

# THE EFFECT OF BASIC PSYCHOLOGICAL NEEDS AND WAYS OF COPING ON MENTAL WELL-BEING AND PSYCHOPATHOLOGY: A CROSS-CULTURAL STUDY IN TURKEY, BRAZIL AND SWITZERLAND

YİĞİT GÖNÇ

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A Thesis Submitted to The Graduated School of Izmir University of Economics Master's Program in Clinical Psychology

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### ABSTRACT

# THE EFFECT OF BASIC PSYCHOLOGICAL NEEDS AND WAYS OF COPING ON PSYCHOLOGICAL WELL-BEING AND PSYCHOPATHOLOGY: A CROSS-CULTURAL STUDY IN TURKEY, BRAZIL AND SWITZERLAND

Gönç, Yiğit

Master's Program in Clinical Psychology

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#### July, 2022

The aim of this study was to investigate the moderator role country variable on the indirect effect of basic psychological need satisfaction and frustration on mental wellbeing and psychopathology with ways of coping mediation. The data were collected from 614 participants in the survey, 209 were from Turkey, 203 were from Switzerland and 202 were from Brazil. Basic Psychological Need Satisfaction and Frustration Scale, Ways of Coping Scale, Brief Symptom Inventory, and Warwick-Edinburgh Mental Well-Being Scale were used to collect data. The results showed that need satisfaction was in a positive correlation with mental well-being, and need frustration was in a positive correlation with psychopathology. Coping ways of problem-focused coping, seeking social support, focusing on the positive, tension reduction and self blame were in a positive correlation with mental well-being. Wishful thinking, detachment and keep to self were in positive correlation with certain ways of coping. (e.g., relatedness frustration was correlated with keep to self). Moderated mediation analyses were performed to investigate the cross-country effect of need satisfaction and frustration on mental well-being and psychopathology with ways of coping mediation. Country moderation was found to have a significant effect in relationships between need satisfaction and frustration and ways of coping in all research models, except for the relationship between relatedness satisfaction and seeking social support. While this relationship was interpreted as universal, other relationships interpreted as tended to be moderated cross-culturally. The findings were discussed within the framework of the literature.

Keywords: Basic Psychological Need Satisfaction and Frustration, Ways of Coping, Mental Well-Being, Psychopathology, Cross-Cultural

### ÖZET

# TEMEL PSİKOLOJİK İHTİYAÇLAR VE BAŞA ÇIKMA YOLLARININ MENTAL İYİ OLUŞ VE PSİKOPATOLOJİ ÜZERİNE ETKİSİ: TÜRKİYE, BREZİLYA VE İSVİÇRE'DE KÜLTÜRLERARASI BİR ÇALIŞMA

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Bu çalışmanın amacı temel psikolojik ihtiyaç tatmin ve engellemelerinin mental iyi oluşa ve psikopatolojiye, baş etme yöntemlerinin aracı rolüyle olan etkisinde ülke değişkeninin düzenleyici rolünü araştırmaktı. Veriler, 209'u Türkiye'den, 203'ü İsviçre'den ve 202'si Brezilya'dan olmak üzere 614 katılımcıdan anket yoluyla toplandı. Temel psikolojik İhtiyaçların Tatmini ve Engellenmesi Ölçeği, Baş Etme Yolları Ölçeği, Kısa Semptom Envanteri ve Warwick-Edinburgh Mental İyi-Oluş Ölçeği bu çalışmada veri toplamak için kullanılmıştır. Sonuçlar, ihtiyaç tatmininin mental iyi-oluş ile pozitif bir korelasyon içinde olduğunu ve ihtiyaç engellenmesinin psikopatoloji ile pozitif bir korelasyon içinde olduğunu gösterdi. Problem odaklı başa çıkma, sosyal destek arama, olumluya odaklanma, gerilimi azaltma ve kendini suçlama gibi başa çıkma yollarının mental iyi-oluş ile pozitif korelasyon içinde olduğunu se ihtiyaçı engellenmesinin seşlama yollarının mental iyi-oluş ile pozitif korelasyon içinde olduğunu gösterdi. Problem odaklı başa çıkma, sosyal destek arama, olumluya odaklanma, gerilimi azaltma ve kendini suçlama gibi başa çıkma yollarının mental iyi-oluş ile pozitif korelasyon içinde olduğu başa teme yollarının ise psikopatolojilerle pozitif ilişki içinde olduğu görülmüştür. Belirli ihtiyaç tatminleri ve

engellenmeleri, belirli başa çıkma yöntemleriyle ilişkilidir (örneğin, ilişkili olma engellenmesi, kendine saklama ile ilişkilidir). İhtiyaç tatmini ve engellenmesinin, başa çıkma yollarının düzenleyici rolü ile mental iyi-oluş ve psikopatoloji üzerindeki etkisini ülkeler arası biçimde araştırmak için düzenlenmiş aracılık analizleri yapıldı. İlişki olma tatmini ile sosyal destek arama arasındaki ilişki dışında, ihtiyaç tatmini ile engellenmesi ve başa çıkma yolları arasındaki ilişkilerin araştırıldığı modellerin tümünde, ülkenin düzenleyici rolünün anlamlı bir etkiye sahip olduğu bulunmuştur. İlişki olma tatmini ile sosyal destek arama arasındaki ilişki evrensel olarak yorumlanırken, diğer ilişkiler kültürlerarası düzenlenebilir olmaları eğilimleriyle yorumlandı. Bulgular literatür çerçevesinde tartışılmıştır.

Anahtar Sözcükler: Temel Psikolojik İhtiyaç Tatmini ve Engellenmesi, Baş Etme Yolları, Mental İyi-Oluş, Psikopatoloji, Kültürlerarası

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# DEDICATION

to Gözde, who gave meaning to my life with her elegant existence



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### **CHAPTER 1: INTRODUCTION**

Throughout history, almost all cultures have been interested in mental well-being and psychopathology. These concepts also form the basis of modern psychology (Ryff, and Singer, 1998). Obtaining and maintaining mental well-being is one of the greatest aims of modern humanity. This concept of mental health is affected by variety of factors from personal to macro-cultural (Hidalgo et al., 2010). Almost all human behaviours, from styles of living to interpersonal relationships are actually aimed at obtaining mental well-being. Political, economic and social institutions are formed for this pursuit. Basic psychological needs theory, which is a mini-theory of self determination theory, was developed to understand the factors responsible for obtaining mental well-being (Vansteenkiste, and Ryan, 2013). According to the theory, the satisfaction and frustration of three basic psychological needs, autonomy, competence, and relatedness, strongly influence mental well-being and psychopathology. The importance and impact of these three needs are universal, and their impact is the same in every culture of the world (Deci, and Ryan, 2000). However, the way people perceive these needs, the degree of importance they attach and the suitability of cultural factors to meet these needs vary in different cultures (Ryan, and Deci, 2017). One of such differences is about coping with stress and problems related to mental well-being and psychopathology. Coping is a quite broad concept in psychology and different coping strategies have different results in terms of mental health (Folkman, 1984; Folkman, and Lazarus, 1985). Such a broad concept, which is in life, can be applied very differently for people and can be affected by many different factors. Two of these factors are basic psychological needs (Skinner, and Edge, 2002), and cultural differences (Skinner, and Zimmer-Gembeck, 2007). In this context, it will be important to investigate the ways of coping in the impact of basic psychological needs on mental well-being and psychopathology and to examine the cultural differences that have an impact on this model.

#### 1.1. Mental Well-Being

In this section, mental well-being will be examined in detail and studies in the literature will be presented. In this context, philosophical and historical considerations of the concept of mental well-being, subjective and psychological well-being, mental well-being and psychopathology, factors associated with mental well-being and psychopathology will be presented.

#### 1.1.1. Philosophical and Historical Considerations of the Concept of Well-Being

Throughout history, the concept of mental well-being has been one of the fundamental themes of philosophy (Ryff, and Singer, 1998). Although there are philosophical approaches about mental well-being over the millennia, psychological research on this concept is not old. (Ryff, and Singer, 1998). In particular, with postmodernism, interest in psychological development and health increased after the 1960s (Ryan, and Deci, 2001). The field of study in psychology on psychopathology has shifted to understanding well-being (Diener, 1984) and how to improve well-being (Cowen, 1991).

There are two perspectives on the definition of well-being: Eudaimoniaism and Hedonism. The concept of "eudaimonia," derived from the Latin root in Aristotle's Nicomachean Ethics, opened a historical page in philosophical studies of mental health. In this essence, Aristotle poses the question of the highest virtue that human beings can attain. This questioning has made Aristotle one of the most important figures in the positive illumination of psychology (Ryff, 1989). According to Aristotle, the greatest virtue a human being can attain is "eudaimonia". Eudaimonia is a lifestyle rather than a momentary feeling of happiness. It is concerned with the happiness that is sustainable rather than a momentary happiness. It should be noted that the happiness mentioned here is different from that of the hedonistic (hedonistic) view, namely, "doing and experiencing things that give pleasure" (Waterman, 1993).

Another philosophical concept that has contributed to the emergence of the concept of mental well-being is hedonism (Ryan, and Deci, 2001). This idea also dates back to the Greek philosophers. According to Aristippus, a student of Socrates who contributed to the emergence of the concept of hedonism, in order to be happy, a person should do things that are pleasing to him/her and avoid things that gives pain to him/her (Diener, Lucas, and Oishi, 2002). According to hedonistic thinking, a good society consists of people who are at peace with themselves and enjoy life (Ryan, and Deci, 2000a). Hedonic happiness refers more to the current state of one's mood. In the present moment, the concepts of seeking pleasure and avoiding pain form the core of hedonism. In essence, it is about maximizing pleasure and minimizing pain.

#### 1.1.2. Subjective and Psychological Well-Being

In examining studies of well-being, it is apparent that the relevant literature focuses on the dimensions of subjective and psychological well-being. Subjective and psychological well-being are considered two of the most important psychological characteristics related to mental health (Derdikman-Eiron et al., 2011). While subjective well-being represents the hedonic dimension of well-being, psychological well-being constitutes the eudaimonic dimension. While investigating the components of a good life from these two perspectives, a wellspring of human values emerges that enhance people's potential in terms of what they can do (Keyes et al., 2002). Some researchers argue that these structures are identical. This can lead to conceptual confusion regarding psychological and subjective well-being. Although debate continues about the conceptual distinction between these two types of well-being, research has shown that they are two related but distinct concepts (Chen et al., 2013; Ryan, and Deci, 2000a; Samman, 2007; Waterman, 1993). Accordingly, subjective and psychological well-being are constructs that have different biological (Ryff, and Singer, 2006) and psychological (Waterman, 1993) relationships.

Consistent with research on what makes people happy and how people experience happiness, Diener (1984) defined the concept of subjective well-being to mean that an individual frequently experiences positive emotions by experiencing satisfaction with his/her life. The frequency with which a person has experiences that make him or her feel good is a determining factor in the person's subjective well-being (Diener et al., 1999; Schimmack, 2008). The concept encompasses people's reactions, emotions, and life satisfaction in the face of daily events (Oishi et al., 1999). Subjective well-being consists of subjective evaluations and is the measure of positivity for all aspects of life (Diener, 2000).

Psychological well-being is defined as psychological functioning in its simplest form. Psychological functioning includes self-realization, insight, life satisfaction, and functioning of the individual as a whole (Ryan, and Deci, 2001). The concept reflects that people have meaning in their lives, work to improve their impact on life, develop healthy relationships with others, act freely in their behaviors, and meet their personal needs and demands (Keyes et al., 2002).

The two approaches described above offer two perspectives on what a good life should be like and how human existence can become meaningful. Keyes et al. (2002) state that subjective well-being and psychological well-being are subsumed under the general concept of well-being and represent two distinct aspects of well-being. Mental well-being, which is a holistic view of well-being, refers to a multidimensional structure that includes both approaches of subjective well-being and psychological well-being. In recent years, researchers have internalized a holistic view of well-being more frequently.

#### 1.1.3. Mental Well-Being and Psychopathology

Since the beginning of modern human history, the definition of mental health has been influenced by the social environment, social values, historical events, intellectual and philosophical developments until it reached today's scientific definitions (Davison, and Neale, 2004). Although there have been different definitions or assumptions about psychopathology throughout history, psychopathology is a concept that expressed with mental illness, abnormal/maladaptive behaviors, and symptoms. Psychopathology refers to a range of significant impairments in mental well-being, but this definition does not capture the complexity of relationships between specific disorders and well-being (Goodman, Doorley, and Kashdan, 2018). For this reason, it is more beneficial to investigate the mental disorders and psychopathological symptoms by categorizing in psychological research (Cacioppo, and Bernston, 1999; Clark, Watson, and Mineka, 1994).

#### 1.1.4. Factors Associated with Mental Well-Being

Examination of the literature reveals that most studies on well-being address the factors that positively or negatively influence well-being. Studies have shown that people's mental well-being is influenced by their personal experiences and social, physical, and psychological characteristics (Hidalgo et al., 2010). Although variables such as gender and age (e.g., Hidalgo et al., 2010) are frequently cited in the literature as factors affect the mental well-being, this section identifies variables that affect mental well-well being such as socioeconomic status, educational level, relationship status, and parental status.

**Socioeconomic status** is one of the most important factors affecting well-being. It has been shown that there is a significant relationship between socioeconomic status and well-being (Hidalgo et al., 2010). In a comprehensive study by Minkov (2009) based on 97 countries, perceptions of life control and life satisfaction were found to predict levels of well-being. Poverty and low perceptions of life control were found to be positively related to individual unhappiness. The well-being of individuals with low socioeconomic status was also found to be negatively affected due to their low life opportunities. The socioeconomic status factor, which has important effects on psychological well-being, is important because it affects some objective conditions such as the health care system, education, employment, and leisure activities. It is argued that financial success or failure along with environmental resources can have a

significant impact on a person's sense of achievement, environmental dominance, and level of self-acceptance. This shows that socioeconomic level has an impact on access to various opportunities. Limited opportunities such as education, employment, and health care systems, impact negatively to mental well-being (Hidalgo et al., 2010). As a result, it can be said that socioeconomic level affects psychological well-being, self-acceptance, life purpose, environmental dominance, and personal development.

**Educational level** is another factor that has an impact on well-being. In different cultures and races, educational status positively predicts psychological well-being (Glenn, and Weaver, 1981). As studies have shown, improved educational status strengthen psychological traits such as resilience, mindfulness, and useful coping methods that are positively related with psychological well-being (Harding, Lopez, and Klainin-Yobas, 2019).

**Relationship status** is highlighted in the literature as one of the factors that influence the well-being. According to Hidalgo et al. (2010), a good marital relationship has a positive effect on health and psychological well-being. However, there are differences in the psychological well-being of individuals who have never been married or were divorced. Compared to married individuals, scores for self-acceptance and establishing positive social relationships are quite low among divorced individuals. In addition, levels of self-improvement are quite high among individuals who have never been married, while levels of building positive relationships with others and self-acceptance have been shown to be low. In a longitudinal study of life in a committed relationship and in a marriage, Dush, and Amato (2005) showed that the social support associated with a romantic relationship is an important determinant of well-being.

**Parental status** is also one of the factors related to well-being that affect people's lives in many ways,. The factors that can be counted among these situations include whether parents are still alive or not, whether people have met their parents or not, whether they have information about them or not. Studies have shown that individuals whose parents are alive have higher values on many different dimensions of psychological well-being than the individuals whose one or both parents are deceased (Marks, Jun, and Song, 2007). The negative effects of parental loss on individuals have been repeatedly demonstrated in various studies (Bergman, Axberg, and Hanson, 2017). The attachment of the human species to its family and caregivers is inherently one of the necessary factors for well-being.

#### 1.2. Basic Psychological Needs Theory

In this section, basic psychological needs theory will be examined in detail and studies in the literature will be presented. In this context, philosophical and historical considerations of psychological need concept, self determination theory, basic psychological needs theory, factors associated with basic psychological needs and basic psychological needs theory in cross-cultural comparison will be presented.

#### 1.2.1. Philosophical and Historical Considerations of Psychological Needs

Like all organisms, the human species wants to exist and complete the life cycle. Whether this is presented as a necessity from the perspective of personal survival, continuation of the species, or from a hedonistic perspective does not change the truth. Human nature tends to adapt optimally to its environment in order to exist. Adequate adaptation requires the satisfaction of a set of needs.. In addition to physical and biological needs, the idea that humans have certain basic psychological needs has a long history.

The human species is constantly searching for what it wants. Undoubtedly, psychological needs are crucial for this quest. The term of need is commonly used to express a person's desires, aspirations, or motivations (Baard et al., 2004). Desires, goals, and tendencies of people are referred to as the main internal factors that are effective in forming their current needs (Ryan, 1995). When needs are not met, an evoked force occurs to meet this need. This is called as impulse. The tendency to engage in behaviors for this purpose is called a motive. Psychological needs have been defined as the major determinants of human behavior that cause behavioral variability and influence cognitive processes (Lathem, and Pinder, 2005). The absence of important conditions that allow people to know themselves, develop their abilities, make their own decisions, and establish healthy relationships with others triggers the urge to meet psychological needs (Baymur, 1994).

Many approaches to psychological needs have been developed. Murray's approach defines 20 needs such as achievement, autonomy, intimacy, and play. Maslow's model of five needs classified as physiological needs, safety, belonging, esteem, and self-actualizatio. Alferder's threefold classification includes the need for existence, relatedness and growth (Hall, and Lindzey, 1978, Maslow, 1970). These approaches emphasize the importance of psychological needs in human nature and highlight the role of psychological needs on well-being and pathology.

#### **1.2.2.** Self Determination Theory

The fact that psychological need is such an important subject, has led researchers to conduct more comprehensive, measurable and universal studies. Self-determination theory is developed for this purpose (Ryan, and Deci, 2000a; Ryan, and Deci, 2002; Vansteenkiste, Niemiec, and Soenens, 2010). Ryan, and Deci (2000c) emphasized the concept of needs has a property that covers a large number of phenomena, but for the use of this concept to gain functionality, it is necessary to define a small number of needs that explain many phenomena. In this context, the self-determination theory was developed, which is an "upper" theory that provides a holistic perspective for psychological theories that define personality from different perspectives (Ryan, and Deci, 2002; Vansteenkiste, Niemiec, and Soenens, 2010). The theory relies on internal and external motivational phenomena. The cognitive and social development of people and the differences between individuals in this context are related to internal and external sources of motivation (Deci, and Ryan, 1985; Ryan, and Deci, 2000a). According to Deci, and Ryan (1985), extrinsic motivation is the performance of an activity with a result-oriented perspective under the influence of external factors such as reward and praise. In contrast, individuals with intrinsic motivation act freely without depending on these external factors. As indicated by the definitions, intrinsic motivation supports "self-determination" better than extrinsic motivation (Deci, and Ryan, 1985). According to this theory, self-determination is the feeling of having a choice to initiate and regulate one's behavior (Deci, Connell, and Ryan, 1989). Selfdetermination theory identifies three basic innate needs: Autonomy, Competence, and Relatedness (see Figure 1.), and it is argued that the degree of satisfaction of needs has a direct impact on the individual's attitudes and behaviors. This impact is not limited to attitudes and behaviors but is critical to mental health (Deci, and Ryan, 2000).

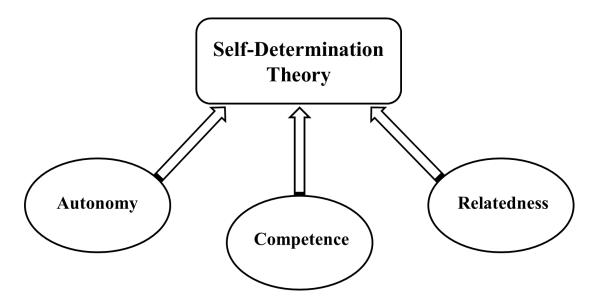


Figure 1. Basic Psychological Needs in Self-Determination Theory

Autonomy, one of the three psychological needs in self-determination theory, is defined as an individual's need to act within the framework of his/her own feelings and desires, to engage in behaviors consistent with his/her own choices, and to independently control those behaviors (Andersen, Chen, and Carter, 2000). An autonomous individual chooses, initiates, accepts, and stands behind her/his actions and behaviors with her/his free will (Deci, and Ryan, 2000). If the person performs her/his behavior under the coercion of others or tries to resist this coercion, it means that he/she is controlled, and in this case it shows that the person's autonomy need is not fulfilled (Deci et al., 1991). If a person has autonomy, he/she must be aware of what he/she wants and know that he/she has the right to choose and act accordingly (Ryan, and Stiller, 1991). To satisfy this need, the individual must reveal his/her free will in choice situations, and to feel it, he/she must be able to do so with an internal motivation (Ryan, and Grolnick, 1986). In other words, to satisfy the need for autonomy, people should be able to act according to their own desires and values, and at this point, they should base the reasons for their decisions on internal resources rather than external factors (Ryan, and Deci, 2017). Individuals who make their own decisions, face the consequences, and feel that they have control over their own actions support their subjective well-being by satisfying their need for autonomy (Andersen et al., 2000). However, in satisfying the need for autonomy, it is important that the environment in which the individual lives and grows up supports autonomy. In an environment without autonomy support, the satisfaction of this need is prevented, and

the pressure of the external environment determines the person's behavior. In such a case, people's behavioral motivations develop in parallel with the reward and punishment practices of the external environment. The determination of behavior by external rather than internal motivations leads to the development of individuals who avoid taking responsibility for their behavior in daily life, cannot develop active solutions to their problems, have low life satisfaction, have difficulty forming social and close relationships, and remain passive in life (Deci et al., 2006; Ryan, and Deci, 2002; Ryan, and Deci, 2006; Sheldon, Ryan, and Chief, 1996).

Relatedness, which is another need in self determination theory, involves the experience of closeness and bonding with others and is defined as the need to be in meaningful interactions with others, to feel related to the social environment, to belong, and to form interpersonal bonds (Reis et al., 2000; Sheldon, and Hilpert, 2012). It requires caring about others' feelings and thoughts, sharing with others, helping by putting one's own interests aside, and striving to belong to the environment by building meaningful relationships (Baumeister, and Leary, 1995; Deci, and Ryan, 2000; Reis et al., 2000). For this reason, the need for relatedness has a context that people can fulfill by being in satisfying relationships that help them feel secure and part of something (Chang, Chang, and Chen, 2018). The tendency of people to integrate into a social group provides the impetus for meeting the need for relatedness. In this direction, relational supports have the power of feedback that provides internalization and autonomic regulation (Ryan, and Deci, 2000c). Satisfying the need for relationship, like other psychological needs, plays an important role in mental health and well-being (Reis et al., 2000). Situations in which the need for relatedness is not met or is inadequately met endanger mental health and form the basis for many psychological diagnoses (Kasser, and Ryan, 1999; Ryan, Deci, and Grolnick, 1995). To satisfy the need for relatedness, individuals need to feel that they have an important place in the lives of others, to communicate with them about personal issues, to participate in shared activities, to be understood and appreciated by them, and to have friends with whom they can interact. In this way, people avoid introverted and insecure feelings that cause them to isolate themselves from others (Reis et al., 2000; Ryan, and Deci, 2008).

**Competence,** another basic psychological need, can be defined as the need to positively influence the environment and to be effective and efficient in dealing with the environment. It is the totality of the individual's learning, interaction with the

environment, and adaptation to the environment. Individuals who feel competent that they will successfully achieve their goals (Williams el al., 2002). Feeling competent allows people to feel like influential individuals (Ryan, and Deci, 2017). If the person sees himself/herself as insufficient to perform a certain action, he/she will not be motivated, and as a result, the behavior will not take place. Therefore, the need for competence is also essential because it is a necessity for human behavior (Deci, and Ryan, 1985). Competence is not an acquired skill or ability, but a sense of confidence and effectiveness that is more likely to be demonstrated in action. Moreover, it leads to the initiatives necessary for the development of adequacy, skills, and abilities (Deci, and Ryan, 2004). The need for competence is referred to as a source of energy for the learning process. To the extent that individuals perform their behavior effectively, the need for competence is satisfied, and in this direction, increasing motivation for competence leads to differently behave and continues the individual's learning process (Deci, and Ryan, 1985). It is critical to identify the activities that individuals can engage in to satisfy their need for competence and demonstrate their abilities. When individuals cannot be active in these activities, they experience frustration of the need for competence. Then, they are damaged by feelings of inefficiency, failure, or helplessness (Deci, and Ryan, 1985; Elliot, McGregor, and Thrash, 2002; Vansteenkiste, Ryan, and Soenens, 2020). While it is assumed that individuals whose competence needs are satisfied are able to cope effectively with problems by relying on their own knowledge and skills in emerging situations, it is stated that individuals whose competence needs are not satisfied make inadequate use of their knowledge and skills and are unable to cope with the situation (Deci, and Ryan, 1985; Deci, and Ryan, 2000).

If the conditions for the satisfaction of the person's basic psychological needs are present, the individual will potentially be at an optimal level of development, and the individual will have maximum development both cognitively and socially under these conditions (Deci, and Ryan, 2000). Satisfaction of the three basic psychological needs, namely the need for autonomy, competence, and relatedness, is necessary for the individual to achieve optimal functionality and continue the integrity of life.

#### 1.2.3. Basic Psychological Needs Theory

In self-determination theory, basic psychological needs are defined as the psychological nutrients necessary for the harmony, integrity, and development of the individual (Ryan, 1995). Just as a plant needs nutrients such as sun, warmth, and light,

humans need psychological needs such as autonomy, competence, and relatedness. The theory states that the appropriate satisfaction of these needs ensures the development of the individual (Sheldon, and Ryan, 2011). Self-determination theory has some mini-theories covering different topics and one of them is the basic psychological needs theory. According to the basic psychological needs theory, the degree of satisfaction or frustration of the needs affects the mental state of the person (Vansteenkiste, and Ryan, 2013). Viewed within this framework, the satisfaction of basic psychological needs affects the individual's well-being, and frustrations related to the failure to meet these needs can form the basis for resistance and psychological harm to the individual (Ryan, and Deci, 2000b).

Satisfying basic psychological needs facilitates adaptation to changing life events or situations and is necessary for mental health (Baard, Deci, and Ryan, 2004; Deci, and Moller, 2005). Satisfying the needs for autonomy, competence, and relatedness contributes to the integration process and well-being (Ryan, and Deci, 2008; Chen et al., 2015; Ryan et al., 1996). According to the results of a study that examined the relationship between mental health and basic psychological needs, a relationship was found between satisfaction of basic psychological needs and low levels of depression (Ryan et al., 2008). According to this study, the level of depression decreases when the level of satisfaction of basic psychological needs increases. In the study conducted by Tian, Chen, and Huebner (2014), it was found that as the level of satisfaction of basic psychological needs increases.

When individuals whose basic psychological needs are not met, an inner defense mechanisms is activated in response. These emergent mechanisms tend to compensate for the individual's unmet psychological needs with other existing tools (Deci, and Vansteenkiste, 2004). It should be noted that in theory, need frustration does not equate to needs dissatisfaction. Rather, need frustration occurs when psychological needs are actively thwarted (Vansteenkiste, and Ryan, 2013). A growing body of research shows that need frustration is clearly related to psychopathology (e.g., Bartholomew, Ntoumanis, and Thøgersen-Ntoumani, 2011; Stebbings et al., 2012). Many studies have demonstrated the role of need frustration in a variety of mental disorders and psychopathological symptoms, including depressive symptoms, eating disorders, and anxiety disorders (Ryan, and Deci, 2017), borderline personality traits (van der Kaap-Deeder, Brenning, and Neyrinck, 2021), narcissism (Matosic et al., 2017), suicidal ideation (Britton et al., 2014), and psychological distress (Gilbert et al., 2021).

#### 1.2.4. Factors Associated With Basic Psychological Needs

In addition to individual characteristics, environmental and social factors are also an important factor in the emergence and satisfaction of basic psychological needs (Ryan, and Deci, 2017; Schultz, 2014). When social-contextual (environmental) factors interfere with children's need satisfaction, these needs cause children to feel out of control (autonomy frustration), inadequate (competence frustration), and alone (relatedness frustration). Therefore, the social context plays a very critical role in triggering an individual's vulnerability and response to foster their potential (Ryan, and Deci, 2000c). Contexts such as family, friends, romantic relationships, and the school environment, which are important social domains of the developmental stages, are crucial. Individuals who grow up in families where needs are not met have been found to experience feelings of tension, short-term satisfaction, conditional love, shame after failure, fluctuations in self-esteem, weak coping skills, low self-worth, feelings of not being approved by parents, and anger toward parents (Assor et al., 2004). On the other hand, the supportive attitude of the environment (e.g., parents, teachers) increases the level of satisfaction of basic needs (Deci et al., 2006; Ryan et al., 1996) and supports individuals to engage in healthier behaviors by gaining strength in coping with stress (Timmerman, and Acton, 2001).

The potential to be fully functional is determinate in several ways (Ryan, Deci, and Vansteenkiste, 2016). Each person faces certain opportunities and obstacles in their development related to biological (e.g., temperament, physical disabilities, intellectual potential), social (parental relationships, romantic relationships, and socialization pathways), and other (e.g., political environment, economic welfare, job oppurtunities, educational opportunities, poverty, migration) factors.

The relationships between parental behaviors and the satisfaction of their children's basic psychological needs have been supported by numerous studies in the literature (Cordeiro et al., 2015; Costa et al., 2016; Ahmad, Vansteenkiste, and Soenens, 2013). This relationship, which can be explained by the social effects on need satisfaction and frustration. Basic psychological needs theory highlights the importance of parental autonomy support. Koçak et al. (2020) showed the positive relationship between autonomy supportive parenting and basic psychological need satisfaction. In this respect, it can be assumed that there will be a strong relationship between the parents' attitude and the satisfaction and frustration levels of the basic psychological needs.

Another and very important factor for social and emotional support of basic

psychological needs is romantic relationships. According to many theorists, romantic relationships are also a reflection of family relationships and sometimes a field of compensation (Knee et al., 2005; Gore, Cross, and Kanagawa, 2009). Many studies that examined the need satisfaction and frustration levels of individuals in romantic relationships show that the presence of a relationship and, moreover, the presence of a satisfying relationship are significantly related to the level of need satisfaction (Blais et al., 1990; Gaine, and La Guardia, 2009). It is found that the social and emotional support of the person in a romantic relationship occurs in a reciprocal relationship with their satisfied needs.

Bradshaw (2021) showed the effects of factors such as freedom, standard of living, basic rights, socioeconomic standards, and social respect on psychological need satisfaction and frustration. The macrocultural characteristics of the environment in which a person lives naturally ensure that his or her needs are satisfied or frustrated. In addition, macrocultural characteristics also affect the individual's microcultural characteristics, potentially affecting the individual's needs, as well as the individual's family, educational, and relational context.

#### 1.2.5. Cross-Cultural Comparison of Basic Psychological Needs Theory

Although the self-determination theory is concerned with the innate needs of human beings and conducts research in this regard, the change and shaping of needs under the influence of the environment is a very important factor. In this context, the study of cultural differences, in which the influence of the environment increases, constitutes a critical role. Even though basic psychological needs are universal, the factors that influence the satisfaction of these needs and the manner in which they are satisfied might differ across cultures (Chirkov, Ryan, and Sheldon, 2010; Ryan, and Deci, 2011). It is argued that these needs should be satisfied with different values in each culture. This is because behaviors have different meanings from one culture to another depending on the culturally accepted values and practices (Ryan, and Deci, 2002). In addition to semantic differences, the social and cultural opportunities necessary to satisfy needs and not be frustrated can vary widely. Thus, cultural differences affect basic psychological needs.

It has been noted that there are cross-cultural differences in how psychological needs are met (Ryan, and Deci, 2000). For example, because in collectivistic cultures group, harmony is important, behaviors in the form of conformity to norms do not lead to a sense of inhibition of the need for autonomy, whereas in individualistic cultures conforming behaviors inhibit the satisfaction of autonomy. It is argued that since Western societies are individualistic, autonomy is also valid in these societies (Markus, and Kitayama, 1991). In a similar study conducted by Hui, and Villareal (1989), Chinese students were examined and it was found that these students, who were raised in a collectivistic culture, required less autonomy than those raised in individualistic cultures. In a study conducted in the United States, individualistic people were found to need more autonomy (Deci, and Ryan, 2000). It should also be noted that the semantic meanings of needs vary for individuals in different cultures (Ryan, and Deci, 2017). For example, the concept of autonomy in one culture might be identified with defining one's individuality by going into one's own home after age 18, while in another culture it might be identified with defining one's individuality by contributing to the family economy after age 18. Although the human need for autonomy is universal, the influence of social and cultural factors on how it can be satisfied is undeniable.

In addition to the need for autonomy, another need that is often considered in crosscultural debates is relatedness. Contrary to what is sometimes assumed, it is possible to satisfy both the need for relatedness and the need for autonomy, as they are distinct concepts (Markus, and Kitayama, 2003; Wiggins, and Trapnell, 1996). Similarly, it might be possible for a culture to have supportive factors for both. But sometimes the importance a culture attaches to relatedness and the ways developed to satisfy it are different. As Kagitcibasi (2005) argues, in collectivist cultures the need for relatedness is more sought after and more resources are created to satisfy it. More than in individualistic cultures, people in collectivistic cultures tend to belong to a group, live in harmony, and be one with a community. This is how social opportunities and expectations are shaped in such cultures and countries. Even though the tools that people can find to satisfy their relatedness needs become stronger and more diverse as a result of such cultural and national differences, the universal meaning of this need does not change. Thus, the need for relatedness is necessary in both individualistic and collectivistic countries (Ryan, and Deci, 2017).

Satisfying the need for competence requires environments in which the person can develop and demonstrate skills (Elliot, McGregor, and Thrash, 2002). People's access to such environments can vary greatly across cultures, and so can the opportunities to satisfy the need (Ryan, and Deci, 2017). For example, in one culture there might be very few activities where women can participate in society and demonstrate their

competence or people from a low socioeconomic class in a society may have similar problems and inhibitions. Opportunities for different age groups may also differ from culture to culture. While young people in one culture may not find opportunities to satisfy their need for competence, older people in another culture might have this problem. For example, Sen (2000) found that some cultural dynamics prevent women from meeting their competence needs. The need for competence of women who could not get enough education, who could not find opportunities to show their adequacy in society, were frustrating. Similarly, the political environment in which people live and the life politics associated with it have a major impact on competence (Doyal, and Gough, 1993). Although the cultural diversity of the need for autonomy and relatedness is more contested in the literature, the need for competence and access to the resources necessary to achieve it also differ across cultures.

These studies emphasize that whether the culture is individualistic or collectivistic affects the need for autonomy. On the other hand, autonomy does not mean detachment from the social environment. On the contrary, failure to fulfill the need for autonomy leads to cultural alienation (Deci, and Ryan, 2000). Apart from the fact that the sources of satisfaction of people's needs change in each culture and the degree of effectiveness of these resources, research shows that the impact of these needs on well-being or unwellness does not change. Chen et al. (2015) examined whether the satisfaction of autonomy, competence, and relatedness and the frustration of these needs contribute to participants' subjective well-being and unhappiness, as outlined in basic psychological needs theory, regardless of cultural background and individual differences in the expression of need satisfaction. Two studies were conducted as part of this research. In the first study, data were collected from 685 adolescents in Belgium and China. The analysis revealed that the need for autonomy and competence is perfectly related to subjective well-being and that cultural and individual differences do not moderate this relationship. In the second study, a total of 1051 data were collected from Belgium, China, America, and Peru with respect to culturally diverse nations. The analyses showed that satisfaction of basic psychological needs is related to well-being and that frustration of these needs is an excellent predictor of negative pschological outcomes. Other cross-cultural research has found robust associations between basic need satisfaction and well-being outcomes such as subjective wellbeing and lower symptoms of psychopathology across cultures (Church et al., 2013; Sheldon, Abad, and Omoile, 2009; Sheldon et al., 2004).

Although the importance of needs varies under the influence of macroculture, their impact on well-being and psychopathology seems to be universal. This allows to examine some cultural differences that might be a factor between needs and their relationship to well-being or psychopathology. One of these factors is coping methods, which differ across cultures. Independent studies show that the degree of need satisfaction shapes and influences ways of coping (Skinner, and Edge, 2002), and that ways of coping vary widely across cultures (Skinner, and Zimmer-Gembeck, 2007). In light of these, cross-cultural variation in the impact of basic psychological needs on well-being and psychopathology through ways of coping reveals itself as a subject that requires to be essentially examined.

#### 1.3. Coping

In this section, coping will be examined in detail and studies in the literature will be presented. In this context, definiton of coping, classification of coping ways, ways of coping in relation to mental well-being and psychopathology, affect of basic psychological needs on coping, coping in cross-cultural comparison will be presented.

### 1.3.1 Definiton of Coping

Life goes on with the problems that all living beings have to cope with in almost every period of time cycles. Like any living being, humans must adapt to their environment in order to survive. However, unlike other living beings, humans must have the ability to adapt not only physically, but also emotionally and cognitively, so that they can protect not only their physical health, but also their mental health. To this end, each person develops strategies by acquiring some skills on how to overcome any threat to physical and mental health, in short, how to fight with life (Aldwin, 2007).

Coping is an important and broad concept in psychology with a long and complex history (Snyder, and Pulvers, 2001). Coping in the historical developmental process was discussed by Folkman, and Lazarus (1984) with these five different perspectives: 1) Unconscious defense mechanisms or ego defense as proposed by Freud in his psychoanalytic theory,

2) Individual approaches such as self-confidence, self-efficacy, or internal control that Erikson addressed in his approach to life stages,

3) Problem-solving efforts in the evolutionary and behaviorist approach theory,

4) A genetically encoded response that both individuals and animals exhibit when confronted with stress, as outlined by researchers such as Cannon and Selye,

5) The organism's ever-changing cognitive and behavioral efforts to adapt when its

individual, physiological, and psychological resources are depleted.

As defined throughout this historical development process, coping is the cognitive and behavioral efforts of individuals to deal with needs that arise from their environment or that they themselves have created in order to control, reduce, or eliminate negative situations or threatening stressful events (Folkman, 1984). The function of coping is generally to prevent negative physical or psychological problems (Holahan, and Moos, 1986).

According to coping model of Folkman, and Lazarus (1984), people respond to stressful situations in consonance with their appraisal strategies: primary appraisal, secondary appraisal. In these appraisal processes, the person's resources and quality of life can be effective in developing the process (Craciun, 2013; Lewis, Ollendick, and Byrd, 2012). Primary appraisal is the process of determining what the situation means to the person. Secondary appraisal is the process of evaluating the resources one has to cope with the situation (Lazarus, and Folkman, 1984). At the end of the two stages, the person activates the coping strategies.

