demonstrated that problem-solving, optimistic and fatalistic coping positively and helplessness negatively predicted subjective well-being, posttraumatic and stress-related growth. As distinct with Western cultures, fatalistic coping appeared in Turkish sample. Researchers argue that the reason of this coping may be the Islamic culture of resigning to God (Arıkan &Karancı, 2012; Kesimci et al.,2005).

To summarize, emerging adulthood is a distinct developmental period with its specific developmental tasks. Researchers emphasize that there may be heightened challenges to cope with during this period due to the developmental tasks to be accomplished. The literature on coping lacks data from emerging adulthood period. However, this period needs to be studied to detect the links between coping resources and coping strategies to pinpoint potential facilitators and frustrators of coping and to gather the information that may be used to foster emerging adults' coping strategies.

2.2 Coping

Lazarus and Folkman (1984, p.141) describe coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." This definition is considered as a process-

oriented definition rather than a trait-oriented one. Also, this definition makes a distinction between automatized adaptive behaviors and coping by limiting coping to demands that exceed one's resources and behaviors that need effort. Additionally, this definition focuses on “managing” that refers to what a person thinks or does instead of how well or bad it works (Lazarus & Folkman, 1984).

As Lazarus (1991) stated coping strategies may vary within individuals and between individuals. One can use different strategies at different stages of the same stressful situation or strategies may vary from one stressor to another. Besides, despite having the same stressor, one coping strategy may be effective for one situation and may not be effective for the other. Although Lazarus (1993) pointed that some coping strategies may be more stable than others, he did not mean the trait approach which basically views how people have coping styles across situations and how they are mostly related to personality styles. When it comes to successful coping, Lazarus asserted that there are no universal effective or ineffective coping strategies although some of them are better or worse than other strategies.

2.3 Ways of Coping

Ways of coping, also called families of coping, have been categorized differently by different researchers. According to Folkman (1984), there are two coping strategies called as problem-focused coping that involves solving the stressful situation (e.g., planning, showing effort, and management of priorities) and emotion-focused coping that involves regulating the unpleasant emotions emerging from the stressful situation (distancing, isolation, and wishful thinking). Both strategies can be used at the same time with different extents in the same stressful situation. While emotion-focused strategies are used when it is not possible to change the stressful situation, problem-focused strategies are used when it is possible to make changes in the situation (Lazarus & Folkman, 1984). Recently, meaning-focused coping as the third kind of coping was addressed by Folkman (2010). Meaning-focused coping was

generated by the idea that positive emotions exist with negative emotions during intensely stressful times. This kind of coping focuses on beliefs and values to form strategies which are revision of goals, gaining strength from experiences and reconsidering priorities in life. It was claimed that three coping strategies interact with each other. For instance, when emotions are regulated (emotion-focused coping), individuals will be more likely to focus on generating solutions (problem-focused coping) and in turn they evaluate their values and goals (Folkman, 2010).

Some researchers, on the other hand, classified coping strategies under different categories. For instance, some categorized strategies as approach versus avoidance coping strategies while some categorized them engagement versus disengagement (Skinner et al., 2003). Some researchers categorized coping styles as direct and indirect coping while some others named them as internal, active, and withdrawal coping (Seiffge-Krenke et al., 2009).

There are also twelve higher-order families of coping. These are: problem-solving, information-seeking, helplessness, escape, self-reliance, support-seeking, delegation, social isolation, accommodation, negotiation, submission, and opposition. Each category includes different strategies that serve the same function. Firstly, problem-solving includes strategizing, instrumental action and planning while information seeking encompasses reading, observation and asking others. While helplessness involves confusion, cognitive interference, and cognitive exhaustion, escape includes behavioral avoidance, mental withdrawal, denial, and wishful thinking. Self-reliance includes emotion regulation, behavior regulation, and emotional expression, support seeking includes contact seeking, comfort-seeking, instrumental aid, and spiritual support. The delegation strategy includes maladaptive help-seeking, complaining, whining and self-pity. Isolation involves social withdrawal, concealment and avoiding others. Accommodation strategy involves distraction, cognitive restructuring, minimization, and acceptance. Negotiation involves bargaining, persuasion, and

priority-setting while submission includes rumination, rigid perseveration, and intrusive thoughts. Lastly, opposition encompasses other-blame, projection and aggression strategies (Skinner et al., 2003). Lazarus and Folkman (1984) underlie the point that none of these coping strategies are better than others and better coping needs a congruity between situational appraisals and choice of coping responses.

Researchers studied coping strategies with the common scale called Ways of Coping Questionnaire (WCQ). First of all Siva (1991 as cited in Uçman, 1999) adopted to Turkish by adding fatalism regarding cultural context. Siva revealed planned behavior, fatalism, mood regulation, being reserved, acceptance, maturation, and helplessness-seeking strategies in Turkish sample. Later, other researchers revised the scale and revealed problem-solving, optimistic, fatalistic and helplessness coping strategies (Arıkan, 2007 ; Dirik, 2006 ; Karancı et al.,1999). Recently, Şenol-Durak et al.(2010) examined the coping scale and revealed 31 item with planful problem-solving, seeking refuge in supernatural forces, keep to self, seeking social support, seeking refuge in fate, escape/avoidance and accepting responsibility subscales. However, there is no consensus on number of items and factors/strategies of WCQ.

2.4 Stress Appraisals

The present study stems from “Transactional Theory of Stress and Coping” (TTSC) that was named by Lazarus and Folkman (1984). According to the theory, stress is not only a stimulus or response, but it is the process of a relationship between stress, person, and environment. The stress level of an individual depends on the demands of the stressful situation and appraisal of the extent demands exceeds resources and creates a threat to well-being.

TTSC proposes that when a person experiences a stressful situation, he/she evaluates this situation with its relevance and importance for the person and this stressful situation's

impact on valued goals. This is called *primary appraisals* which are classified as harm/loss, threat/ challenge and benign by Lazarus and Folkman (1984). Harm/loss appraisals imply for any damage that has already occurred. While *threat* appraisals refer to the possibility for harm and loss, *challenge* appraisals consist of personal growth and feel mastery. Lastly, when the source of stress is perceived as benign, the person does not need any appraisal. While the source of stressor perceived as harm and threat, it is linked with negative emotional reactions, when it is perceived as a challenge, it is associated with positive emotions. These appraisals have some determinants such as control, goal commitment and unfamiliarity of the stressor (Folkman, 1984). Folkman noted that the three appraisals are not independent, and they can exist together during any stressful event.

Lazarus and Folkman (1984) state that there is also a *secondary appraisal* process which is about the situational appraisal of control. When the stressor is acquired as relevant, and significant, the individual considers whether it is possible to control the stressor and whether one has resources and coping options. The primary and secondary appraisals contribute to the coping strategies of individuals. The interaction between primary and secondary appraisal processes is dynamic, neither of them precedes the other one or neither of them is more important than the other one. There is a study which indicated that higher threat perception was associated with higher uncontrollability and higher challenge had strong relationship with perception of self-control. However, researchers claim that there is a linear relationship between them. Appraising stress as a threat or harm and uncontrollable plays a crucial role in the process (Morin et al.,2003).

2.4.1 The Relationship between Appraisals and Coping

Coping efforts are related to stress appraisals (Folkman & Lazarus, 1980). It is stated that coping efforts and appraisals affect each other. When individuals appraise the situation as harm/loss, threat or challenge, they use coping efforts that change the person-environment

relationship which is called problem-focused coping or regulate the distress of the encounter which is called emotion-focused coping (Folkman & Lazarus, 1980).

Previous studies have examined the role of primary stress appraisals on coping strategies. Some researchers have argued that threat appraisals are related to avoidance and emotion-focused strategies, while challenge appraisals are related to problem-focused strategies (Peacock et al., 1993; Ferguson et al., 1999). Indeed, McCrae (1984) found that problem-solving and positive reappraisal are used more for challenge appraisals, while faith, fatalism, and wishful thinking are used more for threat and loss appraisals. Moreover, Folkman et al. (1986) found that when individuals appraise high threat, they use more self-control, escape-avoidance and seeking social support. On the other hand, another study found that while challenge appraisal was positively correlated with problem-solving and seeking social support, there was no correlation between threat appraisal and coping strategies (Bigatti et al., 2012). Despite this, very few studies have investigated the impact of primary appraisals on coping strategies. The literature needs recent studies about the relationship between primary appraisals and coping.

Several researchers focused on how secondary appraisals influence coping strategies. Folkman and Lazarus (1980) stated that perceiving a situation as controllable was associated with problem-focused coping strategies while appraising a situation as uncontrollable was related to emotion-focused coping strategies (Folkman & Lazarus, 1980; 1985). Forsythe and Compas (1987) found this interaction only for major life events but not for daily hassles. In other words, appraising the situation as controllable/ uncontrollable was not found to be related to problem-focused coping for daily hassles; and either daily hassles or major life events for emotion-focused coping. However, recent evidence has supported the idea that while control is related to problem-focused coping, uncontrollability is related to emotion-focused coping such as wishful thinking and avoidance (Zakowski et al., 2001). Similarly,

Gan et al. (2009) revealed that while control-by-self appraisal was strongly related to approach coping, the control-by-other appraisal was related to avoidance coping. In contrast to this, another study demonstrated that while control-by-other was positively related to engagement coping such as planning and seeking support, uncontrollability was positively related to disengagement coping such as avoidance (Newton & McIntosh, 2010). Additionally, a recent study found that control-by-self appraisal was positively associated with problem-focused coping and negatively with wishful thinking. Also, the control-by-other appraisal was positively related to seeking social support. However, unlike previous studies, they found no relationship between uncontrollability and coping strategies (Jordan & Vogt, 2017).

In Turkey, Durak (2007) examined the model about work stress, appraisal of stress, affect-related variables, coping strategies, and psychological distress and adjustment. Results showed that while challenge and control-by-self appraisal was associated to problem-focused coping; higher challenge appraisal was associated to seeking social support. Also, challenge and uncontrollability were significantly linked with emotion-focused coping strategy. Additionally, the results bivariate correlations showed that the perception of centrality (the importance of the situation for one-self) and threat (perceiving the situation as a potential harm or loss) and negative affect and emotion-focused coping was positively correlated with depression and negatively with the appraisal of other-control, positive affect, problem-focused coping and seeking social support. Also, the appraisal of centrality, threat and uncontrollability (sense of the lack of control over the situation) and negative affect were positively correlated with trait anxiety but negatively correlated with the appraisal of challenge, self-control (perceiving the situation as controllable by oneself), other-control (evaluating situations as having available recourses to overcome), positive affect, emotional expression, emotional processing, problem-focused coping, and seeking social support. Lastly, while the perceived other-control, positive affect and seeking social support were

positively correlated with life-satisfaction, life satisfaction was negatively correlated with the threat and negative affect. Even though Durak's study is similar to the present study in examining the cognitive-motivational-relational theory of coping, it did not examine the relationship between appraisals and coping strategies. Also, the role of coping resources have not been examined with appraisals in most of the studies in the literature. In the present study, we aim to the extent the literature by examining the coping resources that may be linked to coping strategies.

