



# JOURNAL of SOCIAL and HUMANITIES SCIENCES RESEARCH (JSHSR)

Uluslararası Sosyal ve Beşeri Bilimler Araştırma Dergisi

**Received/Makale Geliş** 15.07.2021  
**Published /Yayınlanma** 30.11.2021  
**Article Type/Makale Türü** Research Article

**Citation/Alıntı:** Slocum, K. (2021). Kadınlarda spesifik erken dönem uyumsuz şema boyutlarının psikosomatik belirtiler ile ilişkisi ve koşulsuz kendini kabulün bu ilişkideki aracı rolü. *Journal of Social and Humanities Sciences Research*, 8(76), 2677-2692.  
<http://dx.doi.org/10.26450/jshsr.2650>



**PhD Candidate Kadriye SLOCUM**

<https://orcid.org/0000-0001-7109-2756>

Fatih Sultan Mehmet Vakıf University and Istanbul Medeniyet University Joint Clinical Psychology Doctorate Program, Istanbul / TURKEY

## THE MEDIATION EFFECT OF UNCONDITIONAL SELF-ACCEPTANCE ON THE RELATIONSHIP BETWEEN SPECIFIC EARLY MALADAPTIVE SCHEMA DOMAINS AND PSYCHOSOMATIC SYMPTOMS IN A SAMPLE OF WOMEN

### KADINLARDA SPESİFİK ERKEN DÖNEM UYUMSUZ ŞEMA BOYUTLARININ PSİKOSOMATİK BELİRTİLER İLE İLİŞKİSİ VE KOŞULSUZ KENDİNİ KABULÜN BU İLİŞKİDEKİ ARACI ROLÜ

#### ABSTRACT

Psychosomatic symptoms are physical symptoms that are psychological in origin, more commonly seen in women, and inflicting 20% of patients worldwide irrespective of culture or system of healthcare. Their treatment depending on psychological methods more so than medical ones, the present study aimed to further research in this area by evaluating two psychological concepts that have been associated with psychosomatic symptoms: early maladaptive schemas (EMSs) and unconditional self-acceptance, via a mediation model with unconditional self-acceptance as the mediator variable. Unconditional self-acceptance being noted as a significant mediator in this model previously, findings of the present study could increase the generalizability of this model, as suggested by the authors of the study. At the same time, this will be the first study in which unconditional self-acceptance is investigated as a mediator in the relationship between specific EMS domains and psychosomatic symptoms. The study was conducted with 149 women (Mean age = 33.63 ± 11.25), who completed a sociodemographic questionnaire, Young Schema Questionnaire – Short Form 3, Unconditional Self-Acceptance Questionnaire and Brief Symptom Inventory via an online survey. As had been hypothesized, results demonstrated that from among all EMS domains, the domains of Disconnection and Rejection and Impaired Autonomy and Performance were the strongest predictors of psychosomatic symptoms. However, contrary to expectations of the present study, unconditional self-acceptance was not a mediator in this relationship. Reasons to why unconditional self-acceptance may not have been a mediator in the sample of the present study, in addition to the therapeutic implications of the findings in the treatment of psychosomatic symptoms are discussed. Future studies are necessary to understand the significance of unconditional self-acceptance in terms of EMSs and psychosomatic symptoms.

**Keywords:** Early maladaptive schemas, Unconditional self-acceptance, Psychosomatic symptoms, Women, Schema therapy.

#### ÖZET

Psikosomatik belirtiler psikolojik sebeplerden ortaya çıkan fiziksel belirtiler olup, kadınlarda daha sık görülmekte ve kültürden ve sağlık hizmetlerinden bağımsız olarak dünya çapında hastaların %20'sini etkilemektedir. Tedavileri tıbbi müdahalelerden ziyade psikolojik yöntemlere dayanmakta, ancak bu sahadaki çalışmalarda büyük eksiklik gözlenmektedir. Mevcut çalışmanın ana hedefi, bu sahaya katkı sağlama amacı ile psikosomatik belirtilerle ilişkisi saptanan erken dönem uyumsuz şemalar ve koşulsuz kendini kabulü, koşulsuz kendini kabulün aracı değişken olarak ele alındığı bir modelde incelemektir. Koşulsuz kendini kabul önceden bu modelde aracı değişken olarak saptandığından, ortaya çıkan bulguların bu modelin genellenebilirliğini arttırabileceği yazarların önerilerinden de yola çıkarak düşünülmektedir. Aynı zamanda, halihazırdaki çalışma spesifik erken dönem uyumsuz şema boyutları ile psikosomatik belirtiler arasındaki ilişki de, koşulsuz kendini kabulün aracı değişken olarak incelendiği ilk çalışma olacaktır. Çalışma online hazırlanan bir anket üzerinden yürütülmüş olup, örnekleme 149 kadın (Yaş ortalaması = 33.63 ± 11.25) katılmıştır. Veriler Sosyodemografik Veri Formu, Young Şema Ölçeği – Kısa Form 3, Koşulsuz Kendini Kabul Ölçeği ve Kısa Semptom Envanteri kullanılarak toplanmıştır. Hipotezlerle uyumlu