According to this model, the coping process is also influenced by the individual's personal and social resources and constraints. These resources and limitations include the individual's level of performance, personality traits, attitudes and beliefs, financial opportunities, physical health status, and social patterns. Psychological distress and coping are an interactive model. According to the model, the individual and the environment are in an active, fully reciprocal, and mutual interaction (Folkman et al., 1986).

### 1.3.2. Classification of Coping Ways

Many cognitive, emotional, or behavioral strategies are used to cope, and some coping methods lead to more positive outcomes while others tend to cause negative outcomes (Folkman, and Lazarus, 1985; Lazarus, 1993b; Hampel, and Petermann, 2006; Chao, 2011). There are many ways to cope with stress, such as problem solving, seeking information and support, feeling helpless, regulating emotional responses, avoidance behaviors, self-pity, religious thinking, blaming oneself or others, social withdrawal, repetitive thoughts, anger, or acceptance (Skinner, and Zimmer-Gembeck, 2007). These ways are categorized into different groups by different researchers, such as task-oriented coping, emotion-oriented coping, and avoidance-oriented coping (Endler, and Parker, 1990), positive coping and negative coping (Xie, 1998), productive coping and nonproductive coping (Frydenberg, and Lewis, 1993).

In addition, Rothbaum, Weisz, and Snyder (1982) made one of the classifications based on the control principle. According to this, the primary-secondary model of perceived control was presented as two types of coping methods. In primary control, the person tries to deal with the problem or stressful situation by changing the reality or environment, while secondary control is a mechanism to control and change the psychological effects of the problems by refraining from changing the existing reality. Primary-secondary control is a coping category that can differ significantly between people and cultures in terms of the discovery and awareness of spheres of influence in their lives, the determination of these spheres of influence by the social environment, and the complex cognitive processes involved. While primary control is defined by the individual's desire to control the environment, secondary control is defined by the submissive acceptance of the environment in relation to the problem.

As a result of his research, Lazarus (1993a, 1999) established the principles of the coping process as follows. Coping is a complex process. Different coping strategies can be used in all stressful situations. The coping process may vary according to the stressful event and personality, thus depends on the evaluation of the stressful situation. Some coping strategies are related to personality. Positive thinking, for example, is not variable because it depends on the personality of the individual. On the other hand, seeking social support is variable because it is related to the environment. Different coping styles can be used at different stages of the stressful situation. Coping is an important predictor of emotional outcomes. In this regard, some coping strategies might lead to positive outcomes, whereas others may lead to negative outcomes.

Within the framework of Lazarus and Folkman's theory, all these ways are basically grouped into two main categories: problem-focused and emotion-focused coping styles (Lazarus, and Folkman, 1984; Şahin, and Durak, 1995). As mentioned earlier, appraisals of problematic and stressful situations lead to different ways of coping. When appraisals lead to the conclusion that something can be done about the stressful situation, "problem-focused" strategies are used; when nothing can be done about the stressful situation, "emotion-focused" coping strategies tend to be used. According to Folkman, and Lazarus (1980), problem-focused coping is the gathering of information and taking action to change the problematic situation, which is determined by the interaction between the person and the environment. This coping strategy aims to eliminate the stressful situation, minimize its effects, or change the person's

relationship with the stressor. The problem-focused coping mechanism includes cognitive and behavioral styles such as recognizing the stressor, appraising the stressor, choosing the option to change the situation, and actively acting on the cognitive restructuring processes to resolve the problem. Problem-focused coping includes direct problem-focused behaviors such as dividing the problem into parts, acquiring information, seeking alternatives, confronting, taking responsibility, reassessing the situation, and self-control. The person using the problem-focused coping style feels active and in control of the situation (Aldwin, and Yancura, 2004; Folkman, and Moskowitz, 2000). In emotion-focused coping, the person attempts to reevaluate and change the meaning of the event causing the stress, or attempts to reduce the negative emotions caused by the stress by escaping the stressor and feeling better. This coping can be particularly useful when stressors are present that are difficult to control. Emotion-focused coping styles includes emotional, cognitive, and behavioral efforts to reduce the emotional impact of stress. It is not directly aimed at solving the problem (Lazarus, and Folkman, 1984). As attempts are made to reduce and regulate the negative emotions caused by the stressful situation, there are various responses, including strategies such as focusing on the positive, seeking social support, self-soothing (relaxation exercises), seeking emotional support, expressing negative emotions, suppressing emotions, re-evaluating, avoiding thinking about the stressor, wishful thinking, self-blame, denial, tension reduction, keep to self, and detachment (Carver, and Connor-Smith, 2010).

Individuals' evaluations of stress factors and their perceptions of being able to regulate or control the situation lead to different ways of coping (Carver, 2011; Carver, Scheier, and Weintraub, 1989; Zimmer-Gembeck, and Skinner, 2016). Problem-focused and emotion-focused coping styles have different proximal goals. Proximity determines which responses are made. Which behaviors to choose and the function of those behaviors depends on the established purpose. For example, if the person's purpose in seeking support is to gain trust and emotional support, emotion-focused coping is used; if the purpose of seeking support is to obtain information and get instrumental help, a problem-focused coping strategy is used (Carver, and Connor-Smith, 2010). However, comparing them in terms of their functionality, it can be said that it is not correct to consider emotion-focused and problem-focused coping as completely independent coping styles. These two coping styles complement each other in many stressful situations, rather than being interchangeable processes. Therefore, adaptive coping can be achieved by identifying the problem and making an effort to solve it, and by balancing the regulation of emotional processes (Lazarus, 2006).

#### 1.3.3. Ways of Coping in Relation to Mental Well-Being and Psychopathology

Research on this topic shows that coping is a concept that plays a role in mental wellbeing and psychopathology. According to Lazarus, and Folkman (1984), coping with stress is an ever-changing cognitive and behavioral effort to manage specific internal and external demands that exceed the individual's resources in the face of a stressful situation and may be related to mental well-being. The type of coping methods people prefer given the situations in which they live also affects well-being. In the studies conducted, positive focus (Karademas, 2007), social methods of problem solving (Chang, D'Zurilla, and Sanna, 2009), problem-focused coping (Mayordomo-Rodríguez et al., 2015), and rapid recovery (Tomás et al., 2012) have been found to be effective. In addition, studies show that seeking and achieving social support is an important predictor of mental well-being (Chao, 2011). Lavasani et al. (2011) found that social support and perceived parental attitudes affect mental well-being. Shakespeare-Finch, and Green (2013) also examined the relationship between emotional social support and well-being during and after a natural disaster and found that social support had positive and significant relationships with well-being dimensions.

The way problems are managed, their effectiveness, and the intensity of stress all influence mental health (Farley et al., 2005). When reviewing the literature, one often comes across studies that show that people who use certain coping styles suffer more from mental health problems. Study of Maurier, and Norhcott (2000) showed that work-related stress and avoidance coping methods significantly predicted depression symptoms in nurses. Jampol (1989) examined the possible relationships between coping strategies and adjustment to college, anxiety, and depression in college students. The results of the study showed that using strategies such as imaginative thinking, self-isolation, alienation, and not using strategies such as focusing on the positive, optimistic comparison, and focusing on the problem positively predicted anxiety, depression, and low adjustment.

## 1.3.4. Affect of Basic Psychological Needs on Coping

Life for all people is a compound of continuous and incessant choices. Human beings, consciously or unconsciously, always try to find and exhibit the behavior that provides the greatest benefit and pleasure. As mentioned earlier, one of the most important

factors that can cause a person's well-being or psychopathology in this set of behaviors is ways of coping. Aside from the results of the ways people cope with problems, why and how they resort to these methods is one of the most important aspects being explored. According to the basic psychological needs theory, the state of satisfaction of basic psychological needs plays a fundamental role in shaping the behavior of individuals at every moment of life. According to studies of Skinner, and Edge (2002), the satisfaction of three basic needs determines how people respond to coping problems. When people feel autonomous, competent, and related to their environment, they use coping strategies that have a positive impact on mental health. Research has found that basic psychological needs, in addition to coping, also change the way people evaluate and appraise (Ntoumanis et al., 2009; Skinner, and Edge, 2002). According to this research, a person whose needs are satisfied may evaluate both primary and secondary appraisals of problems more positively and usefully, and find the appropriate coping method for himself/herself.

Results in the literature indicate the relationship between the satisfaction of basic psychological needs and healthier and more functional coping methods. Fecteau (2011) examined the relationship between need satisfaction and coping in university students. Students' need satisfaction and coping strategies were examined a few weeks before and a few weeks after midterms. When measured before and after midterms, coping was found to play a complete mediating role between need satisfaction and goal development. According to another study conducted with dancers, dancers' level of appraisal when faced with performance anxiety problems and the usefulness of coping strategies in relation to them vary according to their level of basic psychological need satisfaction (Quested et al., 2011). Another study examined the relationship between individuals' posttraumatic growth and the association between basic psychological needs and coping methods (Yeung et al., 2015). According to the results, individuals with high levels of relationship satisfaction achieved psychologically healthier outcomes by using appropriate and adaptive coping methods (e.g., seeking social support) after traumatic experiences. According to another study, individuals with high satisfaction levels of competence and autonomy, have been shown to use coping methods more effectively by evaluating problems more positively and focusing on the positive aspects of the situation (Altena et al., 2018). In addition, results in the literature indicated that individuals who have their basic psychological needs met use more meaningful coping methods in school life and problems in the

school environment (Shih, 2015; Bonneville-Roussy et al., 2016), and individuals whose needs are met for problems in sports life, injuries, and psychological breakdowns use more focused and successful coping methods (Kendellen, and Camire, 2015; Podlog et al., 2013; Amiot et al., 2004). Although the number of studies on this topic, and on frustration coping methods in particular, is not high in the literature, it would not be surprising to see a relationship between two theoretically compatible topics that applies to all domains of life.

#### 1.3.5. Cross-Cultural Comparison of Coping

The core point of cross-cultural research in the world of science is whether the focused concepts are formed by the universal characteristics of individuals or by the influence of society and the environment. As mentioned earlier, coping ways depend on the problem, the person's assessment of the situation, the person's cognitive functions, satisfaction of psychological needs, and many other characteristics. In addition, coping ways are influenced by many sociocultural levels and diversity, including many cultural contexts (Skinner, and Zimmer-Gembeck, 2007). The coping way is shaped not only by an individual's appraisal of the situation they face, but also by situations that are socially accepted or proscribed in terms of norms (Lazarus, and Folkman, 1984). Besides, cultures are structures influenced by the characteristics of their social institutions, definitions of norms, their political side, interpersonal relationships, the impact of laws on social life, and even the characteristics of spoken language. Therefore, there are many different variations that can affect the way of coping in a culture specific, including educational, political, and economic structures (Kagitcibasi, 1986). Although there is a dominance of Western societies in the literature in the crosscultural study of this topic, this section presents results of research conducted using different cultural structures in the context of cross-cultural differences and similarities in coping ways.

The first study of coping methods in collectivist cultures (Marsella, Escudero, and Gordon, 1972) aimed to determine the common coping methods used by adults in countries such as the Philippines, Korea, and Taiwan; and as a result, projection, acceptance (in a fatalistic perspective), religious thought, and perseverance were commonly used. These ways indicate that people are prone to use emotion-focused coping ways.

The first cross-cultural study of primary and secondary control categorization was conducted in Germany and Japan, and mother-child relationships were examined by Trommsdorff (1989). The results from Germany showed that mothers were less likely to interact cooperatively with their children and reacted harshly and negatively to their children's mischievous behavior. In Japan, on the other hand, mothers had harmonious and cooperative interactions with their children and reacted to their children's inappropriate behavior with blame, shame, and sadness. In this context, it was emphasized that the development of primary-secondary control in children may have aspects related to the mother-child relationship to try to recognize the limits of the impact on the environment. It was discussed that primary control is related to individualism and self-confidence, and secondary control is related to dependence, harmony, and conformity.

In another study on this topic, the differences between individualistic and collectivistic countries were examined using these countries in the study conducted in Malaysia, America, Canada and Germany (Essau, 1992). It was found the secondary control was significantly higher in collectivist countries, while no difference was found in primary control. Accordingly, people in a collectivistic culture use coping methods related to accepting the environment effect rather than changing it.

Another study examined coping ways in India, Italy, Hungary, Sweden, and Yemen with 17 to 18-year-olds (Olah, 1995). This study examined all behavioral and cognitive functions used in coping with internal and external problems and generally divided them into three categories: Assimilation (changing the environment to one's advantage), Accommodation (changing oneself to one's advantage), and Avoidance (a person's physical or psychological avoidance of the problem). Results show that participants in Yemen and India use much more accommodative coping methods than participants in Sweden, Italy, and Hungary, while participants in Sweden, Italy, and Hungary use much more assimilational coping methods. While women in all cultures tend to use more accommodative and emotion-focused methods, men tend to use more assimilative and problem-focused ways. It has been interpreted that this gender difference in outcomes is related to the coping methods that are socially attributed to the genders, and it has been found that men tend to use more functional methods and women more emotion-focused solutions.

One study examined the coping way of "reference to others" (seeking social support, a search for belonging, a spiritual search, seeking professional help, etc.) in Australia, Colombia, Germany, and Palestine (Frydenberg et al., 2003). Seeking some form of communication and contact with the external environment (social support, religion,

and professional help) was found to be more common in collectivist countries to cope with problems.

In a study in which there were both similarities and differences, Gelhaar et al. (2007), conducted an important study in which problem-focused coping mechanisms are examined in Croatia, the Czech Republic, Germany, Italy, Norway, Portugal, and Switzerland. In the study, which examined the problem-focused coping method in many different categorizations, it was found that almost all countries used the problem-focused coping method to a high degree. This means that the participants were either actively involved in solving the problem or were engaged in a cognitive process related to solving the problem. It is stated that, when examining methods of addressing future problems, it was assumed that the low results from Croatia were related to the low employment rate and political and economic developments in the country at the time. The results show that apart from the individualistic-collectivist comparison, which is the most commonly considered comparison in cross-cultural studies in the general perspective, country or culture-specific characteristics, which can differ in a very high variance, such as the political, economic, social, and educational situation in which the respective culture was at that time, can also influence such results.

#### 1.4. Aim of the Study

Throughout history, reaching mental well-being and avoiding psychopathology has been two of the important desires for humanity. In the light of these desires, questions were asked and studies were conducted both in philosophy and psychology. Basic psychological needs and ways of coping were found to be strongly related to mental well-being and psychopathology (Vansteenkiste, and Ryan, 2013; Lazarus, and Folkman, 1984). However, the impact of basic psychological needs on ways of coping has not been extensively studied in cross-cultural studies. The aim of this study is to investigate the effects of basic psychological needs and ways of coping on mental wellbeing and psychopathology in a cross-cultural context. Furthermore, additional aim is to find out which basic psychological need satisfaction and frustration levels will reveal which coping ways in various cultural contexts, i.e., Turkey, Switzerland, and Brazil.

# 1.4.1. Hypotheses

In this section, the hypotheses to be tested in the study will be presented in categories. The basic psychological needs - coping ways - mental well-being/psychopathology relations in the main hypotheses were determined through the previously mentioned theoretical relations.

# 1.4.1.1. Main Hypotheses

# 1.4.1.1.1. Moderated Mediation Hypotheses with Moderator Role of the Country Variable

- 1. Significant indirect effect of autonomy frustration on depression through the mediation of detachment with the moderator role of the country variable is expected.
- 2. Significant indirect effect of relatedness frustration on interpersonal sensitivity through the mediation of keep to self with the moderator role of the country variable is expected.
- 3. Significant indirect effect of competence frustration on anxiety through the mediation of tension reduction with the moderator role of the country variable is expected.
- 4. Significant indirect effect of autonomy frustration on hostility through the mediation of wishful thinking with the moderator role of the country variable is expected.
- 5. Significant indirect effect of competence satisfaction on mental well-being through the mediation of focusing on the positive with the moderator role of the country variable is expected.
- 6. Significant indirect effect of relatedness satisfaction on mental well-being through the mediation of seeking social support with the moderator role of the country variable is expected.
- 7. Significant indirect effect of autonomy satisfaction on mental well-being through the mediation of problem-focused coping with the moderator role of the country variable is expected.

# 1.4.1.2. Secondary Hypotheses

# 1.4.1.2.1. Correlation Hypotheses Between Variables

- 1. Mental well-being is expected to be positively correlated with basic psychological need satisfaction and negatively correlated with basic psychological need frustration.
- 2. Psychopathology is expected to be positively correlated with basic psychological need frustration and negatively correlated with basic psychological need satisfaction.
- 3. Relationship between mental well-being and ways of coping will be explored.
- 4. Relationship between psychopathology and ways of coping will be explored.
- 5. Relationship between need for autonomy, relatedness and competence satisfaction and frustration levels and ways of coping will be explored.

# 1.4.1.2.2. Effect of Demographic Variables on Mental Well-Being, Basic Psychological Need satisfaction and Frustration

- 1. Mental well-being is expected to differ across the levels of perceived socioeconomic status, education level, relationship status and parental status.
- 2. Basic psychological need satisfaction is expected to differ across the levels of perceived socio-economic status, education level, relationship status and parental status.
- Basic psychological need frustration is expected to differ across the levels of perceived socio-economic status, education level, relationship status and parental status.

# 1.4.1.2.3. Explorative Hypotheses for Across-Countries

Basic psychological need satisfaction and frustration, mental well-being, ways of coping and psychopathological symptom scores will be compared across Turkey, Brazil, and Switzerland.

# **CHAPTER 2: METHOD**

## 2.1. Participants

Total of 614 participants were included in the study. Specifically, 209 of participants were from Turkey, 203 of participants were from Switzerland and 202 of participants were from Brazil. A total of 614 participants ranging from 18 to 98 years old ( $M_{age} =$  39.81, SD = 13.47) and it is found that the age distribution in the study is normally distributed when the skewness (.64) and kurtosis (.58) values are analyzed. Other information on the demographic characteristics of the sample is given in Table 1.

Turkey         209         34           Brazil         202         32.9           Switzerland         203         33.1           Gender         203         33.1           Gender         323         52.6           Male         282         45.9           Other (specified by the participant)         9         1.5           Education Level         129         21           Bachelor's Degree         287         46.7           Master Degree         97         15.8           Ph.D.         23         3.7           Other (specified by the participant)         37         6           Working Status         39         6.4           Student         74         12.1           Employed         460         74.9	Variables	Ν	%
Brazil20232.9Switzerland20333.1Gender20333.1Gender32352.6Male28245.9Other (specified by the participant)91.5Education Level91.5Education Level12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status12921Employed396.4Student7412.1Employed46074.9Retired406.5	Country		
Switzerland20333.1Gender932352.6Male28245.9Other (specified by the participant)91.5Education Level91.5Education Level12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status12921Linemployed396.4Student7412.1Employed46074.5Retired406.5	Turkey	209	34
GenderFemale32352.6Male28245.9Other (specified by the participant)91.5Education Level91.5Education Level12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status12921Employed396.4Student7412.1Employed46074.5Retired406.5	Brazil	202	32.9
Female32352.6Male28245.9Other (specified by the participant)91.5Education Level91.5Education Level12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status396.4Student7412.1Employed46074.5Retired406.5	Switzerland	203	33.1
Male28245.9Other (specified by the participant)91.5Education Level91.5Education Level416.7Highschool12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status396.4Student7412.1Employed46074.9Retired406.5	Gender		
Other (specified by the participant)91.5Education Level91.5Primary Education416.7Highschool12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status1012.1Employed396.4Student7412.1Employed46074.9Retired406.5	Female	323	52.6
Education LevelPrimary Education416.7Highschool12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status396.4Student7412.1Employed46074.9Retired406.5	Male	282	45.9
Primary Education416.7Highschool12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status396.4Student7412.1Employed46074.9Retired406.5	Other (specified by the participant)	9	1.5
Highschool12921Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status396.4Student7412.1Employed46074.9Retired406.5	Education Level		
Bachelor's Degree28746.7Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status396.4Unemployed396.4Student7412.1Employed46074.9Retired406.5	Primary Education	41	6.7
Master Degree9715.8Ph.D.233.7Other (specified by the participant)376Working Status376Working Status396.4Student7412.1Employed46074.9Retired406.5	Highschool	129	21
Ph.D.233.7Other (specified by the participant)376Working Status396.4Unemployed396.4Student7412.1Employed46074.9Retired406.5	Bachelor's Degree	287	46.7
Other (specified by the participant)376Working Status396.4Unemployed396.4Student7412.1Employed46074.9Retired406.5	Master Degree	97	15.8
Working StatusUnemployed39Student74Employed460Retired40	Ph.D.	23	3.7
Unemployed396.4Student7412.1Employed46074.9Retired406.5	Other (specified by the participant)	37	6
Student7412.1Employed46074.9Retired406.5	Working Status		
Employed46074.9Retired406.5	Unemployed	39	6.4
Retired 40 6.5	Student	74	12.1
	Employed	460	74.9
Other (specified by the participant) 1 0.2	Retired	40	6.5
	Other (specified by the participant)	1	0.2

Table 1. Characteristics of Sample

ruble 1. (continued) characteristics of bumple		
Who lives with		
Alone	98	16
With my family	254	41.4
With my relatives	7	1.1
With my partner	46	7.5
With my spouse	171	27.9
With my homemate	32	5.2
Other (specified by the participant)	6	1
Relationship Status		
Single	168	27.4
Married	258	42
In a relationship	123	20
Divorced	36	5.9
Widowed	28	4.6
Other (specified by the participant)	1	0.2
Parental Status		
Both of my parents are alive.	373	60.7
My mother passed away, my father is alive.	28	4.6
My father passed away, my mother is alive.	96	15.6
Both of my parents passed away.	108	17.6
Other (specified by the participant)	9	1.5
Number of Siblings		
1 (Only child)	106	17.3
2	264	43
3	136	22.1
4 or more	108	17.6
Order of Birth		
1st born	309	50.3
2nd born	190	30.9
3rd born	72	11.7
4th or above	43	7

# Table 1. (continued) Characteristics of Sample

Perceived Socioeconomic Status		
Lower	61	9.9
Lower middle	95	15.5
Middle	251	40.9
Higher middle	153	24.9
Higher	54	8.8

Table 1. (continued) Characteristics of Sample

N = 614, N number, % percentage

#### 2.2. Measures

In this study, following 5 measures were employed: 1) Demographic Questionnaire,2) Basic Psychological Need Satisfaction and Frustration Scale, 3) Ways of Coping scale, 4) Brief Symptom Inventory 5) Warwick-Edinburgh Mental Well-Being Scale.

#### 2.2.1. Demographic Questionnaire

The following information was obtained from the participants in the Demographic Questionnaire (See Appendix D) prepared within the scope of this research in order to collect the demographic information of the participants: gender: (male, female, other), age, education level (primary education, highschool, bachelor's degree, master degree, ph.D., other), working status (unemployed, student, employed, retired, other), who lives with (alone, with my family, with my relatives, with a homemate, with my partner, with my spouse, other), relationship status (single, married, in a relationship, divorced, widow(er), other), relationship year (if any), parental status (both of my parents are alive; my mother passed away, my father is alive; my father passed away, my mother is alive; both of my parents passed away, other), number of siblings, birth order, perceived socioeconomic level (lower, lower middle, middle, higher middle, higher). Since the demographic questions prepared for different countries in the official languages (Turkish, Portuguese, German) of the countries and some factors differ between countries (such as spesific educational institutions for countries, e.g. vocational schools in Switzerland) are prepared by paying attention to the presence of common elements, such answers are allowed to reply via option "other". In order to avoid the reflections of socioeconomic differences between countries, the participants were asked about their perceived socioeconomic levels.

#### 2.2.2. Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS)

Basic Psychological Need Satisfaction and Frustration Scale (Chen et al., 2015) was developed to measure the satisfaction and frustration of need for autonomy, relatedness and competence. A total of 6 subscales (3 needs x 2 satisfaction/frustration) for the satisfaction and frustration of each need contain items that participants can mark their level of fitness in a five-point Likert type (1 for "Not true at all" and 5 for "Completely true"). Subscales are autonomy satisfaction, relatedness satisfaction, competence satisfaction, autonomy frustration, relatedness frustration and competence frustration. This scale includes 24 items and sample items for each subscales are "I feel I have been doing what really interests me." (autonomy satisfaction), "My daily activities feel like a chain of obligations." (autonomy frustration), "I experience a warm feeling with the people I spend time with." (relatedness frustration), "I feel I can successfully complete difficult tasks." (competence satisfaction), "I feel like a failure because of the mistakes I make." (competence frustration).

Basic psychological need satisfaction and frustration scale was adapted to Turkish by Mouratidis et al. (2018), was adapted to German by Heissel et al. (2019), was adapted to Portuguese by Cordeiro et al. (2016). These adapted versions were used in Turkey, Switzerland and Brazil in this study. (See Appendix E for Adaptions of Basic Psychological Need Satisfaction and Frustration Scale)

In the original studies of Basic Psychological Need Satisfaction and Frustration Scale the six subscales (autonomy, relatedness, competence X satisfaction, frustration) showed an adequate internal consistency with Cronbach's alphas ranging between samples, Cronbach's alpha scores were found in the range of .73 and .89 for the satisfaction subscales and Cronbach's alpha scores were found in the range of .64 and .86 for the frustration subscales (Chen et al., 2015). In the Turkish adaptation of the scale, internal consistency was found .82 for need satisfaction subscale and .79 for need frustration subscale. Specifically, the internal consistency was found .76 for autonomy satisfaction, .82 for autonomy frustration, .84 for competence satisfaction, .80 for competence frustration, .64 for relatedness satisfaction and .76 for relatedness frustration. In the Portuguese adaptation study of the scale, the Cronbach alphas ranged between .70 (autonomy frustration) and .87 (competence satisfaction) (Cordeiro et al., 2016). In the German adaptation study of the scale, it is found that there is satisfactory internal consistencies. Cronbach alphas are 0.85 at the individual level and 0.84 at the class level and also reliability scores for the sucscales at level 1 was sufficient, Autonomy Composite Reliability for 4 items = .78, Relatedness Composite Reliability for 3 items = .79, Competence Composite Reliability for 4 items = .85.

# 2.2.3. Ways of Coping Scale

Ways of Coping Scale (Folkman, and Lazarus, 1985) was used to determine the coping mechanisms that the participants used predominantly in the face of stressful situations. This scale includes 66 items (e.g. "Tried to get the person responsible to change his or her mind.") with four-point Likert type of scale (0 for "Not used" and 3 for "Used a great deal"). Subscales are problem focused coping, wishful thinking, detachment, seeking social support, focusing on the positive, self-blame, tension reduction and keep to self.

Problem-focused coping is a way of finding the cause of the problem and focusing on solving it. Wishful thinking is coping with problems by hoping and waiting that a miracle or a supernatural power will solve them. Detachment is a person's way of coping with problems by staying away from them behaviorally or mentally. Seeking social support is a way to seek help by meeting with another person or group about the problem. Tension reduction is a method of coping with the strategy of reducing anxiety by eating, using drugs or doing sports in the face of problems. Focusing on the positive is a way of coping by seeing the positive aspects of the event. Self-blame is a person's commitment to criticize himself/herself in the face of problems and to promise that there will be different results in the next problem. Keep to self method, on the other hand, is a way of coping with stress by hiding various aspects of problems from others and not sharing them.

Ways of Coping scale was adapted to Turkish by Kaymakçıoğlu (2001), was adapted to German by Ferring, and Filipp (1989), was adapted to Portuguese by Savóia et al. (1996). These adapted versions were used in Turkey, Switzerland and Brazil in this study. (See Appendix H for Adaptions of Ways of Coping Scales)

In the original studies of Ways of Coping Scale, internal consistency for community based sample of 75 participants' Cronbach alphas ranged between .61 and .79 for eight subscales (Folkman, and Lazarus, 1988). In the Turkish adaptation study of the scale, total Cronbach's alpha score of the scale was .86 (Önen, 2004). In the Portuguese adaptation study of the scale, a test-retest method was used for reliability studies and the result was found r = .704. In the German adaptation study of the scale, total Cronbach's alpha score of the scale was .81 (Ferring, and Filipp, 1989).

#### 2.2.4. Brief Symptom Inventory

Brief Symptom Inventory was developed by Derogatis (1975), and it was used to assess psychopathology symptoms. This scale includes 53 items (e.g. "Pains in the heart or chest") with five-point Likert type of scale (0 for "Not at all" and 4 for "Extremely"). Subscales are somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. High score values obtained from the scale are the signs of the individual's psychopathological symptoms.

Somatization: It is the expression of distress and complaints as physical illness. It reflects the problems related to dysfunctions in the heart, blood vessels, stomach, intestines, respiratory and other systems of the body. It detects functional and physical disorders resulting from unresolved interference or conflict. (example scale item: Pains in the heart or chest)

Obsession compulsion: It is the presence of obsessive thoughts that lead to repetitive behaviors. These thoughts are undesirable to individuals, but are persistent and irresistible. (example scale item: Having to check and double check what you do) Interpersonal sensitivity: It is the distress caused by the person's feelings of inadequacy

and self-humiliation. When the individual compares himself/herself with others, he/she feels personal inadequacy, and reflects negative thoughts and feelings such as humiliating himself/herself in interpersonal relationships, having difficulties in these relationships, and feeling uncomfortable. (example scale item: Feeling inferior to others)

Depression: being in a state of constant sadness and not being able to enjoy pleasurable situations. (example scale item: Feelings of worthlessness)

Anxiety: a feeling characterized by an unpleasant state of internal conflict, often accompanied by nervous behavior such as pacing back and forth. (example scale item: Spells of terror or panic)

Hostility: Anger and hostility in thought, emotion and behavior dimensions. (example scale item: Temper outbursts that you could not control)

Phobic anxiety: Reflects persistent fear response to a particular object or situation. Suitable for outdoor places, travel, crowd, vehicles, etc. is the fear of fear. (example scale item: Having to avoid certain things, places, or activities because they frighten you)

Paranoid ideation: Felling insecure, suspicious, jealous, quarrelsome. (example scale

item: Feeling that you are watched or talked about by others)

Psychoticism: It is a condition in which the ability to evaluate reality is impaired. (example scale item: The idea that you should be punished for your sins)

Brief Symptom Inventory was adapted to Turkish by Şahin, and Durak (1994), was adapted to German by Franke (1997), was adapted to Portuguese by Canavarro (1999). These adapted versions were used in Turkey, Switzerland and Brazil in this study. (See Appendix F for Adaptions of Brief Symptom Inventory)

There are many studies on the validity and reliability of the original version of scale. In a study conducted on 719 psychiatric patients, Derogatis (1992) stated that the internal consistency coefficients for nine subscales ranged from .71 (psychoticism) to .85 (depression). In addition, test-retest reliability coefficients performed on 60 adults at two-week intervals ranged between r = .68 (somatization) and r = .91 (phobic anxiety). In the Turkish adaptation study of the inventory, the Cronbach's  $\alpha$  internal consistency coefficient of the scale is between .96 and .95 and between .55 and .86 for the subscales (Savaşır, and Şahin, 1997). In the Portuguese adaptation study of the scale, Cronbach's alpha scores ranged between .72 and .85 which had evaluated as an adequate internal reliability result (Canavarro, 1999). In the German adaptation study of the inventory, Cronbach's alpha scores ranged between .39 and .72 and test-retest reliability with a time interval of one week is .73 and .93 for sample of adults. In addition, Cronbach's alpha scores ranged between .64 and .75 and test-retest reliability with a time interval of one week is .73 and .92 for sample of students (Franke, 2000).

## 2.2.5. Warwick-Edinburgh Mental Well-Being Scale

Warwick-Edinburgh Mental Well-being Scale was developed by Tennant et al. (2007). It was used to measure subjective psychological functioning and mental well-being including both hedonic and eudaimonic perspectives. In this way, it provides an overarching measure of subjective and psychological well-being. This scale includes 14 items (e.g. "I've been thinking clearly") with five-point Likert type of scale (1 for "None of the time" and 5 for "All of the time"). High score values obtained from the scale are the signs of higher mental well-being.

Warwick-Edinburgh Mental Well-being Scale was adapted to Turkish by Keldal (2015), was adapted to German by Lang, and Bachinger (2016), was adapted to Portuguese by Santos (2015). (See Appendix G for Adaptions of Warwick-Edinburgh Mental Well-being Scale)

In the original studies of Warwick-Edinburgh Mental Well-being Scale, internal

consistence according to Cronbach's alpha is .91 in a sample of 1749 participants (Tennant et al., 2007). In the Turkish adaptation study of the scale, the Cronbach Alpha internal consistency coefficient was calculated as .85 (Keldal, 2015). In the Portuguese adaptation study of the scale, the Cronbach Alpha internal consistency coefficient was calculated as .89 (Santos et al., 2015). In the German adaptation study of the scale, the Cronbach Alpha internal consistency coefficient was calculated as .92 (Lang, and Bachinger, 2016).

#### 2.3. Procedure

At the beginning of the study process, the large number of studies pointed to by research to decide which countries to take part in the study, reveal the change of both basic psychological needs and ways of coping in mostly cross individualistic and collectivistic cultural contexts and its extentions (Wuyts et al., 2015; Chen el al., 2015; Benita et al., 2020; Lynch, Salikhova, and Eremeeva, 2020; Chirkov et al., 2003; Marsella, Escudero, and Gordon, 1972; Kagitcibasi, 1986; Essau, 1992; Seginer, 1995). For this reason, in the selection of the countries to be included in the study, attention was paid to the fact that these countries reflect the characteristics of different cultures. Considering the characteristics of the countries where data will be collected in the study, followings were taken into account: Individualism-Collectivism, Power distance index, Masculinity, Uncertainty Avoidance Index. First of all, Hofstede's Power Distance Index analyses the degree to which the less powerful individuals of organizations (eg: official associations) and institutions (social, educational, political) accept and assume that power is distributed unequally. The individualistic behavior emerges when the individual puts his/her own needs above the needs of the group, but according to the collectivistic behavior, the person prioritizes the needs of the group to which he/she is affiliated and defines himself/herself according to the group. Contrary to feminism, masculinity expresses the distribution of roles between the genders and brings with it many problems and power imbalances in the sociological structure of society. Lastly, uncertainty avoidance, to sum up, is a term used to express the tolerance of uncertainty and unknownness of individuals in a society and is one of the most important tools used to describe a society. In the research made with the elaboration shown in the fact that the participants who will take part in this research are adorned with the characteristics of different cultures; Brazil, where the power distance index, collectivism, masculinity and uncertainty avoidance are high; Switzerland, where these scores are on the contrary, and Turkey, which is between

these two countries in terms of social characteristics on an imaginary linear scale, but still closer to Brazil in many aspects, were included as samples in the study (Hofstede, Hofstede, and Minkov, 2005).

Participant Information Form (See Appendix B) and Participant Consent Form (See Appendix C) were prepared in Turkish, Portuguese and German to be presented to participants from Turkey, Brazil and Switzerland. Measurement tools, including demographic questionnaire, for data collection were prepared online in Google Forms Online Survey. All scales were given to the participants in the adapted form to the official languages of the country. In order to avoid the possible effects of presenting the scales to the participants in a single specific order, 24 forms with different scale orders were prepared by using all possible combinations of 4 scales (4! = 24). With this way, Basic Psychological Need Satisfaction and Frustration Scale, Ways of Coping scale, Brief Symptom Inventory and Warwick-Edinburgh Mental Well-Being Scale appeared in a randomized order for each participants. The data collection process was initiated with the approval of the Izmir University of Economics Ethics Committee (See Appendix A). Participants who pressed the participation confirmation button at the beginning of the form were able to access the scales, and participants who gave up filling out the scales during data collection did not included in the data results.

#### 2.4. Data analysis

Participants whose scales were determined to be incompletely filled in the data set obtained from the participants within the scope of the research were automatically excluded in the data analysis by the survey site. A total of 23 data sets that determined to be filled the survey in an irregular and biased way and could negatively affect the results were excluded from the study. Total of 614 participants were included of the study. While the remaining 614 participants were included in the study, no results outside the [-2, +2] band were found in the skewness tests of the scales, and normal distribution could be assumed for the analysis of large sample data of 614 participants within the scope of the Central Limit Theorem. SPSS 20 program were used to conduct descriptive analyses, reliability tests, correlation analyses, independent samples t-test, ANOVA, model 4 mediation and model 7 moderated mediation analyses of PROCESS version 3.5 by Andrew F. Hayes (2020).

# **CHAPTER 3: RESULTS**

#### 3.1. Descriptive Features of Samples

Descriptive features of the data obtained from Turkey, Brazil and Switzerland samples are presented according to the answers of the participants to the demographic questions. As a result of examining the age distribution of the participants across countries, the age range for Turkey is between 18-78 (M = 39.64, SD = 12.05), for Brazil the age range is between 18-98 (M = 39.44, SD = 15.60), for Switzerland the age range is between 18-78 (M = 40.36, SD = 12.60). Considering the skewness and kurtosis values of the participants' age distributions for countries, it was revealed that they were in normal distribution; for Turkey sample skewness = .26, kurtosis = -.55; for Brazil sample skewness = .96, kurtosis = 1.11; for Switzerland sample skewness = .41, kurtosis = -.21. See Table 2. for frequencies and percentages of other information by country obtained through demographic questions.