2.5 Coping Resources: Self-determination Theory (SDT), Positive Youth Development (PYD), and Coping

Coping resources of individuals are essential in the coping process. In the secondary appraisal where individuals appraise the controllability of the stressful situation, they turn to their resources and check what resources are available to cope with the stressors. When individuals feel that they lack the necessary resources, they may appraise the situation as stressful (Blomgren et al., 2016; Seiffge-Krenke et al., 2009). In other words, personal resources are crucial elements for coping strategies (Skinner et al., 2003).

The coping model underlies the importance of personal and social resources influencing evaluation of stressful situations and coping strategies (Lazarus & Folkman, 1984). A sense of control, self-esteem, neuroticism (low), denial (low) and social support had been mentioned as coping resources (Folkman, 1984). Additionally, self-efficacy, optimism/pessimism, task complexity, decision making, autonomy, and commitment were found as coping resources (Ito & Brothheridge, 2003). Some researchers reviewed coping resources and they also revealed social support, optimism, sense of control and self-esteem as major coping resources in the coping process (Taylor & Stanton, 2007). A recent study supported that self-efficacy

was associated with problem-solving and social support with seeking social support and problem-solving (Cicognani, 2011).

In the coping literature, the relationship between coping resources, appraisals and coping strategies have been investigated. For instance, Terry (1991) examined this relationship regarding Lazarus's transactional theory of coping. He examined how specific coping resources and appraisals were related to coping strategies; whether the effect of coping resources on coping strategies was mediated by appraisals and whether coping resources and appraisals had an interactive effect on coping. According to the results, individuals with internal control beliefs and high self-esteem use problem-focused coping strategy. Additionally, participants who are higher in seeking social support (which is an emotion-focused strategy), have higher neuroticism, social support, and self-esteem (low in situational control). Also, participants who use escape/self-blame (as emotion-focused strategy), have a higher external locus of control, and participants who have high self-denial and little social support, use more minimization coping strategy. However, the mediating hypothesis was not supported in the study. Lastly, Terry (1991) found a buffering effect of resources on coping. For instance, the effect of threat on coping was significant when subjects had low scores on resources.

In the coping literature, there is lack of recent studies that examine the relationship between resources, appraisals and coping strategies. Also, coping resources in the studies are limited to control beliefs, self-esteem, social support and some personality characteristics such as neuroticism and denial. In the present study, gratification and frustration of basic psychological needs and indices of positive youth development were conceptualized as resources and will be examined in their relationship with coping strategies.

2.5.1 Self-determination Theory (SDT)

SDT argues that individuals are active agents and they look for challenges in their environment to fulfill personal growth and development. SDT focuses on three fundamental and universal human needs highlighting the importance of satisfying these needs for personal growth and development. These psychological needs are the needs for autonomy, competence, and relatedness. Autonomy refers to be the origin of one's own behavior and choices. Competence reflects a need to interact effectively with the environment and experience a sense of mastery for desired outcomes and preventing undesired ones. Lastly, relatedness is the need for feeling connected to others and being accepted by them (Deci & Ryan, 2002). Satisfaction of these needs is crucial for individuals' psychological well-being. However, lower levels of fulfillment of the needs do not inform us as to how the frustration of these needs are linked to psychological outcomes (Chen et al., 2015; Vansteenkiste & Ryan, 2013). Thus need-satisfaction is related to well-being and need-frustration is related to ill-being. For example, while relatedness satisfaction shows an intimate connection with others, relatedness frustration shows how a person feels excluded and lonely. Also, when a person experiences competence satisfaction, she feels effective to get desired outcomes but in competence frustration she experiences a feeling of failure and doubts about her efficacy. Lastly, while autonomy satisfaction is linked with autonomously regulated (self-determined) self, volition, and willingness, autonomy frustration is associated with feeling controlled and pressured externally or internally (Chen et al., 2015)

The social environment of an individual is proposed to affect the degree to which psychological needs are satisfied or frustrated. In other words, psychological needs can be supported or thwarted by the different parts of the social environment. According to SDT, when the needs are frustrated, it may lead to ill-being (Deci & Ryan, 2000; Ryan et al., 2006).

2.5.2 Basic Psychological Needs, Appraisals, and Coping

Researchers have investigated how basic psychological needs are related to stress appraisals and well-being (Ntoumanis et al., 2009; Skinner & Edge, 2002). Skinner and Edge (2002) claim that three psychological needs are the core point in shaping appraisals and coping with stress: When individuals feel autonomous and competent and are in supportive relationships with significant others in stressful situations, they will probably appraise demands or constraints of goals as challenges and will try to overcome them as opposed to appraising threats or losses. Also, psychological needs satisfaction affects secondary appraisals which refer to processes where one's goals, intentions, and plans are reconstructed and revised. When autonomy and competence are satisfied, secondary appraisals are influenced in a positive way, therefore individuals have a sense of ownership and feel effective in their goal striving. Also, feeling related to others make people realize that there are others to get emotional support and pieces of advice from them. Yet, when psychological needs are frustrated, individuals may feel lack of control, helpless and alienation. Additionally, they may feel pressure and appraise the stressor as a threat or damage.

Grounded on the idea of integrating SDT in coping process (Skinner and Edge, 2002), a new model was comprised based on SDT and Lazarus's (1991) cognitive-motivational-relational theory (CMRT) of coping (Ntoumanis et al., 2009). According to the model, demands, constraints, and available resources lead to perceiving goals as challenged, harmed, threatened or benign and different coping strategies. It is stated that these primary appraisals are linked to secondary appraisals of situational control and it is affected by to what extent a social environment is supportive or thwarting three psychological needs.

To date, there have been few recent research studies on the relationship between basic psychological needs, appraisal and coping strategies. One of the studies investigated the relationship between dancers' basic psychological needs, cognitive appraisals and hormonal

and emotional responses to performing (Quested et al., 2011). They found that basic psychological need satisfaction predicted dancers' threat and challenge appraisals for performing. The results demonstrated that when dancers feel autonomous, related and competent, they perceive performing as a challenge. On the contrary, when they feel a lack of the three needs, they appraise performing as a threat. Another study examined how basic psychological needs (as coping resources), stress appraisals and coping strategies were related to post-traumatic growth (Yeung et al., 2015). Researchers found that relatedness satisfaction makes people think there are others for emotional support and advice to overcome stressors, which may foster adaptive coping strategies such as seeking support. Lastly, Altena et al. (2018) examined the extent basic psychological need satisfaction and coping strategies were related to life quality of homeless young adults. According to the results, positive reappraisal as an adaptive coping strategy which refers to focusing on the positive side was found to be related to competence and autonomy satisfaction.

What is not yet clear is the extent basic psychological needs are related to primary and secondary appraisals together, and which specific coping strategies. Also, no previous study has investigated the relationship between basic psychological need frustration and coping process. The present study aims to fill this gap in the literature.

2.5.3 Positive Youth Development (PYD) and The Five Cs

PYD is a strength-based approach that fosters young people's person-environment interaction for optimal positive functioning (Lerner et al., 2003). PYD project used the Five C's in the a longitudinal study to assess youth thriving and healthy development (Lerner et al., 2005). Five C's include confidence, competence, caring, connection and character (Lerner, 2004). Confidence refers to sense of self-worth and self-efficacy; competence refers to one's positive view in specific areas such as social and academic context; caring means feeling sympathy and empathy for others; connection means having positive bonds with people and

institutions such as family, school, neighborhood, etc., and character refers to the sense of morality and integrity. Thus, these competencies are crucial skills for the positive functioning of youth.

2.5.4 Positive Youth Development, Appraisals and Coping

PYD approach stems from strengthening the person-environment interaction of young people for positive functioning. PYD presents what young people and their context should possess to adjust in the face of changing threats, challenges and maintaining thriving (Lerner et al., 2013). As mentioned above, coping is the process between person-environment interaction, and it is an important component in positive functioning. However, no previous study has examined the relationship among the Five C's of PYD, stress appraisal, and coping strategies. In the present study, the total score of Five C's of PYD will be measured as a coping resource for the optimal functioning of emerging adults..

2.6 The Present Study

Existing literature on coping has revealed information about the relationship between coping resources, stress appraisal, and coping strategies. Nevertheless, little is known about the the relationships between coping, appraisal and the kind of resources can support or thwart coping processes. The present study aimed to test a mediational model that links resources and coping strategies through stress appraisals (see Figure 1). This study aimed to contribute to this growing area of research by exploring supporters and frustraters of emerging adults' coping and give insight to intervention programs to strengthen youth. In this light, this study aimed to address the following research questions and hypotheses:

Research question 1) How do gratification and frustration of basic psychological needs and positive development relate to coping strategies of emerging adults?

Hypothesis 1.1: Emerging adults with higher need satisfaction use more optimistic and problem-solving coping strategies and lower levels of fatalistic and helplessness coping.

Hypothesis 1.2: Emerging adults with higher positive development (total score of competence, confidence, character, connection, and caring skills) use more optimistic and problem-solving coping strategies and low levels of fatalistic and helplessness coping.

Hypothesis 1.3: Emerging adults with higher need frustration use more fatalistic and helplessness coping strategies and low levels of optimistic and problem-solving coping.

Research question 2) How do gratification and frustration of basic psychological needs and positive development and relate to stress appraisals?

Hypothesis 2.1: Emerging adults with higher need satisfaction will have higher levels of appraisals of the stressors as challenges, controllable by self and controllable by others and lower levels of threat, and uncontrollability.

Hypothesis 2.2: Emerging adults with higher levels of positive development will have higher levels of appraising the situations as challenges, controllable by self, and controllable by others, and lower levels of perceiving stressors as a threat, and uncontrollability.

Hypothesis 2.3: Emerging adults with higher need frustration will have higher levels of appraising the stressors as a threat, and uncontrollable, and lower levels of challenge and controllable by others and controllable by self.

Research question 3) How are stress appraisals linked to coping strategies?

Hypothesis 3.1: Higher levels of threat appraisals are linked to higher levels of fatalistic and helplessness coping and lower levels of optimistic and problem-solving coping.

Hypothesis 3.2: Higher levels of challenge appraisals are linked to higher levels of optimistic and problem-solving coping and lower levels of helplessness and fatalistic coping.

Hypothesis 3.3: Higher levels of uncontrollability are linked to high levels of fatalistic and helplessness coping, and lower levels of optimistic and problem-solving coping.

Hypothesis 3.4: Higher levels of control-by-self are linked to optimistic and problem-solving coping and lower levels of fatalistic and helplessness coping.

Hypothesis 3.5: Higher levels of control-by-others are linked to optimistic and problem-solving coping and lower levels of fatalistic and helplessness coping.