Variables	Sample						
	Tur	key	Bra	azil	Switzerland		
	N	%	N	%	N	%	
Gender							
Female	125	59.8	102	50.5	96	47.3	
Male	84	40.2	92	45.5	106	52.2	
Education Level							
Primary Education	14	6.7	25	12.4	2	1	
Highschool	44	21.1	43	21.3	42	20.7	
Bachelor's Degree	111	53.1	94	46.5	82	40.4	
Master Degree	34	16.3	26	12.9	37	18.2	
Ph.D.	2	1	10	5	11	5.4	
Working Status							
Unemployed	23	11	14	6.9	2	1	
Student	21	10	31	15.3	22	10.8	
Employed	145	69.4	147	72.8	168	82.8	
Retired	20	9.6	9	4.5	11	5.4	

Table 2. Demographic Characteristic of the Participants for Three Countries

Countries						
Who lives with						
Alone	25	12	27	13.4	46	22.7
With my family	100	47.8	100	49.5	54	26.6
With my relatives	1	.5	6	3	0	0
With my partner	2	1	12	5.9	32	15.8
With my spouse	70	33.5	39	19.3	62	30.5
With my homemate	11	5.3	14	6.9	7	3.4
Relationship Status						
Single	44	21.1	79	39.1	45	22.2
Married	130	62.2	49	24.3	79	38.9
In a relationship	20	9.6	47	23.3	56	27.6
Divorced	7	3.3	15	7.4	14	6.9
Widowed	7	3.3	12	5.9	9	4.4
Parental Status						
Both of my parents are alive.	127	60.8	114	56.4	132	65
My mother passed away, my	7	3.3	10	5	11	5.4
father is alive.						
My father passed away, my	35	16.7	34	16.8	27	13.3
mother is alive.						
Both of my parents passed	40	19.1	35	17.3	33	16.3
away.						
Other (specified by the	0	0	9	4.5	0	0
participant)						
Number of Siblings						
1 (Only child)	14	6.7	40	19.8	52	25.6
2	69	33	90	44.6	105	51.7
3	60	28.7	45	22.3	31	15.3
4 or more	66	31.6	27	13.4	15	7.4
Order of Birth						
1st born	77	36.8	109	54	123	60.6
2nd born	60	28.7	65	32.2	65	32

Table 2. (continued) Demographic Characteristic of the Participants for ThreeCountries

3rd born	46	22	14	6.9	12	5.9
4th or above	26	12.4	14	6.9	3	1.5
Perceived Socioeconomic Status						
Lower	26	12.4	34	16.8	1	.5
Lower middle	39	18.7	36	17.8	20	9.9
Middle	106	50.7	59	29.2	86	42.4
Higher middle	33	15.8	47	23.3	73	36
Higher	5	2.4	26	12.9	23	11.3

Table 2. (continued) Demographic Characteristic of the Participants for Three Countries

*N* number, % percentage

# 3.2. Reliability of the Scales and Subscales

In this section, the reliability results of the Turkish, Brazilian and Swiss samples included in the data set of current study are given.

#### 3.2.1. Reliability of Basic Psychological Need Satisfaction and Frustration Scale

In the current study of Basic Psychological Need Satisfaction and Frustration Scale show a satisfactory internal consistency with Cronbach's alphas ranging between samples. In subscales, Cronbach's alpha scores were found in the range of .74 and .92 for Turkey sample, .77 and .90 for Brazil sample, .71 and .83 for Switzerland sample. The reliability results in the current study of the Basic Psychological Need Satisfaction and Frustration Scale in Turkey, Brazil and Switzerland samples are given in Table 3.

Subscale	Items	Sample					
		Turkey	Brazil	Switzerland			
Autonomy frustration	4	.74	.80	.83			
Autonomy satisfaction	4	.90	.82	.78			
Competence frustration	4	.81	.77	.80			
Competence satisfaction	4	.92	.90	.78			
Relatedness frustration	4	.80	.82	.71			
Relatedness satisfaction	4	.85	.82	.81			

Table 3. Cronbach's Alphas for Basic Psychological Need Satisfaction and Frustration Scale

## 3.2.2. Reliability of Ways of Coping Scale

In the current study of Ways of Coping Scale show an adequate internal consistency with Cronbach's alphas ranging between samples except self blame, tension reduction and keep to self subscales, probably due to the low number of subscale questions. In subscales, Cronbach's alpha scores were found in the range of .42 and .90 for Turkey sample, .51 and .93 for Brazil sample, .40 and .87 for Switzerland sample. The analysis results in the current study of the Ways of Coping Scale reliability scores in Turkey, Brazil and Switzerland samples are given in Table 4.

Subscale	Items	Sample					
		Turkey	Brazil	Switzerland			
Problem-focused coping	11	.90	.93	.87			
Wishful thinking	5	.82	.80	.83			
Detachment	6	.80	.69	.84			
Seeking social support	7	.81	.79	.75			
Focusing on the positive	4	.69	.81	.48			
Self blame	3	.66	.51	.40			
Tension reduction	3	.42	.53	.65			
Keep to self	3	.57	.65	.65			

#### Table 4. Cronbach's Alphas for Ways of Coping Scale

#### 3.2.3. Reliability of Brief Symptom Inventory

In the current study of Brief Symptom Inventory show an adequate internal consistency with Cronbach's alphas ranging between samples. In subscales, Cronbach's alpha scores were found in the range of .69 and .91 for Turkey sample, .82 and .91 for Brazil sample, .63 and .82 for Switzerland sample. The analysis results in the current study of the Brief Symptom Inventory reliability scores in Turkey, Brazil and Switzerland samples are given in Table 5.

Subscale	Items	Sample			
		Turkey	Brazil	Switzerland	
Somatization	7	.89	.91	.82	
Obsession-Compulsion	6	.87	.89	.81	
Interpersonal Sensitivity	4	.85	.90	.72	
Depression	6	.88	.90	.74	
Anxiety	6	.87	.85	.73	
Hostility	5	.91	.88	.75	
Phobic Anxiety	5	.70	.84	.70	
Paranoid Ideation	5	.79	.85	.72	
Psychoticism	5	.69	.82	.63	

#### Table 5. Cronbach's Alphas for Brief Symptom Inventory

## 3.2.4. Reliability of Warwick-Edinburgh Mental Well-Being Scale

In the current study of Warwick-Edinburgh Mental Well-Being Scale show a satisfactory internal consistency with Cronbach's alphas ranging between samples. In scale, Cronbach's alpha scores were found .95 for Turkey sample, .96 for Brazil sample, .91 for Switzerland sample. The analysis results in the current study of the Warwick-Edinburgh Mental Well-Being Scale reliability scores in Turkey, Brazil and Switzerland samples are given in Table 6.

Scale	Items	Sample				
		Turkey	Brazil	Switzerland		
All items	14	.95	.96	.91		

Table 6. Cronbach's Alphas for Warwick-Edinburgh Mental Well-Being Scale

## 3.3. Correlation Analyses of Variables

Pearson correlation analysis between variables that used in the current study were examined with the inclusion of all samples. Pearson correlation analysis between mental well-being scores and basic psychological need satisfaction and frustration scores show that there are significant relationships between all basic psychological need scores and mental well-being score (See Table 7.). Results showed the need frustration scores have a negative relationship with well-being scores, while need satisfaction scores have a positive relationship with well-being and correlate more strongly than need frustration scores.

Pearson correlation analysis between mental well-being scores and ways of coping scores show that there are significant relationships between all ways of coping scores and mental well-being score (See Table 8.). Results showed while problem focused coping, seeking social support, focusing on the positive and tension reduction have strong positive relationship with mental well-being score.

Pearson correlation analysis between mental well-being scores and psychopathological symptom scores show that there are significant negative relationships between all psychopathological symptom scores and mental well-being score (See Table 9.).

Pearson correlation analysis between basic psychological need satisfaction and frustration scores and ways of coping scores show that coping ways such as problemfocused coping, seeking social support, focusing on the positive and tension reduction, which were previously determined to have a positive relationship with mental wellbeing, are in a strong positive relationship with autonomy, relatedness and competence satisfaction scores. In particular, there are strong positive correlations between autonomy satisfaction and problem-focused coping and focusing on the positive, relatedness satisfaction and seeking social support, competence satisfaction and focusing on the positive values. On the other hand, some coping ways determined to be associated with psychopathology were found to be correlated with autonomy, relatedness, and competence frustration scores. Especially the autonomy/competence frustration and detachment. relatedness frustration and keep self. to autonomy/competence frustration and tension reduction, autonomy frustration and wishful thinking relationships are in a stronger positive correlations compared to the other need frustration ways and coping ways pairs (See Table 10.).

Pearson correlation analysis between Basic Psychological Need Satisfaction and Frustration Scale scores and Brief Symptom Inventory scores show that satisfaction scores have a negative relationship with psychopathological symptom scores, while frustration scores have a positive relationship with all psychopathological symptom scores, and correlate more strongly than satisfaction scores. Especially the autonomy/competence frustration and depression, relatedness frustration and interpersonal sensitivity, autonomy/competence frustration and anxiety, autonomy frustration and hostility, competence frustration and obsession-compulsion

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relationships are in a stronger positive correlations compared to the other need frustration scores and psychopathology symptom scores pairs (See Table 11.).

Pearson correlation analysis between ways of coping scores and psychopathological symptom scores show that coping methods that are positively correlated with mental well-being, such as problem focused coping, seeking social support, and focusing on the positive, are negatively correlated with psychopathological symptoms. On the other hand, relatively stronger correlations were found between wishful thinking and hostility, detachment and depression/anxiety/obsession-compulsion, keep to self and interpersonal sensitivity, tension reduction and anxiety/paranoid identity (See Table 12.). Additional correlation analyses results within countries are presented in the appendices (See Appendix K).

Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. A_sat	.74**	1							
3. A_frus	62**	63**	1						
4. C_sat	.77**	.75**	51**	1					
5. C_frus	71**	64**	.67**	74**	1				
6. R_sat	.56**	.54**	29**	.64**	50**	1			
7. R_frus	51**	42**	.44**	51**	.62**	63**	1		
8. Sat_tot	.79**	.89**	55**	.91**	72**	.82**	59**	1	
9. Frus_tot	73**	67**	.84**	69**	.90**	56**	.80**	73**	1

Table 7. Correlation Analysis Result between Mental Well-Being and Basic Psychological Need Satisfaction and Frustration

\*\* p < .01; \* p < .05; N = 614; A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total

		-				0	• 1	U	
Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. Prbfcs	.63**	1							
3. Wishfl	43**	33**	1						
4. Detach	43**	23**	.53**	1					
5. Socsup	.34**	.32**	.28**	.07	1				
6. Focpos	.66**	.73**	18**	11**	.48**	1			
7. Selfblm	.18**	.45**	.13**	.05	.32**	.35**	1		
8. Tensred	.37**	.49**	20**	28**	.20**	.41**	.34**	1	
9. Kpself	32**	04	.12**	.25**	41**	18**	.11**	.03	1

Table 8. Correlation Analysis Result between Mental Well-Being and Ways of Coping

\*\* p < .01; \* p < .05; N = 614; Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

		5				0	<i>J</i> 1	0, 1	1	
Variables	1	2	3	4	5	6	7	8	9	10
1. WellBeing	1									
2. Somati	62**	1								
3. Ocd	71**	.74**	1							
4. Intsens	60**	.62**	.69**	1						
5. Depprs	74**	.72**	.79**	.75**	1					
6. Anxty	72**	.79**	.79**	.65**	.80**	1				
7. Hostil	62**	.66**	.71**	.49**	.69**	.72**	1			
8. Phobia	56**	.65**	.65**	.56**	.67**	.68**	.47**	1		
9. Parnoid	59**	.57**	.65**	.62**	.63**	.67**	.48**	.61**	1	
10. Psycho	63**	.66**	.69**	.64**	.74**	.71**	.53**	.76**	.71**	1

Table 9. Correlation Analysis Result between Mental Well-Being and Psychopathology Symptoms

\*\* p < .01; \* p < .05; N = 614; Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	9. Prbfcs	10. Wishfl	11. Detach	12. Socsup	13. Focpos	14. Selfblm	15. Tensred	16. Kpself
1. A_sat	.65**	46**	33**	.18**	.57**	.21**	.25**	16**
2. A_frus	52**	.57**	.41**	06	38**	14**	33**	.15**
3. C_sat	.48**	35**	34**	.28**	.51**	.16**	.25**	25**
4. C_frus	43**	.46**	.41**	18**	40**	00	26**	28**
5. R_sat	.30**	07	16**	.47**	.38**	.20**	.09*	39**
6. R_frus	22**	.18**	.26**	34**	29**	06	15**	.40**
7. Sat_tot	.56**	35**	32**	.35**	.56**	.22**	.23**	30**
8. Frus_tot	46**	.48**	.43**	22**	42**	08*	30**	.32**

Table 10. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Ways of Coping

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 7-8. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Variables	9. Somati	10. Ocd	11. Intsens	12. Depprs	13. Anxty	14. Hostil	15. Phobia	16. Parnoid	17. Psycho
1. A_sat	56**	63**	44**	57**	63**	67**	41**	43**	45**
2. A_frus	.57**	.67**	.43**	.61**	.65**	.65**	.50**	.58**	.57**
3. C_sat	56**	65**	55**	63**	60**	59**	43**	37**	46**
4. C_frus	.60**	.71**	.61**	.71**	.63**	.60**	.53**	.52**	.58**
5. R_sat	47**	44**	60**	47**	41**	35**	30**	25**	34**
6. R_frus	.51**	.54**	.67**	.55**	.47**	.36**	.43**	.47**	.50**
7. Sat_tot	61**	66**	60**	64**	63**	62**	43**	41**	48**
8. Frus_tot	.66**	.76**	.67**	.74**	.69**	.64**	.57**	.62**	.65**

Table 11. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Psychopathology Symptoms

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 7-9. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	10. Prbfcs	11. Wishfl	12. Detach	13. Socsup	14. Focpos	15. Selfblm	16. Tensred	17. Kpself
1. Somati	40**	37**	.31**	19**	38**	09*	17**	.22**
2. Ocd	44**	.50**	.39**	16**	42**	04	26**	.26**
3. Intsens	24**	.22**	.25**	41**	36**	.00	14**	.45**
4. Depprs	38**	.44**	.38**	24**	45**	.01	24**	.31**
5. Anxty	50**	.45**	.38**	18**	49**	10*	28**	.23**
6. Hostil	49**	.53**	.36**	02	39**	10*	21**	.06
7. Phobia	30**	.34**	.26**	15**	31**	.01	16**	.25**
8. Parnoid	43**	.41**	.31**	17**	40**	07	29**	.28**
9. Psycho	32**	.38**	.29**	17**	34**	.02	17**	.32**

Table 12. Correlation Analysis Result between Psychopathology Symptoms and Ways of Coping

\*\*p < .01; \*p < .05; N = 614; Note. Intra-scale correlations are given in Table 8-9. Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism, Prbfcs = Problem-focused coping,Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

# 3.4. Comparison of Basic Psychological Need Satisfaction and Frustration and Mental Well-Being by Demographic Variables

In this section, the effects of demographic information obtained from the participants on the scores of the scales are reported with the results of the analysis of the research hypotheses.

# 3.4.1. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Perceived Socioeconomic Status

A one-way independent ANOVA was conducted in order to see the effect of perceived socioeconomic status on mental well-being scores. See Table 13. for the means and standard deviations for each of the five groups. Levene's test was conducted in order to investigate the equality of variances in different groups (See Table 27.). Result of the analysis indicated that the variances were not equal for for five socioeconomic status on mental well-being scores F(4, 609) = 7.88, p < .05. Since the assumption of homogeneity of variance was not met for these data, the *Welch's F* test was used. There was a significant effect of perceived socioeconomic status on mental well-being scores  $Welch's F(4, 185.90) = 35.51, p < .01, est. \omega^2 = .18$  (See Table 34.). Since the equal variances not assumed for perceived socioeconomic statuses, Games-Howell test was used to examine differences in detailed with post hoc procedures (See Table 14.).

Socioeconomic Status	n	Mean	SD
Lower	61	39.48	13.19
Lower Middle	95	49.49	10.71
Middle	251	54.75	9.98
Higher Middle	153	58.41	9.35
Higher	54	60.24	10.27

Table 13. Means and Standard Deviations of Mental Well-Being Scores by Socioeconomic Status

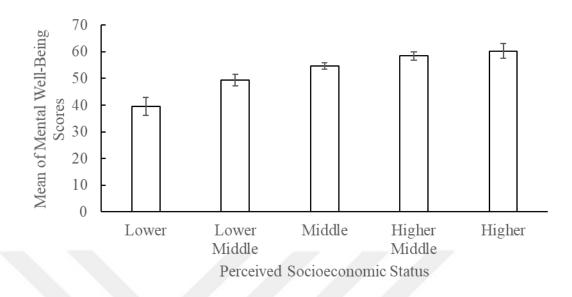


Figure 2. Mean (with 95% CI) Mental Well-Being Scores by Participant's Perceived Socioeconomic Statuses

Table 14. Mean Differences (with 95% CI) with Games-Howell Test Result for Mental Well-Being Means Socioeconomic Status on Mental Well-Being Means

Variable	1.	2.	3.	4.
1. Lower	-			
2. Lower	10.02**	-		
middle	[4.43, 16.61]			
3. Middle	15.27**	5.25**	-	
	[10.24, 20.31]	[1.76, 8.75]		
4. Higher	18.94**	8.91**	3.66**	-
middle	[13.78, 24.09]	[5.24, 12.59]	[.96, 6.36]	
5. Higher	20.76**	10.75**	5.49**	1.83
	[14.69, 26.85]	[5.82, 15.67]	[1.21, 9.78]	[-2.60, 6.26]

A one-way independent ANOVA was conducted in order to see the effect of perceived socioeconomic status on basic psychological need satisfaction and frustration scores. See Table 15. for the means and standard deviations for each of the five groups. Levene's test was conducted in order to investigate the equality of variances in different groups (See Table 28.). Result of the analysis indicated that the variances were not equal for for five socioeconomic status on need satisfaction total scores F (4, 609) = 28.09, p < .05, and on need frustration scores F (4, 609) = 11.58, p < .05. Since the assumption of homogeneity of variance was not met for these data, the *Welch's F* test was used. There was a significant effect of perceived socioeconomic status on need satisfaction total scores *Welch's F* (4, 180.36) = 19.84, p < .01, est.  $\omega^2 = .11$ , and on need frustration scores *Welch's F* (4, 185.90) = 35.51, p < .01, est.  $\omega^2 = .18$  (See Table 35.).

Table 15. Means and Standard Deviations of Basic Psychological Need Satisfaction and Frustration Scores by Socioeconomic Status

		Satisfaction Total		Frustration Total	
Socioeconomic Status	n	Mean	SD	Mean	SD
Lower	61	3.02	1.16	3.07	1.04
Lower Middle	95	3.82	.75	2.51	.71
Middle	251	4.05	.68	2.30	.79
Higher Middle	153	4.24	.49	2.01	.59
Higher	54	4.21	.76	1.93	.70

# 3.4.2. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Education Level

In order to examine the effect of education level on mental well-being and basic psychological need satisfaction and frustration, the education levels of the participants

were basically grouped under 3 headings: lower (primary education, highschool, vocational schools etc.) middle (Bachelor's Degree) higher (Master's Degree, ph. D.)

			Scales					
		Mental	Mental Well-		Satisfaction		ation	
		Bei	Being		Total		tal	
Education Levels	n	М	SD	М	SD	М	SD	
Lower	207	48.01	13.35	3.52	1	2.71	.92	
Middle	287	55.92	9.48	4.14	.55	2.18	.67	
Higher	120	58.76	9.76	4.35	.48	1.90	.62	

Table 16. Mean and Standard Deviation Values Mental Well-Being and BasicPsychological Need Satisfaction and Frustration for Education Levels

A one-way independent ANOVA was conducted in order to see the effect of education level on mental well-being and basic psychological need satisfaction and frustration scores. See Table 16. for the means and standard deviations for each of the three groups. Levene's test was conducted in order to investigate the equality of variances in different groups (See Table 29.). Result of the analysis indicated that the variances were not equal for for three education level on mental well being F(2, 611) = 28.79, p < .05, need satisfaction total scores F(2, 611) = 84.09, p < .05, and on need frustration scores F(2, 611) = 23.68, p < .05. Since the assumption of homogeneity of variance was not met for these data, the *Welch's F* test was used. There was a significant effect education level on mental well being scores *Welch's F* (2, 304.47) = 38.57, p < .01, est.  $\omega^2 = .11$  need satisfaction total scores *Welch's F* (2, 318.61) = 50.72, p < .01, est.  $\omega^2 = .14$ , and on need frustration scores *Welch's F* (2, 317.70) = 45.52, p < .01, est.  $\omega^2 = .13$  (See Table 36.).

# 3.4.3. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Relationship Status

In order to examine the effect of relationship status on mental well-being and basic psychological need satisfaction and frustration, the relationship statuses of the participants were basically grouped under 2 headings: In a relationship (Married, in a relationship), Single (Divorced, Widow(er), Single).

				Scale	es		
		Mental	Well-	Satisfa	action	Frustr	ation
		Being Total			tal	Total	
Relationship Status	n	М	SD	М	SD	М	SD
In a relationship	381	56.88	10.05	4.15	.63	2.16	.75
Single	233	48.80	12.66	3.70	.95	2.55	.86

Table 17. Mean and Standard Deviation Values Mental Well-Being and BasicPsychological Need Satisfaction and Frustration for Relationship Status

An Independent samples t-test was conducted in order to investigate the effect of relationship status on mental well-being and basic psychological need satisfaction and frustration. See Table 17. for the means and standard deviations for each of the two groups. Levene's test was conducted in order to investigate the equality of variances in different groups. Result of the analysis indicated that the variances were not equal for for two relationship status on mental well-being F(1, 612) = 31.27, p < .05, on need satisfaction total scores F(1, 612) = 55.62, p < .05, and on need frustration scores F(1, 612) = 8.00, p < .05.

Participants who are in a relationship scored more in mental well-being scale (M = 56.88, SE = .53), than those not in a relationship (M = 48.80, SE = .82). This difference, 8.08, BCa95% CI [6.30, 9.87], was significant t(408.07) = 8.27, p < .01; it did represent a medium-sized effect, d = 0.64. As shown in Figure 3. the participants who are in a relationship (M = 56.88, SE = .53) showed significantly more scores than the participants who are not in a relationship (M = 48.80, SE = .82).

Participants who are in a relationship scored more in total need satisfaction scales (M = 4.15, SE = .03), than those not in a relationship (M = 3.70, SE = .06). This difference, 0.45, BCa95% CI [0.31, 0.58], was significant t(360.51) = 6.43, p < .01; it did represent a medium-sized effect, d = 0.47. As shown in Figure 4. the participants who are in a relationship (M = 4.15, SE = .03) showed significantly more scores than the participants who are not in a relationship (M = 3.70, SE = .06).

Participants who are in a relationship scored less in total need frustration scales (M = 2.16, SE = .04), than those not in a relationship (M = 2.55, SE = .06). This difference, -0.39, BCa95% CI [-0.52, -0.25], was significant t(439.70) = -5.67, p < .01; it did represent a medium-sized effect, d = 0.52. As shown in Figure 5. the participants who are in a relationship (M = 2.16, SE = .04) showed significantly less scores than the

participants who are not in a relationship (M = 2.55, SE = .06).

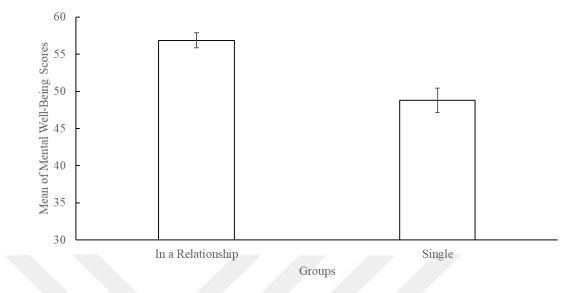


Figure 3. Mean (with 95% CI) of Mental Well-Being Scores of the Participants who are in a Relationship and Single

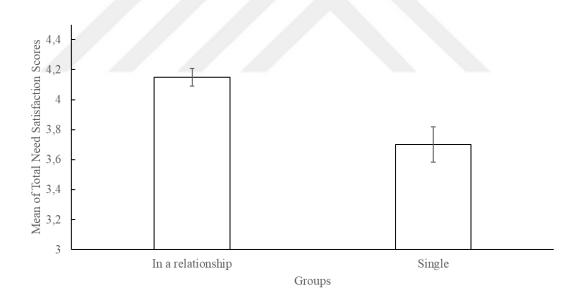


Figure 4. Mean (with 95% CI) of Total Need Satisfaction Scores of the Participants who are in a Relationship and Single

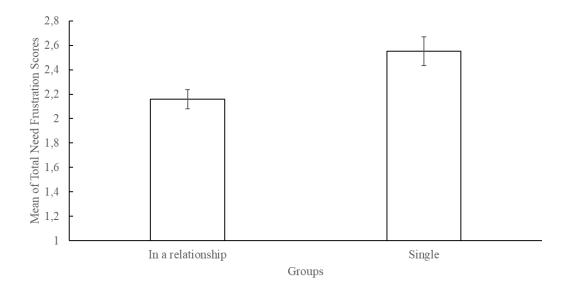


Figure 5. Mean (with 95% CI) of Total Need Frustration Scores of the Participants who are in a Relationship and Single

## 3.4.4. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Parental Status

In order to examine the effect of parental status on mental well-being and basic psychological need satisfaction and frustration, the parental statuses of the participants were basically grouped under 2 headings: parents alive (both of the parents are alive), other (both parents are passed away, only mother passed away, only father passed away, etc.).

				Scale	es		
		Menta	Well-	Satisfa	action	Frustr	ation
		Being Total			tal	To	tal
Parental Status	n	М	SD	М	SD	М	SD
Parents Alive	373	55.03	10.57	4.07	.63	2.22	.70
Other	241	51.94	13.24	3.83	.98	2.43	.96

Table 18. Mean and Standard Deviation Values Mental Well-Being and BasicPsychological Need satisfaction and Frustration for Parental Status

An Independent samples t-test was conducted in order to investigate the effect of parental status on mental well-being and basic psychological need satisfaction and frustration. See Table 18. for the means and standard deviations for each of the two groups. Levene's test was conducted in order to investigate the equality of variances in different groups. Result of the analysis indicated that the variances were not equal for for two relationship status on mental well-being F(1, 612) = 16.55, p < .05, need satisfaction total scores F(1, 612) = 54.31, p < .05, and on need frustration scores F(1, 612) = 42.77, p < .05.

Participants whose parents are alive scored more in mental well-being scale (M = 55.03, SE = .54), than other group (M = 51.94, SE = .86). This difference, 3.09, BCa95% CI [1.07, 5.10], was significant t(431.13) = 3.05, p < .01; it did represent a small-sized effect, d = 0.23. As shown in Figure 6. the participants whose parents are alive (M = 55.03, SE = .54) showed significantly more scores than the other group (M = 51.94, SE = .86).

Participants whose parents are alive scored more in need satisfaction scales (M = 4.07, SE = .03), than other group (M = 3.83, SE = .06). This difference, 0.24, BCa95% CI [0.10, 0.39], was significant t(369.20) = 3.42, p < .01; it did represent a small-sized effect, d = 0.24. As shown in Figure 7. the participants whose parents are alive (M = 4.07, SE = .03) showed significantly more scores than the other group (M = 3.83, SE = .06).

Participants whose parents are alive scored less in need frustration scales (M = 2.22, SE = .04), than other group (M = 2.43, SE = .06). This difference, -0.21, BCa95% CI [-0.35, -0.07], was significant t(402.17) = -2.98, p < .01; it did represent a small-sized effect, d = 0.22. As shown in Figure 8. the participants whose parents are alive (M = 2.22, SE = .04) showed significantly less scores than the other group (M = 2.43, SE = .06).

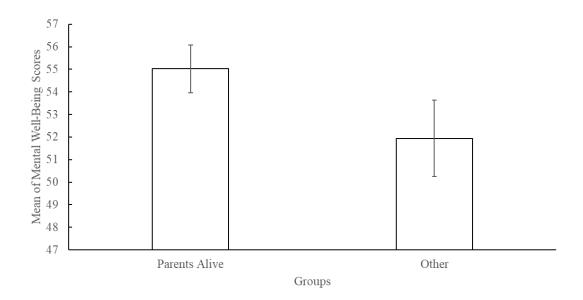


Figure 6. Mean (with 95% CI) of Mental Well-Being Scores of the Participants whose Parents are Alive and Other Group

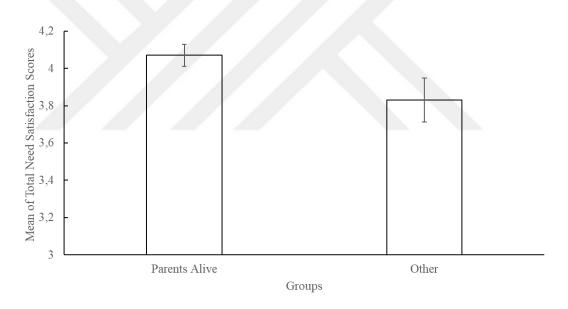


Figure 7. Mean (with 95% CI) of Total Need Satisfaction Scores of the Participants whose Parents are Alive and Other Group

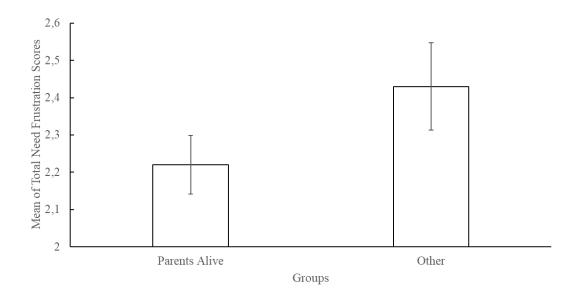


Figure 8. Mean (with 95% CI) of Total Need Frustration Scores of the Participants whose Parents are Alive and Other Group

#### 3.5. Comparison of the Variables Cross-Countries

In this section, the mean and standard deviation values of the scales used in the study in different samples are presented in the tables. Cross-countries ANOVA analyses were made with the mean results of the scales, and the mean values were compared for three countries that took place in study.

#### 3.5.1. Comparison of Basic Psychological Need Satisfaction and Frustration Scores Cross-Countries

A one-way independent ANOVA was conducted in order to see the difference of basic psychological need satisfaction and frustration mean scores of the participants from three countries. See Table 19. for the means and standard deviations for each of the three groups. Levene's test was conducted in order to investigate the equality of variances in different groups (See Table 30.). Result of the analysis indicated that the variances were not equal for for three countries' autonomy satisfaction F(2, 611) = 18.62, p < .05, competence satisfaction F(2, 611) = 13.75, p < .05, competence frustration F(2, 611) = 7.55, p < .05, relatedness frustration scores F(2, 611) = 15.09, p < .05, satisfaction total scores F(2, 611) = 15.68, p < .05 and frustration total scores F(2, 611) = 4.91, p < .05. Since the assumption of homogeneity of variance was not met for these data, the *Welch's F* test was used. There was a significant difference of for three countries' autonomy satisfaction Welch's F(2, 392.67) = 31.11, p < .05, est.  $\omega^2 = .09$ , competence satisfaction Welch's F(2, 394.99) = 4.88, p < .05, est.  $\omega^2 = .01$ ,

competence frustration Welch's F(2, 405.27) = 12.70, p < .05, est.  $\omega^2 = .04$ , relatedness frustration scores Welch's F (2, 401.65) = 5.89, p < .05, est.  $\omega^2 = .02$ , satisfaction total scores Welch's F (2, 393.54) = 4.97, p < .05, est.  $\omega^2 = .01$  and frustration total scores Welch's F (2, 404.54) = 15.72, p < .05, est.  $\omega^2 = .05$  (See Table 38.). Result of the Levene's test indicated that the variances were equal three countries' autonomy frustration scores F(2, 611) = .72, p > .05. and relatedness satisfaction scores F(2, 611) = .72, p > .05. (611) = 2.27, p > .05 (See Table 30.). Since the assumption of homogeneity of variance was met for these data, F test was used. Result of the F test showed that there is significant difference for three countries' autonomy frustration F(2, 611) = 36.30, p < 100.01,  $\omega = .32$  and and relatedness satisfaction scores F (2, 611) = 3.28, p < .05,  $\omega = .09$ (See Table 39.). Since the equal variances assumed for autonomy frustration and relatedness satisfcation mean scores were examined in detailed with post hoc procedures by using Tukey test and since equal variances not assumed, for autonomy satisfaction, competence satisfaction, competence frustration, relatedness frustration, satisfaction total and frustration total mean scores Games-Howell test was used to examine differences in detailed with post hoc procedures (See Table 20.).

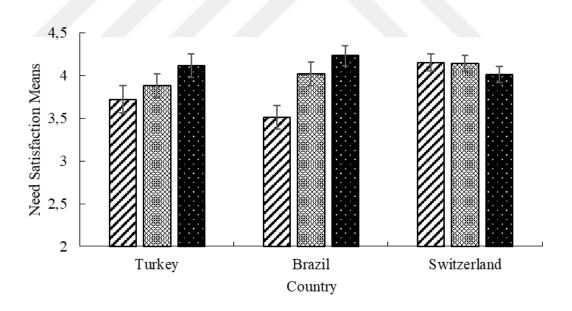
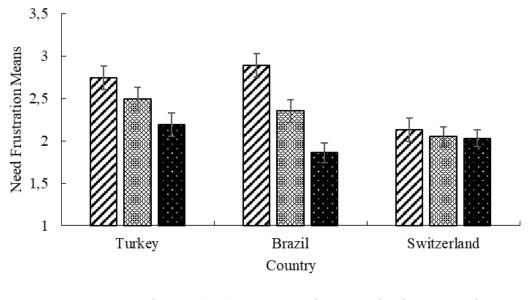


Figure 9. Basic Psychological Need Satisfaction Means Across Countries



■ Autonomy Frustration ■ Competence Frustration ■ Relatedness Frustration

Figure 10.	Basic Psy	chological	Need Fru	stration Mea	ans Across	Countries

			Sam	ples		
	Tur	Turkey Brazil		zil	Switze	erland
Subscales	М	SD	М	SD	М	SD
Autonomy satisfaction	3.72	1.11	3.51	.98	4.15	.70
Autonomy frustration	2.74	.97	2.89	.96	2.13	.93
Competence satisfaction	3.88	1.03	4.02	.93	4.14	.68
Competence frustration	2.49	1.04	2.36	.94	2.05	.84
Relatedness satisfaction	4.11	.94	4.23	.81	4.01	.77
Relatedness frustration	2.19	1.08	1.86	.87	2.03	.76
Total satisfaction	3.90	.92	3.92	.83	4.10	.59
Total frustration	2.47	.86	2.37	.82	2.07	.70

Table 19. Mean and Standard Deviation Values of Basic Psychological NeedSatisfaction and Frustration Scale for Three Countries

•			-	-		
DV	Test	Country	Country	MD	SE	Sig
Autonomy	Games-Howell	Turkey	Switzerland	43	.09	.00
satisfaction		Turkey	Brazil	.21	.09	.10
		Brazil	Switzerland	64	.09	.00
Autonomy	Tukey	Turkey	Switzerland	.61	.09	.00
frustration		Turkey	Brazil	15	.10	.26
		Brazil	Switzerland	.76	.09	.00
Competence	Games-Howell	Turkey	Switzerland	26	.09	.01
satisfaction		Turkey	Brazil	14	.09	.31
		Brazil	Switzerland	12	.09	.29
Competence	Games-Howell	Turkey	Switzerland	.45	.09	.00
frustration		Turkey	Brazil	.14	.09	.34
		Brazil	Switzerland	.31	.09	.00
Relatedness	Tukey	Turkey	Switzerland	.10	.08	.46
satisfaction		Turkey	Brazil	12	.09	.35
		Brazil	Switzerland	.22	.08	.03
Relatedness	Games-Howell	Turkey	Switzerland	.16	.09	.18
frustration		Turkey	Brazil	.33	.09	.00
		Brazil	Switzerland	17	.09	.10
Total	Games-Howell	Turkey	Switzerland	20	.08	.03
satisfaction		Turkey	Brazil	01	.08	.98
		Brazil	Switzerland	18	.08	.03
Total	Games-Howell	Turkey	Switzerland	.41	.08	.00
frustration		Turkey	Brazil	.11	.08	.41
		Brazil	Switzerland	.30	.08	.00

Table 20. Tukey and Games-Howell Test Result for Basic Psychological Need Means

#### 3.5.2. Comparison of Mental Well-Being Scores Cross-Countries

A one-way independent ANOVA was conducted in order to see the difference of mental well-being scores of the participants from three countries. See Table 21. for the means and standard deviations for each of the three groups. Levene's test was conducted in order to investigate the equality of variances in different groups (See Table 31.). Result of the analysis indicated that the variances were not equal for for

three countries' mental well-being scores F(2, 611) = 24.30, p < .05. Since the assumption of homogeneity of variance was not met for these data, the *Welch's F* test was used. There was a significant difference of for three countries' mental well-being scores *Welch's F* (2, 392.67) = 22.18, p < .01, est.  $\omega^2 = .06$  (See Table 37.). Since the equal variances not assumed for mental well-being scores, Games-Howell test was used to examine differences in detailed with post hoc procedures (See Table 22.).

Table 21. Mean and Standard Deviation Values of Mental Well-Being Means for Three Countries

			Sam	ples		
	Tur	key	Bra	zil	Switz	erland
Total Score	М	SD	М	SD	М	SD
Mental Well-Being	51.67	12.61	52.15	12.72	57.67	8.56

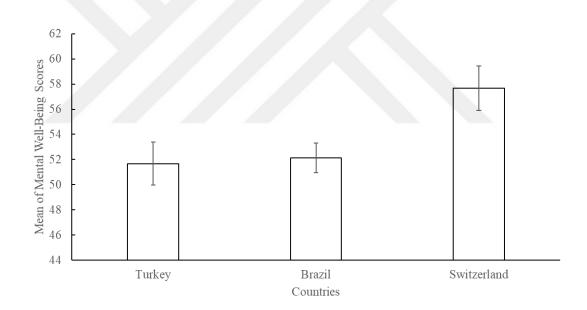


Figure 11. Mean (with 95% CI) Mental Well-Being Means Across Countries

Table 22.	Games-Howell	Test Result for Mental	Well-Being Means

DV	Test	Country	Country	MD	SE	Sig
Mental Well-	Games-Howell	Turkey	Switzerland	-6.00	1.06	.00
Being		Turkey	Brazil	47	1.25	.92
		Brazil	Switzerland	-5.53	1.08	.00

#### 3.5.3. Comparison of Ways of Coping Scores Cross-Countries

A one-way independent ANOVA was conducted in order to see the difference of ways of coping mean scores of the participants from three countries. See Table 23. for the means and standard deviations for each of the three groups. Levene's test was conducted in order to investigate the equality of variances in different groups (See Table 32.). Result of the analysis indicated that the variances were not equal for for three countries' problem focused coping means F(2, 611) = 24.06, p < .05, focusing positive means F (2, 611) = 43.24, p < .05, self blame means F (2, 611) = 7.23, p < .05.05, keep to self means F(2, 611) = 4.53, p < .05. Since the assumption of homogeneity of variance was not met for these data, the Welch's F test was used. There was a significant difference of for three countries' problem focused coping means Welch's  $F(2, 395.54) = 75.01, p < .01, \text{ est. } \omega^2 = .19$ , focusing on the positive means Welch's F  $(2, 383.55) = 11.94, p < .01, est. \omega^2 = .03, self blame means Welch's F (2, 404.13) =$ 26.71, p < .01, est.  $\omega^2 = .08$ , keep to self means Welch's F (2, 404.80) = 15.02, p < .01, est.  $\omega^2 = .04$  (See Table 40.). Result of the analysis indicated that the variances were equal for three countries' wishful thinking means F(2, 611) = .08, p > .05, detachment means F(2, 611) = 1.14, p > .05, seeking social support means F(2, 611) = 1.41, p > .05.05, and tension reduction means F(2, 611) = .06, p > .05. Since the assumption of homogeneity of variance was met for these data, F test was used. Result of the F test showed that there is significant difference for three countries' wishful thinking means  $F(2, 611) = 54.03, p < .01, \omega = .46$ , detachment means  $F(2, 611) = 71.58, p < .01, \omega$ = .43, seeking social support means F(2, 611) = 20.67, p < .01,  $\omega = .25$  and tension reduction means F(2, 611) = 52.84, p < .01,  $\omega = .38$  (See Table 41.). Since the equal variances assumed for wishful thinking, detachment, seeking social support and tension reduction means were examined in detailed with post hoc procedures by using Tukey test and since equal variances not assumed, for problem focused coping, focusing on the positive, self blame and keep to self means Games-Howell test was used to examine differences in detailed with post hoc procedures (See Table 24.).

			Sam	ples					
	Tur	key	Bra	zil	Switze	erland			
Subscales	М	SD	М	SD	М	SD			
Problem-focused coping	1.86	.69	1.36	.87	2.23	.56			
Wishful thinking	1.98	.74	2.00	.73	1.16	.75			
Detachment	1.61	.72	1.13	.66	.81	.68			
Seeking social support	1.91	.69	2.03	.65	1.63	.59			
Focusing on the positive	1.86	.79	1.76	.98	2.09	.54			
Self blame	1.62	.73	1.21	.77	1.72	.63			
Tension reduction	1.20	.73	1.31	.75	1.90	.74			
Keep to self	1.19	.73	.97	.84	1.41	.78			

Table 23. Mean and Standard Deviation Values of Ways of Coping Means for Three Countries

Table 24. Tukey and Games-Howell Test Result for Basic Psychological Need Means

DV	Test	Country	Country	MD	SE	Sig
Problem-	Games-Howell	Turkey	Switzerland	37	.07	.00
focused coping		Turkey	Brazil	.50	.07	.00
		Brazil	Switzerland	88	.07	.00
Wishful	Tukey	Turkey	Switzerland	.81	.07	.00
thinking		Turkey	Brazil	02	.07	.95
		Brazil	Switzerland	.83	.07	.00
Detachment	Tukey	Turkey	Switzerland	.80	.07	.00
		Turkey	Brazil	.49	.07	.00
		Brazil	Switzerland	.32	.07	.00
Seeking social	Tukey	Turkey	Switzerland	.28	.06	.00
support		Turkey	Brazil	12	.06	.16
		Brazil	Switzerland	.40	.06	.00
Focusing on	Games-Howell	Turkey	Switzerland	24	.07	.00
the positive		Turkey	Brazil	.09	.08	.00
		Brazil	Switzerland	33	.08	.00

Self blame	Games-Howell	Turkey	Switzerland	08	.07	.46
		Turkey	Brazil	.41	.07	.00
		Brazil	Switzerland	49	.07	.00
Tension	Tukey	Turkey	Switzerland	70	.07	.00
reduction		Turkey	Brazil	10	.07	.32
		Brazil	Switzerland	59	.07	.00
Keep to self	Games-Howell	Turkey	Switzerland	22	.07	.01
		Turkey	Brazil	.23	.08	.01
		Brazil	Switzerland	44	.08	.00

Table 24. (continued) Tukey and Games-Howell Test Result for BasicPsychological Need Means

#### 3.5.4. Comparison of Psychopathological Symptom Scores Cross-Countries

A one-way independent ANOVA was conducted in order to see the difference of psychopathology symptom mean scores of the participants from three countries. See Table 25. for the means and standard deviations for each of the three groups. Levene's test was conducted in order to investigate the equality of variances in different groups (See Table 33.). Result of the analysis indicated that the variances were not equal for for three countries' somatization means F(2, 611) = 20.97, p < .05, obsessioncompulsion means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, interpersonal sensitivity means F(2, 611) = 13.78, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .05, p < .0(611) = 15.36, p < .05, depression means F(2, 611) = 27.21, p < .05, anxiety means F(2, 611) = 37.97, p < .05, hostility means F(2, 611) = 52.14, p < .05, phobic anxiety means F(2, 611) = 9.18, p < .05, paranoid ideation means F(2, 611) = 31.43, p < .05and psychoticism means F(2, 611) = 17.73, p < .05. Since the assumption of homogeneity of variance was not met for these data, the Welch's F test was used. There was a significant difference of for three countries' somatization means Welch's F(2, $(385.57) = 9.70, p < .01, \text{ est. } \omega^2 = .03, \text{ obsession-compulsion means Welch's } F(2, \infty)$ 398.56) = 23.22, p < .01, est.  $\omega^2$  = .07 interpersonal sensitivity means Welch's F (2, 399.16) = 5.71, p < .01, est.  $\omega^2$  = .02, depression means Welch's F (2, 384,85) = 13.82, p < .01, est.  $\omega^2 = .04$ , anxiety means Welch's F (2, 379.41) = 34.33, p < .01, est.  $\omega^2 =$ .10, hostility means Welch's F(2, 375.24) = 49.39, p < .01, est.  $\omega^2 = .14$ , phobic anxiety means Welch's F (2, 396.56) = 9.70, p < .01, est.  $\omega^2 = .03$ , paranoid ideation means Welch's F (2, 390.62) = 35.19, p < .01, est.  $\omega^2 = .10$  and psychoticism means Welch's  $F(2, 387.33) = 9.16, p < .01, \text{ est. } \omega^2 = .03$  (See Table 42.). Since the equal variances not assumed for somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism, Games-Howell test was used to examine differences in detailed with post hoc procedures (See Table 26.).

		Sam	ples					
Tur	key	Bra	azil	Switze	erland			
М	SD	М	SD	М	SD			
.84	.91	.77	.96	.54	.58			
1.43	1.01	1.23	.99	.87	.73			
1.22	1.13	.87	.99	1.02	.78			
1.21	1.02	1.04	1.00	.80	.62			
1.11	.97	1.14	.95	.61	.56			
1.16	1.17	1.24	1.01	.53	.60			
0.74	.73	.66	.83	.47	.56			
1.22	.93	1.32	1.03	.71	.65			
.62	.68	.62	.84	.41	.48			
	M         .84         1.43         1.22         1.21         1.11         1.16         0.74         1.22	.84.911.431.011.221.131.211.021.11.971.161.170.74.731.22.93	Turkey         Brain           M         SD         M           .84         .91         .77           1.43         1.01         1.23           1.22         1.13         .87           1.21         1.02         1.04           1.11         .97         1.14           0.74         .73         .66           1.22         .93         1.32	Turkey         Brazil           M         SD         M         SD           .84         .91         .77         .96           1.43         1.01         1.23         .99           1.22         1.13         .87         .99           1.21         1.02         1.04         1.00           1.11         .97         1.14         .95           1.16         1.17         1.24         1.01           0.74         .73         .66         .83           1.22         .93         1.32         1.03	Turkey         Brazil         Switze           M         SD         M         SD         M           .84         .91         .77         .96         .54           1.43         1.01         1.23         .99         .87           1.22         1.13         .87         .99         1.02           1.21         1.02         1.04         1.00         .80           1.11         .97         1.14         .95         .61           1.16         1.17         1.24         1.01         .53           0.74         .73         .66         .83         .47           1.22         .93         1.32         1.03         .71			

Table 25. Mean and Standard Deviation Values of Psychopathology Symptom Meansfor Three Countries

Table 26. Games-Howell Test Result for Psychopathology Symptom Means

DV	Test	Country	Country	MD	SE	Sig
Somatization	Games-Howell	Turkey	Switzerland	.30	.08	.00
		Turkey	Brazil	.06	.09	.77
		Brazil	Switzerland	.23	.08	.01
Obsession-	Games-Howell	Turkey	Switzerland	.56	.09	.00
Compulsion		Turkey	Brazil	.20	.10	.10
		Brazil	Switzerland	.36	.09	.00
Interpersonal	Games-Howell	Turkey	Switzerland	.20	.10	.09
Sensitivity		Turkey	Brazil	.35	.10	.00
		Brazil	Switzerland	15	.09	.20

Depression	Games-Howell	Turkey	Switzerland	.42	.08	.00
		Turkey	Brazil	.18	.10	.18
		Brazil	Switzerland	.24	.08	.01
Anxiety	Games-Howell	Turkey	Switzerland	.49	.08	.00
		Turkey	Brazil	03	.09	.95
		Brazil	Switzerland	.52	.08	.00
Hostility	Games-Howell	Turkey	Switzerland	.63	.09	.00
		Turkey	Brazil	08	.11	.75
		Brazil	Switzerland	.71	.08	.00
Phobic	Games-Howell	Turkey	Switzerland	.27	.06	.00
Anxiety		Turkey	Brazil	.08	.08	.58
		Brazil	Switzerland	.14	.08	.02
Paranoid	Games-Howell	Turkey	Switzerland	.50	.08	.00
Ideation		Turkey	Brazil	11	.10	.51
		Brazil	Switzerland	.61	.09	.00
Psychoticism	Games-Howell	Turkey	Switzerland	.21	.06	.00
		Turkey	Brazil	.00	.08	1.00
		Brazil	Switzerland	.21	.07	.01

Table 26. (continued) Games-Howell Test Result for Psychopathology Symptom Means

3.6. Moderated Mediation Analyses with Moderator Role of the Country Variable

Before adding the moderator of moderated meditation analyses in the study, mediation analyses were performed to control the significance results run by Process macro model 4, v3.5 (Hayes, 2013). The Process macro, model 7, v3.5 (Hayes, 2013) in SPSS version 20 with bias-corrected 95% confidence intervals (n = 5000) was used to test moderated mediation analyses that carried out by adding country moderation on the significant mediation models to see any possible cultural effects. If the 95% confidence interval values do not include the number zero, the effect of the variables in these models is considered to be significant (Preacher, and Hayes, 2008). In order to compare the moderation roles of the three countries in the mediation analysis, pairwise comparison models were included in the analysis by coding dummy and Turkey-Brazil, Switzerland-Turkey and Brazil-Switzerland comparison models were prepared. Basic psychological need satisfaction is used as independent variable, ways of coping is used as mediator, mental well-being is used as dependent variable and country variable is used as moderator, and secondly, psychological need frustration is used as independent variable, ways of coping is used as mediator, psychopathological symptom is used as dependent variable and country variable is used as moderator. The specified data analysis plans were carried out using the subscales in the hypotheses (See Figure 12-13).

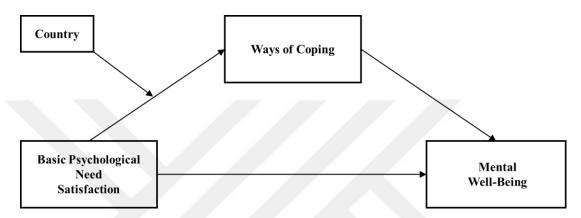


Figure 12. Data Analysis Plan of the Indirect Effect of Basic Psychological Need Satisfaction on Mental Well-Being through the Mediation of Ways of Coping with the Moderator Role of Country

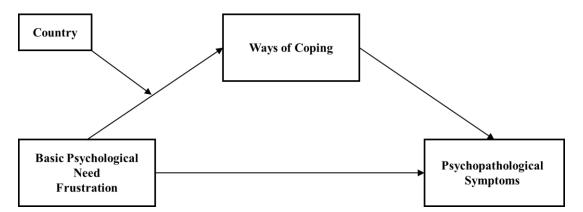


Figure 13. Data Analysis Plan of the Indirect Effect of Basic Psychological Need Frustration on Psychopathological Symptoms through the Mediation of Ways of Coping with the Moderator Role of Country

# 3.6.1. Moderating Role of Country on Indirect Effect of Autonomy Frustration on Depression through the Mediation of Detachment

Process macro model 4 was employed to determine any possible mediation effect of detachment on indirect effect of autonomy frustration on depression. Autonomy frustration significantly predicts detachment, B = .31, t(612) = 11.02,  $\beta = .41$ , p < .001. Autonomy frustration explains 16.6% of variance in detachment, F(1, 612) = 121.50, p < .001,  $R^2 = .17$ . Since the B value is positive, it can be concluded that there is a positive relationship. As autonomy frustration increases, detachment increases. Autonomy frustration significantly predicts depression, with the presence of detachment in the model, B = .50, t(611) = 15.74,  $\beta = .54$ , p < .001. Detachment also significantly predicts depression, B = .19, t(611) = 4.45,  $\beta = .15$ , p < .001. This model explains 38.9% of the variance in depression, F(2, 611) = 194.45, p < .001,  $R^2 = .39$ . Positive values of B indicate that as autonomy frustration increases, depression increase and as detachment increases, depressive symptoms also increase. When detachment is not in the model, autonomy frustration significantly predicts depression, B = .55, SE = .03, t(612) = 18.92, p < .001. When mediator is not in the model autonomy frustration explains 36.9% of variance in depression, F(1, 612) = 358.09, p $< .001, R^2 = .37$ . There was a significant indirect effect of autonomy frustration on depression through detachment, B = .06, BCa95% CI [.02, .10]. These results suggest that detachment is a significant mediator for the relationship between autonomy frustration and depression, in which the influence of autonomy frustration on depression is partially mediated by detachment. The graphical representation of the mediation model is given in Figure 14.

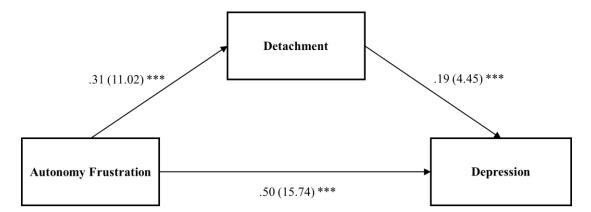


Figure 14. Effect of Autonomy Frustration on Depression through the Mediation of Detachment. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Unstandardized B coefficients are presented and values in parentheses are t values*.

Process macro model 7 was employed to test moderating role of country on indirect effect of autonomy frustration on depression through the mediation of detachment. Multicategorical country variable were coded for Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil comparisons. Moderation analysis was conducted on the relationship between autonomy frustration and detachment by country variable. Turkey-Brazil difference in detachment is significant, B = .51, SE = .06, t(407) = 7.93, = p < 0.001, Switzerland-Turkey difference in detachment is significant, B = -.57, SE = .06, t(408) = -9.15, p < 0.001, and Switzerland-Brazil difference in detachment is significant, B = -.14, SE = .07, t(405) = -2.13, p < 0.05. Interaction of Turkey-Brazil comparison by autonomy frustration significantly predicts detachment, B = .28, SE =.07, t(407) = 4.20, p < 0.001, interaction of Switzerland-Turkey comparison by autonomy frustration significantly predicts detachment, B = .11, SE = .06, t(408) =1.73, p < 0.05, and interaction of Switzerland-Brazil comparison by autonomy frustration significantly predicts detachment, B = .39, SE = .06, t(405) = 6.07, p < .050.001. It can be inferred that Turkey-Brazil, Switzerland-Turkey, and Switzerland-Brazil models significantly moderated the indirect effect of autonomy frustration on detachment. Simple slopes for the association between autonomy frustration and detachment were tested for Brazil, Turkey and Switzerland conditional effects. Brazil results of autonomy frustration does not predict detachment significantly, B = .04, SE = .05, t = .92, p = .36. Turkey results of autonomy frustration predict detachment significantly, B = .32, SE = .04, t = 7.26, p < .001. Switzerland results of autonomy frustration predict detachment significantly, B = .43, SE = .05, t = 9.16, p < .001.

Autonomy frustration significantly predicts depression, with the presence of detachment in the model, B = .50, SE = .03, t(611) = 15.74, p < .001. Detachment also significantly predicts depression, B = .19, SE = .04, t(611) = 4.45, p < .001. Positive values of *B* indicate that as autonomy frustration increases, depression increase and as detachment increases, depression also increase. The graphical representation of the moderated mediation model is given in Figure 15.

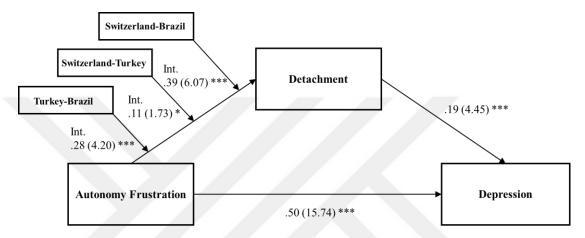


Figure 15. Moderating Role of Country on Indirect Effect of Autonomy Frustration on Depression through the Mediation of Detachment. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Int* = *Interaction*. *Unstandardized B coefficients are presented and values in parentheses are t values*.

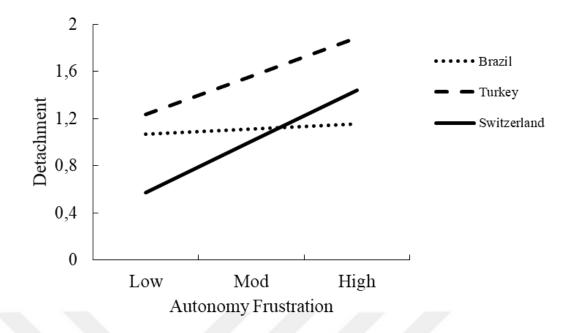


Figure 16. Line Graph Showing the Moderating Effect of Countries in the Relationship between Autonomy Frustration and Detachment.

## 3.6.2. Moderating Role of Country on Indirect Effect of Relatedness Frustration on Interpersonal Sensitivity through the Mediation of Keep to Self

Process macro model 4 was employed to determine any possible mediation effect of keep to self on indirect effect of relatedness frustration on interpersonal sensitivity. Relatedness frustration significantly predicts keep to self, B = .35, t(612) = 10.80,  $\beta =$ .40, p < .001. Relatedness frustration explains 16% of variance in keep to self, F (1,  $(612) = 116.57, p < .001, R^2 = .16$ . Since the B value is positive, it can be concluded that there is a positive relationship. As relatedness frustration increases, keep to self increases. Relatedness frustration significantly predicts interpersonal sensitivity, with the presence of keep to self in the model, B = .62, t(611) = 18.46,  $\beta = .58$ , p < .001. Keep to self also significantly predicts interpersonal sensitivity, B = .27, t(611) = 6.97,  $\beta = .22$ . p < .001. This model explains 49% of the variance in interpersonal sensitivity,  $F(2, 611) = 293.10, p < .001, R^2 = .49$ . Positive values of B indicate that as relatedness frustration increases, interpersonal sensitivity increase and as keep to self increases, interpersonal sensitivity symptoms also increase. When keep to self is not in the model, relatedness frustration significantly predicts interpersonal sensitivity, B = .72, SE =.03, t(612) = 22.34, p < .001. When mediator is not in the model relatedness frustration explains 45% of variance in interpersonal sensitivity,  $F(1, 612) = 498.89, p < .001, R^2$ 

= .45. There was a significant indirect effect of relatedness frustration on interpersonal sensitivity through keep to self, B = .09, BCa95% CI [.06, .13]. These results suggest that keep to self is a significant mediator for the relationship between relatedness frustration and interpersonal sensitivity, in which the influence of relatedness frustration on interpersonal sensitivity is partially mediated by keep to self. The graphical representation of the mediation model is given in Figure 17.

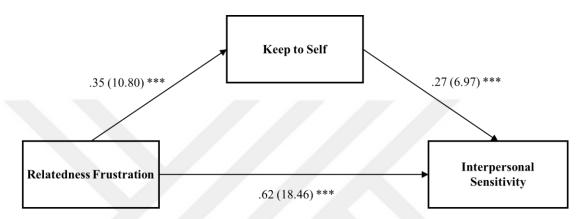


Figure 17. Effect of Relatedness Frustration on Interpersonal Sensitivity through the Mediation of Keep to Self. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Unstandardized B coefficients are presented and values in parentheses are t values*.

Process macro model 7 was employed to test moderating role of country on indirect effect of relatedness frustration on interpersonal sensitivity through the mediation of keep to self. Multicategorical country variable were coded for Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil comparisons. Moderation analysis was conducted on the relationship between relatedness frustration and keep to self country variable. Turkey-Brazil difference in keep to self is not significant, B = .12, SE = .07, t(407) = 1.62, p = .11, Switzerland-Turkey difference in keep to self is significant, B = .27, SE = .07, t(408) = 3.97, p < .001, and Switzerland-Brazil difference in keep to self is significant, B = .27, SE = .07, t(407) = -2.49, p < .001, and Switzerland-Brazil difference in keep to self, B = .19, SE = .08, t(407) = -2.49, p < .05, interaction of Switzerland-Turkey comparison by relatedness frustration significantly predicts keep to self, B = .27, p < .01, and interaction of Switzerland-Brazil comparison by relatedness frustration significantly predicts keep to self, B = .27, p < .01, and interaction of Switzerland-Brazil comparison by relatedness frustration significantly predicts keep to self, B = .27, p < .01, and interaction of Switzerland-Brazil comparison by relatedness frustration significantly predicts keep to self, B = .27, p < .01, and interaction of Switzerland-Brazil comparison by relatedness frustration significantly predicts keep to self, B = .22, SE = .08, t(408) = 2.77, p < .01, and interaction of Switzerland-Brazil comparison by relatedness frustration significantly predicts keep to self. Turkey = .75. It can

be inferred that Turkey-Brazil and Switzerland-Turkey models significantly moderated the indirect effect of relatedness frustration on keep to self. Simple slopes for the association between relatedness frustration and keep to self were tested for Brazil, Turkey and Switzerland conditional effects. Brazil results of relatedness frustration predict keep to self significantly, B = .42, SE = .06, t = 7.27, p < .001. Turkey results of relatedness frustration predict keep to self significantly, B = .42, SE = .06, t = 7.27, p < .001. Turkey results of relatedness frustration predict keep to self significantly, B = .24, SE = .05, t = 5.14, p < .001. Switzerland results of relatedness frustration predict keep to self significantly, B = .45, SE = .07, t = 6.84, p < .001. Relatedness frustration significantly predicts interpersonal sensitivity, with the presence of keep to self in the model, B = .62, SE = .03, t(611) = 18.46, p < .001. Keep to self also significantly predicts interpersonal sensitivity, B = .27, SE = .04, t(611) = 6.97, p < .001. Positive values of *B* indicate that as relatedness frustration increases, interpersonal sensitivity increase and as keep to self increases, interpersonal sensitivity also increase. The graphical representation of the moderated mediation model is given in Figure 18.

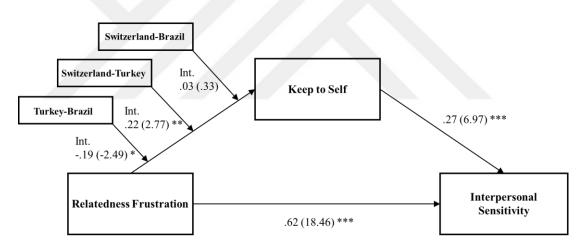


Figure 18. Moderating Role of Country on Indirect Effect of Relatedness Frustration on Interpersonal Sensitivity through the Mediation of Keep to Self. *Note:* \*\*\*p < .001; \*\* p < .01; \* p < .05. *Int* = *Interaction*. *Unstandardized B coefficients are presented and values in parentheses are t values*.

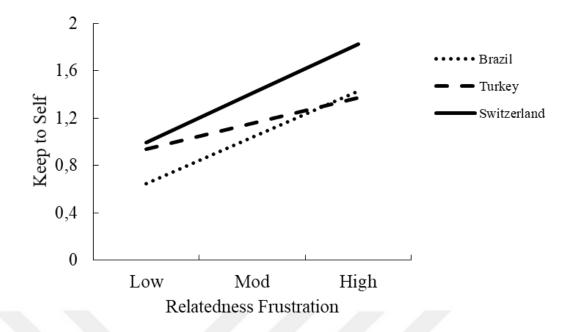


Figure 19. Line Graph Showing the Moderating Effect of Countries in the Relationship between Relatedness Frustration and Keep to Self.

## 3.6.3. Moderating Role of Country on Indirect Effect of Competence Frustration on Anxiety through the Mediation of Tension Reduction

Process macro model 4 was employed to determine any possible mediation effect of tension reduction on indirect effect of competence frustration on anxiety. Competence frustration significantly predicts tension reduction, B = -.22, t(612) = -6.69,  $\beta = -.22$ , p < .001. Competence frustration explains 6.8% of variance in tension reduction, F(1, 1) $(612) = 44.72, p < .001, R^2 = .07$ . Since the B value is negative, it can be concluded that there is a negative relationship. As competence frustration decreases, tension reduction increases. Competence frustration significantly predicts anxiety, with the presence of tension reduction in the model, B = .55, t(611) = 18.58,  $\beta = .60$ , p < .001. Tension reduction also significantly predicts anxiety, B = -.14, t(611) = -4.01,  $\beta = -.13$ , p < -.13.001. This model explains 41.3% of the variance in anxiety, F(2, 611) = 214.69, p < 1000.001,  $R^2 = .41$ . Positive value of B indicates that as competence frustration increases, anxiety increase. However, negative B value for tension reduction indicates that as tension reduction increases, anxiety symptoms decrease. When tension reduction is not in the model, competence frustration significantly predicts anxiety, B = .58, SE =.03, t(612) = 20.08, p < .001. When mediator is not in the model competence frustration explains 39.7% of variance in anxiety, F(1, 612) = 403.40, p < .001,  $R^2 = .40$ . There was a significant indirect effect of competence frustration on anxiety through tension reduction, B = .03, BCa95% CI [.01, .05]. These results suggest that tension reduction is a significant mediator for the relationship between competence frustration and anxiety, in which the influence of competence frustration on anxiety is partially mediated by tension reduction. The graphical representation of the mediation model is given in Figure 20.

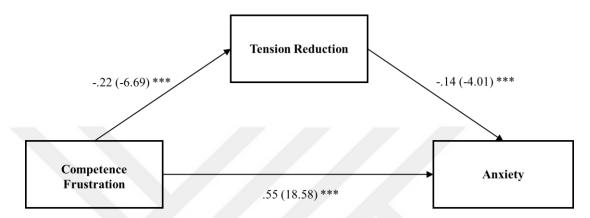


Figure 20. Effect of Competence Frustration on Anxiety through the Mediation of Tension Reduction. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Unstandardized B coefficients are presented and values in parentheses are t values*.

Process macro model 7 was employed to test moderating role of country on indirect effect of competence frustration on anxiety through the mediation of tension reduction. Multicategorical country variable were coded for Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil comparisons. Moderation analysis was conducted on the relationship between competence frustration and tension reduction by country variable. Turkey-Brazil difference in tension reduction is not significant, B = -.09, SE = .07, t(407) = -1.29, p = .20, Switzerland-Turkey difference in tension reduction is significant, B = .58, SE = .07, t(408) = 8.25, p < 0.001, and Switzerland-Brazil difference in tension reduction is significant, B = .54, SE = .07, t(405) = 7.44, p < 0.001. Interaction of Turkey-Brazil comparison by competence frustration significantly predicts tension reduction, B = -.17, SE = .07, t(407) = -2.32, p < .05, interaction of Switzerland-Turkey comparison by competence frustration significantly predicts tension reduction, B = -.18, SE = .07, t(408) = -2.39, p < .05, and interaction of Switzerland-Brazil comparison by competence frustration significantly predicts tension reduction, B = -.18, SE = .07, t(408) = -2.39, p < .05, and interaction of Switzerland-Brazil comparison by competence frustration significantly predicts tension reduction, B = -.18, SE = .07, t(408) = -2.39, p < .05, and interaction of Switzerland-Brazil comparison by competence frustration significantly predicts tension reduction, B = -.18, SE = .07, t(408) = -2.39, p < .05, and interaction of Switzerland-Brazil comparison by competence frustration significantly predicts tension reduction, B = -.18, SE = .07, t(408) = -2.39, p < .05, and interaction of Switzerland-Brazil comparison by competence frustration significantly predicts tension reduction, B = -.35, SE = .08, t(405) = -4.31, p < .001. It can be inferred that

Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil models significantly moderated the indirect effect of competence frustration on tension reduction. Simple slopes for the association between competence frustration and tension reduction were tested for Brazil, Turkey and Switzerland conditional effects. Brazil results of competence frustration does not predict tension reduction significantly, B = -.00, SE = .05, t = -.00, p = .99. Turkey results of competence frustration predict tension reduction significantly, B = -.00, SE = .05, t = -.05, t = -.05, t = -.00. Switzerland results of competence frustration predict tension reduction significantly, B = -.17, SE = .05, t = -3.59, p < .001. Switzerland results of competence frustration predict tension reduction significantly, B = -.06, t = -5.83, p < .001. Competence frustration significantly predicts anxiety, with the presence of tension reduction in the model, B = .55, SE = .03, t(611) = 18.58, p < .001. Tension reduction also significantly predicts anxiety, B = -.14, SE = .04, t(611) = -4.01, p < .001. Positive value of *B* indicates that as competence frustration increases, anxiety increase however negative value of *B* indicates that as tension reduction increases, anxiety decreases. The graphical representation of the moderated mediation model is given in Figure 21.

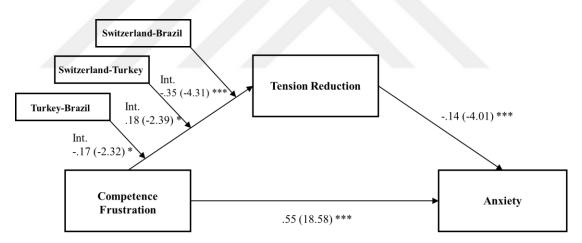


Figure 21. Moderating Role of Country on Indirect Effect of Competence Frustration on Anxiety through the Mediation of Tension Reduction. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Int* = *Interaction*. *Unstandardized B coefficients are presented and values in parentheses are t values*.

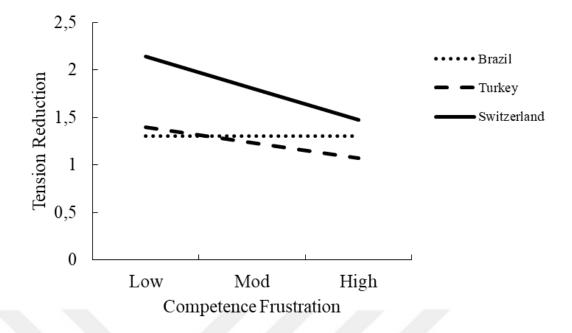


Figure 22. Line Graph Showing the Moderating Effect of Countries in the Relationship between Competence Frustration and Tension Reduction.

#### 3.6.4. Moderating Role of Country on Indirect Effect of Autonomy Frustration on Hostility through the Mediation of Wishful Thinking

Process macro model 4 was employed to determine any possible mediation effect of wishful thinking on indirect effect of autonomy frustration on hostility. Autonomy frustration significantly predicts wishful thinking, B = .47, t(612) = 17.04,  $\beta = .57$ , p < .57.001. Autonomy frustration explains 32.2% of variance in wishful thinking, F(1, 612)= 290.46, p < .001,  $R^2 = .32$  Since the B value is positive, it can be concluded that there is a positive relationship. As autonomy frustration increases, wishful thinking increases. Autonomy frustration significantly predicts hostility, with the presence of wishful thinking in the model, B = .52, t(611) = 14.46,  $\beta = .52$ , p < .001. Wishful thinking also significantly predicts hostility, B = .29, t(611) = 6.64,  $\beta = .24$ , p < .001. This model explains 46.6% of the variance in hostility, F(2, 611) = 267.04, p < .001,  $R^2 = .47$ . Positive values of B indicate that as autonomy frustration increases, hostility increase, and as wishful thinking increases, hostility symptoms also increase. When wishful thinking is not in the model, autonomy frustration significantly predicts hostility, B = .66, SE = .03, t(612) = 21.39, p < .001. When mediator is not in the model autonomy frustration explains 42.8% of variance in hostility, F(1, 612) = 457.71, p < 100.001,  $R^2 = .43$ . There was a significant indirect effect of autonomy frustration on hostility through wishful thinking, B = .14, BCa95% CI [.09, .19]. These results suggest that wishful thinking is a significant mediator for the relationship between autonomy frustration and hostility, in which the influence of autonomy frustration on hostility is partially mediated by wishful thinking. The graphical representation of the mediation model is given in Figure 23.

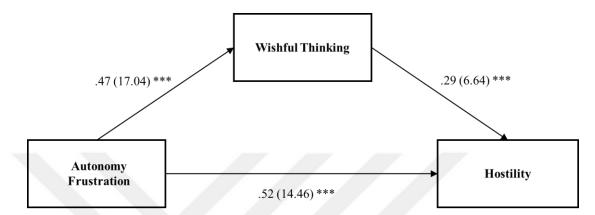


Figure 23. Effect of Autonomy Frustration on Hostility through the Mediation of Wishful Thinking. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Unstandardized B coefficients are presented and values in parentheses are t values*.

Process macro model 7 was employed to test moderating role of country on indirect effect of autonomy frustration on hostility through the mediation of wishful thinking. Multicategorical country variable were coded for Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil comparisons. Moderation analysis was conducted on the relationship between autonomy frustration and wishful thinking by country variable. Turkey-Brazil difference in wishful thinking is not significant, B = .03, SE = .07, t(407) = .39, p = .69, Switzerland-Turkey difference in wishful thinking is significant, B = -.55, SE = .06, t(408) = -8.53, p < .001, and Switzerland-Brazil difference in wishful thinking is significant, B = -.52, SE = .07, t(405) = -7.75, p < .001. Interaction of Turkey-Brazil comparison by autonomy frustration does not predict wishful thinking, B = .02, SE = .07, t(407) = .30, p = .76, however interaction of Switzerland-Turkey comparison by autonomy frustration significantly predicts wishful thinking, B = .19, SE = .06, t(408) = 2.92, p < .01, interaction of Switzerland-Brazil comparison by autonomy frustration significantly predicts wishful thinking, B = .21, SE = .07, t(405) = 3.20, p < .01. It can be inferred that Switzerland-Turkey and Switzerland-Brazil models significantly moderated the indirect effect of autonomy frustration on

wishful thinking. Simple slopes for the association between autonomy frustration and wishful thinking were tested for Brazil, Turkey and Switzerland conditional effects. Brazil results of autonomy frustration predict wishful thinking significantly, B = .32, SE = .05, t = 6.73, p < .001. Turkey results of autonomy frustration predict wishful thinking significantly. B = .34, SE = .05, t = 7.36, p < .001. Switzerland results of autonomy frustration predict wishful thinking significantly. B = .34, SE = .05, t = 7.36, p < .001. Switzerland results of autonomy frustration predict wishful thinking significantly. B = .53, SE = .05, t = 10.86, p < .001. Autonomy frustration significantly predicts hostility, with the presence of wishful thinking in the model, B = .52, SE = .04, t(611) = 14.46, p < .001. Wishful thinking also significantly predicts hostility, B = .29, SE = .04, t(611) = 6.64, p < .001. Positive values of *B* indicate that as autonomy frustration increases, hostility increase and as wishful thinking increases, hostility also increase. The graphical representation of the moderated mediation model is given in Figure 24.

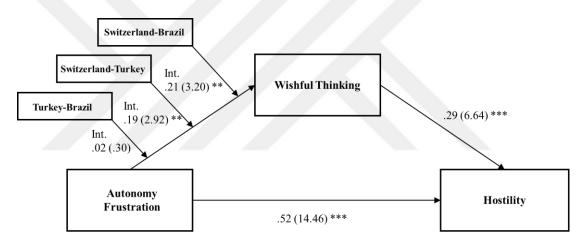


Figure 24. Moderating Role of Country on Indirect Effect of Autonomy Frustration on Hostility through the Mediation of Wishful Thinking. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Int* = *Interaction*. *Unstandardized B coefficients are presented and values in parentheses are t values*.

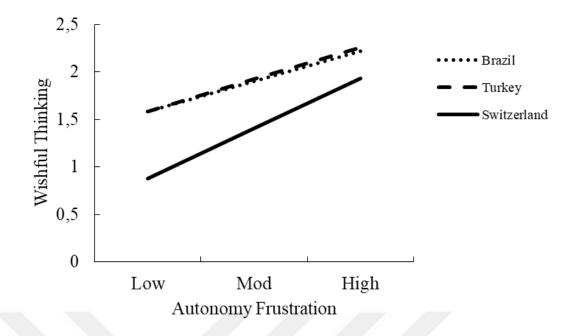


Figure 25. Line Graph Showing the Moderating Effect of Countries in the Relationship between Autonomy Frustration and Wishful Thinking.

#### 3.6.5. Moderating Role of Country on Indirect Effect of Competence Satisfaction on Mental Well-Being through the Mediation of Focusing on the Positive

Process macro model 4 was employed to determine any possible mediation effect of focusing on the positive on indirect effect of competence satisfaction on mental wellbeing. Competence satisfaction significantly predicts focusing on the positive, B = .46,  $t(612) = -14.65, \beta = .51, p < .001$ . Competence satisfaction explains 26% of variance in focusing on the positive, F(1, 612) = 214.71, p < .001,  $R^2 = .26$ . Since the B value is positive, it can be concluded that there is a positive relationship. As competence satisfaction increases, focusing on the positive increases. Competence satisfaction significantly predicts mental well-being, with the presence of focusing on the positive in the model, B = 7.69, t(611) = 22.35,  $\beta = .59$ , p < .001. Focusing on the positive also significantly predicts mental well-being, B = 5.28, t(611) = 13.71,  $\beta = .36$ , p < .001. This model explains 68.9% of the variance in mental well-being, F(2, 611) = 675.61,  $p < .001, R^2 = .69$ . Positive values of B indicate that as competence satisfaction increases, mental well-being increase, and as focusing on the positive increases, mental well-being also increase. When focusing on the positive is not in the model, competence satisfaction significantly predicts mental well-being, B = 10.10, SE = .34, t(612) = 29.85, p < .001. When mediator is not in the model competence satisfaction explains 59.3% of variance in mental well-being, F(1, 612) = 890.81, p < .001,  $R^2 = .59$ . There was a significant indirect effect of competence satisfaction on mental wellbeing through focusing on the positive, B = 2.41, BCa95% CI [1.90, 2.96]. These results suggest that focusing on the positive is a significant mediator for the relationship between competence satisfaction and mental well-being, in which the influence of competence satisfaction on mental well-being is partially mediated by focusing on the positive. The graphical representation of the mediation model is given in Figure 26.