Research question 4) Do emerging adults' stress appraisals mediate the relationship between coping resources and coping strategies?

Hypothesis 4: Emerging adults' threat, challenge, uncontrollability, control-by-self, control-by-others appraisals mediate the relationship between their resources and coping strategies.

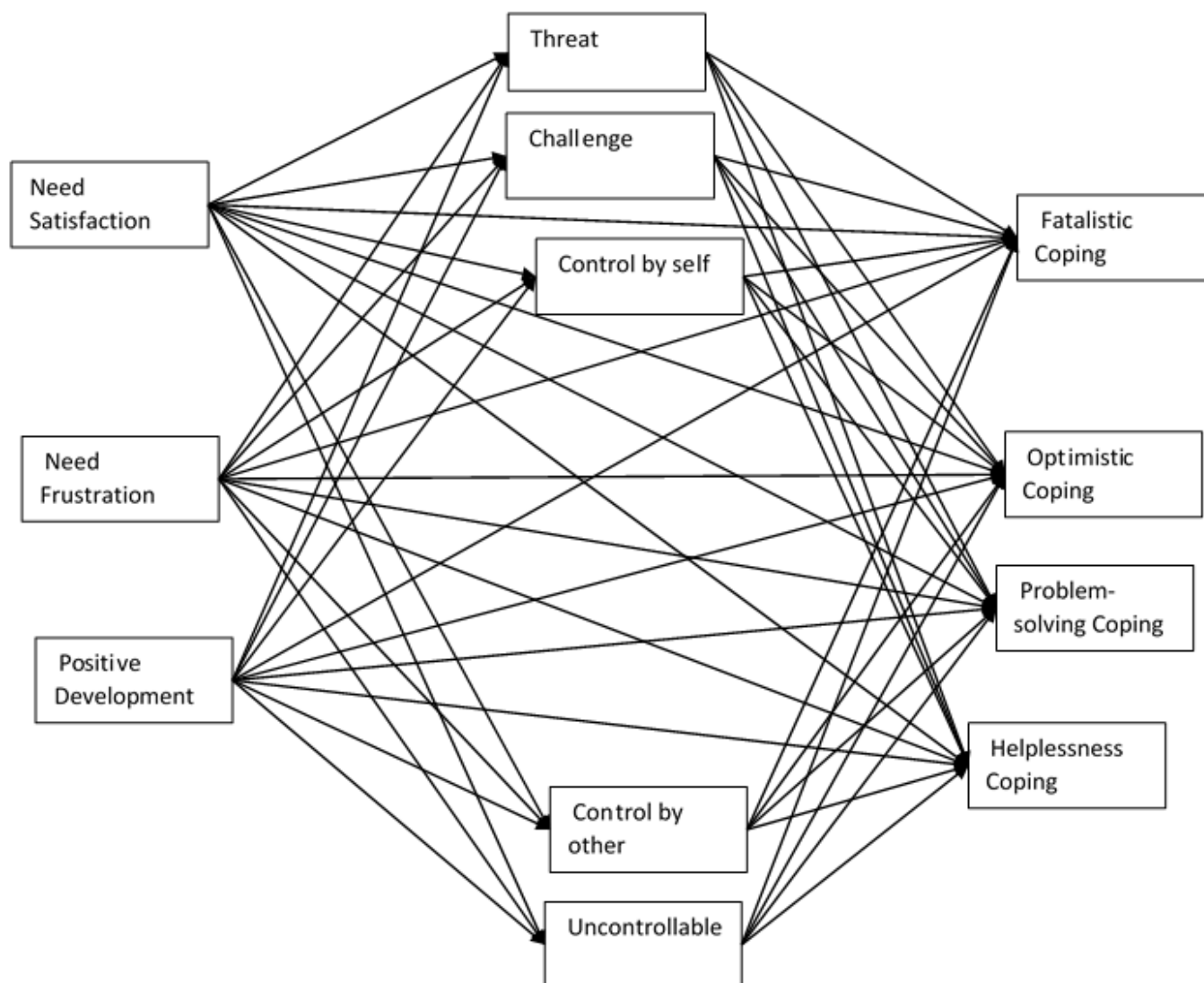


Figure 1. The Hypothesized Model

CHAPTER 3

METHOD

3.1 Participants

A total of 568 emerging adults aged between 18 and 30 ($M = 22.7$, $SD = 2.89$) participated in the present study. After data screening, participants ($N = 59$) who did not complete more than half of the battery of questionnaires and who have multivariate outliers ($N=43$) were deleted. Analyses were conducted with the remaining 466 participants. The characteristic of the sample were given in Table 1.

Table 4. Characteristics of the Sample (N= 466)

Variables	N	%
Sex		
Female	359	77.0
Male	105	22.5
Other	2	0.4
Age		
18	28	6.0
19	40	8.6
20	52	11.2
21	60	12.9
22	45	9.7
23	52	11.2
24	49	10.5
25	52	11.2
26	29	6.2
27	17	3.6
28	16	3.4

29	14	3.0
30	2	0.4
Missing	10	2.1
Are you a student?		
Yes	346	74.2
No	120	25.8
Education level		
Secondary school	6	1.3
High school	264	56.7
Vocational high school	18	3.9
University	158	33.9
Master/PhD	19	4.1
Missing	1	0.2
Employment Status		
Yes	168	36.1
No	298	63.9
Marital Status		
Single	421	90.3
Engaged	18	3.9
Married	27	5.8
Living with		
Alone	78	16.7
Family	277	59.4
Partner	27	5.8
Friends	84	18.0
Education Level of Mother		
Primary school	76	16.3
Secondary school	44	9.4
High school	144	30.9

Vocational high school	8	1.7
University	173	37.1
Master/PhD	20	4.3
Missing	1	0.2
Education Level of Father		
Primary school	51	10.9
Secondary school	50	10.7
High school	120	25.8
Vocational high school	12	2.6
University	190	40.8
Master/PhD	43	9.2
Financially support anyone		
Yes	40	8.6
No	425	91.2
Missing	1	0.2

3.2 Procedure

After receiving the approval of the Ministry of Education and Ethics Committee of Ozyegin University, participants were recruited via email, social media accounts, and Research Participation system (SONA) at Ozyegin University. Students received extra credit for their participation. Participants filled out a battery of computer-assisted questionnaire via Qualtrics. Participants received an online informed consent form which included the aim of the research, procedure and participants' rights such as withdrawing from the study at the beginning or any time they want. Filling out the questionnaire took around 15-20 minutes. The present study started in December 2019 and the data collection was completed in February 2020.

3.3 Materials

3.3.1 Demographic Questionnaire. Participants completed the demographic questionnaire which included items like age, sex, education level, occupation, marital status, parents' marital status, and parents' education level and whether they financially support anyone.

3.3.2 Basic Needs Satisfaction and Frustration Scale (BPNSFS; Chen et al., 2015) was used to measure the level of psychological needs gratification and frustration that emerging adults perceive in their lives. The scale was adopted to Turkish by Mouratidis et al. (2018). There were 24 items in the scale with 6 dimensions (autonomy, relatedness and competence satisfaction/frustration). Participants were expected to evaluate their satisfaction and frustration with respect to a 5-point Likert type scale (1= Not true at all, 5= Completely true). Sample items are "I feel a sense of choice and freedom in the things I undertake" (autonomy satisfaction), "Most of the things I do feel like "I have to" (autonomy frustration), "I feel that the people I care about also care about me" (relatedness satisfaction), "I feel excluded from the group I want to belong to" (relatedness frustration), "I feel confident that I can do things well" (competence satisfaction), "I have serious doubts about whether I can do things well" (competence frustration).

In the present study, the Cronbach alphas of autonomy, relatedness and competence satisfaction were .81, .72 and .92, respectively. The Cronbach's alpha coefficients of autonomy, relatedness and competence frustration were .80, .79 and .87, respectively. The Cronbach's alpha coefficients of need satisfaction and need frustration were .86 and .87, respectively.

3.3.3 Positive Youth Development Short Form-Older Adolescence (PYD-SF; Geldhof et al., 2012 & Dost-Gözkan, 2016) was used to assess emerging adult's positive development regarding their competence, confidence, character, caring and connection. The

Turkish version was adopted and tested with emerging adults by Dost-Gözkan (2016).

Participants rated items on the 5-point Likert scale (1= never, 5= always). PYD-SF consisted of 34 items with 5 subscales. The sample items are "I do very well in my classwork at school" (competence), "I usually act the way I am supposed to" (confidence), "I hardly ever do things I know I shouldn't do" (character), "When I see someone being taken advantage of, I want to help them" (caring), "Adults in my town or city listen to what I have to say" (connection). In the present study, the Cronbach's alpha coefficient of competence, confidence, character, caring and connection were .65, .81, .65, .86., .84, respectively. The Cronbach's alpha of total scale was .90.

3.3.4 Stress Appraisal Measure (SAM; Peacock & Wong, 1990) was used in order to measure participants' primary and secondary appraisals. The SAM was developed by Peacock and Wong (1990). There are 24 items with a 5-point Likert type scale (1=Not at all, 5=Extremely). Threat, Challenge, and Centrality were evaluated under primary appraisals; Self-control, Uncontrollability, and Others-control constituted secondary appraisals. Among primary appraisals, centrality refers to the importance of the situation for one-self, threat refers to perceiving the situation as potential harm or loss, and challenge refers to the evaluation of potential gain from the situation. Sample items for primary appraisals are "To what extent can I become a stronger person because of this problem?" (challenge), "Does this situation have important consequences for me?" (centrality), "Is this going to have a negative impact on me?" (threat). Among secondary appraisals self-control refers to perceiving the situation as controllable by oneself, controllable-by-other refers to evaluating situations as having available recourses to overcome and uncontrollability refers to a sense of the lack of control over the situation. Sample items for secondary appraisals are "Will I be able to overcome the problem?" (control-by-self), "Is there anyone who can help me to manage this problem?" (control-by-others), "Is this a totally hopeless situation?" (uncontrollability). In the

present study, we examined threat, challenge, and uncontrollability appraisals as mediators between coping resources and coping strategies.

In the present study, we used the Turkish version of SAM standardized in Turkish by Durak and Senol-Durak (2012). In the Turkish standardization, the internal consistencies were reported as .70 to .90 for university students and from .68 to .87 for adults. In the present study, the Cronbach alphas of uncontrollability, threat, challenge, control-by-self and control-by-others were .75, .91, .74, .88, .88, respectively.

3.3.5 Ways of Coping Questionnaire. (WCQ; Folkman & Lazarus, 1985) Lazarus and Folkman developed a 68-item checklist including problem-focused and emotion-focused coping strategies. Later, they revised the scale with 66 items with a 4-point Likert scale (Folkman & Lazarus, 1985). In that version, the scale has 8 subscales grouped under emotion-focused, problem-focused and social support coping styles.