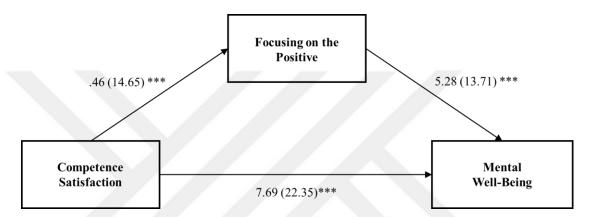


Figure 26. Effect of Competence Satisfaction on Mental Well-Being through the Mediation of Focusing on the Positive. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Unstandardized B coefficients are presented and values in parentheses are t values.* 

Process macro model 7 was employed to test moderating role of country on indirect effect of competence satisfaction on mental well-being through the mediation of focusing on the positive. Multicategorical country variable were coded for Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil comparisons. Moderation analysis was conducted on the relationship between competence satisfaction and focusing on the positive by country variable. Turkey-Brazil difference in focusing on the positive is significant, B = .17, SE = .07, t(407) = 2.29, p < .05, Switzerland-Turkey difference in focusing on the positive is significant, B = .17, SE = .07, t(407) = 2.29, p < .05, Switzerland-Turkey difference in focusing on the positive is significant, B = .14, SE = .06, t(408) = 2.61, p < .01, and Switzerland-Brazil difference in focusing on the positive is significant, B = .29, SE = .07, t(405) = 4.05, p < .001. Interaction of Turkey-Brazil comparison by competence satisfaction does not predict focusing on the positive, B = .02, SE = .07, t(407) = .27, p = .79, however interaction of Switzerland-Turkey comparison by competence satisfaction significantly predicts focusing on the positive, B = -.34, SE = .07, t(408)

= -4.92, p < .001, and interaction of Switzerland-Brazil comparison by competence satisfaction significantly predicts focusing on the positive, B = -.32, SE = .09, t(405)= -3.45, p < .001. It can be inferred that Switzerland-Turkey and Switzerland-Brazil models significantly moderated the indirect effect of competence satisfaction on focusing on the positive. Simple slopes for the association between competence satisfaction and focusing on the positive were tested for Brazil, Turkey and Switzerland conditional effects. Brazil results of competence satisfaction predict focusing on the positive significantly, B = .50, SE = .05, t = 9.83, p < .001. Turkey results of competence satisfaction predict focusing on the positive significantly, B =.52, SE = .05, t = 11.45, p < .001. Switzerland results of competence satisfaction predict focusing on the positive significantly, B = .18, SE = .07, t = 2.64, p < .01. Competence satisfaction significantly predicts mental well-being, with the presence of focusing on the positive in the model, B = 7.69, SE = .34, t(611) = 22.35, p < .001. Focusing on the positive also significantly predicts mental well-being, B = 5.28, SE = .38, t(611) =13.71, p < .001. Positive values of B indicate that as competence satisfaction increases, mental well-being increase and as focusing on the positive increases, mental wellbeing also increase. The graphical representation of the moderated mediation model is given in Figure 27.

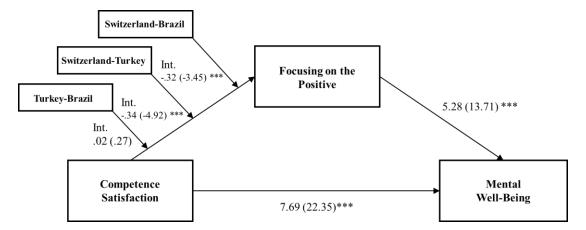


Figure 27. Moderating Role of Country on Indirect Effect of Competence Satisfaction on Mental well-being through the Mediation of Focusing on the Positive. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Int* = *Interaction*. *Unstandardized B coefficients are presented and values in parentheses are t values*.



Figure 28. Line Graph Showing the Moderating Effect of Countries in the Relationship between Competence Satisfaction and Focusing of the Positive.

## 3.6.6. Moderating Role of Country on Indirect Effect of Relatedness Satisfaction on Mental Well-Being through the Mediation of Seeking Social Support

Process macro model 4 was employed to determine any possible mediation effect of seeking social support on indirect effect of relatedness satisfaction on mental wellbeing. Relatedness satisfaction significantly predicts seeking social support, B = .37,  $t(612) = 13.24, \beta = .47, p < .001$ . Relatedness satisfaction explains 22.3% of variance in seeking social support, F(1, 612) = 175.36, p < .001,  $R^2 = .22$ . Since the B value is positive, it can be concluded that there is a positive relationship. As relatedness satisfaction increases, seeking social support increases. Relatedness satisfaction significantly predicts mental well-being, with the presence of seeking social support in the model, B = 7.14, t(611) = 13.67,  $\beta = .52$ , p < .001. Seeking social support also significantly predicts mental well-being, B = 1.78, t(611) = 2.68,  $\beta = .10$ , p < .01. This model explains 32.5% of the variance in mental well-being, F(2, 611) = 146.99, p < 100.001,  $R^2 = .32$ . Positive values of *B* indicate that as relatedness satisfaction increases, mental well-being increase, and as seeking social support increases, mental well-being also increase. When seeking social support is not in the model, relatedness satisfaction significantly predicts mental well-being, B = 7.80, SE = .46, t(612) = 16.85, p < .001. When mediator is not in the model relatedness satisfaction explains 31.7% of variance

in mental well-being, F(1, 612) = 283.96, p < .001,  $R^2 = .32$ . There was a significant indirect effect of relatedness satisfaction on mental well-being through seeking social support, B = .66, BCa95% CI [.15, 1.21]. These results suggest that seeking social support is a significant mediator for the relationship between relatedness satisfaction and mental well-being, in which the influence of relatedness satisfaction on mental well-being is partially mediated by seeking social support. The graphical representation of the mediation model is given in Figure 29.

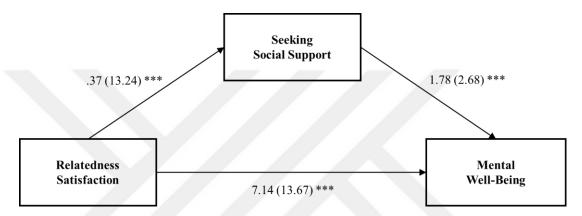


Figure 29. Effect of Relatedness Satisfaction on Mental Well-Being through the Mediation of Seeking Social Support. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Unstandardized B coefficients are presented and values in parentheses are t values.* 

Process macro model 7 was employed to test moderating role of country on indirect effect of relatedness satisfaction on mental well-being through the mediation of seeking social support. Multicategorical country variable were coded for Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil comparisons. Moderation analysis was conducted on the relationship between relatedness satisfaction and seeking social support by country variable. Turkey-Brazil difference in seeking social support is not significant, B = -.08, SE = .06, t(407) = -1.32, p = .19, however Switzerland-Turkey difference in seeking social support is significant, B = -.08, SE = .06, t(407) = -1.32, p = .19, however Switzerland-Turkey difference in seeking social support is significant, B = -.33, SE = .06, t(405) = -5.82, p < .001. Interaction of Turkey-Brazil comparison by relatedness satisfaction does not predict seeking social support, B = .10, SE = .07, t(407) = 1.43, p = .15, interaction of Switzerland-Turkey comparison by relatedness satisfaction does not predict seeking social support, B = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, SE = .06, t(408) = .01, p = .00, E = .06, t(408) = .00, p = .00, E = .00, t(408) = .00, p = .00, E = .00, t(408) = .00, p = .00, E = .00, t(408) = .00, p = .00, E = .00, t(408) = .00, p = .00, E = .00, t(408) = .00, p = .00, E = .00, t(408) = .00, p = .00, E = .00, t(408) = .00, p = .00, t(408) = .00, p = .00, t(408) = .00, p = .00, t(408) = .00, p = .00, t(408) = .00, t(408) = .00, t(408) = .00, t(408) = .00, t(408) = .00, t(408) = .00, t(408) = .00, t(408) = .00

= .99, and interaction of Switzerland-Brazil comparison by relatedness satisfaction does not predict seeking social support, B = .10, SE = .07, t(405) = 1.39, p = .17. It can be inferred that Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil models do not moderate the indirect effect of relatedness satisfaction on seeking social support. Relatedness satisfaction significantly predicts mental well-being, with the presence of seeking social support in the model, B = 7.14, SE = .52, t(611) = 13.67, p< .001. Seeking social support also significantly predicts mental well-being, B = 1.78, SE = .67, t(611) = 2.68, p < .001. Positive values of B indicate that as relatedness satisfaction increases, mental well-being increase and as seeking social support increases, mental well-being also increase. The graphical representation of the moderated mediation model is given in Figure 30.

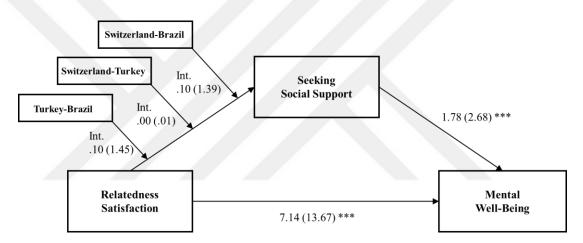


Figure 30. Moderating Role of Country on Indirect Effect of Relatedness Satisfaction on Mental Well-Being through the Mediation of Seeking Social Support. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Int* = *Interaction*. *Unstandardized B coefficients are presented and values in parentheses are t values*.

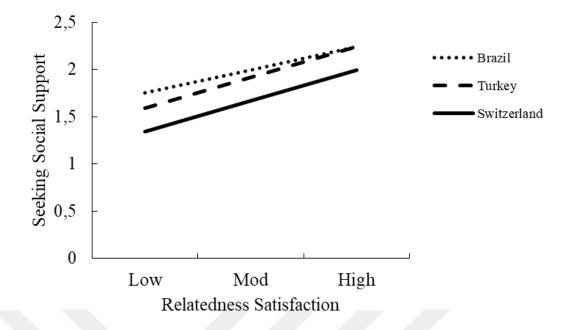


Figure 31. Line Graph Showing the Moderating Effect of Countries in the Relationship between Relatedness Satisfaction and Seeking Social Support.

## 3.6.7. Moderating Role of Country on Indirect Effect of Autonomy Satisfaction on Mental Well-Being through the Mediation of Problem-Focused Coping

Process macro model 4 was employed to determine any possible mediation effect of problem-focused coping on indirect effect of autonomy satisfaction on mental wellbeing. Autonomy satisfaction significantly predicts problem-focused coping, B = .53,  $t(612) = 21.25, \beta = .65, p < .001$ . Autonomy satisfaction explains 42.5% of variance in problem-focused coping, F(1, 612) = 451.59, p < .001,  $R^2 = .42$  Since the B value is positive, it can be concluded that there is a positive relationship. As autonomy satisfaction increases, problem-focused coping increases. Autonomy satisfaction significantly predicts mental well-being, with the presence of problem-focused coping in the model, B = 6.88, t(611) = 16.64,  $\beta = .58$ , p < .001. Problem-focused coping also significantly predicts mental well-being, B = 3.68, t(611) = 7.23,  $\beta = .25$ , p < .001. This model explains 58% of the variance in mental well-being, F(2, 611) = 422.31, p  $< .001, R^2 = .58$ . Positive values of B indicate that as autonomy satisfaction increases, mental well-being increases, and as problem-focused coping increases, mental wellbeing also increase. When problem-focused coping is not in the model, autonomy satisfaction significantly predicts mental well-being, B = 8.83, SE = .33 t(612) = 27.04, p < .001. When mediator is not in the model autonomy satisfaction explains 54.4% of variance in mental well-being, F(1, 612) = 731.06, p < .001,  $R^2 = .54$ . There was a significant indirect effect of autonomy satisfaction on mental well-being through problem-focused coping, B = 1.95, BCa95% CI [1.40, 2.53]. These results suggest that problem-focused coping is a significant mediator for the relationship between autonomy satisfaction and mental well-being, in which the influence of autonomy satisfaction on mental well-being is partially mediated by problem-focused coping. The graphical representation of the mediation model is given in Figure 32.

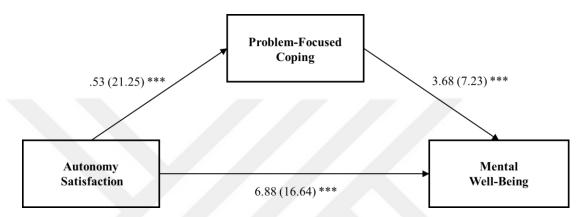


Figure 32. Effect of Autonomy Satisfaction on Mental Well-Being through the Mediation of Problem-Focused Coping. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Unstandardized B coefficients are presented and values in parentheses are t values.* 

Process macro model 7 was employed to test moderating role of country on indirect effect of autonomy satisfaction on mental well-being through the mediation of problem-focused coping. Multicategorical country variable were coded for Turkey-Brazil, Switzerland-Turkey and Switzerland-Brazil comparisons. Moderation analysis was conducted on the relationship between autonomy satisfaction and problem-focused coping by country variable. Turkey-Brazil difference in problem-focused coping is significant, B = .40, SE = .06, t(407) = 6.50, p < .001, Switzerland-Turkey difference in problem-focused coping is significant, B = .40, SE = .06, t(407) = 6.50, p < .001, Switzerland-Turkey difference in problem-focused coping is significant, B = .53, SE = .06, t(405) = 8.74, p < .001. Interaction of Turkey-Brazil comparison by autonomy satisfaction significantly predicts problem-focused coping, B = .13, SE = .06, t(407) = -2.25, p < .05, and interaction of Switzerland-Turkey comparison by autonomy satisfaction significantly predicts problem-focused coping, B = .16, SE = .06, t(408) = 2.83, p < .01, however interaction of Switzerland-Brazil comparison by

autonomy satisfaction does not predict problem-focused coping, B = .03, SE = .07, t(405) = .37, p = .71. It can be inferred that Turkey-Brazil and Switzerland-Turkey models significantly moderated the indirect effect of autonomy satisfaction on problem-focused coping. Simple slopes for the association between autonomy satisfaction and problem-focused coping were tested for Brazil, Turkey and Switzerland conditional effects. Brazil results of autonomy satisfaction predict problem-focused coping significantly, B = .53, SE = .04, t = 13.16, p < .001. Turkey results of autonomy satisfaction predict problem-focused coping significantly, B = .39, SE = .39, t = 11.27, p < .001. Switzerland results of autonomy satisfaction predict problem-focused coping significantly, B = .55, SE = .06, t = 9.89, p < .001. Autonomy satisfaction significantly predicts mental well-being, with the presence of problemfocused coping in the model, B = 6.88, SE = .41, t(611) = 16.64, p < .001. Problemfocused coping also significantly predicts mental well-being, B = 3.68, SE = .51, t(611)= 7.23, p < .001. Positive values of B indicate that as autonomy satisfaction increases, mental well-being increase and as problem-focused coping increases, mental wellbeing also increase. The graphical representation of the moderated mediation model is given in Figure 33.

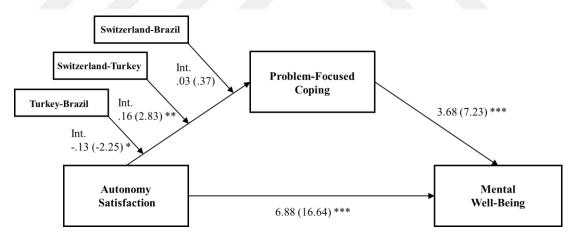


Figure 33. Moderating Role of Country on Indirect Effect of Autonomy Satisfaction on Mental Well-Being through the Mediation of Problem-Focused Coping. *Note:* \*\*\* p < .001; \*\* p < .01; \* p < .05. *Int* = *Interaction*. *Unstandardized B coefficients are presented and values in parentheses are t values*.

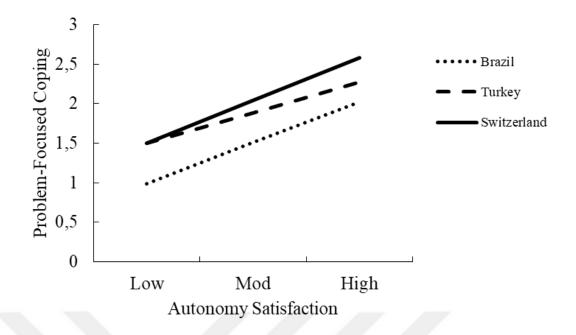


Figure 34. Line Graph Showing the Moderating Effect of Countries in the Relationship between Autonomy Satisfaction and Problem-Focused Coping.

#### 3.7. Summary of Results

The data were collected from 614 participants in the survey, 209 were from Turkey, 203 were from Switzerland and 202 were from Brazil.

In the correlation analyses, a positive correlation was found between mental well-being and basic psychological need satisfaction values and a positive correlation was found between psychopathology symptoms and basic psychological need frustration values. In ways of coping, problem-focused coping, seeking social support, focusing on the positive, and tension reduction were found to be positively correlated to mental wellbeing and basic psychological need satisfaction. On the other hand, keep to self, wishful thinking, detachment and self blame were found to be positively correlated with psychopathology symptoms and basic psychological need frustration.

The effects of demographic variables on mental well-being and basic psychological need satisfaction and frustration were analyzed by ANOVA analysis. As the perceived socioeconomic status and education level increased increased, mental well-being and need satisfaction scores increased, while need frustration decreased. Similar results were found for the participants who had a relationship rather than single ones. Lastly, participants whose parents were alive demonstrate higher mental well-being and need satisfaction scores and lower need frustration scores.

Basic psychological need satisfaction and frustration were compared between countries by ANOVA analysis. Switzerland had the highest results in autonomy and competence satisfaction and had the lowest scores in autonomy and competence frustration scores. On the other hand, Brazil had the highest results in relatedness satisfaction and had the lowest results in relatedness frustration. Switzerland had the highest total need satisfaction scores and also had the lowest total need frustration scores.

In the cross-country comparison of mental well-being; while higher results were obtained in Switzerland compared to Turkey and Brazil, no significant difference was found between Brazil and Turkey. Parallel to the results of mental well-being, when comparing the symptoms of psychopathology between countries, Switzerland had the lowest results in other psychopathologies except for interpersonal sensitivity.

Ways of coping was compared between countries. It was found that the ways of coping differed between countries. In post-hoc comparisons, some ways of coping were identified that were used in one country significantly more than in other countries, for example problem-focused coping, focusing on the positive, keep to self in Switzerland; detachment in Turkey; seeking social support, wishful thinking in Brazil.

7 research models were determined to investigate the moderation role of country differences in the mediation role of ways of coping in the relationship between basic psychological needs and mental well-being and psychopathology. Interaction effects of all country comparisons were found significant, except for Switzerland-Brazil comparison in the relationship between relatedness frustration and keep to self, Turkey-Brazil comparison in the relationship between autonomy frustration and wishful thinking, Turkey-Brazil comparison in the relationship between competence satisfaction and focusing on the positive, Switzerland and Brazil comparison in the relationship between autonomy satisfaction and problem-focused coping interaction effects. On the other hand, cross-country moderation role was not found significant in the effect of relatedness satisfaction on the mediation of seeking social support for any country comparisons.

### **CHAPTER 4: DISCUSSION**

In this study, basic psychological need satisfaction and frustration effects on mental well-being and psychopathology were investigated with the effect of ways of coping mediation. Whether there is a cross-cultural difference in this model was determined by adding the country variable as moderator and comparing the results from Turkey, Brazil, and Switzerland. Thus, a study model was established in which the country variable is the moderator, ways of coping is the mediator, basic psychological need satisfaction and frustration is independent variable, and psychopathological symptoms and mental well-being are dependent variables. Within the scope of this study, the relations of the variables with each other by correlation analysis were examined. Afterwards, a comparison of mental well-being, basic psychological need satisfaction and frustration at different levels of perceived socioeconomic status, education level, relationship status and parental status was carried out. Thereafter, the variables used in the study were compared in different countries. Lastly, the effects of basic psychological need satisfaction and frustration on psychopathology and mental wellbeing with ways of coping mediation were examined, under the guidance of the hypotheses, first with the model 4 mediation analysis without addition of the country variable, and then with the model 7 moderated mediation analysis adding the country variable. In this chapter, the obtained results are discussed according to the hypotheses formed in line with the aim of the research and interpreted in line with the relevant literature.

#### 4.1. Correlation Analyses of Variables

In line with the hypotheses, the correlation analyses of mental well-being, basic psychological need satisfaction and frustration, psychopathology and ways of coping values with each other were conducted.

# 4.1.1. Mental Well-Being and Basic Psychological Need Satisfcation and Frustration

The results show that basic psychological need satisfaction values are in a positive correlation with mental well-being, while basic psychological need frustration values are in a negative correlation with mental well-being. When the relationship between mental well-being and basic psychological need satisfcation and frustration was examined, results were supported by the literature (Vansteenkiste, and Ryan, 2013; Ryan, and Deci, 2008; Chen et al., 2015; Ryan et al., 1996). In addition, the

relationship of need satisfaction values with mental well-being is stronger than the relationship of frustration values with mental well-being. This result is similar to the stronger relationship examples found in the literature between satisfaction of basic psychological needs and mental well-being (Vansteenkiste, and Ryan, 2013).

#### 4.1.2. Mental Well-Being and Ways of Coping

When the relationship between mental well-being and ways of coping were examined, coping ways such as problem-focused coping, seeking social support, focusing on the positive, tension reduction were identified as having a strong positive relationship with mental well-being. On the other hand, coping ways such as wishful thinking, detachment, and keep to self were found to be negatively related to mental well-being. Similar results in the literature were found and considering presenting results. Present results are supported by the literature (Karademas, 2007; Mayordomo-Rodríguez et al., 2015; Tomás et al., 2012; Chang, D'Zurilla, and Sanna, 2009; Chao, 2011). Controversially, a positive correlation was found between self-blame and mental wellbeing, albeit a weak one. Self-blame, although which has been repeatedly shown to be associated with psychopathology (Stroebe et al., 2014; Lythe et al., 2015), is also related to perceived control in individuals at lower levels and can be evaluated as a factor in the relationship to mental well-being (Skinner, and Zimmer-Gembeck, 2011). Because, according to research and theoretical assumptions, self-blame has a relationship with perceived control (Folkman, 2010). Accordingly, when people blame themselves for the problems and streses around them to a small extent, they look for a solution about themselves, and they might choose to change themselves rather than change the environment where their effects may be low (O'neill, and Kerig, 2000; Skinner, and Zimmer-Gembeck, 2011).

### 4.1.3. Basic Psychological Need Satisfcation and Frustration and Ways Of Coping

When the results of the relationship between basic psychological need satisfcation and frustration and ways of coping were examined, basic psychological need satisfaction values were found to be positively related to problem-focused coping, seeking social support, focusing on the positive, tension reduction. On the contrary, basic psychological need frustration values were found to be positively related to wishful thinking, detachment, tension reduction and keep to self. Consistent with the research, coping methods are highly influenced by the satisfaction and frustration of basic psychological needs (Ntoumanis et al., 2009; Skinner, and Edge, 2002). More specifically, it was revealed that certain basic psychological need satisfaction/frustration were more strongly correlated with certain coping ways. For example, autonomy satisfaction and problem-focused coping, autonomy frustration and wishful thinking, autonomy/competence frustration and detachment, relatedness satisfaction and seeking social support, autonomy/competence satisfaction and focusing on the positive, autonomy/competence frustration and tension reduction, relatedness frustration and keep to self. Despite the fewness of studies in the literature on which need satisfaction/frustration might be related to which coping methods, it is possible to make some comments with the theoretical assumptions of concepts. It was not surprising that the need for relatedness related to interpersonal relationships was strongly correlated with two social sharing-related coping methods, seeking social support and keep to self. In wishful thinking, the individual hopes for an external (e.g. spiritual, coincidence) solution rather than effective solutions under her/his own influence. In cases where the need to control one's own actions is thwarted, as in autonomy frustration, it is quite meaningful for people to develop a way of coping with wishful thinking. Likewise, the high relationship between autonomy frustration and a way of coping such as detachment, which will avoid seeking an effective solution to the problem, is remarkable. Detachment is also highly relevant to competence frustration, where one ceases to effectively influence one's environment. In addition, it is an expected result that one who has a satisfied autonomy and competence can identify and implement some productive ways of coping, such as tension reduction, by identifying one's own problems and relieving oneself about it. When the relationship between problem-focused coping and autonomy satisfaction is examined, it is found in the literature that individuals who can make autonomous decisions can define their own goals and fulfill the necessary responsibilities to achieve these goals (Deci, and Ryan, 2000). Thus, individuals can achieve self-control and self-regulation over their lives. It is possible to theorize that individuals with competence satisfaction will focus on more positive thoughts and provide positive solutions to these problems with selfconfidence.

## 4.1.4. Basic Psychological Need Satisfcation and Frustration and Psychopathological Symptoms

Results of the relationship between basic psychological need satisfcation and frustration and psychopathological symptoms were examined and results were found to support the literature (Ryan, and Deci, 2017). The results show that basic psychological need frustration values are in a positive correlation with

psychopathology, while basic psychological need satiscation values are in a negative correlation with psychopathology. In addition, the relationship of frustration values with psychopathology is stronger than the relationship of satisfaction values with psychopathology. This result is similar to the stronger relationship examples found in the literature between frustration of basic psychological needs and psychopathology (Vansteenkiste, and Ryan, 2013).

#### 4.1.5. Ways of Coping and Psychopathological Symptoms

Lastly, when the results of the relationship between ways of coping and psychopathological symptoms are examined, results were found to support the literature showing that ways of coping affect psychopathology (Farley et al., 2005). While the ways such as problem-focused coping, seeking social support, tension reduction and focusing on the positive are in negative correlation with psychopathologies, ways such as wishful thinking, detachment and keep to self are in positive correlation with psychopathologies. When examined more specifically, the strong positive correlation between detachment and depression was found. As stated in the literature; detachment, which is the tendency of individuals to stay away from problems and give up solutions, is considered to be a factor in depression and (Maurier, and Norhcott, 2000). Another strong positive relationship is between keep to self and interpersonal sensitivity was demonstrated by many sources in the literature (Masten, 2001; Boyce et al., 1991). While not sharing problems and not seeking social support, it might cause people to keep problems to themselves and create an unresolved chain of problems, while at the same time it may cause interpersonal sensitivity. One of the notable results is the strong positive relationship between wishful thinking and hostility. As the reason for this situation, it should be remembered that the person who uses the way of coping of wishful thinking waiting for external factors to solve the problem. In addition, in Kelly's model of hostility explanation, psychopathological symptom is defined as blaming one's difficulty in coping with external reality, trying to force the outside world to conform to one's own views, even if this is a false hope and causes emotional expense and/or harm (Lester, 2019). Therefore, the strong positive correlation of the psychopathological symptom of hostility, which is an indication that the person has an adjustment problem related to external reality, and wishful thinking, which is the person's attribution of the solution to the outside world, can be interpreted in this respect. In addition, anxiety is in a strong negative relationship with tension reduction. This result is also supported by the literature, there are many examples that show that people's ability to reduce their tension is successful in relieving anxiety symptoms (De Dios, 2010).

When the correlations are interpreted collectively, it is found that basic psychological need satisfaction is correlated with mental well-being, and basic psychological need frustration is correlated with psychopathology. In this relationship, certain need satisfactions and frustrations are correlated with certain ways of coping (e.g., relatedness frustration is correlated with keep to self)

### 4.2. Comparison of Basic Psychological Need Satisfaction and Frustration and Mental Well-Being by Demographic Variables

Basic psychological need satisfaction and frustration and mental well-being were compared at different levels of perceived socioeconomic status, education level, relationship status and parental status by ANOVA analysis.

### 4.2.1. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Perceived Socioeconomic Status

When the results of the analysis are examined, it has been revealed that when the perceived socioeconomic status increases, mental well-being also increases, except for the higher and middle-higher comparison. Many studies show that mental well-being is affected by personal, psychological or physical characteristics, as well as by the social environment and external factors in which people live (Hidalgo et al., 2010). Some of the most important of these external factors are socioeconomic status and people's perceptions about them (Hidalgo et al., 2010). It is a frequently revealed result in the literature that the increase in the perceived socioeconomic status of people affects their mental well-being positively, since they can provide hope, opportunity for personal development, life satisfaction at the moment, finding meaning, creating opportunities and resources (Minkov, 2009; Hidalgo et al., 2010).

When the results of the analysis are examined, it has been revealed that when the perceived socioeconomic status increases, psychological need satisfaction also increases and psychological need frustration decreases. These results are supported by the results in the literature. In addition to personal characteristics, the environment has a critical importance among the factors affecting psychological need satisfaction and frustration (Ryan, and Deci, 2017; Schultz, 2014). Social, cultural, and environmental contexts play a role in both satisfying and frustrating one's psychological needs (Ryan, and Deci, 2000c). Supporting the results found in this study, Bradshaw (2021) found higher results in the well-being of people with better socioeconomic status. Increasing

people's living standards, improving social freedoms, and better economic opportunities provide important tools to satisfy people's needs for both autonomy, relatedness and competence.

### 4.2.2. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Education Level

In another ANOVA analysis performed in the study, it was revealed that as the level of education increased, mental well-being increased. Similarly, it has been demonstrated by many studies that as the education level of individuals increases, their mental well-being increases, possibly with a more functional social environment and better coping methods (Glenn, and Weaver, 1981; Harding, Lopez, and Klainin-Yobas, 2019). Reasons for the strong relationship between the higher level of education and mental well-being, are linked with the increasion of the opportunities for individuals to gain strengthness, different perspectives and resilience in the face of problems.

It has been revealed that when the education level increases, psychological need satisfaction also increases and psychological need frustration decreases. Ryan, Deci, and Vansteenkiste (2016) revealed that education status, like many other social factors, is an important variable that affect basic psychological needs. Aside from the possible better socioeconomic status that academic progress may bring, individuals can provide better satisfaction as their level of education increases. Particularly in their need for competence and autonomy together with the tools of sense of achievement and autonomous decision making in a academic environment will be satisfied, and also need for relatedness with the tools these social environment will be provided.

### 4.2.3. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Relationship Status

In another analysis, people were divided into those who are in a romantic relationship and those who are not, and compared in terms of their mental well-being. As a result of the analysis, it was revealed that those who are in a relationship have significantly better mental well-being results than those who are not. This result is supported by many studies in the literature (Hidalgo et al., 2010; Dush, and Amato, 2005). Being in a romantic relationship gives people a tool to better cope with their problems in social sharing, helps establish emotional bonds, helps people develop self-acceptances, and leads a meaningful life by creating a purpose. This result is parallel to the result that relatedness satisfaction and the way of coping of seeking social support are positively correlated with mental well-being. When people are in a relationship, their relatedness needs are better satisfied and they have a source of social support to share their problems with. In this regard, the results are self-consistent and in line with the literature (Gore, Cross, and Kanagawa, 2009).

In the ANOVA analysis, it was found that the participants in a relationship had an increase in their basic psychological need satisfaction and a decrease in their basic psychological need frustration compared to those who were not in a relationship. This result can be supported by many studies showing that relationship status has an effect on need satisfaction and frustration (Blais et al., 1990; Knee et al., 2005; Gaine, and La Guardia, 2009). Being in a relationship is a very important tool in terms of being able to satisfy needs, especially the need for relatedness. For the need for relatedness, which represents universal tendencies such as communicating and establishing close relationships, one of the basic satisfying tools in society is to be in a romantic relationship is interrelated, being in a relationship can also provide environments where people can be more satisfying in terms of needs for competence and autonomy. *4.2.4. Comparison of Mental Well-Being and Basic Psychological Need Satisfaction and Frustration by Parental Status* 

Lastly, mental well-being was compared at two levels of parental information. In this analysis, in which the survival of the parents of the individuals was compared in terms of mental well-being. Mental well-being results of the participants whose parents were alive were significantly higher. This result can be supported by the study of Marks, Jun, and Song (2007), who previously compared the survival of the parents of the participants in terms of mental well-being and found a similar result. The importance of parents is very critical in the concept of family, where people can receive social support and gain many mature defense and coping methods together.

In the ANOVA analysis, in which the effect of whether the families are alive or not on basic psychological need satisfaction and frustration, the need satisfactions of the participants whose parents are alive are higher and their need frustration are lower. There is a large body of literature in the literature on the impact of familial variables on people's needs (Cordeiro et al., 2015; Costa et al., 2016; Ahmad, Vansteenkiste, and Soenens, 2013). According to studies, being raised in a family environment that can provide sufficient support creates a great driving force for all needs of individuals. In its generalized form, whether or not the parents are alive or not might have brought about this result by providing the prerequisite for the individuals to be in this family

environment.

As discussed in this section, all perceived socioeconomic status, educational level, relationship status, and parental status have an impact on mental well-being and basic psychological need satisfaction and frustration. Improved socioeconomic status, higher education level, being in a romantic relationship, and parental survival lead to higher mental well-being outcomes and more satisfied needs.

## 4.3. Comparison of the Variables Across the Three Countries (Turkey, Brazil, and Switzerland)

Basic psychological need satisfaction and frustration, mental well-being, ways of coping and psychopathological symptom mean scores were compared across Turkey, Brazil, and Switzerland by ANOVA analysis.

### 4.3.1. Comparison of Basic Psychological Need Satisfaction and Frustration Across Three Countries (Turkey, Brazil, and Switzerland)

In order to compare basic psychological need satisfaction and frustration scale, the mean scores of autonomy satisfaction, autonomy frustration, competence satisfaction, competence frustration, relatedness satisfaction, relatedness frustration, total satisfaction and total frustration; were compared across countries. In the results of the analysis, it was revealed that the country variable had an effect on all these investigated subscales. Post-hoc analyses were applied according to the homogeneity results in order to examine specifically at the differences between countries.

### 4.3.1.1. Comparison of Autonomy Satisfaction and Frustration Across Three Countries (Turkey, Brazil, and Switzerland)

According to results, autonomy satisfaction means from biggest to smallest were 4.15 in Switzerland, 3.72 in Turkey, 3.51 in Brazil. There is a significant difference between Switzerland and the other two countries, while there is no significant difference between Turkey and Brazil. In results, autonomy frustration means from smallest to biggest were 2.13 in Switzerland, 2.74 in Turkey, 2.89 in Brazil. There is a significant difference between Switzerland and the other two countries, while there is no significant difference between Switzerland and the other two countries, while there is no significant difference between Turkey and Brazil. According to the literature research, it has been revealed that individualistic cultures attach more importance to autonomy than collectivistic cultures (Hui, and Villareal, 1989). More familial, societal, and cultural tools are used to support autonomy in individualistic and Western cultures (Deci, and Ryan, 2000). The results of the study can be supported by these examples of the literature. Although Turkey is a country where individualism and autonomous

are important compared to Brazil, these results may have occurred in Turkey due to gender differences. According to their research, Van Bergen, and Saharso (2016) revealed that the autonomy frustration scores of Turkish women are quite high, and many results such as low life satisfaction, blocked liberties, inhibited careers and educational processes can be affected by this. All sorts of factors of a country and culture can have an impact on needs. Besides being an individualistic culture, the results of higher autonomy satisfaction and lower autonomy frustration in Switzerland might be explained by the influence of families, educational institutions, social institutions and political factors affecting individuals. Such societal and interpersonal influences can lead to such an outcome when they are supportive and encouraging of people's autonomy.

### 4.3.1.2. Comparison of Competence Satisfaction and Frustration Across Three Countries (Turkey, Brazil, and Switzerland)

Result of the analysis of competence means revealed that competence satisfaction means from biggest to smallest were 4.14 in Switzerland, 4.02 in Brazil, 3.88 in Turkey. There is a significant difference between Switzerland and Turkey, while there is no significant difference between Brazil and other two countries. In results, competence frustration means from smallest to biggest were 2.05 in Switzerland, 2.36 in Brazil, 2.49 in Turkey. There is a significant difference between Switzerland and the other two countries, while there is no significant difference between Turkey and Brazil. Reports show that while Switzerland has much more preferable results in competence satisfaction and frustration scores, Turkey is in the opposite position. In order to meet the need for competence as states in the literature, it is essential that there are appropriate tools in society for this need (Ryan, and Deci, 2017). Various studies on this subject have revealed that individuals in Switzerland have very high scores in experiencing job satisfaction (Breaugh, Ritz, and Alfes, 2018; Staempfli, and Lamarche, 2020; Stalder, and Lüthi, 2020). Professions are one of the most effective environments where the need for competence can find a healthy resource, with the ability to demonstrate one's adequacy and ability. The fact that Swiss people experience such great satisfaction with their professions and get rewards for their work supports this result in the study. There are many reasons for low competence scores in Turkey, such as the economic, political and business environment. In addition, the most important difference might be the barriers to women's participation in society and the business world. The participation rate of women in society and the workforce is

quite low in Turkey (Kaya, 2014). These results can be interpreted as the fact that women in Turkey are frustrated with the need for competence in society, which is supported by the research in the literature (Sen, 2000).

## 4.3.1.3. Comparison of Relatedness Satisfaction and Frustration Across Three Countries (Turkey, Brazil, and Switzerland)

Result of the analysis of relatedness means revealed that relatedness satisfaction means from biggest to smallest were 4.23 in Brazil, 4.11 in Turkey, and 4.01 in Switzerland. There is a significant difference between Brazil and Switzerland, while there is no significant difference between Turkey and other two countries. These results can be interpreted with the effect of the importance given to the need for relatedness in collectivistic cultures. According to discussion of Kagitcibasi (2005), collectivistic cultures have more resources for the need for relatedness and are in higher order of importance for individuals. For these reasons, Switzerland result, which has the lowest mean scores in relatedness satisfaction scores, is in parallel with the individualisticcollectivistic cultural differences in the literature. Studies in the literature have shown that young people in Brazil continue to receive social support from interpersonal relationships in the transition to social life after leaving the family (Van Horn, and Marques, 2000). In addition, it can be estimated that the relatedness needs of these people, who continue to talk to their families, will lead to healthier results. Research shows that in Brazil, interpersonal relations, staying in touch with families, and belonging to groups in social life are important cultural characteristics. For these reasons, people in Brazil can find more resources for their relatedness satisfactions than in Switzerland. In results, relatedness frustration means from smallest to biggest were, 1.86 in Brazil, 2.03 in Switzerland, and 2.19 in Turkey. There is a significant difference between Brazil and Turkey, while there is no significant difference between Switzerland and other two countries. According to the basic psychological needs theory, although satisfaction and frustration are in a relationship with each other, do not represent a complete contrast (Ryan, and Deci, 2017). Although the relatedness satisfaction results are significantly lower in Switzerland than in Brazil, there is no significant difference between the frustration results. In Switzerland the people's resources were not sufficient for satisfaction, however, there were no strong social obstacles for frustration.

### 4.3.1.4. Comparison of Total Need Satisfaction and Frustration Across Three Countries (Turkey, Brazil, and Switzerland)

As a result of the analysis of total needs means, it is revealed that total need satisfaction means from biggest to smallest were 4.10 in Switzerland, 3.92 in Brazil, and 3.90 in Turkey. There is a significant difference between Switzerland and other two countries, while there is no significant difference between Brazil and Turkey. In results, total need frustration means from smallest to biggest were 2.07 in Switzerland, 2.37 in Brazil, and 2.47 in Turkey. There is a significant difference between Brazil and Turkey. Switzerland and other two countries, while there is no significant difference between Brazil and Turkey. There is a significant difference between Brazil and Turkey. The results of autonomy, competence, and relatedness that make up these total scores were discussed. According to the theory, high need satisfaction predict mental wellbeing, and high frustration scores predict ill-being (Ryan, and Deci, 2017).

# 4.3.2. Comparison of Mental Well-Being Scores Across Three Countries (Turkey, Brazil, and Switzerland)

Mental well-being scores of the participants were compared across countries. According to the results, a significant difference was found between the three countries in terms of mental well-being scores. More specifically, while Switzerland has significantly higher mental well-being scores than both Turkey and Brazil, there is no significant difference between Turkey and Brazil. These results are similar to the need satisfaction scores in the countries (Ryan, and Deci, 2017). In Switzerland, where total need satisfaction scores are higher than in Turkey and Brazil, mental well-being scores were found to be higher. Of course, there are many factors that can be interpreted as the reason for this result. As stated earlier, there are many personal and social factors that affect mental well-being (Hidalgo et al., 2010). Socioeconomic levels are also one of the most important factors that ensure people's mental well-being (Hidalgo et al., 2010). According to the research, Switzerland is at the forefront of the world's largest economies, and the welfare level of its people is very high (Dutta, Lanvin, and Wunsch-Vincent, 2015). This economic prosperity might also be affecting the mental well-being score of Switzerland.

# 4.3.3. Comparison of Ways of Coping Scores Across Three Countries (Turkey, Brazil, and Switzerland)

Ways of coping scores of the participants were compared across countries. According to the results, a significant difference was found between the three countries in terms of ways of coping scores. Subscales of problem-focused coping, wishful thinking, detachment, seeking social support, focusing on the positive, self blame, tension reduction and keep to self were investigated via post-hoc procedures to find out specific significant country differences.

Problem-focused coping, seeking social support, focusing on the positive and tension reduction are the ways of coping that have been found to be related to the mental wellbeing of individuals as previously studied and shown in the literature (Karademas, 2007; Chang, D'Zurilla, and Sanna, 2009; Mayordomo-Rodríguez et al., 2015). In comparison of problem-focused coping, Switzerland has significantly higher scores than both Turkey and Brazil. In addition Turkey has significantly higher problemfocused coping scores than Brazil. Trommsdorff (1989) argued that people in the individualistic cultures tend to control the environment more frequently. Similarly, people in these cultures use more problem-focused coping methods. Research results support this cross-cultural distinction. In comparison of seeking social support, while Switzerland has significantly lower scores than both Turkey and Brazil, these is no significant difference between Turkey and Brazil. Essau (1992), in his study, revealed that people in collectivistic cultures apply more secondary control and emotionfocused copings. Similarly, Frydenberg et al. (2003) found in their study that people from a collectivistic culture are more prone to seeking social support. The result of significantly higher seeking social support in Turkey and Brazil can be explained on this basis. In comparison of tension reduction, while Switzerland has significantly higher scores than both Turkey and Brazil, these is no significant difference between Turkey and Brazil. Some tension reduction ways are consumption, doing an activity or going to vacation. In such a result, the variance between the economic welfare in Switzerland and the economic welfare of Brazil and Turkey should be taken into account (Dutta, Lanvin, and Wunsch-Vincent, 2015). Resources that will be created by economic welfare are more suitable for tension reduction. In comparison of focusing on the positive, Switzerland has significantly higher scores than both Turkey and Brazil. In addition, Turkey has significantly higher focusing on the positive scores than Brazil. In support of these results, a research conducted by Baranski et al. (2021), a study was conducted on positive attitudes towards situations from 61 countries. Optimism results in this study were 3.36 for Switzerland, 3.24 for Turkey, and 3.23 for Brazil. According to studies, there are many factors that affect focusing on the positive cross-culturally. People can use it as a psychological shield (Segerstrom, 2007), or they can take their compatriots as a reference (Heine et al., 2002). According to Hofstede's Power Distance Index analysis, personal and political freedoms between countries are ranked as Switzerland, Turkey, Brazil from highest to lowest (Hofstede, Hofstede, and Minkov, 2005). Political environments in countries also directly affect people's hopes and positivity for the future (Furr, and Funder, 2020). The results of the current study might have been influenced and shaped by personal and political freedoms in countries, as well as many factors.

Ways of coping, which were previously shown to be related to psychopathologies and mental disorders, such as wishful thinking, detachment, self blame and keep to self, were compared across countries in the current study (Maurier, and Norhcott, 2000; Jampol, 1989). In comparison of wishful thinking, while both Turkey and Brazil have significantly higher scores than Switzerland, these is no significant difference between Turkey and Brazil. Gallup Poll (2009) investigated how important religion and religious thought is for individuals in 144 countries. According to the research, religion is important for 23% of Swiss individuals, for 64% of Turkish individuals and for 87% of Brazilian individuals. The results of wishful thinking and religious thinking in the results of the study are parallel. In addition, according to the research of Heppner et al. (2006), wishful coping methods are applied more frequently in collectivistic cultures. In comparison of detachment, both Turkey and Brazil have significantly higher scores than Switzerland. In addition, Turkey has signiciantly higher detachment scores than Brazil. In a study investigating the widespread use of ways of coping in collectivistic countries, it was revealed that coping methods such as detachment and avoidance are used more frequently in countries where the problems can not be solved (Heppner et al., 2006). When people feel helpless, they resort to such coping methods. It can be interpreted that people in Turkey and Brazil are more often helpless in the face of their problems. In comparison of self blame, while Switzerland and Turkey has significantly higher scores than Brazil, these is no significant difference between Switzerland and Turkey. According to research about self-blame, Feinberg et al. (2019) demonstrated that individualistics target themselves with more responsibility and blame. On the other hand, in collectivistic countries, when people blame themselves, severity of the blame is more high. The high results in Switzerland and Turkey can be explained by the citizens taking responsibility for the events and target themselves harshly. In comparison of keep to self, while Switzerland has significantly higher scores than both Turkey and Brazil. In addition, Turkey has signiciantly higher keep to self scores than Brazil. Studies in the literature found that people in collectivistic countries socially

share more and keep their experiences less to themselves (Frydenberg et al., 2003; Heppner, 2006). Studies supporting these results reveal that people in collectivistic culture resort to ways of coping by sharing more with the outside world, while people in individualistic culture keep it to themselves. As a result of the interpretation of all analyses, the importance of differences between cultures and countries in changing coping methods was discussed. It has been revealed that many coping methods are used in every culture that can indicate a positive or negative mental health results.

## 4.3.4. Comparison of Psychopathology Scores Across Three Countries (Turkey, Brazil, and Switzerland)

Psychopathology scores of the participants were compared across countries. According to the results, a significant difference was found between the three countries in terms of psychopathology scores. Subscales of somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism were investigated via post-hoc procedures to find out specific significant country differences. As previously suggested, psychopathology results, which are expected to show a direct change with basic psychological need satisfaction and frustration levels, are compatible with this. High need satisfactions and low need frustrations were paralleled by Switzerland, which had very low results in all symptoms except the interpersonal sensitivity subscale psychopathology symptoms. The result that Switzerland's interpersonal sensitivity mean is higher than Brazil's, can be interpreted as a reflection of relatedness frustration outcome differences. In addition, low levels of keep to self and seeking social support, which are ways of coping that might have a strong relationship with interpersonal sensitivity, can be interpreted together with this result. Another remarkable result found in the hostility subscale was Turkey and Brazil, which had higher results with a very strong significant value than Switzerland. This result can be interpreted with many different and important factors such as political, social, justice, legal and educational. The relevance of anger and hostility to the prevention of people's life goals has been revealed in the literature (Power, and Dalgleish, 2007). Aside from the frustration of needs, especially the need for autonomy, it can generate anger and hostility when people feel inhibited on government agencies such as political, economic, educational, legal. Except for interpersonal sensitivity, the fact that there are mentally healthier individuals in Switzerland can be supported by the literature (Kessler et al., 2005). The high results of these and other psychopathology symptoms in Turkey and Brazil, which

are higher than Switzerland, can be strongly explained by the psychological health support factors of the country and the perspective of the culture on psychopathology. When the health system of Switzerland is examined, the importance given to mental health due to canton policies, treatment support in psychopathologies, referrals to specialists, psychopathology prevention studies and such health system policies are at a highly preferable level (Schneeberger, and Schwartz, 2018). Such state and cantonal policies increase public awareness of psychological support and psychopathologies, as well as the support provided (Busato et al., 2012). High psychopathologies, except that the needs of the individuals can not be satisfied and frustrated (Taşkın, 2007; Bilge, and Çam, 2010; Santos, Barros, and Santos, 2016). Lack of mental health support and the society's stigmas and negative views on mental disorders might have been additional factors in revealing such psychopathology outcomes in Brazil and Turkey.

## 4.4. Moderator Role of Country Variable on the Indirect Effect of Basic Psychological Need Satisfaction and Frustration on Mental Well-Being and Psychopathology through the Mediation of Ways of Coping

Previous results show that basic psychological need satisfaction and frustration predict mental well-being and psychopathology. On the other hand, ways of coping influenced by basic psychological needs were also found to predict mental well-being and psychopathology. For this reason, a mediation research model was prepared in which ways of coping is mediation, basic psychological needs is independent variable, and mental well-being and psychopathology are dependent variables separately. In addition to this model, moderated mediation research models were prepared with the hypothesis that the country variable has a significant moderator role in the effect of basic psychological needs on ways of coping.

Before the moderated mediation models in the study, predetermined 7 research models tested by mediation analysis with Process macro model 4 without the moderation role of country.

1. Autonomy frustration on depression through the mediation of detachment

2. Relatedness frustration on interpersonal sensitivity through the mediation of keep to self

3. Competence frustration on anxiety through the mediation of tension reduction

4. Autonomy frustration on hostility through the mediation of wishful thinking

5. Competence satisfaction on mental well-being through the mediation of focusing on the positive

6. Relatedness satisfaction on mental well-being through the mediation of seeking social support

7. Autonomy satisfaction on mental well-being through the mediation of problemfocused coping

As moderation role, the country variable was added to previously analyzed mediation models to determine the differences between countries and cultures in this relationship. Thus, moderated mediation analyses established with Process macro model 7.

## 4.4.1. Moderating Role of Country Variable on the Indirect Effect of Autonomy Frustration on Depression through the Mediation of Detachment

Mediating role of detachment was found significant in the effect of autonomy frustration on depression. Studies in the literature indicated there are many factors affecting depression (Brody, Pratt, and Hughes, 2018; Witcomb et al., 2018; Fang, and Wu, 2019). Two of these factors specified as autonomy frustration and detachment (Shahar, and Henrich, 2013; Muhamad Nasharudin, 2020). People who with a thwarted need for autonomy and use detachment way of coping are more likely to suffer from depression. These findings in the literature support the result of the model in the current study. Detachment was found to be a significant mediation affecting depression continued to be a significant factor. When the direct and total effects are examined, it can be interpreted as the major factor in the model is autonomy frustration.

With the addition of the country variable as a moderator to the research model, interaction effects between Turkey-Brazil, Switzerland-Turkey, Switzerland-Brazil comparisons and independent variable were found significant. This result indicates that autonomy frustration is an important factor for resorting to detachment in the relationship of factors related to depression outcome, aforementioned relationship moderated by all country differences. When the line graph is examined, it has been revealed that the country moderation has changed the strength of this relationship. It can be interpreted as the strength of the relation between autonomy frustration and detachment is variable between countries included in the study.

When the aspects and strengths of this relationship are examined, it can be said that Turkey result strongly provides evidence for this relationship. As discussed earlier, it is predicted that mental distancing from events can be achieved in insoluble societies. Brazil's ineffectiveness in this relationship as seen in the line graph stems from its ability to compensate for this psychological coping method in another way. As seen in other analyzes, it is seen intensely that Brazil strongly turns to social issues in the state of autonomy frustration or finds some solutions within its belief systems. The fact that Switzerland supports the relationship, but is in a rare position, has been supported by the comments on the country and culture made in the previous sections. While the high detachment results in Turkey is an important issue that needs to be examined separately, the fact that it started with the autonomy frustration trigger creates a strong basic psychological need theory support.

### 4.4.2. Moderating Role of Country Variable on the Indirect Effect of Relatedness Frustration on Interpersonal Sensitivity through the Mediation of Keep to Self

Mediating role of keep to self was found significant in the effect of relatedness frustration on interpersonal sensitivity. Studies in the literature indicated relatedness frustration and keep to self way of coping are the predictors for interpersonal sensitivity (Costa, Ntoumanis, and Bartholomew, 2015; Colle et al., 2017). Individuals who are frustrated with the need for relatedness and use keep to self way of coping are more likely to suffer from interpersonal sensitivity. These findings in the literature support the result of the model in the current study. Keep to self was found to be a significant mediation affecting interpersonal sensitivity in the model, but the direct effect between relatedness frustration and interpersonal sensitivity continued to be a significant factor. When the direct and total effects are examined, it can be interpreted as the major factor in the model is relatedness frustration.

With the addition of the country variable as a moderator to the research model, interaction effects between Turkey-Brazil, Switzerland-Turkey comparisons and independent variable were found significant. This result indicates that relatedness frustration is an important factor for resorting to keep to self in the relationship of factors related to interpersonal sensitivity outcome, aforementioned relationship moderated by Turkey-Brazil, Switzerland-Turkey comparisons. When the line graph is examined, it has been revealed that the country moderation has changed the strength of this relationship. It can be interpreted as the strength of the relation between relatedness frustration and keep to self is variable between countries included in the study except Switzerland-Brazil.

When this relationship is examined in a special way between countries, the parallelism

has been preserved except for the situation showing the frequency in Switzerland and the situation showing the rarity in Brazil. This angular similarity made the result nonsignificant. As discussed and stated earlier, the theoretical context between relatedness frustration and keep to self already creates a strong relationship expectation. Turkey result's angular proximity shows that this relationship is actually close to being transcultural. However, divergence with small variances shows that relatedness satisfaction may create differences in the use of keep to self in some cultures. This relationship, which has not changed in any way, has caused interpersonal sensitivity in the cultures studied.

### 4.4.3. Moderating Role of Country Variable on the Indirect Effect of Competence Frustration on Anxiety through the Mediation of Tension Reduction

Mediating role of tension reduction was found significant in the effect of competence frustration on anxiety. Studies in the literature indicated there are many factors affecting anxiety (Brook, and Schmidt, 2008; Vink, Aartsen, and Schoevers, 2008; Rapee, 2012). Two of these factors specified as competence frustration and tension reduction (Rouse et al., 2020; De Dios, 2010). People who with a thwarted need for competence and does not use tension reduction way of coping are more likely to suffer from anxiety. These findings in the literature support the result of the model in the current study. Tension reduction was found to be a significant mediation affecting anxiety in the model, but the direct effect between competence frustration and anxiety continued to be a significant factor. When the direct and total effects are examined, it can be interpreted as the major factor in the model is competence frustration.

With the addition of the country variable as a moderator to the research model, interaction effects between Turkey-Brazil, Switzerland-Turkey, Switzerland-Brazil comparisons and independent variable were found significant. This result indicates that competence frustration is an important factor for resorting to tension reduction in the relationship of factors related to anxiety outcome, aforementioned relationship moderated by all country differences. When the line graph is examined, it has been revealed that the country moderation has changed the strength of this relationship. It can be interpreted as the strength of the relation between competence frustration and tension reduction is variable between countries included in the study.

As the results revealed, the angular difference of Brazil, which showed a great difference, revealed the cross-cultural variability of the strength of this relationship. Competence frustration has a significant impact on the tension reduction strategy in countries such as Switzerland, where the competence of the system and individuals is intense and may have a strong impact on the internal world. The ways in which tension reduction can take shape in many different ways (religious, social, organizational) in countries such as Brazil have been discussed in the previous sections. The results can be supported by the literature in this section.

### 4.4.4. Moderating Role of Country Variable on the Indirect Effect of Autonomy Frustration on Hostility through the Mediation of Wishful Thinking

Mediating role of wishful thinking was found significant in the effect of autonomy frustration on hostility. Studies in the literature indicated there are many factors affecting hostility (Messner, 2022; Friedman, 1970). Two of these factors specified as autonomy frustration and wishful thinking (Joussemet et al., 2008; Otero-López, Santiago, and Castro, 2021). Individuals who are frustrated with the need for autonomy and use wishful thinking way of coping are more likely to display hostility. These findings in the literature support the result of the model in the current study. Wishful thinking was found to be a significant mediation affecting hostility in the model, but the direct effect between autonomy frustration and hostility continued to be a significant factor. When the direct and total effects are examined, it can be interpreted as the major factor in the model is autonomy frustration.

With the addition of the country variable as a moderator to the research model, interaction effects between Switzerland-Turkey, Switzerland-Brazil comparisons and independent variable were found significant. This result indicates that autonomy frustration is an important factor for resorting to wishful thinking in the relationship of factors related to hostility outcome, aforementioned relationship moderated by Switzerland-Turkey, Switzerland-Brazil comparisons. When the line graph is examined, it has been revealed that the country moderation has changed the strength of this relationship. It can be interpreted as the strength of the relation between autonomy frustration and wishful thinking is variable between countries included in the study except Turkey-Brazil.

In this moderated mediation analysis, which is one of the outstanding results, the relationship between Turkey and Brazil was found to be coincident in the relationship of autonomy frustration and wishful thinking. Where concrete solutions to the problems cannot be provided, the feature of the wishful thinking - hostility relationship has been mentioned in the previous section. These two countries and cultures refer to wishful thinking at the point where people cannot solve or relieve their problems and

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sources of stress internally. After the relief created by this strategy, it can cause anger in people and masses because of the blockage of the deadlock. When discussed from this point of view, the fact that these two countries prove this relationship much stronger than Switzerland gives results supporting the literature.

## 4.4.5. Moderating Role of Country Variable on the Indirect Effect of Competence Satisfaction on Mental Well-Being through the Mediation of Focusing on the Positive

Mediating role of focusing on the positive was found significant in the effect of competence satisfaction on mental well-being. Studies in the literature indicated competence satisfaction and focusing on the positive are the predictors for mental well-being (Ryan, and Deci, 2008; Chen et al., 2015; Karademas, 2007). These findings in the literature support the result of the model in the current study. Focusing on the positive was found to be a significant mediation affecting mental well-being in the model, but the direct effect between competence satisfaction and mental well-being continued to be a significant factor. When the direct and total effects are examined, it can be interpreted as the major factor in the model is competence satisfaction.

With the addition of the country variable as a moderator to the research model, interaction effects between Switzerland-Turkey, Switzerland-Brazil comparisons and independent variable were found significant. This result indicates that competence satisfaction is an important factor for resorting to focusing on the positive in the relationship of factors related to mental well-being outcome, aforementioned relationship moderated by Switzerland-Turkey, Switzerland-Brazil comparisons. When the line graph is examined, it has been revealed that the country moderation has changed the strength of this relationship. It can be interpreted as the strength of the relation between competence satisfaction and focusing on the positive is variable between countries included in the study except Turkey-Brazil.

The angular similarity of the results for Turkey and Brazil, which emerged as a result of this analysis, indicates that these two cultures ascribe similar cultural importance to the use of competence satisfaction followed by focusing on the positive, personally, socially and organizationally. Switzerland is the country that has been found to use this theoretical strategy most strongly, which is an important way to ensure mental well-being. Supporting competence satisfaction with its leadership in culturally job satisfaction, women's participation in society, economic welfare and similar issues may be one of the factors that created this result in Switzerland and this is at a point supported by the literature as discussed in the previous sections.

4.4.6. Moderating Role of Country Variable on the Indirect Effect of Relatedness Satisfaction on Mental Well-Being through the Mediation of Seeking Social Support Mediating role of seeking social support was found significant in the effect of relatedness satisfaction on mental well-being. Studies in the literature indicated relatedness satisfaction and seeking social support are the predictors for mental well-being (Ryan, and Deci, 2008; Chen et al., 2015; Chao, 2011; Lavasani et al., 2011). These findings in the literature support the result of the model in the current study. Seeking social support was found to be a significant mediation affecting mental wellbeing in the model, but the direct effect between relatedness satisfaction and mental well-being continued to be a significant factor. When the direct and total effects are examined, it can be interpreted as the major factor in the model is relatedness satisfaction.

Adding the country variable as a moderator showed that there was no significant interaction effects between country comparisons and independent variable in this research model. This result indicates that relatedness satisfaction is an important factor for resorting to seeking social support in the relationship of factors related to mental well-being outcome, aforementioned relationship did not moderate by any country differences. Strength or direction of the relationship did not change in any country. It can be interpreted as the relationship between relatedness satisfaction and seeking social support is transcultural for this study.

The result, which highlights the transculturality of this relationship, which is one of the most striking results in the study, adds to the version that has been put forward many times by many psychological theories. Social support for individuals constitutes one of the most critical cornerstones in mental health, as suggested by object relations theorists of psychoanalytic theory (Mitchell, and Black, 2016) and attachment theory (Bowbly, 1979). Emphasizing that this relationship is similar in the same direction and strength in the three countries studied reveals a transcultural result, at least in the current study. Babies naturally need attachment and seek social support. If they don't get frustrated with it when they grow up, and they are satisfied with their need for relatedness, they still seek social support without hesitation. Research shows that seeking social support is vital and critical, whether it solves problems or not (Lavasani et al., 2011). This result shows the importance of the transcultural outcome of the relationship of relatedness satisfaction, seeking social support, and mental well-being.

## 4.4.7. Moderating Role of Country Variable on the Indirect Effect of Autonomy Satisfaction on Mental Well-Being through the Mediation of Problem-Focused Coping

Mediating role of problem-focused coping was found significant in the effect of autonomy satisfaction on mental well-being. Studies in the literature indicated autonomy satisfaction and problem-focused coping are the predictors for mental well-being (Ryan, and Deci, 2008; Chen et al., 2015; Mayordomo-Rodríguez et al., 2015). These findings in the literature support the result of the model in the current study. Problem-focused coping was found to be a significant mediation affecting mental wellbeing in the model, but the direct effect between autonomy satisfaction and mental wellbeing continued to be a significant factor. When the direct and total effects are examined, it can be interpreted as the major factor in the model is autonomy satisfaction.

With the addition of the country variable as a moderator to the research model, interaction effects between Turkey-Brazil, Switzerland-Turkey comparisons and independent variable were found significant. This result indicates that autonomy satisfaction is an important factor for resorting to problem-focused coping in the relationship of factors related to mental well-being outcome, aforementioned relationship moderated by Turkey-Brazil, Switzerland-Turkey comparisons. When the line graph is examined, it has been revealed that the country moderation has changed the strength of this relationship. It can be interpreted as the strength of the relation between autonomy satisfaction and problem-focused coping is variable between countries included in the study except Switzerland-Brazil.

Cognitive coping methods, in which the problem and solution are organically linked, are used more frequently in western, individualistic and industrial societies. The dominance of Switzerland in the relationship between this basic psychological need and coping method, as a result of this research, supports the literature. This result, which can take a position in the nature-nurture debate, shows that such methods are socially, familial and organizationally supported and given importance in some cultures. It has been revealed that this importance is attributed to different areas in Turkey and Brazil and supported by different social and psychological resources.

#### 4.4.8. Discussing the Moderating Role of Country Variable in All Models

The aim of the research was to examine the cross-country variability of ways of coping, which is the mediator in the effect of basic psychological need satisfaction and frustration on well-being and ill-being. According to the interpretations of the findings, it was revealed that at least 2 of the moderation effects were significant and had an effect on the model in all of the other relationships, except for the relationship between relatedness satisfaction and seeking social support. As is known, there is no study in the literature investigating country moderation in the effects of need satisfaction and frustration on mental well-being and psychopathology, with ways of coping mediation. For this reason, it will be discussed with research that are in contact with the subject.

Results of the present study showed that, while the effects of basic psychological needs on well-being and ill-being are universal, supporting Deci, and Ryan (2000). The use of ways of coping can vary culturally (Skinner, and Zimmer-Gembeck, 2007). In the literature, it is shown that the ways of coping used by people in all cultures are culturally constructed as well as containing personal differences (Lazarus, and Folkman, 1984). The results of satisfaction and frustration of basic psychological needs are also affected in this cultural structuring. According to the results of the current study, the strength of the effects of need satisfaction and frustration on the ways of coping changes in all the models except one. The only result that the direction or strength of the effect did not change in all countries was the effect of relatedness satisfaction on seeking social support. Studies in the literature showed the seeking social support varies cross countries and cultures (Essau, 1992; Frydenberg et al. 2003). The analyses in the present study also supported this conclusion. In addition, with moderated mediation analysis, it was revealed that in every country where relatedness satisfaction increased, people resorted to seeking social support more in order to obtain mental well-being. It has been interpreted in the literature that people who provide relatedness satisfaction can seek more social support and thus obtain wellbeing (Baumeister, and Leary, 1995). Although more studies are needed on this subject, the results of the current study revealed that as relatedness satisfaction increases, the increase in the use of seeking social support is a transcultural result.

#### 4.5. Limitation and Further Studies

In this section, limitations of the study and suggestions for further studies will be discussed.

Equal distribution of demographic information such as educational status could not

provided between countries. In order to minimize the effects of demographic variables on dependent variables, keeping these demographic variables equal or controlling them as covariance will provide more meaningful results in future studies.

How well the data collected from countries in cross-cultural studies represent that country is always a matter of debate. In this study, although it is tried to collect data from different cities, regions, socio-economic and socio-cultural classes as much as possible, the representation of the country can never reflect the reality one hundred percent. In the data collected from Switzerland, the inability to collect data from French and Italian cantons due to German scales, and the inability to collect data from those regions due to the difficulty of accessing rural areas in Turkey and Brazil reduces the degree of this representation. These impossibilities cause a limitation in the study. Another limitation of the study was that parental status analysis on whether or not participants' parents were alive or not. Since the parental survivability rate was low among older participants, these comparison analyses were affected by the age variable. In future studies, dividing the participants into age groups and comparing them accordingly will provide more meaningful results.

In the ANOVA analysis, the mental well-being and basic psychological need satisfaction and frustration scores of the individuals were compared between the presence and absence of their romantic relationships. The satisfaction that people get from the romantic relationships could be an another important factor related to study. In future studies, a comparison of the satisfaction they get in the romantic relationships might provide results that can be interpreted in more functional ways.

In the study, it was desired to find specific explanations and relationships about basic psychological needs, ways of coping, and psychopathological symptoms. For this reason, subscales were used extensively. However, this preference, besides its advantage, created a limitation in terms of making a general sense of the study. In future studies, studying with total scores or studying with more specific and singular concepts will provide higher focus on the topic.

In further studies, more countries may be included to represent more cultures. In this way, it can be more effectively examined how ways of coping, which can have very different variations, are transformed in an cross-cultural way with the effect of basic psychological need satisfaction and frustration.

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### **CHAPTER 5: CONCLUSION**

The aim of this study was to examine the effects of basic psychological needs and ways of coping on mental well-being and psychopathology in a cross-cultural context. For this purpose, moderator role of country variable in the indirect effect of basic psychological need satisfaction and frustration on mental well-being and psychopathology through the mediation of ways of coping were investigated.

Ways of coping in the impact of need for autonomy, competence and relatedness on well-being and ill-being have been examined separately. Our results show that certain need satisfactions or frustrations cause certain ways copings in research models and ways of copings have partial mediation effects in all these models.

Moderated mediation analyses were performed in these models to investigate the change in the direction or strength of the effects of the need satisfaction and frustration on the ways of coping cross-cultural. Country moderation was found to have a significant effect on need satisfaction/frustration-ways of coping relationships in all research models, except for the relationship between relatedness satisfaction and seeking social support. While this relationship is interpreted as universal, other relationships interpreted as tended to be moderated cross-culturally.

#### 5.1. Implications

The study revealed the importance of various issues and the critical interactions of factors with each other. The importance of basic psychological needs and ways of coping on mental well-being is one of them. In addition, the interaction of these two on the path of mental well-being or psychopathology can take an important place under both sociological and psychological titles. The issue of which basic psychological need satisfaction and frustration gives rise to which ways of coping and its consequences are closely related to humanity. The cross-cultural perspective, which is the main contribution of this study, provides an important interpretation. The strength of the effects of these basic psychological needs on coping styles has changed without changing the direction. In other words, while the effect remained in 3 different cultures, the strength of the effect changed. Except for one relationship: relatedness satisfaction - seeking social support - mental well-being. This relationship maintains its angular parallelism in all three countries. The transcultural conclusion that can be reached from here can provide an important signal to the world of science. It is accepted that similarities rather than human and cultural differences are taken as basis

in terms of establishing the basis for social and clinical structuring. For this reason, in any micro or macro culture where relatedness satisfaction can be achieved, people will resort to seeking social support and provide mental well-being. This relatedness satisfaction - seeking social support - mental well-being transcultural path offers a useful and functional formula in many areas. When psychological comments are made in parallel with the field of study, in conditions where the need for relatedness is somehow supported and satisfaction is ensured, it will be effective for these people to have social support relationships regardless of cross-cultural aspects in terms of reaching mental well-being. Social support sharing in the society, which is the next theoretical stage, will also provide social conditions that will further support the need for relatedness. These conditions, in which the society is fed from the individual and the individual from the society, will make both individuals and society more mental well-being. Throught the history, in the way of science, cross-cultural findings show us the differences between cultures, but humanbeings mostly needed to focus transcultural results to find some answers about the human kind. The specific answer that this study brings to the fore on behalf of the human kind is the transculturalism of the relationship of relatedness satisfaction and seeking social support.

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## **APPENDICES**

Appendix A: Ethics Committee Approval

SAYI: B.30.2.İEÜ.0.05.05-020-187

27.01.2022

KONU : Etik Kurul Kararı hk.

## Sayın Prof. Dr. Falih KÖKSAL ve Yiğit GÖNÇ,

"A Cross-Cultural Study in Turkey, Brazil and Switzerland: The Effect of Basic Psychological Needs and Ways of Coping on Mental Well-Being and Psychopathology" başlıklı projenizin etik uygunluğu konusundaki başvurunuz sonuçlanmıştır.

Etik Kurulumuz 27.01.2022 tarihinde sizin başvurunuzun da içinde bulunduğu bir gündemle toplanmış ve Etik Kurul üyeleri projeleri incelemiştir.

Sonuçta 27.01.2022 tarihinde "A Cross-Cultural Study in Turkey, Brazil and Switzerland: The Effect of Basic Psychological Needs and Ways of Coping on Mental Well-Being and Psychopathology" konulu projenizin etik açıdan uygun olduğuna oy birliğiyle karar verilmiştir.

Gereği için bilgilerinize sunarım. Saygılarımla

JuneBergun

Prof. Dr. Murat Bengisu Etik Kurul Başkanı

#### Turkish

#### Katılımcı Bilgi Formu

Sayın katılımcı,

Bu çalışmanın amacı Türkiye, Brezilya ve İsviçre'den katılımcıların vereceği cevaplarla temel psikolojik ihtiyaçlarının tatmin ve engellenmesi ile mental iyi oluş / psikopatoloji arasındaki ilişkinin baş etme yollarının aracı rolü etkisiyle kültürler arası olarak araştırılmasıdır. Bu amaçla size cevaplamanız üzere birtakım sorular sorulacaktır.

Çalışma sonuçlarıyla ilgili daha fazla bilgi almak isterseniz Yiğit Gönç (goncyigit@gmail.com) ile iletişime geçebilirsiniz.

Çalışmaya katılımınız ve katkılarınız için teşekkür ederiz.

#### German

#### Teilnehmerinformationsformular

Liebe Teilnehmer,

Ziel dieser Studie ist es, den Zusammenhang zwischen der Befriedigung und Prävention psychischer Grundbedürfnisse und psychischem Wohlbefinden / Psychopathologie mit der vermittelnden Rolle von Coping-Methoden kulturübergreifend zu untersuchen, wobei Antworten von Teilnehmern aus der Türkei, Brasilien und der Schweiz gegeben werden. Dazu werden Ihnen einige Fragen zur Beantwortung gestellt.

Wenn Sie weitere Informationen zu den Ergebnissen der Studie erhalten möchten, können Sie sich an Yiğit Gönç (goncyigit@gmail.com) wenden.

Vielen Dank für Ihre Teilnahme und Ihren Beitrag zur Studie.

#### Portuguese

#### Formulário de Informação do Participante

Caro participante,

O objetivo deste estudo é investigar multiculturalmente a relação entre a satisfação e prevenção das necessidades psicológicas básicas e bem-estar psicológico / psicopatologia com o papel mediador dos métodos de enfrentamento, a partir das

respostas a serem dadas por participantes da Turquia, Brasil e Suíça. Para isso, você deverá responder algumas perguntas.

Se você deseja obter mais informações sobre os resultados do estudo, pode entrar em contato com Yiğit Gönç (goncyigit@gmail.com).

Obrigado por sua participação e contribuição para o estudo.



#### Turkish

#### Katılımcı Onay Formu

Bu çalışma, İzmir Ekonomi Üniversitesi bünyesinde, Klinik Psikoloji Yüksek Lisans programı kapsamında, Prof. Dr. Falih Köksal danışmanlığında Yiğit Gönç tarafından yürütülmektedir. Bu form sizi çalışma koşulları hakkında bilgilendirmek için hazırlanmıştır.

Bu çalışmanın amacı Türkiye, Brezilya ve İsviçre'den 18 yaş üstü katılımcıların vereceği cevaplarla temel psikolojik ihtiyaçlarının tatmin ve engellenmesi ile psikolojik iyi oluş / psikopatoloji arasındaki ilişkinin baş etme yollarının aracı rolü etkisiyle kültürler arası olarak araştırılmasıdır. Bu amaçla size cevaplamanız üzere birtakım sorular sorulacaktır.

Katılmayı kabul edersiniz toplamda yaklaşık 15 dakika sürecek bu çalışmada sizden anketteki soruları yanıtlamanız istenecek. Her bir soruyu okuyup, kendiniz için en doğru cevabı verecek şekilde yanıtlamanız araştırmanın geçerlilik ve güvenirliği için gereklidir.

Araştırmada sizden kimlik bilgilerinizi ortaya çıkaracak hiçbir bilgi istenmeyecektir. Verdiğiniz yanıtlar gizli tutulacak, bu bilgilere sadece araştırmacılar ulaşabilecektir. Katılımcılardan elde edilecek bilgiler toplu halde değerlendirilecek, bilimsel yayınlar ve akademik amaçlar için kullanılacaktır.

Çalışmaya katılım tamamen gönüllülük esasına dayanmaktadır. Çalışma kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım sırasında herhangi bir nedenden ötürü kendinizi rahatsız hissederseniz çalışmaya katılmayı reddedebilir veya cevaplamayı yarıda bırakabilirsiniz. Çalışmaya katılımınız için teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak isterseniz Yiğit Gönç (goncyigit@gmail.com) ile iletişime geçebilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılmayı kabul ediyor ve istediğim zaman çalışmadan çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum.

Evet Hayır

#### German

#### Einverständniserklärung des Teilnehmers

Diese Studie wird von Yiğit Gönç unter der Leitung von Prof. Dr. Falih Köksal im Rahmen des Masterstudiengangs Klinische Psychologie der Wirtschaftsuniversität İzmir durchgeführt. Dieses Formular wurde erstellt, um Sie über die Studienbedingungen zu informieren. Ziel dieser Studie ist es, den Zusammenhang zwischen der Befriedigung und Prävention psychischer Grundbedürfnisse und psychischem Wohlbefinden / Psychopathologie mit der vermittelnden Rolle von Coping-Methoden kulturübergreifend zu untersuchen, wobei Antworten von Teilnehmern (über 18 Jahre alt) aus der Türkei, Brasilien und der Schweiz gegeben werden. Dazu werden Ihnen einige Fragen zur Beantwortung gestellt.

In dieser Studie, die insgesamt etwa 15 Minuten dauern wird, wenn Sie der Teilnahme zustimmen, werden Sie gebeten, die Fragen in den Umfragen zu beantworten. Für die Gültigkeit und Verlässlichkeit der Forschung ist es wichtig, dass Sie jede Frage so lesen und beantworten, dass Sie für sich selbst die richtige Antwort erhalten.

Bei der Recherche werden keine Informationen von Ihnen abgefragt, um Ihre Identitätsinformationen preiszugeben. Ihre Antworten werden vertraulich behandelt und nur Forscher können auf diese Informationen zugreifen. Die von den Teilnehmenden gewonnenen Informationen werden gemeinsam ausgewertet und für wissenschaftliche Publikationen und wissenschaftliche Zwecke verwendet.

Die Teilnahme an der Studie ist vollkommen freiwillig. Die Studie enthält keine Fragen, die persönliche Beschwerden verursachen können. Wenn Sie sich jedoch während der Teilnahme aus irgendeinem Grund unwohl fühlen, können Sie die Teilnahme an der Studie verweigern oder die Beantwortung einstellen. Vielen Dank für Ihre Teilnahme an der Studie. Wenn Sie mehr über die Studie erfahren möchten, können Sie sich an Yiğit Gönç (goncyigit@gmail.com) wenden.

Ich nehme völlig freiwillig an dieser Studie teil und weiß, dass ich jederzeit aus der Studie aussteigen kann. Ich akzeptiere die Verwendung meiner Angaben in wissenschaftlichen Publikationen.

Ja Nein

#### Portuguese

#### Formulário de Consentimento de Participante

Este estudo é realizado por Yiğit Gönç sob a supervisão do Prof. Dr. Falih Köksal, no âmbito do Programa de Mestrado em Psicologia Clínica da Universidade de Economia de Izmir. Este formulário foi preparado para informá-lo sobre as condições do estudo.

O objetivo deste estudo é investigar multiculturalmente a relação entre a satisfação e prevenção das necessidades psicológicas básicas e bem-estar psicológico / psicopatologia com o papel mediador dos métodos de enfrentamento, a partir das respostas a serem dadas por participantes (mais de 18 anos) da Turquia, Brasil e Suíça. Para isso, você deverá responder algumas perguntas.