Ways of Coping Questionnaire was adopted to Turkish by Siva (1991, as cited in Uçman, 1999). In Siva's study, 7 subscales were produced. These were planned behavior, fatalism, mood regulation, being reserved, acceptance, maturation, and helplessness-seeking help. Karanci et al. (1999) revised the scale with 61 items and they used a 3-point Likert scale. Later, Dirik (2006) used a 42-item format that was adopted by Karanci et al. (1999). Dirik (2006) found four factors which consisted of fatalistic coping, optimistic/seeking social support, problem-solving coping and helplessness coping. The Cronbach alphas were .80, .73, .73, .77, respectively. Additionally, Arıkan (2007) used this four-factor solution with 38 items that was found by Dirik (2006) and the Cronbach alphas were .76, .70, .79 and .79, respectively. In the present study, 38-item format with a 3-point Likert scale (1 = never, 2 = sometimes, 3 = always) and four factors was used. In the present study, the Cronbach's alpha coefficients of fatalistic, optimistic, problem-solving and helplessness were .82, .78, .81, .76, respectively.

3.4 Analysis Plan

The descriptive analyses for all the variables and bivariate correlations among demographics and study variables were conducted using SPSS version 25. In order to examine the direct and indirect links between the perceived coping resources and coping strategies, a path analysis with a bootstrapping approach (with 5000 bootstrapped samples) was conducted using Mplus version 7.4 (Muthén & Muthén, 2012-2017).



CHAPTER 4

RESULTS

4.1 Preliminary Analysis

Before conducting the main analyses, continuous variables were examined through various SPSS 25 program for missing values, normality and outliers. The variables were examined for the 509 participants in the study. Accordingly, there were eight variables each with one or two missing value ranged between 0.2 % and 0.6% and one participant with 14 missing values. Little MCAR was conducted to understand missing pattern. According to the results, missing values were completely random (MCAR), $\chi^2 = 431,562$, $p = .255$. Missing values were discardable, yet they were addressed using the full information maximum likelihood approach (FIML) in MPlus 7.4.

In order to detect the multivariate outliers, chi square test was used with the criterion of $\chi^2(124) = 178,408$ for $p < 0.001$ (Tabachnick and Fidell, 2007). Forty-three outliers above the criterion were deleted, leaving 466 cases. To assess normality assumption, skewness and kurtosis were tested. As can be seen in Table 3, the skewness and kurtosis scores of the variables are in the range of -2/+2 range meeting the criteria for the normal distribution (George & Mallery, 2019).

Lastly, in order to examine multicollinearity and singularity assumption, bivariate correlation was computed between all study variables. The coefficients of significant correlations range between .12 and .73 and none of the subscales were equal or above .90 (Tabachnick & Fidell, 1996). Additionally, Tolerance found to be above .10 and VIF (Variance Inflation Factor) was less than 10, indicating no multicollinearity (Pallant, 2016).

4.2 Confirmatory Factor Analysis

Confirmatory factor analyses (CFA) were conducted by using Mplus 7.4 to examine the extent factor structure fit to the data. To detect poor factor loadings which are less than .30 (Tabachnick & Fidell, 2007) and model fit, the Chi-Square Test of Model Fit, the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) were used. For RMSEA, less than .06 indicates good fit and while between .06-.08 acceptable, values greater than .10 indicate poor fit. Lastly, CFI and TLI values should be greater than .90 and .95 for good fit (Hu & Bentler, 1999).

Basic Needs Satisfaction and Frustration Scale. Autonomy, relatedness and competence items were analyzed under two subscales: need satisfaction and frustration. For need satisfaction, autonomy, relatedness and competence factor loadings were between .495 and .866. For need frustration, autonomy, relatedness and competence factor loading were between .617 and .848. Therefore, there was no need to remove any item. For both scales, the model fit indicated good fit. (see Table 2).

Positive Youth Development. Regarding competence, the loading of item 3 was less than .30 and the loadings of item 5, 16, 19 and 20 (character) were less than .30. Therefore, these items were removed from the scale. The loading of items for confidence were between .429 and .790; care were between .630 and .823; connection were between .503 and .731. The scale had moderate fit to the data (see Table 2).

Stress Appraisal. Factor loadings of items for threat was between .627 and .829; uncontrollability was between .480 and .762; challenge was between .594 and .790; control-by-self was between .456 and .873 and control-by-others was between .643 and .941. Therefore, none of items were removed. Also, the scale had moderate fit (see Table 2).

Ways of Coping. The loadings of item 1,2,9,29,30,33 (fatalistic coping), 4 and 21 (optimistic coping) were less than .30 and they were removed from the scale. The loadings of items for problem-solving were between .415 and .689 and helplessness were between .442 and .629. The model had not perfect fit to the data (see Table 2).



Table 5. Summary of Confirmatory Factor Analyses for all the scales

Scale	Subscale	Item	χ^2	df	p	χ^2/df	CFI	TLI	RMSEA
Need Satisfaction	3	12	112.526	51	.00	2.21	.98	.97	.05[.04; .06]
Need Frustration	3	12	103.778	51	.00	2.03	.98	.97	.05 [.03; .06]
Positive Youth Development	5	34	1227.152	504	.00	2.43	.90	.89	.06 [.05; .06]
Stress Appraisal	5	24	696.907	239	.00	2.91	.93	.92	.06 [.06; .07]
Ways of Coping	4	38	1317.453	632	.00	2.08	.87	.85	.05 [.05; .05]

Table 6. Descriptive Statistics for Demographic and Study Variables ($N=466$)

Variable	<i>M</i>	<i>SD</i>	Min	Max	Skew	Kurt
Age	22.70	2.91	18	30	.31	-.66
SES	3.63	1.43	1.00	6.00	-.37	-1.04
Need Satisfaction	3.85	.54	2.33	5.00	-.06	-.30
Need Frustration	2.35	.66	1.00	4.67	.60	.48
Positive Development Index	3.97	.46	2.41	5.00	-.25	-.15
Threat	3.39	.74	1.00	5.00	-.17	-.04
Challenge	2.77	.80	1.00	5.00	.04	-.22
Uncontrollability	2.76	.73	1.00	5.00	-.11	.06
Control-by-self	3.40	.74	1.00	5.00	-.32	.38
Control-by-others	3.41	.97	1.00	5.00	-.36	-.52
Fatalistic Coping	1.91	.42	1.00	3.00	.13	-.51
Optimistic Coping	2.46	.36	1.29	3.00	-.24	-.81
Problem-solving Coping	2.43	.35	1.33	3.00	-.17	-.78
Helplessness	2.07	.42	1.00	3.00	.06	-.32

4.3 Bivariate Correlations

As can be seen in Table 4, correlational analysis indicated that as age increased uncontrollability appraisal and fatalistic coping increased while helplessness coping style decreased. Sex was positively related with threat appraisal, optimistic coping and helplessness coping, indicating that female participants had higher levels of threat appraisal, optimistic and helplessness coping style than did males. As SES (created as an index of socioeconomic status

based on the mean score of maternal and paternal education levels) increased, levels of threat appraisal and optimistic coping also increased.

There were significant correlations among study variables. As positive development as well as need satisfaction increased appraisals of challenge, control-by-self and control-by-others increased, and threat and uncontrollability appraisals decreased. Contrary to this association pattern, (as expected) as need frustration increased threat and uncontrollability appraisals increased while appraisals of challenge, control-by-self and control-by-others decreased.

Emerging adults' fatalistic coping was positively related with need frustration, and uncontrollability appraisal. Unexpectedly, it was positively correlated with positive development index and challenge appraisal. Emerging adults' problem-solving and optimistic coping style were positively correlated with need satisfaction, positive development, appraisals of challenge, control-by-self and control-by-others appraisals while they were negatively associated with need frustration, uncontrollability and threat appraisals. Finally, helplessness coping style was positively correlated with need frustration, uncontrollability and threat appraisals, while it was negatively related with need satisfaction, positive development, challenge, control-by-self and control-by-others appraisals.

Coping strategies, were significantly correlated with each other: Problem-solving and optimistic coping and (unexpectedly) fatalistic coping were positively correlated with each other, whereas problem-solving and optimistic coping were negatively correlated with helplessness coping.

Tablo 4. The Pearson Correlations of the demographic and study variables (N=466)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.Age	--													
2.Sex	-.08	--												
3.SES	-.21**	.03	--											
4.Need Satisfaction	-.02	-.01	.02	--										
5.Need Frustration	-.07	-.04	.05	-.61**	--									
6.Positive Development	.04	.07	-.02	.73**	-.59**	--								
7.Uncontrollability	.13**	.03	.05	-.31**	.41**	-.25**	--							
8.Threat	.09	.14**	.09*	-.28**	.45**	-.21**	.54**	--						
9.Challenge	-.04	-.03	-.04	.29**	-.15**	.33**	-.18**	-.23**	--					
10.Control-by-self	.03	-.05	-.03	.55**	-.43**	.53**	-.41**	-.43**	.52**	--				
11.Control-by-others	-.00	.18**	.20**	.38**	-.24**	.40**	-.16**	-.04	.26**	.45**	--			
12.Fatalistic Coping	.10*	.08	-.08	-.01	.10*	.12*	.11*	.09	.11*	.01	-.00	--		
13.Optimistic Coping	.06	-.01	-.06	.43**	-.37**	.49**	-.35**	-.25**	.32**	.47**	.22**	.14**	--	
14.Problem Solving Coping	-.03	-.00	-.02	.49**	-.39**	.53**	-.35**	-.22**	.30**	.50**	.26**	.10*	.75**	--
15.Helpless Coping	-.11*	.14**	.03	-.37**	.55**	-.33**	.38**	.50**	-.14**	-.42**	-.12**	.14**	-.35**	-.32**

Note. * $p < .05$, ** $p < .01$, SES = Socioeconomic status

4.4. Hypotheses Testing

4.4.1. The Model Fit

The hypothesized model was evaluated with the model fit indices. As the model was developed nonsignificant paths were removed. The fit statistics yielded a good fit between the data and the model: $\chi^2 = 53.9$, $df = 39$, $p = .06$, CFI = .99, TLI = .98, CI RMSEA = .03 [.00; .05].

4.4.2. The Links between Need Satisfaction, Need Frustration, Positive Development and Coping Strategies

It was hypothesized that high levels of need satisfaction (Hypothesis 1.1) and positive development (Hypothesis 1.2) would be linked to higher levels of optimistic and problem-solving and lower levels of fatalistic and helplessness coping. In contrast, higher levels of need frustration (Hypothesis 1.3) would be linked to higher levels of fatalistic and helplessness coping strategies and lower levels of optimistic and problem-solving coping.

The path analysis demonstrated that as positive development increased, optimistic, problem-solving coping and (unexpectedly) fatalistic coping increased. Additionally, as need frustration increased fatalistic coping and helplessness coping levels increased. However, contrary to hypotheses, need satisfaction was not linked to any coping strategies. In addition to that, there was no relationship between need frustration and problem-solving and optimistic coping and between positive development and helplessness coping.

4.4.3. The Links between Need Satisfaction, Frustration, Positive Development and Stress Appraisals

With regard to relationship between coping resources and stress appraisal, it was hypothesized that high levels of positive development (Hypothesis.2.2) and need satisfaction (Hypothesis 2.1) would be linked to higher levels of perceiving the situations as a challenge,

controllable by the self, and controllable by others, and lower levels of perceiving stressors as a threat, and uncontrollable. Also, the higher levels of need frustration (Hypothesis 2.3) would be linked to the higher levels of perceiving stressors as a threat, and uncontrollable and lower levels of perceiving the situations as a challenge, controllable by the self, and controllable by others.

The examinations of path coefficients indicated that as need satisfaction increased, control-by-self and control-by-others appraisals increased. When need frustration increased, uncontrollability and threat appraisal increased, whereas control-by-self appraisal decreased. As positive development increased challenge, control-by-self and control-by-other appraisals increased. However, contrary to hypotheses, need satisfaction was not linked to challenge, threat and uncontrollability appraisal. In addition to that, positive development was not linked to threat and uncontrollability appraisals. Lastly, need frustration was not linked to challenge and control-by-other appraisals.

4.4.4. The Links between Stress Appraisals and Coping Strategies

It was hypothesized that higher levels of threat (Hypothesis 3.1) and uncontrollability (Hypothesis 3.3) appraisals would be linked to higher levels of fatalistic and helplessness and lower levels of optimistic and problem-solving coping, while higher levels of challenge (Hypothesis 3.2), control-by-self (Hypothesis 3.4) and control-by-others appraisals (Hypothesis 3.5) would be linked to higher levels of optimistic and problem-solving coping and lower levels of fatalistic and helplessness coping.

The examination of the path coefficients revealed that as uncontrollability appraisal increased optimistic and problem-solving coping decreased. When threat appraisal increased helplessness coping increased. As control-by-self appraisal increased, optimistic and problem-solving increased, while helplessness coping decreased. However, contrary to hypotheses,

challenge and control-by-other appraisal were not linked to any coping strategies. Moreover, uncontrollability was not linked to fatalistic and helplessness coping. Additionally, threat appraisal was not linked to fatalistic and negatively to optimistic and problem-solving coping. Lastly, control-by-self appraisal was not linked to fatalistic coping.

4.4.5. The Mediation Role of Stress Appraisals in the Relationship between Resources and Coping Strategies

It was hypothesized that stress appraisals would mediate the links between resources and coping strategies (Hypothesis 4). The examination of the confidence intervals indicated that control-by-self appraisal mediated the relationship between need satisfaction and optimistic coping. Also, control-by-self appraisal mediated the link from need satisfaction to problem-solving and also from need satisfaction to helplessness coping. In addition to that, control-by-self appraisal mediated the link between need frustration and problem-solving. Additionally, control-by-self appraisal mediated the link from positive development index to optimistic and positive development to problem-solving coping. Uncontrollability appraisal mediated the link between need frustration and optimistic coping. Also, uncontrollability mediated the link between need frustration and problem-solving coping. Threat appraisal mediated the link between need frustration and helplessness coping. Coefficients of indirect effects and confidence intervals are presented in Table 5.

On the other hand, path analyses showed that there was no mediation between resources and fatalistic coping. Also, challenge and control-by-other appraisal were not considered in the mediation analysis because they were not associated to any coping strategy. Lastly, the confidence intervals revealed that there were some nonsignificant paths: The path from need frustration (through control-by-self) to optimistic and to helplessness coping, the path from positive development (through control-by-self) to helplessness coping.

Table 5. Confidence Intervals for The Links Between Resources in The Relationship with Stress Appraisals

Predictors	Mediators	Dependent Variables			
		Optimistic Coping	Fatalistic Coping	Problem-solving Coping	Helplessness Coping
		β [% 95 CI]	β [% 95 CI]	β [% 95 CI]	β [%95 CI]
Need Satisfaction	UC	--	--	--	--
	THR	--	--	--	--
	CH	--	--	--	--
	SC	.05[.02;.09]**	--	.06[.02;.10]**	-.03[-.06;-.01]**
	OC	--	--	--	--
Need Frustration	UC	-.08[-.12; -.04]***	--	-.07[-.11; -.03]**	--
	THR	--	--	--	.14[.09; .18]***
	CH	--	--	--	--
	SC	<i>ns</i>	--	-.03[-.05; -.01]**	<i>ns</i>
	OC	--	--	--	--
Positive Development	UC	--	--	--	--
	THR	--	--	--	--
	CH	--	--	--	--
	SC	.06 [.03; .10]**	--	.07 [.03; .10]***	<i>ns</i>
	OC	--	--	--	--

Note. *p<.05, **p<.01, ***p<.001 UC= Uncontrollability, THR= Threat, CH=Challenge, SC=Control-by-self ,OC=Control-by-other

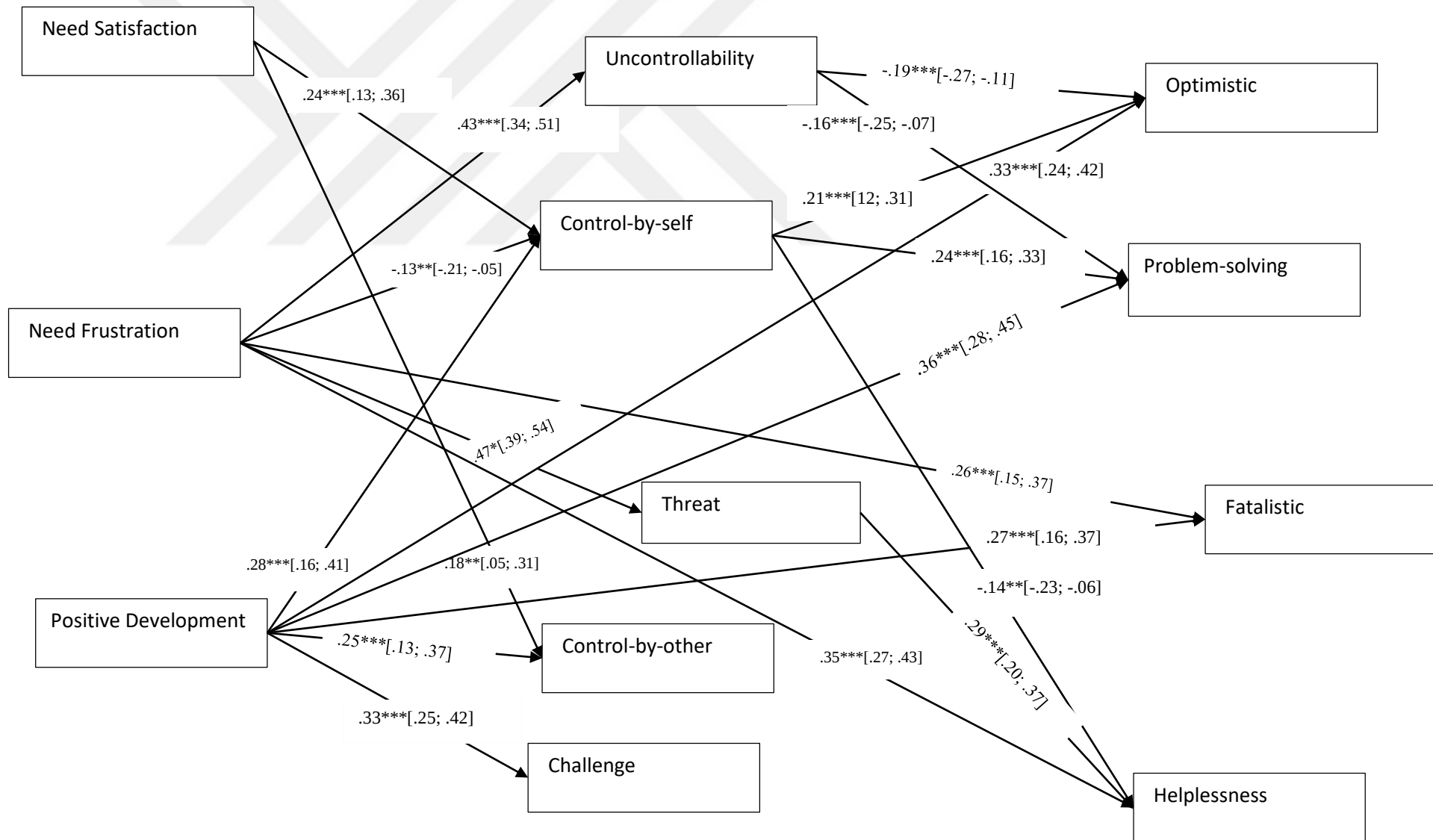


Figure 2. The Mediation Model Predicting Coping Strategies from Need Satisfaction, Frustration, Positive Development via Stress Appraisals

CHAPTER 5

DISCUSSION

The primary purpose of the present study was to examine the links between emerging adult's coping resources and coping strategies through the mediation of their stress appraisals. From a developmental perspective, emerging adulthood is a distinct period with so many challenging developmental tasks to be accomplished which may be overwhelming for some emerging adults (Arnett, 2004; Seiffge-Krenke & Haid, 2012). Based on the previous studies examining the links between coping resources and coping strategies (Folkman, 1984; Ntoumanis et al., 2009; Skinner & Edge, 2002; Taylor & Stanton, 2007), we tested a mediational model which links coping resources (operationalized here as positive development and gratification and frustration of basic psychological needs) to coping with the stressful situations via stress appraisals.

Overall, the findings showed that positive development and need frustration and satisfaction were linked to specific strategies emerging adults used to cope with stressful situations and that how emerging adults appraised the stressful situation some extent mediated the links between their coping resources and coping strategies.

In the following sections, the findings were discussed in detail.

5.1. The Links between Need Satisfaction, Need Frustration, Positive Development and Coping Strategies

The first research question aimed to find the link between resources and coping strategies. Path analysis revealed that higher need frustration was positively linked to fatalistic and helplessness coping. In other words, when emerging adults' needs are frustrated, they feel

like stuck in somewhere and guilty about what happened, they overthink about the stressful situation, and wish to be stronger and change what had already happened (helplessness coping). Also, when emerging adults' needs are frustrated, their coping strategy become more religiously oriented that they think it came from God, it is their fate, praying could help and there might be positive thing in it (fatalistic coping). These findings are consistent with SDT view that need frustrations is related to ill-being (Chen et al., 2015; Deci & Ryan, 2002).

Although need frustration was associated with all of the coping strategies in the bivariate correlational analysis, it was not significantly linked to optimistic and problem-solving coping in the path model. Similarly, although correlational analysis showed that need satisfaction was associated with all coping strategies (except fatalistic coping), need satisfaction was not linked to any of coping strategies in the path analysis. One of the reasons for these non-significant associations is that all independent variables are linked to outcome variables after controlling for the effects of each other. In such multivariate models, a considerable portion of the variance is accounted for by other variables in the model.