Neste estudo, que levará aproximadamente 15 minutos no total, caso você aceite participar, será solicitado que você responda às perguntas das pesquisas. É essencial para a validade e confiabilidade da pesquisa que você leia e responda a cada pergunta de uma forma que forneça a resposta mais correta para você.

Na pesquisa, nenhuma informação será solicitada de você para revelar suas informações de identidade. Suas respostas serão mantidas em sigilo e apenas pesquisadores podem acessar essas informações. As informações obtidas junto aos participantes serão avaliadas coletivamente e utilizadas para publicações científicas e fins acadêmicos.

A participação no estudo é totalmente voluntária. O estudo não contém perguntas que possam causar desconforto pessoal. No entanto, se você se sentir desconfortável por qualquer motivo durante a participação, pode recusar-se a participar do estudo ou parar de responder.

Obrigado por sua participação no estudo. Se você deseja obter mais informações sobre o estudo, pode entrar em contato com Yiğit Gönç (goncyigit@gmail.com). Participo deste estudo de forma totalmente voluntária e sei que posso desistir do estudo a qualquer momento. Aceito o uso das informações que presto em publicações científicas.

Sim 🗌 Não 🗌

## Appendix D: Demographic Questions

## Turkish

## **Cinsiyetiniz**:

- Erkek
- Kadın
- Diğer (belirtiniz)

## Yaşınız:

## Eğitim düzeyiniz:

- İlköğretim
- Lise
- Lisans
- Yüksek lisans
- Doktora
- Diğer (belirtiniz)

## Çalışma durumunuz:

- Çalışmıyor
- Öğrenci
- Çalışıyor
- Emekli
- Diğer (Belirtiniz)

## Kiminle yaşıyorsunuz:

- Tek Başıma
- Ailemle
- Akrabalarımla
- Ev Arkadaşımla
- Eşimle
- Partnerimle
- Diğer (Belirtiniz)

## İlişki durumunuz:

- Bekar
- Evli

- İlişkisi Var
- Boşanmış
- Dul
- Diğer (Belirtiniz)

## İlişkiniz var ise kaç yıllık?

## Ebeveyn durumunuz:

- Ebeveynlerimin ikisi de hayatta
- Annem vefat etti babam hayatta
- Babam vefat etti annem hayatta
- Ebeveynlerimin ikisi de vefat etti
- Diğer(belirtiniz)

## Kardeş sayınız:

Kaçıncı çocuksunuz (1 = en büyük çocuk) :

# Sizin bakış açınıza göre sosyoekonomik durumunuz nedir?

- Alt
- Orta alt
- Orta
- Orta üst
- Üst

#### German

### Geschlecht:

- Männlich
- Weiblich
- Andere Antwort (bitte angeben)

#### das Alter:

## Ihr Bildungsniveau:

- Grundschule
- Oberstufe
- Bachelor
- Master
- Promotion
- Andere Antwort (bitte angeben)

#### Ihr Arbeitsstatus:

- Nicht erwerbstätig
- Student
- Erwerbstätig
- Rentner
- Andere Antwort (bitte angeben)

#### Mit wem lebst du:

- Allein
- Mit meiner Familie
- Mit meinen Verwandten
- Mit einem Mitbewohner
- Mit meinem Ehepartner
- Mit meinem Partner
- Andere Antwort (bitte angeben)

## Ihr Beziehungsstatus:

- Ledig
- Verheiratet
- İn einer Beziehung
- Geschieden

- Verwitwet
- Andere Antwort (bitte angeben)

## Wenn Sie eine Beziehung haben, wie viele Jahre dauert sie?

#### **Ihr Elternstatus:**

- Meine Eltern leben beide.
- Meine Mutter ist gestorben, mein Vater lebt.
- Mein Vater ist gestorben, meine Mutter lebt.
- Meine beiden Eltern sind verstorben
- Andere antwort (bitte angeben)

## Anzahl deiner Geschwister:

Wie ist deine Geburtsreihenfolge? (z.B. 1= das älteste Kind) :

Welchen sozioökonomischen Status haben Sie aus Ihrer Sicht?

- Niedrig
- Mittel niedrig
- Mittel
- Mittel hoch
- Hoch

#### Portuguese

### Gênero:

- Masculino
- Feminino
- Outro (por favor especifique)

#### Idade:

#### Nível de escolaridade:

- Ensino fundamental
- Ensino médio
- Graduação
- Mestrado
- Doutorado
- Outro (por favor especifique)

### Status de trabalho:

- Desempregado
- Estudante
- Trabalhando (empregado ou empreendedor)
- Aposentado
- Outro (por favor especifique)

#### Com quem você mora:

- Sozinho (a)
- Com minha família
- Com parentes
- Com colega (s)
- Com meu cônjuge
- Com meu companheiro (a)
- Outro (por favor especifique)

## O seu status de relacionamento:

- Solteiro (a)
- Casado (a)
- União Estável
- Divorciado (a)

- Viúvo (a)
- Outro (por favor especifique)

## Se seu estado civil for casado ou união estável, há quanto tempo?

## Em relação aos seus pais:

- Meus pais estão vivos
- Minha mãe faleceu, meu pai está vivo
- Meu pai faleceu, minha mãe está viva
- Ambos os meus pais faleceram,
- Outro (por favor especifique)

Se você tem irmãos, quantos são (sem contar com você):

E qual é a sua posição na ordem de nascimento entre você e seus irmãos? (por exemplo: 1°, 2°..../ sendo o primeiro = o filho mais velho; o ultimo= o filho caçula) :

No seu ponto de vista, em que condição socioeconômica você está?

- Classe Baixo
- Classe Média Baixa
- Classe Média
- Classe Média Alta
- Classe Alta

# Appendix E: The Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS)

## **Turkish Version**

Aşağıda yaşamınızdaki deneyimleri göz önünde bulundurarak cevaplayacağınız bazı ifadeler bulunmakta. Lütfen dikkatlice okuyunuz ve 1'den 5'e kadar ifadelerin sizin için uygunluğunu belirtin.

1 = Hiç doğru değil

5 = Tamamen doğru

l. Önemsediğim insanların da beni önemsediğini	1	2	3	4	5
nissederim.					
2. Kararlarımın gerçekten ne istediğimi yansıttığını	1	2	3	4	5
nissederim.					
3. Yaptığım şeylerin çoğunda hayal kırıklığına uğradığımı	1	2	3	4	5
nissederim.					
1. Çok fazla şey yapma konusunda baskı hissederim.	1	2	3	4	5
5. Yeteneklerim konusunda güvensizlik hissederim.	1	2	3	4	5
5. Birlikte zaman gecirdigim insanlarla samimi duygular	1	2	3	4	5
çindeyim.					
7. Zor görevleri başarıyla tamamlayabileceğimi hissederim.	1	2	3	4	5
3. Üstlendiğim şeyleri özgürce seçebildiğimi hissederim.	1	2	3	4	5
9. Bir şeyleri iyi yapabileceğim konusunda kendime	1	2	3	4	5
güvenirim.					
10. Benim için önemli olan insanların bana karşı soğuk ve	1	2	3	4	5
nesafeli olduğunu hissederim.					
1. Hedeflerime ulaşmak için yeterli olduğumu hissederim.	1	2	3	4	5
2. Gerçekten ilgimi çeken şeyleri yaptığımı hissederim.	1	2	3	4	5

13. Kurduğum ilişkilerin yüzeysel olduğunu hissederim.	1	2	3	4	
14. Yaptığım seylerin çoğunu "yapmak zorundaymışım"	1	2	3	4	
gibi hissederim.					
15. Bir şeyleri iyi yapıp yapamayacağım konusunda ciddi	1	2	3	4	
kuşkularım var.					
16. Önemsediğim ve beni önemseyen insanlara bağlı	1	2	3	4	
olduğumu hissederim.					
17. Tercih ettiğim şeyler gerçekten kim olduğumu gösterir.	1	2	3	4	
18. Zaman geçirdiğim insanların beni sevmedikleri	1	2	3	4	
izlenimine sahibim.					
19. Gündelik işlerim art arda gelen zorunluluklarmış gibi	1	2	3	4	1
hissettiriyor.					
20. Yaptigim hatalar yüzünden kendimi başarısız biri gibi	1	2	3	4	
hissederim.					
21. İçinde olmak istediğim gruptan dışlandığımı hissederim.	1	2	3	4	
22. Yapmak istemeyecegim pek cok seyi yapmak	1	2	3	4	
zorundaymisim gibi hissederim.					
23. Yaptigim seylerde kendimi yeterli hissederim.	1	2	3	4	
24. Benim için önemli olan diğer insanlara yakın ve bağlı	1	2	3	4	
hissederim.					

## **German Version**

Im Folgenden befragen wir Sie zu Ihren aktuellen Erfahrungen im Leben. Bitte lesen Sie jede der folgenden Aussagen genau durch. Auf einer Skala von 1 bis 5 können Sie den Grad der Zustimmung für die jeweilige Aussage wählen.

1 = Trifft überhaupt nicht zu

5 = Trifft voll und ganz zu

1. Ich spüre, dass ich den Menschen, die mir etwas bedeuten,	1	2	3	4	5
auch wichtig bin.					
2. Ich habe das Gefühl, dass meine Entscheidungen	1	2	3	4	5
widerspiegeln, was ich wirklich will.					
3. Ich bin von vielen meiner Leistungen enttäuscht.	1	2	3	4	5
4. Bei zu vielen Dingen fühle ich mich unter Druck gesetzt,	1	2	3	4	5
diese tun zu müssen.					
5. Ich bin mir meiner Fähigkeiten nicht sicher.	1	2	3	4	5
6. Ich empfinde ein warmes Gefühl für die Menschen, mit	1	2	3	4	5
denen ich Zeit verbringe.					
7. Ich habe das Gefühl schwierige Aufgaben erfolgreich	1	2	3	4	5
meistern zu können.					
8. Ich habe die Wahl und fühle mich frei in dem was ich tue.	1	2	3	4	5
9. Ich bin davon überzeugt, dass ich Dinge gut kann.	1	2	3	4	5
0. Ich spüre, dass Personen, die mir wichtig sind, sich mir	1	2	3	4	5
gegenüber kalt und distanziert verhalten.					
11. Ich fühle mich kompetent meine Ziele erreichen zu	1	2	3	4	5
können.					
12. Mein Gefühl sagt mir, dass ich immer tat was mich	1	2	3	4	5
wirklich interessiert.					
13. Mein Gefühl sagt mir, dass die Beziehungen, die ich	1	2	3	4	5
	1	1	1	1	1

14. Die meisten Dinge die ich tue, fühlen sich an als ob ich diese tun muss.	1	2	3	4	
15. Ich habe ernsthafte Zweifel daran, dass ich Dinge gut kann.	1	2	3	4	
16. Ich fühle mich mit Menschen verbunden, die sich um mich kümmern und um die ich mich kümmere.	1	2	3	4	
17. Ich habe das Gefühl, dass meine Entscheidungen ausdrücken, wer ich wirklich bin.	1	2	3	4	
18. Ich habe den Eindruck, dass Menschen mit denen ich meine Zeit verbringe mich nicht leiden können.	1	2	3	4	
19. Meine täglichen Aktivitäten fühlen sich wie eine Reihe von Verpflichtungen an.	1	2	3	4	
20. Ich fühle mich wie ein Versager aufgrund der Fehler, die ich mache.	1	2	3	4	
21. Ich fühle mich ausgeschlossen aus der Gruppe, zu der ich gehören möchte.	1	2	3	4	
22. Ich fühle mich gezwungen viele Dinge zu tun, die ich mir selbst nicht aussuchen würde.	1	2	3	4	
23. Ich fühle mich kompetent in dem was ich tue.	1	2	3	4	
24. Mit Personen, die mir wichtig sind, fühle ich mich nah und verbunden.	1	2	3	4	

# **Portuguese Version**

Indica em que medida concordas com cada afirmação referente a experiências que podem ou não ocorrer na tua vida em geral.

- 1 = não é verdade
- 5 =completamente verdadeiro

1. Sinto que as pessoas de quem gosto também gostam de					
1. Sinto que as pessoas de quem gosto tantoem gostam de	1	2	3	4	5
mim.					
2. Siento que mis decisiones reflejan lo que realmente	1	2	3	4	5
quiero.					
3. Sinto-me desiludido(a) com muitos dos meus	1	2	3	4	5
desempenhos.					
4. Faço a maior parte das coisas porque sou pressionado/a	1	2	3	4	5
pelas outras pessoas.					
5. Sinto-me inseguro(a) em relação às minhas capacidades.	1	2	3	4	5
6. Sinto-me bem junto das pessoas com quem passo a maior	1	2	3	4	5
parte do tempo.					
7. Consigo ser bem-sucedido(a) em tarefas difíceis.	1	2	3	4	5
8. Tenho a possibilidade de escolher e a liberdade para fazer	1	2	3	4	5
as coisas que faço.					
9. Confio na minha capacidade para fazer as coisas bem-	1	2	3	4	5
feitas.					
10. Sinto que as pessoas que considero importantes se	1	2	3	4	5
10. Sinto que as pessoas que considero importantes se mostram frias e distantes comigo.	1	2	3	4	5
	1	2 2 2	3	4	5
mostram frias e distantes comigo.					
mostram frias e distantes comigo.					
mostram frias e distantes comigo. 11. Sinto que sou capaz de alcançar os meus objetivos.	1	2	3	4	5
<ul> <li>mostram frias e distantes comigo.</li> <li>11. Sinto que sou capaz de alcançar os meus objetivos.</li> <li>12. Sinto que que tenho vindo a fazer as coisas que</li> </ul>	1	2	3	4	5
<ul> <li>mostram frias e distantes comigo.</li> <li>11. Sinto que sou capaz de alcançar os meus objetivos.</li> <li>12. Sinto que que tenho vindo a fazer as coisas que realmente me interessam.</li> </ul>	1	2	3	4	5

	1	1	1	<b>1</b>	-
15. Duvido seriamente que consiga fazer alguma coisa bem.	1	2	3	4	
16. Sinto-me ligado(a) a pessoas que se preocupam comigo e com quem eu me preocupo.	1	2	3	4	
17. As escolhas que faço revelam a pessoa que eu sou.	1	2	3	4	
<ul><li>18. Tenho a impressão que a(s) pessoa(s) com quem eu passo o tempo não gostam de mim.</li></ul>	1	2	3	4	
19. As minhas atividades diárias são feitas por obrigação.	1	2	3	4	
20. Sinto que sou um fracasso por causa de todos os erros que tenho cometido.	1	2	3	4	
21. Sinto-me excluído(a) do grupo a que gostava de pertencer.	1	2	3	4	
22. Sinto-me obrigado(a) a fazer muitas coisas que não quero.	1	2	3	4	
23. Sinto que tenho capacidade para fazer bem as coisas que faço.	1	2	3	4	
24. Sinto-me próximo(a) e ligado(a) a pessoas que considero	1	2	3	4	

## Appendix F: Brief Symptom Inventroy (BSI)

## **Turkish Version**

Aşağıda insanların bazen yaşadıkları belirtilerin ve yakınmaların bir listesi verilmiştir. Listedeki her maddeyi lütfen dikkatle okuyun. Daha sonra o belirtinin sizde bugün dahil, son bir haftadır ne kadar varolduğunu yandaki bölmede uygun olan yerde işaretleyin. Her belirti için sadece bir yeri işaretlemeye ve hiçbir maddeyi atlamamaya özen gösterin.

Yanıtlarınızı aşağıdaki ölçeğe gore değerlendirin:

Bu belirtiler son bir haftadır sizde ne kadar var?

0:Hiç yok

1.Biraz var

2.Orta derecede var

3.Epey var

4.Çok fazla var

Bu belirtiler son bir haftadır sizde ne kadar var?					
1.İçinizdeki sinirlilik ve titreme hali	0	1	2	3	4
2.Baygınlık,baş dönmesi	0	1	2	3	4
3.Bir başka kişinin sizin düşüncelerinizi kontrol edeceği fikri	0	1	2	3	4
4.Başınıza gelen sıkıntılardan dolayı başkalarının suçlu	0	1	2	3	4
olduğu korkusu					
5.Olayları hatırlamada güçlük	0	1	2	3	4
6.Çok kolayca kızıp öfkelenme	0	1	2	3	4
7.Göğüs (kalp) bölgesinde ağrılar	0	1	2	3	4
8.Meydanlık (açık) yerlerden korkma duygusu	0	1	2	3	4
9. Yaşamınıza son verme düşünceleri	0	1	2	3	4

					T
10.İnsanların çoğuna güvenilemeyeceği hissi	0	1	2	3	
11.İştahta bozukluklar	0	1	2	3	
12.Hiç bir nedeni olmayan ani korkular	0	1	2	3	
13.Kontrol edemediğiniz duygu patlamaları	0	1	2	3	
14.Başka insanlarla beraberken bile yalnızlık hissetmek	0	1	2	3	
15.İşleri bitirme konusunda kendini engellenmiş hissetmek	0	1	2	3	
16.Yalnızlık hissetmek	0	1	2	3	
17.Hüzünlü,kederli hissetmek	0	1	2	3	
18.Hiçbir şeye ilgi duymamak	0	1	2	3	
19.Ağlamaklı hissetmek	0	1	2	3	
20.Kolayca incinebilme,kırılmak	0	1	2	3	
21.İnsanların sizi sevmediğine, kötü davrandığına inanmak	0	1	2	3	
22.Kendini diğerlerinden daha aşağı görme	0	1	2	3	
23.Mide bozukluğu, bulantı	0	1	2	3	
24.Diğerlerinin sizi gözlediği yada hakkınızda konuştuğu duygusu	0	1	2	3	
25.Uykuya dalmada güçlük	0	1	2	3	

26.Yaptığınız şeyleri tekrar tekrar doğru mu diye kontrol etmek	0	1	2	3	4
27.Karar vermede güçlükler	0	1	2	3	4
28.Otobüs,tren,metro gibi umumi vasıtalarla seyahatlerden korkmak	0	1	2	3	4
29.Nefes darlığı, nefessiz kalmak	0	1	2	3	4
30.Sıcak soğuk basmaları	0	1	2	3	4
31.Sizi korkuttuğu için bazı eşya, yer yada etkinliklerden uzak kalmaya çalışmak	0	1	2	3	4
32.Kafanızın bomboş kalması	0	1	2	3	2
33.Bedeninizin bazı bölgelerinde uyuşmalar, karıncalanmalar	0	1	2	3	2
34.Günahlarınız için cezalandırılmanız gerektiği	0	1	2	3	4
35.Gelecekle ilgili umutsuzluk duyguları	0	1	2	3	2
36.Konsantrasyonda (dikkati bir şey üzerinde toplama) güçlük/zorlanmak	0	1	2	3	2
37.Bedenin bazı bölgelerinde zayıflık, güçsüzlük hissi	0	1	2	3	2
38.Kendini gergin ve tedirgin hissetmek	0	1	2	3	2
39.Ölme ve ölüm üzerine düşünceler	0	1	2	3	4
40.Birini dövme,ona zarar verme,yaralama isteği	0	1	2	3	4
41.Birşeyleri kırma, dökme isteği	0	1	2	3	4

çalışmak					
43.Kalabalıklarda rahatsızlık duymak	0	1	2	3	
44.Bir başka insana hiç yakınlık duymamak	0	1	2	3	
45.Dehşet ve panik nöbetleri	0	1	2	3	
46.Sık sık tartışmaya girmek	0	1	2	3	
47.Yalnız bırakıldığında / kalındığında yalnızlık hissetmek	0	1	2	3	
48.Başarılarınız için diğerlerinden yeterince takdir görmemek	0	1	2	3	
49.Yerinde duramayacak kadar tedirgin hissetmek	0	1	2	3	
50.Kendini değersiz görmek / değersizlik duyguları	0	1	2	3	
51. Eğer izin verirseniz insanların sizi sömüreceği duygusu	0	1	2	3	
52.Suçluluk duyguları	0	1	2	3	
53.Aklınızda bir bozukluk olduğu fikri	0	1	2	3	

#### **German Version**

Sie finden nachstehend eine Liste von Problemen und Beschwerden, die man manchmal hat. Bitte lesen Sie jede Frage sorgfältig durch und entscheiden Sie, wie sehr Sie durch diese Beschwerden gestört oder bedrängt worden sind, und zwar während der vergangenen sieben Tage bis heute. Überlegen Sie bitte nicht erst, welche Antwort "den besten Eindruck" machen könnte, sondern antworten Sie so, wie es für Sie persönlich zutrifft. Machen Sie bitte hinter jeder Frage ein Kreuz bei der für Sie am besten zutreffenden Antwort.

Bitte beantworten Sie jede Frage!

- 0 = überhaupt nicht
- 1 = ein wenig
- 2 = ziemlich
- 3 = stark
- 4 =sehr stark

Wie sehr litten Sie in den letzten sieben Tagen unter...

Wie sehr litten Sie in den letzten sieben Tagen unter?					
1. Nervosität oder innerem Zittern	0	1	2	3	4
2. Ohnmachts- oder Schwindelgefühlen	0	1	2	3	4
3. der Idee, dass irgendjemand Macht über Ihre Gedanken hat	0	1	2	3	4
4. dem Gefühl, dass andere an den meisten Ihrer Schwierigkeiten Schuld sind	0	1	2	3	4
5. Gedächtnisschwierigkeiten	0	1	2	3	4
6. dem Gefühl, leicht reizbar und verärgerbar zu sein	0	1	2	3	4
7. Herz- oder Brustschmerzen	0	1	2	3	4
8. Furcht auf offenen Plätzen oder auf der Straße	0	1	2	3	4

9. Gedanken, sich das Leben zu nehmen	0	1	2	3	4
10. dem Gefühl, dass man den meisten Menschen nicht trauen kann	0	1	2	3	4
11. schlechtem Appetit	0	1	2	3	4
12. plötzlichem Erschrecken ohne Grund	0	1	2	3	4
13. Gefühlsausbrüchen, gegenüber denen Sie machtlos waren	0	1	2	3	4
14. Einsamkeitsgefühlen, selbst wenn Sie in Gesellschaft sind	0	1	2	3	4
15. dem Gefühl, dass es Ihnen schwerfällt, etwas anzufangen	0	1	2	3	4
16. Einsamkeitsgefühlen	0	1	2	3	4
17. Schwermut	0	1	2	3	4
18. dem Gefühl, sich für nichts zu interessieren	0	1	2	3	4
19. Furchtsamkeit	0	1	2	3	4
20. Verletzlichkeit in Gefühlsdingen	0	1	2	3	4
21. dem Gefühl, dass die Leute unfreundlich sind oder Sie nicht leiden können	0	1	2	3	4
22. Minderwertigkeitsgefühlen gegenüber andern	0	1	2	3	4
23. Übelkeit oder Magenverstimmung	0	1	2	3	4
24. dem Gefühl, dass andere Sie beobachten oder über Sie	0	1	2	3	4

	T	1	T		Т
reden					
25. Einschlafschwierigkeiten	0	1	2	3	
26. dem Zwang, wieder und wieder nachzukontrollieren, was	0	1	2	3	
Sie tun					
27. Schwierigkeiten, sich zu entscheiden	0	1	2	3	
28. Furcht vor Fahrten in Bus, Straßenbahn, U-Bahn oder	0	1	2	3	
Zug					
29. Schwierigkeiten beim Atmen	0	1	2	3	
30. Hitzewallungen und Kälteschauern	0	1	2	3	
31. der Notwenigkeit, bestimmte Dinge, Orte oder	0	1	2	3	
Tätigkeiten zu meiden, weil Sie durch diese erschreckt			[		
werden					
		1		2	_
32. Leere im Kopf	0	1	2	3	
		1		2	
33. Taubheit oder Kribbeln in einzelnen Körperteilen	0	1	2	3	
34. dem Gefühl, dass Sie für Ihre Sünden bestraft werden	0	1	2	3	
sollten					
35. einem Gefühl der Hoffnungslosigkeit angesichts der	0	1	2	3	+
Zukunft					
36. Konzentrationsschwierigkeiten	0	1	2	3	
37. Schwächegefühl in einzelnen Körperteilen	0	1	2	3	
	1	1	2	3	
38. dem Gefühl, gespannt oder aufgeregt zu sein	0	1			
			2	2	
<ul><li>38. dem Gefühl, gespannt oder aufgeregt zu sein</li><li>39. Gedanken an den Tod und ans Sterben</li></ul>	0 0 0	1	2	3	

Schmerzen zuzufügen					
41. dem Drang, Dinge zu zerbrechen oder zu zerschmettern	0	1	2	3	
42. starker Befangenheit im Umgang mit anderen	0	1	2	3	
43. Abneigung gegenüber Menschenmengen, z. B. beim Einkaufen oder im Kino	0	1	2	3	
44. dem Eindruck, sich anderen Personen nie so richtig nahe fühlen zu können	0	1	2	3	
45. Schreck- und Panikanfällen	0	1	2	3	
46. der Neigung, immer wieder in Erörterungen oder Auseinandersetzungen zu geraten	0	1	2	3	
47. Nervosität, wenn Sie alleine gelassen werden	0	1	2	3	
48. mangelnder Anerkennung Ihrer Leistungen durch andere	0	1	2	3	
49. so starker Ruhelosigkeit, dass Sie nicht stillsitzen können	0	1	2	3	
50. dem Gefühl, wertlos zu sein	0	1	2	3	
51. dem Gefühl, dass die Leute Sie ausnutzen, wenn Sie es zulassen würden	0	1	2	3	
52. Schuldgefühlen	0	1	2	3	
53. dem Gedanken, dass irgendetwas mit Ihrem Verstand nicht in Ordnung ist.	0	1	2	3	

#### **Portuguese Version**

A seguir encontra-se uma lista de problemas ou sintomas que por vezes as pessoas apresentam. Assinale, num dos espaços à direita de cada sintoma, aquele que melhor descreve o grau em que cada problema o incomodou durante a última semana. Para cada problema ou sintoma marque apenas um espaço com uma cruz. Não deixe nenhuma pergunta por responder.

Em que medida foi incomodado pelos sintomas seguintes

0:Nunca

- 1:Poucas vezes
- 2:Algumas vezes

3:Muitas vezes

4:Muitíssimas vezes

Em que medida foi incomodado pelos sintomas seguintes					
1. Nervosismo ou tensão interior	0	1	2	3	4
2. Desmaios ou tonturas	0	1	2	3	4
3. Ter a impressão que as outras pessoas podem controlar os seus pensamentos	0	1	2	3	4
4. Ter a ideia que os outros são culpados pela maioria dos seus problemas	0	1	2	3	4
5. Dificuldade em se lembrar de coisas passadas ou recentes	0	1	2	3	4
6. Aborrecer-se ou irritar-se facilmente	0	1	2	3	4
7. Dores sobre o coração ou no peito	0	1	2	3	4
8. Medo na rua ou praças públicas	0	1	2	3	4
9. Pensamentos de acabar com a vida	0	1	2	3	4
10. Sentir que não pode confiar na maioria das pessoas	0	1	2	3	4

11. Perder o apetite	0	1	2	3	
12. Ter um medo súbito sem razão para isso	0	1	2	3	
13. Ter impulsos que não se podem controlar	0	1	2	3	
14. Sentir-se sozinho mesmo quando está com mais pessoas	0	1	2	3	
15. Dificuldade em qualquer trabalho	0	1	2	3	
16. Sentir-se sozinho	0	1	2	3	
17. Sentir-se triste	0	1	2	3	
18. Não ter interesse por nada	0	1	2	3	
19. Sentir-se atemorizado	0	1	2	3	
20. Sentir-se facilmente ofendido nos seus sentimentos	0	1	2	3	
21. Sentir que as outras pessoas não são amigas ou não gostam de si	0	1	2	3	
22. Sentir-se inferior aos outros	0	1	2	3	
23. Vontade de vomitar ou mal-estar do estômago	0	1	2	3	┨
24. Impressão de que os outros o costumam observar ou falar de si	0	1	2	3	
	0	1	2	3	╡

26. Sentir necessidade de verificar várias vezes o que faz	0	1	2	3	4
27. Dificuldade em tomar decisões	0	1	2	3	4
28. Medo de viajar de autocarro, de comboio ou de metro	0	1	2	3	4
29. Sensação de que lhe falta o ar	0	1	2	3	4
30. Calafrios ou afrontamentos	0	1	2	3	4
31. Ter de evitar certas coisas, lugares ou actividades por lhe causarem medo	0	1	2	3	4
32. Sensação de vazio na cabeça	0	1	2	3	4
<ul><li>33. Sensação de anestesia (encortiçamento ou formigueiro)</li><li>no corpo</li></ul>	0	1	2	3	4
34. Ter a ideia de que devia ser castigado pelos seus pecados	0	1	2	3	4
35. Sentir-se sem esperança perante o futuro	0	1	2	3	4
36. Ter dificuldade em se concentrar	0	1	2	3	4
37. Falta de forças em partes do corpo	0	1	2	3	4
38. Sentir-se em estado de tensão ou aflição	0	1	2	3	4
39. Pensamentos sobre a morte ou que vai morrer	0	1	2	3	4
	0	1	2	3	4
40. Ter impulsos de bater, ofender ou ferir alguém					

42. Sentir-se embaraçado junto de outras pessoas	0	1	2	3	
43. Sentir-se mal no meio das multidões como lojas, cinemas ou assembleias	0	1	2	3	
44. Grande dificuldade em sentir-se "próximo" de outra pessoa	0	1	2	3	
45. Ter ataques de terror ou pânico	0	1	2	3	
46. Entrar facilmente em discussão	0	1	2	3	
47. Sentir-se nervoso quando tem de ficar sozinho	0	1	2	3	
48. Sentir que as outras pessoas não dão o devido valor ao seu trabalho ou às suas capacidades	0	1	2	3	
49. Sentir-se tão desassossegado que não consegue manter-se sentado quieto	0	1	2	3	
50. Sentir que não tem valor	0	1	2	3	
51. A impressão que, se deixasse, as outras pessoas se aproveitariam de si	0	1	2	3	
52. Ter sentimentos de culpa	0	1	2	3	
53. Ter a impressão que alguma coisa não regula bem na sua cabeça	0	1	2	3	

# Appendix G: Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)

# **Turkish Version**

Lütfen aşağıdaki ifadeleri son zamanlarda (son 2 hafta içerisinde) hissettiğiniz duygu ve düşüncelerinizi dikkate alarak cevaplayınız.

Son 2 hafta içerisinde	Hiçbir	Nadiren	Bazen	Sık	Her
	zaman			sık	zaman
1. Gelecekle ilgili iyimserim.					
2. Kendimi işe yarar ( faydalı)					
hissediyorum.					
3. Kendimi rahatlamış					
hissediyorum.					
4. Diğer insanlara karşı ilgiliyim.					
5. Farklı işlere zaman ayırabilecek					
enerjim var.					
6. Sorunlarla iyi bir şekilde başa					
çıkabilirim.					
7. Açık ve net bir biçimde					
düşünebiliyorum.					
8. Kendimden memnunum.					
9. Kendimi diğer insanlara yakın					
hissediyorum.					
10. Kendime güveniyorum.					
44 77 111 1 1 1					
11. Kendi kararlarımı kendim					
verebiliyorum.					
12. Sevildiğimi hissediyorum.					
13. Yeni şeylere karşı ilgiliyim.					

14. Neşeli hissediyorum.			



## **German Version**

Nachfolgend sind einige Aussagen über Gefühle und Gedanken. Bitte kreuzen Sie die Antwortmöglichkeit an, die Ihre Erfahrung während der letzten zwei Wochen am besten beschreibt.

Während der letzten 2 Wochen	Niemals	Selten	Manchmal	Oft	Immer
1. Ich habe mich in Bezug auf die					
Zukunft optimistisch gefühlt.					
2. Ich habe mich nützlich gefühlt.					
3. Ich habe mich entspannt					
gefühlt.					
4. Ich habe mich für andere					
Menschen interessiert.					
5. Ich hatte viel Energie.					
6. Ich bin mit Problemen gut					
umgegangen.					
7. Ich konnte klar denken.					
8. Ich habe mich wohl gefühlt.					
9. Ich habe mich anderen					
Menschen nahe gefühlt.					
10. Ich habe mich zuversichtlich					
gefühlt.					
11. Ich war in der Lage,					
Entscheidungen zu treffen.					
12. Ich habe mich geliebt gefühlt.					
13. Ich habe mich für Neues					
interessiert.					
14. Ich habe mich fröhlich					
gefühlt.					

# **Portuguese Version**

Em baixo encontram-se algumas afirmações sobre sentimentos e pensamentos. Por favor assinale a resposta que melhor descreve a sua experiência em relação a cada uma delas nas 2 últimas semanas.

2 últimas	Nunca	Raramente	Algumas	Frequentemente	Sempre
semanas			vezes		
1. Tenho-me					
sentido otimista					
em relação ao					
futuro					
2. Tenho-me					
sentido útil					
3. Tenho-me					
sentido					
relaxado/a					
4. Tenho-me					
sentido					
interessado/a					
pelas outras					
pessoas					
5. Tenho tido					
energia de sobra					
6. Tenho lidado					
bem com os					
problemas					
7. Tenho					
conseguido					
pensar de forma					
clara					
8. Tenho-me					

sentido bem			
comigo mesmo/a			
9. Tenho-me			
sentido			
próximo/a de			
outras pessoas			
10. Tenho-me			
sentido confiante			
11. Tenho sido			
capaz de			
construir as			
minhas opiniões			
sobre as coisas			
12. Tenho-me			
sentido amado/a			
13. Tenho-me			
sentido			
interessado/a em			
coisas novas			
14. Tenho-me			
sentido alegre			

## Appendix H: Ways of Coping (Revised)

## **Turkish Version**

Bu ölçek kişilerin yaşamlarındaki sıkıntılar ve stresle başa çıkmak için neler yaptıklarını belirlemek amacıyla geliştirilmiştir. Lütfen sizin için sıkıntı ya da stres oluşturan olayları düşünerek, maddeleri size uygunluk derecesine göre işaretleyin.

- 0 = Hiç Kullanmam
- 1 = Bazen Kullanırım
- 2 = Çoğunlukla Kullanırım
- 3 = Her zaman Kullanırım

1. Yalnızca bir sonraki adımda yapmam gereken şeye konsantre oldum.	0	1	2	3
2. Problemi daha iyi anlamak için onu analiz etmeye çalıştım.	0	1	2	3
3. Dikkatimi sorulardan uzaklaştırmak için işe veya yerine geçecek başka bir faaliyete koyuldum.	0	1	2	3
<ul> <li>4. Yapılacak tek şeyin beklemek olduğunu düşündüm ve her şeyi zamana bıraktım.</li> </ul>	0	1	2	3
5. Bu durumdan olumlu bir şey çıkarabilmek için pazarlık ettim ya da ödün verdim.	0	1	2	3
6. İşe yaramayacağını düşündüğüm halde bir şeyler yaptım, en azından bir şeyler yapıyordum.	0	1	2	3
7. Sorumlu olan kişiyi fikrini değiştirmesi için ikna etmeye çalıştım.	0	1	2	3
8. Durum hakkında daha fazla bilgi edinmek için biriyle konuştum.	0	1	2	3
9. Kendi kendimi eleştirdim veya kendime kızdım.	0	1	2	3
10. Köprüleri yıkmamaya, bazı kapıları açık bırakmaya çalıştım.	0	1	2	
11. Bir mucize olmasını ümit ettim.	0	1	2	3
12. Kaderime razı oldum, sadece bazen çok şanssızım.	0	1	2	

		1	T T	Т
13. Sanki hiçbir şey olmamış gibi devam ettim.	0	1	2	
, , , , , , , , , , , , , , , , , , , ,				
14. Duygularımı kendime saklamaya çalıştım.	0	1	2	
15. Olayların iyi yanını görmeye çalıştım.	0	1	2	
16. Her zamankinden fazla uyudum.	0	1	2	
17. Soruna neden olan kişiye ya da kişilere öfkemi gösterdim.	0	1	2	
18. Başka birinin sempati ve anlayışını kabul ettim.	0	1	2	
19. Kendi kendime, kendimi daha iyi hissettiren şeyler söyledim	n. 0	1	2	
20. Yaratıcı bir şeyler yapmak için esinlendim.	0	1	2	
21. Her şeyi unutmaya çalıştım.	0	1	2	
22. Bir uzmandan psikolojik yardım aldım.	0	1	2	
23. İyi yönde değiştim ya da olgunlaştım.	0	1	2	
24. Bir şey yapmadan önce, ne olabileceğini görmek için bekledim.	0	1	2	
		1	2	
25. Arayı düzeltmek (telafi) için özür diledim veya bir şeyler yaptım.	0			
	0	1	2	

28. Bir şekilde duygularımı dışa vurdum.	0	1	2	
29. Problemi kendimin açtığını fark ettim.	0	1	2	
30. Bu deneyimden, başlangıcındaki halime göre daha iyi bir noktada çıktım.	0	1	2	
31. Problemle ilgili somut bir şeyler yapabilecek biriyle konuştum.	0	1	2	
32. Bir süreliğine sorundan uzaklaştım; dinlenmeye veya tatil yapmaya çıktım.	0	1	2	,
33. Yiyerek, içerek, sigara kullanarak, uyuşturucu ya da ilaç kullanarak kendimi daha iyi hissetmeye çalıştım.	0	1	2	
34. Büyük bir rizikoyu göze aldım veya çok riskli şeyler yaptım.	0	1	2	
35. Çok fazla aceleci davranmamaya veya ilk önsezimi izlememeye çalıştım.	0	1	2	
36. Yeni bir inanç buldum.	0	1	2	
37. Gururumu korudum ve metin oldum.	0	1	2	,
38. Yaşımda neyin önemli olduğunu yeniden keşfettim.	0	1	2	
39. Sorunun olumlu bir hale dönmesi için bir şeyleri değiştirdim.	0	1	2	
40. Genelde insanlarla beraber olmaktan kaçındım.	0	1	2	
41. Beni etkilemesine izin vermedim, sorun hakkında çok fazla düşünmeyi reddettim.	0	1	2	
42. Saygı duyduğum bir akrabamdan veya arkadaşımdan tavsiye istedim.	0	1	2	

44. Durumu hafife aldım, bu konuda çok ciddi olmayı reddettim.	0	1	2	
45. Biriyle nasıl hissettiğim hakkında konuştum.	0	1	2	
46. Boyun eğmedim ve istediğim şey için savaştım.	0	1	2	
47. Hıncımı diğer insanlardan çıkardım.	0	1	2	
48. Geçmiş tecrübelerimi kullandım, daha önce de benzer bir durum yaşamıştım.	0	1	2	
49. Ne yapılması gerektiğini biliyordum, bu yüzden işleri yoluna koymak için çabalarımı iki katına çıkardım.	0	1	2	
50. Bunun olduğuna inanmayı reddettim.	0	1	2	
51. Kendi kendime, bir dahaki sefere olayların daha farklı olacağına dair söz verdim.	0	1	2	
52. Problem için birkaç tane farklı çözüm buldum.	0	1	2	
53. Yapılacak bir şey olmadığı için durumu kabul ettim.	0	1	2	
54. Duygularımın diğer şeylere çok fazla engel olmasını önlemeye çalıştım.	0	1	2	
55. Olan şeyi veya nasıl hissettiğimi değiştirebilmeyi isterdim.	0	1	2	
56. Kendimle ilgili bazı şeyleri değiştirdim.	0	1	2	
57. O anda olduğundan daha iyi bir zamanda veya yerde olmayı düşledim veya hayal ettim.	0	1	2	
58. Sorunun çekip gitmesini veya bir şekilde sona ermesini diledim.	0	1	2	
59. Meselenin nasıl sonuçlanabileceğine dair hayaller kurdum ve dilekler diledim.	0	1	2	

60. Dua ettim.	0	1	2	3
61. Kendimi en kötü için hazırladım.	0	1	2	3
62. Aklımda, ne söyleyeceğimin veya ne yapacağımın üstünden geçtim.	0	1	2	3
63. Takdir ettiğim birinin bu durumu nasıl ele alacağını düşündüm ve bunu örnek aldım.	0	1	2	3
64. Meseleleri diğer kişinin bakış açısından görmeye çalıştım.	0	1	2	3
65. Meselelerin daha ne kadar kötü olabileceğini kendi kendime hatırlattım.	0	1	2	3
66. Koşuya, yürüyüşe çıktım veya egzersiz yaptım.	0	1	2	3

## **German Version**

Hier ist eine Liste mit Aussagen darüber, wie man mit einer schwierigen Situation umgehen kann. Bitte denken Sie an ein Ereignis, das Sie beschäftigt hat. Bitte überlegen Sie bei jeder Aussage, in welchem Ausmaß sie für Sie zutrifft und kreuzen Sie die entsprechende Antwort an.