Secondly, although there is no direct link between need satisfaction (for example) and coping strategies, the effect was through the mediator variables. Indeed, in the original mediational model proposed by researchers (Ntoumanis et al., 2009), direct paths between basic needs (gratification and frustration) and coping strategies had not been hypothesized because they thought that stress appraisals are mediators in this process. In other words, the links would be possible via stress appraisals. However, another researcher found direct paths between basic psychological needs and coping, and basic needs satisfaction was evaluated separately in interaction with coping in that study. As a result, autonomy need was above competence and relatedness and it was associated with accommodation coping (openness, Good will, flexibility, cooperation) (Skinner & Edge, 2002). In the present study, autonomy, relatedness and competence satisfaction were components of the composite score of need satisfaction. It

may be another the reason for the disappearance of significant links between need satisfaction and coping in the path model.

Positive development (total score of competence, confidence, character, connection, and caring skills) was examined as coping resource in the present study and results show that emerging adults who have higher levels of positive development characteristics are better at emotion regulation, thinking calmly, trying to find positive aspects to improve themselves and trying to develop new perspective about life (optimistic) and are more able to find different solutions and plans to overcome the situation (problem-solving). This finding is consistent with the claims of PYD perspective that states that the Five C's supports youth strength and in turn fosters adaptive developmental regulations (Lerner et al., 2013). The present results contributed to PYD research showing that positive development characteristics are linked to skills such as coping with stress.

The present findings showed that higher levels positive development was related higher fatalistic coping. This finding was contrary to expectations and also surprising considering that in the present model tested high need frustration was linked to higher fatalistic coping and need frustration was negatively correlated with positive development. One possible explanation for these contradictory results may be related to the characteristics of fatalism. Some researchers argue that fatalism has two sides; people can gain strength with religion by having a meaning frame and acceptance, and become more tolerant about stressful situations, in contrast, it may lead people to pessimism because they may perceive that there is nothing to do, and think that the outcome never changes and in turn people do not show more effort to cope and feel helpless (Cheng et al., 2013; Kesimci et al., 2005). In other words, emerging adults who have higher positive development score believe that everything come from God, it is their fate but praying can help and there may be good reason for it. To examine this finding in cultural context, fatalistic coping was found as positive indicator of posttraumatic growth

for earthquake survivors and cancer patients in Turkish sample (Ahmadi et al., 2019; Arıkan & Karancı, 2012; Kesimci et al., 2005). Researchers argue that fatalistic approach shows religious characteristics of Turkish culture. The study with cancer patients in Turkey revealed that people can redefine the stressors as benevolent for them. Also, they think it is God's punishment for their sins. Additionally, people can passively wait God's control over the situation, and lessen their responsibility over the situation. Also, people can actively give up the control to God when they believe that they have done their best. Besides God's control, people can pray, visit the Mosque and read religious texts to control their emotions such as fear and anxiety. Islamic teaching emphasizes "Sabır (tolerance)" and "kader (predestination)" which can help people to deal with difficulties. Thus, fatalistic approach may not lead to helplessness, and people can gain strength, optimistic view, and new meaning for what they experience (Ahmadi et al., 2019; Kesimci et al., 2005). However, researchers highlighted that this type of coping can lead to negative outcomes such as helplessness and depression when individuals do not have stable belief and trust to God. For instance, some cancer patients elaborated that they were abandoned by God, and they were angry with God. Also, researchers emphasized that individuals may turn to religion when they do not have other alternatives or other resources around them (Ahmadi et al., 2019).

Additionally, although bivariate correlations revealed significant negative relationship between positive development and helplessness coping, the path analysis did not reveal significant relationship. One possible explanation may be the effect of need frustration on helplessness. Further studies should examine the effect of need frustration over the presence or satisfied resources.

5.2. The Links between Need Satisfaction, Frustration, Positive Development and Stress Appraisals

The second aim of the present study was to find the relationship between resources and stress appraisals. The path analysis revealed that need satisfaction was linked to only control-by-self and control-by-other appraisals. Consistent with the literature, when emerging adults' basic psychological needs were fulfilled, they evaluated stressful situations as more controllable by themselves. In other words, they appraised the situation such that they had ability to overcome the difficulties in the situation. Also, participants appraised situations more controllable by others, when their basic psychological needs were satisfied. It means that they appraise that they have enough resources, people around them can help them if needed because their autonomy, relatedness and competence needs are satisfied (Ntoumanis et al., 2009, Yeung et al., 2015).

Nevertheless, some of the hypotheses were not supported in the present study. Although need satisfaction was positively related to challenge and negatively to threat and uncontrollability appraisal in bivariate correlations (congruent with the findings of Quested et al., 2011), the path analysis did not support these relationships. One explanation may be the bidirectional relationship between appraisals and coping as proposed by Ntoumanis et al. (2009). Other researchers also examined the relationship between primary appraisals and basic needs via secondary appraisals and found that secondary appraisals (control-by-self, and control-by-others) were mediators between primary appraisals (threat and challenge), need satisfaction and need frustration. Control-by-self and control-by-other appraisals mediated the relationship between challenge and need satisfaction (Bartholomew et al., 2017).

In the present study, higher levels of need frustration was linked with higher threat, uncontrollability and the lower level of control-by-self appraisal. As consistent with the literature, when emerging adults' needs are frustrated, they perceive stressful situations as

uncontrollable, in other words, beyond the capacity of anyone to solve, and appraise the situation as threatening because of its importance and negative consequences for them. Also, they appraise less self-control and ability to solve the problem in the situation. These results supported the idea that the lack of resources, thwarted needs make people evaluate situations threatening and perceive lack of control over the situation (Quested et al., 2011; Skinner & Edge, 2002). Need frustration was significantly linked to challenge and control-by-other appraisal in bivariate correlations but the relationships were nonsignificant in the path analysis. The reason may be the other variables in the model such as need satisfaction and positive development which were related to control-by-other and challenge appraisals. Another explanation may be the difference between need satisfaction, the presence of resources and frustration. While low satisfaction or low resources cannot show how one's needs are frustrated, high need frustration can refer to low need satisfaction (Rouse et al, 2019; Vansteenkiste & Ryan, 2013). Therefore, the common effect on control-by-self can refer to high need frustration includes low need satisfaction, whereas difference of their effect can refer to their distinctive feature.

The last coping resource, positive development was positively related to challenge, control-by-self and control-by-other appraisals. When emerging adults show higher levels of positive development characteristics, they evaluate the stressful situations as something having a positive and making them stronger, - and they also think that they have enough ability and support from others to help them if needed. These findings are consistent with PYD approach highlighting personal and social resources showing whether young people are thriving or not (Lerner et al., 2013). Although positive development was significantly associated with threat and uncontrollability appraisals, they were not related in the path analysis. One possible explanation may be need frustration that was highly related to

uncontrollability and threat appraisals in the present study. Therefore, the present study may become a bridge for further studies to examine the Five C's with coping process.

5.3. The Links between Stress Appraisals and Coping Strategies

The present study aimed to indicate the relationship between stress appraisals and coping. The findings demonstrated that while high threat appraisal was related to higher helplessness coping, higher uncontrollability appraisal was linked to lower optimistic and problem-solving coping. Also, higher control-by-self appraisal was related to higher optimistic and problem-solving coping and lower helplessness. These findings are consistent with the literature showing that specific stress appraisals are related with different coping strategies (Ferguson et al., 1999; Peacock et al., 1993). Additionally, the findings supported that the finding that when people appraise a situation as threat and uncontrollable, they use more disengagement coping strategy, and feeling of control make people use more problem-focused coping strategies and less disengagement (Folkman & Lazarus, 1980; 1985; Newton & McIntosh, 2010; Zakowski et al., 2001).

Although the bivariate correlations revealed that threat appraisal were significantly related to optimistic, problem-solving (consistent with the findings of Ferguson, et al., 1999; McCrae, 1984; Peacock et al., 1993), challenge appraisal was linked to optimistic, problem-solving and helplessness strategies (consistent with the findings of Bigatti et al., 2012), control-by-other appraisal was significantly associated with optimistic, problem-solving and helplessness and uncontrollability was related to helplessness coping (consistent with the findings of Newton & McIntosh, 2010), we did not find these links in the path model. Lastly, fatalistic coping was only significantly related to uncontrollability and challenge appraisals in bivariate correlations but the path finding failed to find the link between stress appraisals and fatalistic coping strategy. The possible explanation for these non-significant associations may be other variables in the model such as resources. In one study, the researcher found

significant relationship between appraisals and coping with the effect of resources. For instance, the effect of threat on coping was significant when subjects had low scores on resources (Terry, 1991). In the present study, for example, threat appraisal may be significantly linked to optimistic and problem-solving when emerging adults have lower scores on resources or higher scores on need frustration.

Overall, the findings of primary and secondary appraisals together revealed that, when emerging adults appraised the situation as threatening, dangerous for themselves, they are more likely to use helplessness coping, they feel like being trapped in somewhere, they overthink about situation and feel guilty and blame themselves. Additionally, when emerging adults feel control over the situation, they are more positive, try to find solutions, struggle against difficulties, learn from it and develop new perspective and they feel less helplessness. Contrarily, when emerging adults feel no control over the situation, they are less positive and become less problem-focused oriented.

5.4. The Mediational Role of Stress Appraisals in the Relationship between Resources and Coping Strategies

The last purpose of the study was to test the mediational relationship between coping resources and coping strategies via stress appraisals. Based on the proposed model (Ntoumanis et al., 2009), it was hypothesized that emerging adults' threat, challenge, uncontrollability, control-by-self, control-by-other appraisals mediate the relationship between their resources and coping strategies. The results of path analyses partially supported the hypotheses. Although need satisfaction had not any direct effect on any coping strategy, need satisfaction was linked to optimistic, problem-solving and helplessness coping via control-by-self appraisal. It means that emerging adults who feel themselves autonomous, competent and related to others are optimistic with stressful situations, try to find different solutions and they feel less helpless, because they appraise that they have the ability and have

enough resources to cope with the stressful situation. Furthermore, the findings revealed that although need frustration had only direct link with helplessness and fatalistic coping, uncontrollability mediated the links from need frustration to optimistic and problem-solving coping. Also, need frustration was linked to problem-solving via control-by-self appraisal. Lastly, threat appraisal mediated the relationship between need frustration and helplessness coping. These findings mean that emerging adults who are need-thwarted, use less optimistic coping because they appraise that the situation cannot be controlled. Relatedly, emerging adults with thwarted needs feel that nobody (including themselves) have the ability or resources to change the situation and in turn they try less to find solutions. Also, emerging adults with higher need frustration appraise the situation more threatening for their wellbeing and in turn they feel trapped, and guilty about what happened and overthink about it and feel powerless. Regarding positive development, control-by-self appraisal mediated the link between positive development and optimistic and problem-solving coping, meaning that emerging adults who have higher score with the Five C's appraised that they have the capability to cope with the situation and in turn they are optimistic to find solutions for the situation.

Overall, the findings were consistent with the literature that some stress appraisals mediated the relationship between resources and coping strategies. (Ntoumanis et al., 2009). Additionally, PYD approach stems from strengthening the person-environment interaction of young people for positive functioning. PYD presents what young people and their context should possess to adjust in the face of changing threats, challenges and maintaining thriving the positive development indices (Lerner et al., 2013). However, not all appraisals mediated the relationship between resources and coping strategies. The reason may be the other possible mediators such as social context, specific demands and stressors and affect/emotions, and personality dispositions that are the part of the proposed coping model

(Ntoumanis et al., 2009). Future studies should examine other possible mediators in the coping model.

5.5. The Link between Demographic Variables (Age, Sex, SES) and Outcome Variables

According to bivariate correlations and in the path analysis, emerging adults' age was positively related with uncontrollability appraisal and fatalistic coping while negatively correlated with helplessness coping. It means that while the older participants appraised situations as more uncontrollable and used more fatalistic coping than the younger ones, the younger participants used more helplessness coping than the older ones. In the literature, some studies revealed that problem-focused strategies increase by age and some found no difference when they compared age of university students and coping strategies (Gelhaar et al., 2007; Seiffge-Krenke, 1995; Seiffge-Krenke et al., 2009). In the present study, participants were between 18-30 years old emerging adults and the reason of the rise of uncontrollability appraisal may be the developmental tasks increasing with age, such as graduation, finding job, in other words, increase in responsibility in life. Thus, the decrease in helplessness with the increase of age seems consistent with this finding. Additionally, the increase in fatalistic coping instead of problem-solving may be the result of Islamic culture (Kesimci et al., 2005).

5.6. Strengths and Limitations

The present study was the first to examine the links between basic psychological need satisfaction, frustration, positive development and coping strategies via stress appraisals in Turkey. Specifically, while the literature proposed basic needs for the coping model, it has not been examined extensively. We considered need frustration with need satisfaction which was the first in the coping literature. We saw that while the levels of resources are vital, thwarted needs proved that it was not enough to have more resources. Also, positive development

index has never been studied with appraisals and coping strategies. The present study contributed the literature by clarifying emerging adult's coping mechanisms and pointing out the areas needed to be examined and intervened.

Every study has own limitations and the present study has some limitations that would be enlightening for future studies. Firstly, this study has cross-sectional design. Therefore, it is not possible to infer any causal relationship. Secondly, another limitation is female/male ratio in the present study. In the present study, the number of female participants overweighed male participants. Therefore, it may affect the representativeness of population. Additionally, the current study only examined four types of coping and it would be so helpful to examine more coping strategies for further studies. Also, we did not include possible variables such as the kind of stressful situation, demands, personality characteristics that may have a role on coping.

5.7. Implications

The findings of the study revealed intervention areas by examining coping resources and appraisals of emerging adults. The present study demonstrated that higher gratification of basic needs and positive development of emerging adults were related to feeling self-control and in turn emerging adults used more optimistic, problem-solving strategies and less helplessness to cope with the stress. Also, when emerging adults' needs were thwarted, they felt less self-control and more no control and in turn used less problem-solving strategy and less optimistic with higher uncontrollability appraisal. Lastly, emerging adults with thwarted needs appraised the situation as threat and in turn used more helplessness coping.

To examine interventions on coping, there are some interventions programs to teach children, adolescents and young adults to manage stress and use adaptive coping strategies. For instance, Multiple Stress Management Intervention (MSMI) is 8 week and 2-hour session

program for college students. The program has module to train students about the nature of the stress and their stress reactions. In the second module, students have relaxation training such as breathing. In the third module, activities focus on cognitive restructuring, in other words appraisal of the stress, and problem-solving training. In the fourth module, students learn to manage anger and anxiety. In the last module, students learn about goal setting, time management, and self-monitoring. The study found that students who participated MSMI had higher scores on approach and lower scores on avoidance coping strategies (Chinaveh,2013). Similarly, The Coping Enhancement Training (CET) program aims to develop coping competencies of adults. The first module focuses on the source of, and type of stress, and the importance of appraisals. In the second module, participants learn to use situation-appropriate coping strategies (e.g avoidance of unnecessary stressors). To manage it, they are trained for problem or situation analyses, self-observation, planning activities, time management, and cognitive restructuring. Lastly, they learn relaxation techniques. The effectiveness of the program was supported in longitudinal study. CET increased functional strategies such as problem-solving, and reduced dysfunctional strategies (Bodenmann et al.,2002). Another intervention program called Creating Opportunity for Personal Empowerment (COPE) was developed by Melnyk (2003). This program is seven-session lessons to promote positive coping skills and decrease anxiety and depression symptoms of adolescents and young adults. The program focuses on positive thinking, building coping skills, problem-solving, goal setting, communication skills, practicing positive thinking and coping skills for stressful situations. The effectiveness study of the program for college students revealed that anxiety and depressive symptoms decreased, and coping and management skills increased (Hart et al.,2018).

Coping-focused interventions mostly focus on psychoeducation about stress, stress appraisals, problem-solving skills, adaptive coping strategies, and relaxation techniques.

These interventions may not directly aim to foster basic psychological needs and the Five C's but their activities may indirectly enhance autonomy, competence and relatedness and the Five C's. Future intervention programs may generate programs to directly enhance basic psychological needs and the Five C's, and in turn may support emerging adults to be more optimistic, problem-solving oriented and feel less helplessness.



APPENDICES

APPENDIX A. Demographics Form

1. Yaşınız: _____

2. Cinsiyetiniz: Erkek (1) Kadın (2) Diğer (3) _____

3. Öğrenci misiniz? Evet (1) Hayır (2)

4. Hangi bölümde öğrencisiniz: _____

5. En son mezun olduğunuz okul:

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

6. Çalışıyor musunuz? Evet (1) Hayır (2)

7. (Eğer evetse) Kaç yıldır çalışıyorsunuz? _____

8. (Eğer evetse) Mesleğiniz nedir? _____

9. Medeni durumunuz:

Bekar (1) Sözlü/Nişanlı (2) Evli (3) Boşanmış (4) Eşi vefat etmiş (5)

10. Anneniz ve babanız: Evli (1) Boşanmış (2) Diğer (belirtiniz) (3) _____

11. Anneniz çalışıyor mu? Evet (1) Hayır (2) Emekli (3) Diğer (4) _____

12. Babanız çalışıyor mu? Evet (1) Hayır (2) Emekli (3) Diğer (4) _____

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

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

APPENDIX B. Basic Needs Satisfaction and Frustration Scale (BPNSFS; Chen, Vansteenkiste, et al., 2015)

1 Tamamen Yanlış	2 Kısmen Yanlış	3 Biraz Doğru	4 Oldukça Doğru	5 Tamamen Doğru
Tamamen Yanlış 1	Kısmen Yanlış 2	Biraz Doğru 3	Oldukça Doğru 4	Tamamen Doğru 5

1-Üstendiğim şeyleri özgürce seçebildiğimi hissedirim	1	2	3	4	5
2- Kararlarımın gerçekte ne istediğimi yansıttığını hissedirim	1	2	3	4	5
3- Tercih ettiğim şeyler gerçekten kim olduğumu gösterir	1	2	3	4	5
4-Gerçekten ilgimi çeken şeyler yaptığımı hissedirim	1	2	3	4	5
5-Yaptığım şeylerin çoğunu “yapmak zorundaymışım” gibi hissedirim	1	2	3	4	5
6-Yapmak istemeyeceğim pek çok şeyi yapmak zorundaymışım gibi hissedirim	1	2	3	4	5
7-Çok fazla şey yapma konusunda baskı hissedirim	1	2	3	4	5
8-Gündelik işlerim art arda gelen zorunluluklarmış gibi hissettiriyor	1	2	3	4	5
9-Önemsediğim insanların da beni önemseddiğini hissedirim	1	2	3	4	5
10-Önemsediğim ve beni önemseyen insanlara bağlı olduğumu hissedirim	1	2	3	4	5
11-Benim için önemli olan diğer insanlara yakın ve bağlı hissedirim	1	2	3	4	5
12-Birlikte vakit geçirdiğim insanlarla samimi duygular içindeyim	1	2	3	4	5
13-İçinde olmak istediğim gruptan dışlandığımı hissedirim	1	2	3	4	5
14-Benim için önemli olan insanların bana karşı soğuk ve mesafeli olduğunu hissedirim	1	2	3	4	5
15-Zaman geçirdiğim insanların beni sevmedikleri izlenimine sahibim	1	2	3	4	5
16- Kurduğum ilişkilerin yüzeysel olduğunu hissedirim	1	2	3	4	5
17-Bir şeyleri iyi yapabileceğim konusunda kendime güvenirim	1	2	3	4	5
18- Yaptığım şeylerde kendimi yeterli hissedirim	1	2	3	4	5
19-Hedeflerime ulaşmak için yeterli olduğumu hissedirim	1	2	3	4	5
20-Zor görevleri başarıyla tamamlayabileceğimi hissedirim	1	2	3	4	5
21-Bir şeyleri iyi yapıp yapamayacağım konusunda ciddi kuşkularım var	1	2	3	4	5
22-Yaptığım şeylerin çoğunda hayal kırıklığına uğradığımı hissedirim	1	2	3	4	5

23-Yeteneklerim konusunda güvensizlik hissedirim	1	2	3	4	5
24-Yaptığım hatalar yüzünden kendimi başarısız biri gibi hissedirim	1	2	3	4	5



APPENDIX C. Positive Youth Development Short Form-Older Adolescence (PYD-SF; Geldhof et al., 2012 & Dost-Gözkın, 2016)

Aşağıdaki ifadelere 5'li ölçeği kullanarak ne derece katıldığınızı belirtiniz.

Hiç katılmıyorum [1]	Katılmıyorum [2]	Biraz Katılıyorum [3]	Genelde Katılıyorum [4]	Tamamen katılıyorum [5]					
1. Pek çok arkadaşım var					1	2	3	4	5
2. Derslerimde başarılıyım					1	2	3	4	5
3. Sporda yaşıtlarımdan daha iyiyim					1	2	3	4	5
4. Genellikle kendimden memnunum					1	2	3	4	5
5. Yapmamam gerektiğini bildiğim şeyleri pek yapmam					1	2	3	4	5
6. Görünüşümden memnunum					1	2	3	4	5
7. Yaşıtlarım kadar akıllıyım					1	2	3	4	5
8. Sportif faaliyetlerde iyiyim					1	2	3	4	5
9. Yaşıtlarım arasında sevilen biriyim					1	2	3	4	5
10. Güzel/yakışıklı olduğumu düşünüyorum					1	2	3	4	5
11. Genelde davranmam gerektiği gibi davranırım									
12. Sahip olduğum özellikler için mutluyum					1	2	3	4	5
13. Kendim olduğum için memnunum					1	2	3	4	5
14. Yetişkin olduğumda iyi bir hayatım olacağına inanıyorum.					1	2	3	4	5

Aşağıdaki ifadelerin sizin için ne derece önemli olduğunu 5'li ölçeğe göre değerlendiriniz.