0 = nie

1 = selten

- 2 = gelegentlich
- 3 = oft

1. Ich konzentrierte mich darauf, was ich als nächstes zu tun hatte	0	1	2	(1)
2. Ich versuchte, das Problem zu durchdenken, um es besser zu verstehen.	0	1	2	3
3. Ich wandte mich der Arbeit oder anderen Aktivitäten zu, um mich abzulenken.	0	1	2	3
4. Ich dachte mir, daß mit der Zeit alles anders aussehen würde - ich brauchte nur abzuwarten.	0	1	2	3
5. Ich schloß Kompromisse, um der Situation noch etwas Positives abzugewinnen.	0	1	2	3
6. Ich tat irgendetwas, obwohl ich wußte, daß es nicht viel nutzen würde; Hauptsache, ich habe überhaupt etwas getan.	0	1	2	3
7. Ich versuchte, die verantwortliche Person zu einer Änderung ihrer Meinung zu bewegen.	0	1	2	(1)
8. Ich redete mit jemandem, um mehr über die Situation zu erfahren.	0	1	2	3
9. Ich machte mir Vorwürfe.	0	1	2	3
10. Ich versuchte, mir eine Entscheidung möglichst lange offenzuhalten.	0	1	2	3
11. Ich hoffte auf ein Wunder.	0	1	2	

12. Ich nahm das Geschehene hin; manchmal habe ich eben Pech.	0	1	2	
13. Ich tat so, als ob nichts geschehen wäre.	0	1	2	
14. Ich versuchte, meine Gefühle für mich zu behalten.	0	1	2	
15. Ich bemühte mich, die gute Seite der Ereignisse zu sehen -	0	1	2	
jedes Unglück hat auch sein Gutes.				
16. Ich schlief mehr als gewöhnlich.	0	1	2	
17. Ich äußerte der Person/den Personen gegenüber, die das	0	1	2	
Problem verursacht hatte/n, meinen Ärger.				
18. Ich ließ mich von jemandem trösten.	0	1	2	
19. Ich sagte Dinge zu mir, die mir halfen, mich besser zu fühlen.	0	1	2	I
20. Ich fühlte mich angeregt, etwas Kreatives zu tun.	0	1	2	
21. Ich versuchte, die ganze Sache zu vergessen.	0	1	2	
22. Ich suchte professionelle Hilfe auf.	0	1	2	
23. Ich entwickelte mich in meiner Persönlichkeit positiv.	0	1	2	
24. Ich wartete die weiteren Ereignisse ab, bevor ich etwas tat.	0	1	2	$\frac{1}{1}$
25. Ich entschuldigte mich oder tat etwas, um es wieder	0	1	2	
gutzumachen.			_	
26. Ich machte mir einen Plan, was als nächstes zu tun sei und befolgte ihn.	0	1	2	
27. Ich fand mich mit dem ab, was meiner Vorstellung am nächsten kam.	0	1	2	T
	1	1	1	

				Τ
29. Mir wurde klar, daß ich das Problem selbst verursacht hatte.	0	1	2	
30. Es ging mir besser als zuvor.	0	1	2	
31. Ich sprach mit jemandem, der an dem Problem konkret etwas ändern konnte.	0	1	2	
32. Ich schob die ganze Angelegenheit für eine Weile beiseite - ich ruhte aus oder nahm Urlaub.	0	1	2	
<ul><li>33. Ich versuchte, mein Wohlbefinden durch Essen, Trinken,</li><li>Rauchen, Medikamente oder Drogen zu verbessern.</li></ul>	0	1	2	
34. Ich ließ es darauf ankommen oder tat etwas Risikoreiches.	0	1	2	
35. Ich bemühte mich, nicht voreilig zu handeln oder meinem ersten Gefühl zu folgen.	0	1	2	
36. Ich fand zum Glauben.	0	1	2	
37. Ich behielt meinen Stolz und ließ mich nicht unterkriegen.	0	1	2	
38. Ich entdeckte wieder, was im Leben wichtig ist.	0	1	2	
39. Ich veränderte etwas, so daß sich alles zum Besten wendete.	0	1	2	
40. Ich vermied das Zusammensein mit anderen Personen.	0	1	2	
41. Ich ließ die Sache nicht an mich herankommen - ich dachte nicht viel darüber nach.	0	1	2	
42. Ich bat einen Verwandten oder Freund, dessen Meinung ich respektierte, um Rat.	0	1	2	
43. Ich ließ keinen wissen, wie schlimm die Dinge wirklich waren.	0	1	2	
44. Ich lehnte es ab, die Sache ernst zu nehmen.	0	1	2	

45. Ich erzählte jemandem, wie es mir ging.	0	1	2	
46. Ich ließ mich nicht unterkriegen und kämpfte für das, was ich wollte.	0	1	2	
47. Ich ließ das Problem an anderen Personen aus.	0	1	2	Ī
48. Ich schöpfte aus der Erfahrung, die ich früher mit ähnlichen	0	1	2	
Situationen gemacht hatte.				
49. Ich wußte, was zu tun war; deshalb verdoppelte ich meine	0	1	2	1
Bemühungen, um die Dinge ins Laufen zu bringen.				
50. Ich glaubte einfach nicht, daß es wirklich passiert war.	0	1	2	
51. Ich nahm mir fest vor, daß es das nächste Mai anders laufen	0	1	2	╋
würde.				
52. Ich überlegte mir verschiedene Lösungen für des Problem.	0	1	2	t
53. Ich fand mich damit ab, weil nichts mehr zu ändern war.	0	1	2	
54. Ich bemühte mich, mich durch meine Gefühle nicht zu sehr	0	1	2	
bei anderen Dingen beeinträchtigen zu lassen.				
55. Ich wünschte mir, daß ich das Geschehene und meine Gefühle	0	1	2	Ī
ändern könnte.				
56. Ich änderte mich bewußt.	0	1	2	
57. Ich träumte von einer besseren Zeit oder wünschte mich an	0	1	2	_
einen anderen Ort.				
58. Ich wünschte mir, daß die Situation bald vorbei wäre.	0	1	2	╞
59. Ich malte mir aus, wie die Angelegenheit ausgehen würde.	0	1	2	
60. Ich betete.	0	1	2	╉
		1		
61. Ich machte mich auf das Schlimmste gefaßt.	0	1	2	

62. Ich ging im Geiste durch, was ich sagen oder tun könnte.	0	1	2	3
63. Ich nahm, mir eine Person, die ich bewundere, zum Vorbild und überlegte mir, wie sie in der Situation handeln würde.	0	1	2	3
64. Ich versuchte, mich in die Lage der anderen Person hineinzuversetzen.	0	1	2	3
65. Ich machte mir klar, wieviel schlimmer die Situation noch sein könnte.	0	1	2	3
66. Ich betätigte mich sportlich.	0	1	2	3

## **Portuguese Version**

Leia cada item abaixo e indique, fazendo um círculo na categoria apropriada, o que você fez na situação estressante, de acordo com a seguinte classificação:

0 = não usei esta estratégia

1 = usei um pouco

2 = usei bastante

3 = usei em grande quantidade

1. Me concentrei no que deveria ser feito em seguida, no	0	1	2	3
próximo passo.				
2. Tentei analisar o problema para entendê-lo melhor.	0	1	2	3
3. Procurei trabalhar ou fazer alguma atividade para me distrair.	0	1	2	3
4. Deixei o tempo passar - a melhor coisa que poderia fazer era	0	1	2	3
esperar, o tempo é o melhor remédio.				
5. Procurei tirar alguma vantagem da situação.	0	1	2	3
6. Fiz alguma coisa que acreditava não daria resultados, mas ao	0	1	2	3
menos eu estava fazendo alguma coisa.				
7. Tentei encontrar a pessoa responsável para mudar suas idéias.	0	1	2	3
8. Conversei com outra(s) pessoa(s) sobre o problema,	0	1	2	3
procurando mais dados sobre a situação.				
9. Me critiquei, me repreendi.	0	1	2	3
10. Tentei não fazer nada que fosse irreversível, procurando	0	1	2	3
deixar outras opções.				
11. Esperei que um milagre acontecesse.	0	1	2	3
12. Concordei com o fato, aceitei o meu destino.	0	1	2	3
	0	1	2	3

14. Procurei guardar para mim mesmo(a) os meus sentimentos.	0	1	2	
15. Procurei encontrar o lado bom da situação.	0	1	2	
16. Dormi mais que o normal.	0	1	2	
17. Mostrei a raiva que sentia para as pessoas que causaram o problema.	0	1	2	-
18. Aceitei a simpatia e a compreensão das pessoas.	0	1	2	-
19. Disse coisas a mim mesmo (a) que me ajudassem a me sentir bem.	0	1	2	
20. Me inspirou a fazer algo criativo.	0	1	2	
21. Procurei esquecer a situação desagradável.	0	1	2	_
22. Procurei ajuda profissional.	0	1	2	_
23. Mudei ou cresci como pessoa de uma maneira positiva.	0	1	2	_
	-	1	2	_
24. Esperei para ver o que acontecia antes de fazer alguma coisa.	0	1	2	
<ul><li>24. Esperei para ver o que acontecia antes de fazer alguma coisa.</li><li>25. Desculpei ou fiz alguma coisa para repor os danos.</li></ul>	0	1	2	_
				_
25. Desculpei ou fiz alguma coisa para repor os danos.	0	1	2	
<ul> <li>25. Desculpei ou fiz alguma coisa para repor os danos.</li> <li>26. Fiz um plano de ação e o segui.</li> <li>27. Tirei o melhor que poderia da situação, que não era o</li> </ul>	0	1	2 2 2	

30. Saí da experiência melhor do que eu esperava.	0	1	2	3
31. Falei com alguém que poderia fazer alguma coisa concreta sobre o problema.	0	1	2	3
32. Tentei descansar, tirar férias a fim de esquecer o problema.	0	1	2	3
33. Procurei me sentir melhor, comendo, fumando, utilizando drogas ou medicação.	0	1	2	
34. Enfrentei como um grande desafio, fiz algo muito arriscado.	0	1	2	
35. Procurei não fazer nada apressadamente ou seguir o meu primeiro impulso.	0	1	2	
36. Encontrei novas crenças.	0	1	2	
37. Mantive meu orgulho não demonstrando os meus sentimentos.	0	1	2	
38. Redescobri o que é importante na vida.	0	1	2	
39. Modifiquei aspectos da situação para que tudo desse certo no final.	0	1	2	
40. Procurei fugir das pessoas em geral.	0	1	2	
41. Não deixei me impressionar, me recusava a pensar muito sobre esta situação.	0	1	2	
42. Procurei um amigo ou um parente para pedir conselhos.	0	1	2	
43. Não deixei que os outros soubessem da verdadeira situação.	0	1	2	
44. Minimizei a situação me recusando a preocupar-me seriamente com ela.	0	1	2	
45. Falei com alguém sobre como estava me sentindo.	0	1	2	
	1	1	1	

47. Descontei minha raiva em outra(s) pessoa(s).	0	1	2	
48. Busquei nas experiências passadas uma situação similar.	0	1	2	
49. Eu sabia o que deveria ser feito, portanto dobrei meus	0	1	2	
esforços para fazer o que fosse necessário. 50. Recusei acreditar que aquilo estava acontecendo.	0	1	2	
51. Prometi a mim mesmo(a) que as coisas serão diferentes na	0	1	2	
próxima vez. 52. Encontrei algumas soluções diferentes para o problema.	0	1	2	
53. Aceitei, nada poderia ser feito.	0	1	2	
54. Procurei não deixar que meus sentimentos interferissem muito nas outras coisas que eu estava fazendo.	0	1	2	
		1	1	
55. Gostaria de poder mudar o que tinha acontecido ou como eu senti.	1 0	1	2	
	ı 0	1	222	
senti. 56. Mudei alguma coisa em mim, me modifiquei de alguma				
senti. 56. Mudei alguma coisa em mim, me modifiquei de alguma forma. 57. Sonhava acordado(a) ou imaginava um lugar ou tempo	0	1	2	
senti. 56. Mudei alguma coisa em mim, me modifiquei de alguma forma. 57. Sonhava acordado(a) ou imaginava um lugar ou tempo melhores do que aqueles em que eu estava. 58. Desejei que a situação acabasse ou que de alguma forma	0 0 0 0	1	2	
senti. 56. Mudei alguma coisa em mim, me modifiquei de alguma forma. 57. Sonhava acordado(a) ou imaginava um lugar ou tempo melhores do que aqueles em que eu estava. 58. Desejei que a situação acabasse ou que de alguma forma desaparecesse. 59. Tinha fantasias de como as coisas iriam acontecer, como se	0 0 0 0	1 1 1 1	2 2 2 2	
senti. 56. Mudei alguma coisa em mim, me modifiquei de alguma forma. 57. Sonhava acordado(a) ou imaginava um lugar ou tempo melhores do que aqueles em que eu estava. 58. Desejei que a situação acabasse ou que de alguma forma desaparecesse. 59. Tinha fantasias de como as coisas iriam acontecer, como se encaminhariam.	0 0 0 0 0 0	1 1 1 1	2 2 2 2 2 2	

63. Pensei em uma pessoa que admiro e em como ela resolveria a	0	1	2	3
situação e a tomei como modelo.				
64. Procurei ver as coisas sob o ponto de vista da outra pessoa.	0	1	2	3
65. Eu disse a mim mesmo(a) "que as coisas poderiam ter sido	0	1	2	3
piores".				
66. Corri ou fiz exercícios	0	1	2	3



#### Appendix I: Tables of Levene's Test Results

Table 27. Levene's Test Result for Socioeconomic Status on Mental Well-Being Means

Means	Levene Statistic	df1	df2	Sig.
Mental Well-Being	7.88	4	609	.00

 Table 28. Levene's Test Result for Socioeconomic Status on Basic Psychological Need

 Satisfaction and Frustration Means

Means	Levene Statistic	df1	df2	Sig.
Satisfaction Total	28.09	4	609	.00
Frustration Total	11.58	4	609	.00

Table 29. Levene's Test Result for Education Level on Mental Well-Being and BasicPsychological Need Satisfaction and Frustration Means

Means	Levene Statistic	df1	df2	Sig.
Mental Well-Being	28.79	2	611	.00
Satisfaction Total	84.09	2	611	.00
Frustration Total	23.68	2	611	.00

Table 30. Levene's Test Result for Basic Psychological Need Means

Means	Levene Statistic	df1	df2	Sig.
Autonomy satisfaction	18.62	2	611	.00
Autonomy frustration	.72	2	611	.49
Competence satisfaction	13.75	2	611	.00
Competence frustration	7.55	2	611	.00
Relatedness satisfaction	15.09	2	611	.11
Relatedness frustration	2.27	2	611	.00
Total satisfaction	15.68	2	611	.00
Total frustration	4.91	2	611	.01

Means	Levene Statistic	df1	df2	Sig.
Mental Well-Being	24.30	2	611	.00

Table 31. Levene's Test Result for Mental Well-Being Means

Table 32. Levene's Test Result for Ways of Coping Means

Means		Levene Statistic	df1	df2	Sig.
Problem-foc	used coping	24.06	2	611	.00
Wishful thin	lking	.08	2	611	.93
Detachment		1.14	2	611	.32
Seeking soc	ial support	1.41	2	611	.25
Focusing on	the positive	43.24	2	611	.00
Self blame		7.23	2	611	.00
Tension redu	uction	.06	2	611	.95
Keep to self		4.53	2	611	.01

 Table 33. Levene's Test Result for Psychopathology Symptom Means

	• 1			
Means	Levene Statistic	df1	df2	Sig.
Somatization	20.97	2	611	.00
Obsession-Compulsion	13.78	2	611	.00
Interpersonal Sensitivity	15.36	2	611	.00
Depression	27.21	2	611	.00
Anxiety	37.97	2	611	.00
Hostility	52.14	2	611	.00
Phobic Anxiety	9.18	2	611	.00
Paranoid Ideation	31.43	2	611	.00
Psychoticism	17.73	2	611	.00

#### Appendix J: Tables of ANOVA and Welch's F Test Results

Table 34. Welch's F Test Result for Socioeconomic Status on Mental Well-Being Means

Means	Welch's F	df1	df2	Sig.	est. $\omega^2$
Mental Well-Being	35.51	4	185.90	.00	.18

est.  $\omega^2$  adjusted omega square effect size

 Table 35. Welch's F Test Result for Socioeconomic Status on Basic Psychological

 Need Satisfaction and Frustration Means

Means	Welch's F	df1	df2	Sig.	est. $\omega^2$
Satisfaction Total	19.84	4	180.36	.00	.11
Frustration Total	21.96	4	187.55	.00	.18

est.  $\omega^2$  adjusted omega square effect size

Table 36. Welch's F Test Result for Education Level on Mental Well-Being and BasicPsychological Need Satisfaction and Frustration Means

Means	Welch's F	df1	df2	Sig.	est. $\omega^2$
Mental Well-Being	38.57	2	304.47	.00	.11
Satisfaction Total	50.72	2	318.61	.00	.14
Frustration Total	45.52	2	317.70	.00	.13

est.  $\omega^2$  adjusted omega square effect size

Means	Welch's F	df1	df2	Sig.	est. $\omega^2$
Mental Well-Being	22.18	2	392.67	.00	.06

Table 37. Welch's F Test Result for Mental Well-Being Means

est.  $\omega^2$  adjusted omega square effect size

Table 38. Welch's F Test Result for Basic Psychological Need Means

Means	Welch's F	df1	df2	Sig.	est. $\omega^2$
Autonomy satisfaction	31.12	2	392.67	.00	.09
Competence satisfaction	4.88	2	394.99	.00	.01
Competence frustration	12.70	2	405.27	.00	.04
Relatedness frustration	5.89	2	401.65	.03	.02
Total satisfaction	4.97	2	393.54	.00	.01
Total frustration	15.72	2	404.54	.00	.05

est.  $\omega^2$  adjusted omega square effect size

Table 39. ANOVA Result for Basic Psychological Need Means

Means	F Statistic	df1	df2	Sig.	ω
Autonomy frustration	36.30	2	611	.00	.32
Relatedness satisfaction	3.28	2	611	.04	.09

 $\omega$  omega effect size

Table 40. Welch's F Test Result for Ways of Coping Means

Means	Welch's F	df1	df2	Sig.	est. $\omega^2$
Problem-focused coping	75.01	2	395.54	.00	.19
Focusing on the positive	11.94	2	383.55	.00	.03
Self blame	26.71	2	404.13	.00	.08
Keep to self	15.02	2	404.80	.00	.04

est.  $\omega^2$  adjusted omega square effect size

Means	F Statistic	df1	df2	Sig.	ω
Wishful thinking	84.03	2	611	.00	.46
Detachment	71.58	2	611	.00	.43
Seeking social support	20.67	2	611	.00	.25
Tension reduction	52.84	2	611	.00	.38

Table 41. ANOVA Result for Ways of Coping Means

 $\omega$  omega effect size

Table 42. Welch's F Test Result for Psychopathology Symptom Means

Means	Welch's F	df1	df2	Sig.	est. $\omega^2$
Somatization	9.70	2	385.57	.00	.03
Obsession-Compulsion	23.22	2	398,56	.00	.07
Interpersonal Sensitivity	5.71	2	399.16	.00	.02
Depression	13.82	2	384.85	.00	.04
Anxiety	34.33	2	379.41	.00	.10
Hostility	49.39	2	375.24	.00	.14
Phobic Anxiety	9.70	2	396.56	.00	.03
Paranoid Ideation	35.19	2	390.62	.00	.10
Psychoticism	9.16	2	387.33	.00	.03

est.  $\omega^2$  adjusted omega square effect size

#### Appendix K: Correlation Analyses Result Tables within Countries

Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. A_sat	.76**	1							
3. A_frus	57**	54**	1						
4. C_sat	.81**	.81**	46**	1					
5. C_frus	73**	60**	.62**	71**	1				
6. R_sat	.66**	.60**	31**	.67**	49**	1			
7. R_frus	45**	35**	.47**	40**	.59**	53**	1		
8. Sat_tot	.84**	.91**	49**	.93**	67**	.84**	46**	1	
9. Frus_tot	70**	59**	.81**	61**	.88**	53**	.83**	64**	1

Table 43. Correlation Analysis Result between Mental Well-Being and Basic Psychological Need Satisfaction and Frustration for Turkey

\*\* p < .01; \* p < .05; N = 614; A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total

Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. Prbfcs	.63**	1							
3. Wishfl	40**	09	1						
4. Detach	45**	32**	.55**	1					
5. Socsup	.42**	.59**	.15**	07	1				
6. Focpos	.68**	.84**	09	20**	.54**	1			
7. Selfblm	.20**	.48**	.28**	.12	.48**	.46**	1		
8. Tensred	.39**	.56**	.02	15**	.33**	.50**	.30**	1	
9. Kpself	30**	02	.28**	.45**	19**	.07	.18**	.08	1

Table 44. Correlation Analysis Result between Mental Well-Being and Ways of Coping for Turkey

\*\* p < .01; \* p < .05; N = 614; Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Variables	1	2	3	4	5	6	7	8	9	10
1. WellBeing	1									
2. Somati	56**	1								
3. Ocd	72**	.71**	1							
4. Intsens	62**	.64**	.72**	1						
5. Depprs	77**	.69**	.78**	.81**	1					
6. Anxty	67**	.74**	.83**	.69**	.82**	1				
7. Hostil	74**	.65**	.74**	.59**	.77**	.83**	1			
8. Phobia	44**	.60**	.60**	.58**	.61**	.60**	.44**	1		
9. Parnoid	40**	.50**	.60**	.75**	.63**	.56**	.40**	.60**	1	
10. Psycho	48**	.54**	.62**	.69**	.64**	.59**	.43**	.70**	.74**	1

Table 45. Correlation Analysis Result between Mental Well-Being and Psychopathology Symptoms for Turkey

\*\* p < .01; \* p < .05; N = 614; Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	9. Prbfcs	10. Wishfl	11. Detach	12. Socsup	13. Focpos	14. Selfblm	15. Tensred	16. Kpself
1. A_sat	.63**	41**	49**	.29**	.69**	.23**	.34**	14**
2. A_frus	36**	.44**	.44**	18**	35**	06**	28**	.21**
3. C_sat	.64**	36**	43**	.37**	.68**	.29**	.34**	15**
4. C_frus	43**	.42**	.49**	25**	46**	01**	24**	.33**
5. R_sat	.51**	18**	34**	.52**	.54**	.36**	.27**	29**
6. R_frus	29**	.23**	.29**	-34**	29**	13**	23**	.35**
7. Sat_tot	.67**	36**	47**	.43**	.72**	.32**	.36**	21**
8. Frus_tot	43**	.43**	.48**	31**	44**	08**	30**	.36**

Table 46. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Ways of Coping for Turkey

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 43-44. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Variables	9. Somati	10. Ocd	11. Intsens	12. Depprs	13. Anxty	14. Hostil	15. Phobia	16. Parnoid	17. Psycho
1. A_sat	46**	56**	42**	58**	57**	71**	25**	16*	23**
2. A_frus	.53**	.62**	.49**	.57**	.61**	.55**	.43**	.51**	.49**
3. C_sat	48**	61**	46**	60**	58**	67**	31**	16*	27**
4. C_frus	.53**	.67**	.64**	.70**	.60**	.62**	.49**	.48**	.54**
5. R_sat	47**	48**	56**	50**	42**	47**	25**	25**	27**
6. R_frus	.48**	.49**	.61**	.50**	.44**	.36**	.39**	.53**	.46**
7. Sat_tot	52**	62**	53**	63**	59**	70**	30**	21**	29**
8. Frus_tot	.61**	.70**	.69**	.70**	.65**	.60**	.51**	.61**	.59**

Table 47. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Psychopathology Symptoms for Turkey

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 43-45. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	10. Prbfcs	11. Wishfl	12. Detach	13. Socsup	14. Focpos	15. Selfblm	16. Tensred	17. Kpself
1. Somati	40**	.33**	.45**	29**	39**	10	23**	.21**
2. Ocd	43**	.48**	.50**	23**	48**	06	28**	.24**
3. Intsens	27**	.41**	.43**	34**	33**	.05	21**	.42**
4. Depprs	43**	.49**	.48**	31**	49**	01	27**	.34**
5. Anxty	42**	.47**	.52**	20**	48**	03	25**	.24**
6. Hostil	55**	.49**	.53**	23**	61**	12	31**	.17*
7. Phobia	19**	.31**	.29**	10	17*	.13	10	.24**
8. Parnoid	07	.42**	.28**	12	10	.19**	13	.35**
9. Psycho	09	.38**	.31**	13	11	.19**	07	.43**

Table 48. Correlation Analysis Result between Psychopathology Symptoms and Ways of Coping for Turkey

\*\*p < .01; \*p < .05; N = 614; Note. Intra-scale correlations are given in Table 44-45. Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism, Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. A_sat	.71**	1							
3. A_frus	69**	57**	1						
4. C_sat	.69**	.69**	46**	1					
5. C_frus	71**	68**	.65**	78**	1				
6. R_sat	.37**	.45**	17**	.45**	44**	1			
7. R_frus	45**	46**	.37**	48**	.57**	67**	1		
8. Sat_tot	.70**	.85**	48**	.85**	76**	.78**	66**	1	
9. Frus_tot	75**	69**	.83**	69**	.89**	50**	.75**	75**	1

Table 49. Correlation Analysis Result between Mental Well-Being and Basic Psychological Need Satisfaction and Frustration for Switzerland

\*\* p < .01; \* p < .05; N = 614; A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total

Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. Prbfcs	.39**	1							
3. Wishfl	63**	58**	1						
4. Detach	58**	57**	.64**	1					
5. Socsup	.23**	.09	.17*	.07	1				
6. Focpos	.47**	.40**	23**	12	.32**	1			
7. Selfblm	.15*	.37**	.04	18*	.21**	.15*	1		
8. Tensred	.44**	.52**	42**	34**	.17*	.34**	.23**	1	
9. Kpself	23**	.01	.07	.09	62**	13	.00	07	1

Table 50. Correlation Analysis Result between Mental Well-Being and Ways of Coping for Switzerland

\*\* p < .01; \* p < .05; N = 614; Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

		-				-	• •		-	
Variables	1	2	3	4	5	6	7	8	9	10
1. WellBeing	1									
2. Somati	62**	1								
3. Ocd	65**	.68**	1							
4. Intsens	36**	.43**	.52**	1						
5. Depprs	59**	.64**	.69**	.51**	1					
6. Anxty	63**	.76**	.70**	.46**	.73**	1				
7. Hostil	56**	.70**	.61**	.24**	.58**	.61**	1			
8. Phobia	54**	.57**	.54**	.38**	.61**	.61**	.53**	1		
9. Parnoid	51**	.55**	.65**	.36**	.59**	.59**	.61**	.63**	1	
10. Psycho	58**	.59**	.57**	.30**	.61**	.60**	.59**	.75**	.65**	1

Table 51. Correlation Analysis Result between Mental Well-Being and Psychopathology Symptoms for Switzerland

\*\* p < .01; \* p < .05; N = 614; Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	9. Prbfcs	10. Wishfl	11. Detach	12. Socsup	13. Focpos	14. Selfblm	15. Tensred	16. Kpself
1. A_sat	.69**	52**	45**	.13	.30**	.19**	.27**	16*
2. A_frus	63**	.65**	.59**	08	36**	21**	43**	.13
3. C_sat	.49**	44**	35**	.12	.23**	.04	.34**	21**
4. C_frus	54**	.55**	.41**	11	30**	.03	40**	.24**
5. R_sat	.20**	.03	.02	.50**	.17*	.20**	.05	42**
6. R_frus	24**	.14*	.17*	38**	18**	16*	21**	.44**
7. Sat_tot	.55**	36**	30**	.31**	.28**	.17*	.26**	32**
8. Frus_tot	59**	.56**	.48**	22**	35**	14	42**	.31**

Table 52. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Ways of Coping for Switzerland

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 49-50. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Table 53. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Psychopathology Symptoms for Switzerland

Variables	9. Somati	10. Ocd	11. Intsens	12. Depprs	13. Anxty	14. Hostil	15. Phobia	16. Parnoid	17. Psycho
1. A_sat	56**	66**	34**	39**	55**	55**	41**	45**	43**
2. A_frus	.50**	.61**	.25**	.58**	.57**	.69**	.50**	.65**	.54**
3. C_sat	54**	67**	41**	50**	52**	45**	36**	43**	42**
4. C_frus	.61**	.75**	.49**	.66**	.61**	.54**	.49**	.58**	.51**
5. R_sat	41**	32**	64**	25**	34**	16*	21**	12	18*
6. R_frus	.42**	.47**	.67**	.35**	.42**	.25**	.36**	.40**	.36**
7. Sat_tot	61**	65**	57**	45**	56**	46**	39**	39**	41**
8. Frus_tot	.62**	.74**	.55**	.65**	.65**	.61**	.55**	.67**	.57**

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 49-51. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	10. Prbfcs	11. Wishfl	12. Detach	13. Socsup	14. Focpos	15. Selfblm	16. Tensred	17. Kpself
1. Somati	41**	.50**	.42**	08	18*	01	20**	.23**
2. Ocd	50**	.58**	.36**	08	24**	05	38**	.23**
3. Intsens	11	.05	02	52**	22**	09	12	.58**
4. Depprs	33**	.51**	.29**	10	31**	.10	30**	.25**
5. Anxty	40**	.52**	.38**	08	28**	.01	27**	.19**
6. Hostil	54**	.59**	.47**	.09	19**	11	29**	.03
7. Phobia	34**	.44**	.41**	.01	17*	.00	15*	.18*
8. Parnoid	40**	.51**	.47**	01	15*	02	37**	.20**
9. Psycho	35**	.50**	.51**	.01	15*	.05	21**	.15*

Table 54. Correlation Analysis Result between Psychopathology Symptoms and Ways of Coping for Switzerland

\*\*p < .01; \*p < .05; N = 614; Note. Intra-scale correlations are given in Table 50-51. Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism, Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. A_sat	.70**	1							
3. A_frus	58**	69**	1						
4. C_sat	.77**	.75**	62**	1					
5. C_frus	68**	66**	.72**	74**	1				
6. R_sat	.69**	.70**	56**	.78**	65**	1			
7. R_frus	68**	62**	.60**	72**	.74**	76**	1		
8. Sat_tot	.79**	.91**	69**	.93**	75**	.90**	76**	1	
9. Frus_tot	73**	74**	.88**	78**	.92**	73**	.87**	82**	1

Table 55. Correlation Analysis Result between Mental Well-Being and Basic Psychological Need Satisfaction and Frustration for Brazil

 $\overline{** p < .01}; * p < .05; N = 614; A_sat = Autonomy Satisfaction, A_frus = Autonomy frustration, C_sat = Competence Satisfaction, C_frus = Competence Frustration, R_sat = Relatedness Satisfaction, R_frus = Relatedness Frustration, Sat_tot = Satisfaction Total, Frus_tot = Frustration Total$ 

Table 56. Corre	lation Ana	alysis Res	uit betwee	en Menta	і well-ве	ing and w	ays of Co	ping for I	Brazil
Variables	1	2	3	4	5	6	7	8	9
1. WellBeing	1								
2. Prbfcs	.60**	1							
3. Wishfl	20**	05	1						
4. Detach	22**	.12	.17*	1					
5. Socsup	.55**	.65**	.27**	.01	1				
6. Focpos	.69**	.82**	08	.08	.70**	1			
7. Selfblm	.12	.32**	.42**	.21**	.48**	.32**	1		
8. Tensred	.18*	.31**	.32**	.00	.46**	.34**	.42**	1	
9. Kpself	57**	35**	.39**	.42**	36**	50**	00	11	1

Table 56. Correlation Analysis Result between Mental Well-Being and Ways of Coping for Brazil

\*\* p < .01; \* p < .05; N = 614; Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Variables	1	2	3	4	5	6	7	8	9	10
1. WellBeing	1									
2. Somati	66**	1								
3. Ocd	70**	.78**	1							
4. Intsens	77**	.71**	.80**	1						
5. Depprs	75**	.78**	.83**	.84**	1					
6. Anxty	78**	.84**	.77**	.79**	.81**	1				
7. Hostil	45**	.67**	.69**	.57**	.62**	.57**	1			
8. Phobia	64**	.70**	.72**	.66**	.73**	.78**	.45**	1		
9. Parnoid	74**	.61**	.66**	.73**	.64**	.74**	.40**	.59**	1	
10. Psycho	75**	.78**	.79**	.80**	.88**	.84**	.58**	.79**	.70**	1

Table 57. Correlation Analysis Result between Mental Well-Being and Psychopathology Symptoms for Brazil

\*\* p < .01; \* p < .05; N = 614; Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	9. Prbfcs	10. Wishfl	11. Detach	12. Socsup	13. Focpos	14. Selfblm	15. Tensred	16. Kpself
1. A_sat	.60**	32**	.02	.35**	.54**	.07	05	37**
2. A_frus	43**	.41**	.06	19**	34**	.01	02	.34**
3. C_sat	.44**	28**	17*	.38**	.48**	.12	.04	45**
4. C_frus	37**	.32**	.20**	29**	37**	.05	.00	.39**
5. R_sat	.40**	21**	23**	.36**	.42**	.15*	.06	43**
6. R_frus	35**	.25**	.25**	32**	40**	03	04	.44**
7. Sat_tot	.53**	30**	13	.40**	.53**	.12	.02	46**
8. Frus_tot	43**	.37**	.19**	30**	42**	.01	02	.44**

Table 58. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Ways of Coping for Brazil

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 55-56. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self

Variables	9. Somati	10. Ocd	11. Intsens	12. Depprs	13. Anxty	14. Hostil	15. Phobia	16. Parnoid	17. Psycho
1. A_sat	66**	66**	61**	63**	67**	61**	54**	60**	63**
2. A_frus	.65**	.75**	.62**	.67**	.67**	.70**	.54**	.50**	.66**
3. C_sat	65**	68**	73**	71**	70**	56**	56**	54**	64**
4. C_frus	.66**	.71**	.70**	.74**	.66**	.59**	.56**	.48**	.66**
5. R_sat	57**	57**	63**	63**	57**	47**	45**	47**	56**
6. R_frus	.62**	.68**	.74**	.76**	.63**	.52**	.54**	.52**	.68**
7. Sat_tot	69**	70**	72**	72**	70**	60**	57**	59**	67**
8. Frus_tot	.73**	.80**	.77**	.82**	.74**	.68**	.62**	.57**	.75**

Table 59. Correlation Analysis Result between Basic Psychological Need Satisfaction and Frustration and Psychopathology Symptoms for Brazil

\*\* p < .01; \* p < .05; N = 614; Note. Intra-scale correlations are given in Table 55-57. A\_sat = Autonomy Satisfaction, A\_frus = Autonomy frustration, C\_sat = Competence Satisfaction, C\_frus = Competence Frustration, R\_sat = Relatedness Satisfaction, R\_frus = Relatedness Frustration, Sat\_tot = Satisfaction Total, Frus\_tot = Frustration Total, Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism

Variables	10. Prbfcs	11. Wishfl	12. Detach	13. Socsup	14. Focpos	15. Selfblm	16. Tensred	17. Kpself
1. Somati	39**	.28**	.02	27**	41**	08	.02	.33**
2. Ocd	41**	.36**	.12	33**	41**	.02	.04	.44**
3. Intsens	44**	.23**	.19**	45**	51**	09	10	.42**
4. Depprs	38**	.29**	.21**	39**	45**	.02	05	.44**
5. Anxty	53**	.23**	.11	45**	54**	11	13	.44**
6. Hostil	31**	.39**	07	06	18*	.08	.24**	.16*
7. Phobia	35**	.23**	.04	39**	44**	05	10	.38**
8. Parnoid	59**	.14*	.12	55**	64**	18**	18**	.50**
9. Psycho	42**	.27**	.10	41**	52**	06	12	.43**

Table 60. Correlation Analysis Result between Psychopathology Symptoms and Ways of Coping for Brazil

\*\*p < .01; \*p < .05; N = 614; Note. Intra-scale correlations are given in Table 56-57. Somati = Somatization, Ocd = Obsession-Compulsion, Intsens = Interpersonal Sensitivity, Depprs = Depression, Anxty = Anxiety, Hostil = Hostility, Phobia = Phobic Anxiety, Parnoid = Paranoid Ideation, Psycho = Psychoticism, Prbfcs = Problem-focused coping, Wishfl = Wishful thinking, Detach = Detachment, Socsup = Seeking social support, Focpos = Focusing on the positive, Selfblm = Self blame, Tensred = Tension reduction, Kpself = Keep to self