	Hiç önemli değil 1	Biraz önemli 2	Önemli 3	Oldukça önemli 4	Çok önemli 5
15. Dünyayı daha yaşanılabilir bir yer haline getirmeye çalışmak.	1	2	3	4	5
16. İnsanların yaşamlarını iyileştirmek için zaman ve para harcamak.	1	2	3	4	5
17. Arkadaşlarım benimle alay etse bile, doğru olduğuna inandığım şeyi yapmak.	1	2	3	4	5
18. Hata yaptığım ya da başımı derde soktuğum zaman davranışlarımın sorumluluğunu üstlenmek.	1	2	3	4	5

Aşağıdaki ifadeler ne derece sizi yansıtıyor?

	Hiç yansıtıyor 1	Çok az yansıtıyor 2	Kısmen yansıtıyor 3	Çoğunlukla yansıtıyor 4	Kesinlikle yansıtıyor 5
19. Farklı kültürden olan insanlar hakkında bilgi sahibi olmak.	1	2	3	4	5
20. Kendi kültürüm dışındaki insanlarla vakit geçirmekten keyif almak.	1	2	3	4	5

Aşağıdaki ifadeler size ne derece tanımlıyor?Aşağıdaki 5'li ölçeği kullanarak değerlendiriniz.

Hiç iyi tanımlamıyor	İyi tanımlamıyor	Biraz tanımlıyor	İyi tanımlıyor	Çok iyi tanımlıyor			
1	2	3	4	5			
21. Birinin istismar edildiğini gördüğümde ona yardım etmek isterim.			1	2	3	4	5
22. Bir insanın başına kötü şeyler gelmesi canımı sıkıyor			1	2	3	4	5
23. Benim sahip olduklarıma sahip olmayan insanlar için üzülürüm			1	2	3	4	5
24. Birine kötü davranıldığını gördüğümde o kişi için üzülürüm.			1	2	3	4	5
25. Hiç arkadaşı olmayan birini görmek beni üzer.			1	2	3	4	5

26. Üzgün ya da kırılmış birini gördüğümde o kişi için üzülürüm.	1	2	3	4	5
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Aşağıdaki ifadelere 5'li ölçeği kullanarak ne derece katıldığınızı belirtiniz.

	Hiç katılmıyorum [1]	Katılmıyorum [2]	Biraz Katılıyorum [3]	Genelde Katılıyorum [4]	Tamamen katılıyorum [5]		
27. Okulumda sık sık teşvik edildiğimi düşünüyorum.			1	2	3	4	5
28. Ailemde kendimi işe yarar ve önemli hissederim.			1	2	3	4	5
29. Yaşadığım şehirde diğer insanlar için önemli olduğumu hissederim.			1	2	3	4	5
30. Okulumda hocalarım beni yapabileceğimin en iyisini yapmaya yönlendirirler.			1	2	3	4	5
31. Ailemle iyi bir iletişimim vardır.			1	2	3	4	5
32. Yaşadığım çevredeki insanlar söylemek istediğim şeyleri dinlerler.			1	2	3	4	5

	Doğru değil	Çok az doğru	Kısmen doğru	Genellikle doğru	Tamamen doğru
33. Arkadaşlarımdan iyi arkadaşlar olduklarını düşünürüm.	1	2	3	4	5
34. Arkadaşlarım beni önemser.	1	2	3	4	5

APPENDIX D. Stress Appraisal Measure (SAM; Peacock & Wong, 1990)

Bu anket, STRES HAKKINDAKİ GENEL DÜŞÜNCELERİNİZLE ilgilidir. Doğru ya da yanlış cevap yoktur. Lütfen, TÜM SORULARA yanıt veriniz, yanıt vermediğiniz soru bırakmayınız. Her bir soruyu sizin için uygun rakamı DAİRE İÇİNE ALARAK değerlendiriniz	Hiç	Çok Az	Orta Düzeyde	Oldukça	Aşırı Düzeyde
1- Stres, tamamen çaresiz bir durum mu?	1	2	3	4	5
2- Stres, sonuçlarından hiç kimsenin kaçamayacağı bir durum mu?	1	2	3	4	5
3- Stresle baş etmek için ihtiyaç duyarsam yardım isteyebileceğim herhangi bir kişi ya da destek talep edebileceğim bir uzman (psikolog, doktor, danışman, vb.) var mı?	1	2	3	4	5
4- Stres, beni endişelendirir mi?	1	2	3	4	5
5- Stresin benim için önemli sonuçları var mı?	1	2	3	4	5
6- Stresin benim üzerimde olumlu bir etkisi olur mu?	1	2	3	4	5
7- Stresli durumları çözmeye çalışmak için ne kadar istekliyim?	1	2	3	4	5
8- Stresin sonuçlarından ne kadar etkilenirim?	1	2	3	4	5
9- Stres, beni ne kadar daha güçlü kılar?	1	2	3	4	5
10- Stresin sonuçları olumsuz olur mu?	1	2	3	4	5
11- Stresle başa çıkabilecek yeteneklere sahip miyim?	1	2	3	4	5
12- Stresin benim yaşamımda ciddi etkileri olur mu?	1	2	3	4	5
13- Stresle baş etmek için gerekli niteliklere sahip miyim?	1	2	3	4	5
14- Stresle baş etmek için bana yardım edebilecek bir kaynağım (kişi, para,) var mı?	1	2	3	4	5
15- Stresle baş etmede bana yardım sağlayabilecek uygun ve yeteri kadar kaynağım var mı?	1	2	3	4	5
16- Stres, herhangi bir kişinin gücünü aşar mı?	1	2	3	4	5
17- Stresin olumlu sonuçlarının da olabileceğini düşünmek beni ne kadar heyecanlandırır?	1	2	3	4	5

18- Stres, ne kadar tehdit edici bir durumdur?	1	2	3	4	5
19- Stres, herhangi bir kişinin çözemeyeceği bir sorun mu?	1	2	3	4	5
20- Stresle baş edebilir miyim?	1	2	3	4	5
21- Stresin üstesinden gelmem için bana yardım edebilecek herhangi biri var mı?	1	2	3	4	5
22- Stresli durumlarda başarılı sonuçlar elde etmek için gerekli becerilere sahip miyim?	1	2	3	4	5
23- Stresin benim için uzun vadeli sonuçları var mı?	1	2	3	4	5
24- Stresin benim üzerimde olumsuz bir etkisi olur mu?	1	2	3	4	5

APPENDIX E. Ways of Coping Questionnaire. (WCQ; Folkman & Lazarus,1985)

Aşağıda insanların sıkıntılarını gidermek için kullanabilecekleri bazı yollar belirtilmektedir. Cümlelerin her birini dikkatlice okuduktan sonra, kendi sıkıntılarınızı düşünerek, bu yolları ne ölçüde kullandığınızı 3'lü ölçeği kullanarak belirtiniz.	Hiçbir zaman	Bazen	Her zaman
1. Aklımı kurcalayan şeylerden kurtulmak için değişik işlerle uğraşırım.	1	2	3
2. Bir mucize olmasını beklerim.	1	2	3
3. İyimser olmaya çalışırım.	1	2	3
4. Çevremdeki insanlardan sorunlarımı çözmemde bana yardımcı olmalarını beklerim.	1	2	3
5. Bazı şeyleri büyütmeyip üzerinde durmamaya çalışırım.	1	2	3
6. Sakin kafayla düşünmeye ve öfkelenmemeye çalışırım.	1	2	3
7. Durumun değerlendirilmesini yaparak en iyi kararı vermeye çalışırım.	1	2	3
8. Ne olursa olsun direnme ve mücadele etme gücünü kendimde hissederim.	1	2	3
9. Olanları unutmaya çalışırım.	1	2	3
10. Başa gelen çekilir diye düşünürüm.	1	2	3
11. Durumun ciddiyetini anlamaya çalışırım.	1	2	3
12. Kendimi kapana sıkışmış hissederim.	1	2	3
13. Duygularımı paylaştığım kişilerin bana hak vermesini isterim.	1	2	3
14. "Her işte bir hayır vardır" diye düşünürüm.	1	2	3
15. Dua ederim.	1	2	3
16. Elimde olanlarla yetinmeye çalışırım.	1	2	3
17. Olanları kafama takıp sürekli düşünmekten kendimi alamam.	1	2	3
18. Sıkıntılarımı içimde tutmaktansa paylaşmayı tercih ederim.	1	2	3
19. Mutlaka bir çözüm yolu bulabileceğime inanıp bu yolda uğraşırım.	1	2	3
20. "İş olacağına varır" diye düşünürüm.	1	2	3

21. Ne yapacağıma karar vermeden önce arkadaşlarımın fikrini alırım.	1	2	3
22. Kendimde her şeye yeniden başlayacak gücü bulurum.	1	2	3
23. Olanlardan olumlu bir şeyler çıkarmaya çalışırım.	1	2	3
24. Bunun alın yazım olduğunu ve değişmeyeceğini düşünürüm.	1	2	3
25. Sorunlarıma farklı çözüm yolları ararım.	1	2	3
26. “Olanları keşke değiştirebilseydim” diye düşünürüm.	1	2	3
27. Hayatla ilgili yeni bir bakış açısı geliştirmeye çalışırım.	1	2	3
28. Sorunlarımı adım adım çözmeye çalışırım.	1	2	3
29. Her şeyin istediğim gibi olmayacağını düşünürüm.	1	2	3
30. Dertlerimden kurtulayım diye ihtiyacı olanlara sadaka veririm.	1	2	3
31. Ne yapacağımı planlayıp ona göre davranırım.	1	2	3
32. Mücadele etmekten vazgeçerim.	1	2	3
33. Sıkıntılarımdan kendimden kaynaklandığını düşünürüm.	1	2	3
34. Olanlar karşısında “Kaderim buymuş” derim.	1	2	3
35. “Keşke daha güçlü bir insan olsaydım” diye düşünürüm.	1	2	3
36. “Benim suçum ne” diye düşünürüm.	1	2	3
37. “Allah’ın takdiri buymuş deyip” kendi kendimi teselli etmeye çalıştım.	1	2	3
38. Temkinli olmaya ve yanlış yapmamaya çalışırım.			
39. Çözüm için kendim bir şeyler yapmak isterim.	1	2	3
40. Hep benim yüzümden oldu diye düşünürüm.	1	2	3
41 Hakkımı savunmaya çalışırım.	1	2	3
42. Bir kişi olarak olgunlaştığımı ve iyi yönde geliştiğimi hissederim.	1	2	3

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