Issue/Sayı: 76

Volume/Cilt: 8

jshsr.org

ISSN: 2459-1149

olarak, psikosomatik belirtileri en güçlü yordayıcıların erken dönem uyumsuz şema boyutlarından Kopukluk ve Reddedilmişlik ile Zedelenmiş Otonomi boyutlarının olduğu saptanmıştır. Fakat öngörülenlerin aksine, koşulsuz kendini kabul bu ilişkide aracı değişken olarak ortaya çıkmamıştır. Elde edilen sonuçlar çalışmanın örnekleme çerçevesinde tartışılmış ve psikosomatik belirtilerin tedavisi açısından önemi ele alınmıştır. Koşulsuz kendini kabulün, erken dönem uyumsuz şemalar ve psikosomatik belirtiler açısından anlam ve önemi için bu sahada daha çok çalışma yapılması gerektiği düşünülmektedir.

**Anahtar Kelimeler:** Erken dönem uyumsuz şemalar, Koşulsuz kendini kabul, Psikosomatik belirtiler, Kadın, Şema terapi.

## 1. INTRODUCTION

Psychosomatic symptoms are debilitating health problems that have serious costs on individuals and society (Leonidou, Panayiotou, Bati & Karekla, 2016). According to a collaborative study conducted by the World Health Organization, which included the primary care settings of fifteen cities for the purpose of quantifying the frequency of psychosomatic symptoms, results demonstrated that though the most severe forms of psychosomatic symptoms were rare, the milder forms were not, with psychosomatic symptoms inflicting 20% of patients worldwide, irrespective of culture or system of healthcare (O'Sullivan, 2015). Similarly, psychosomatic symptoms are the most frequent symptoms for which general practitioners are consulted, as many as one third of the people who go to see their general practitioner (O'Sullivan, 2015). Psychosomatic symptoms are also a major cause of most leave days from work or school, making it a leading contributor to losses in economic productivity (Piko, Barabas & Boda, 1997). For instance, in 2005, a study conducted in Boston discovered that individuals with psychosomatic symptoms cost the healthcare system twice as much as those who do not develop such symptoms, which results in an annual cost of approximately \$256 billion in the United States, a whopping contrast to the \$132 billion costs of diabetes in 2002 (O'Sullivan, 2015). High healthcare costs are primarily due to frequent healthcare visits (Barsky, Orav & Bates, 2005; Burton, 2003; Grabe, Baumeister, John, Freyberger & Völzke, 2009; Kroenke, 2003; Shaw & Creed, 1991; So, 2008) and yet, medical interventions offer little comfort (Leonidou et al., 2016) since psychosomatic symptoms are unable to be explained through medical tests or physical examination (Smulevich et al., 1999).

With a growing body of research supporting the deficiencies of the field of medicine in treating psychosomatic symptoms, in combination with an increasing prevalence of the condition globally, the field of psychosomatic medicine has underlined the necessity for a biopsychosocial consideration of patient care in psychosomatic illnesses that encompass: “(1) the role of psychosocial factors in affecting individual vulnerability to all types of diseases, (2) the interaction between psychosocial and biological factors in the course and outcome of disease, (3) the application of psychological therapies to the prevention, treatment and rehabilitation of [these illnesses]” (Fava & Sonino, 2000, pp.186). In other words, the biopsychosocial model “recognizes that the course of an organic illness is often modified by the patient’s emotional environment [and that in terms of psychosomatic symptoms] such correlations are important to recognize in order to understand the pathogenesis as well as appropriately manage [this health problem]” (Brill, Patel & MacDonald, 2001, pp.602). Consequently, studies seeking to further understand psychosomatic symptoms from a psychological perspective, in an attempt to improve psychological interventions available for this health problem represent an important research endeavor. Prior studies have found that a number of psychosocial factors modulate an individual’s vulnerability to developing an illness, including the development of psychosomatic symptoms. Recent life events, early life events, personality, chronic stress and allostatic load, psychological well-being, and health attitudes and behavior are among these factors (Fava & Sonino, 2000). When considering psychosomatic symptoms, however, most present studies have delved deeper into the factors of early life events and psychological well-being.

In terms of early life events, studies have discovered that repetitive painful relational experiences with significant figures in childhood and/or adolescence bring about early maladaptive schemas (EMSs) in individuals and that these EMSs make individuals psychologically vulnerable to a wide range of psychological conditions, including psychosomatic symptoms (Arpacı, 2019; Poursharifi et al., 2011; Láng, 2015). In lieu of these findings, there have been a number of studies that have looked into the relationship between EMSs and psychosomatic symptoms (Davoodi et al., 2018; Henker et al., 2019; Manavipour & Miri, 2017). As for the studies regarding the factor of psychological well-being, concepts such as unconditional self-acceptance, self-compassion, mindfulness, and cognitive fusion have been studied as possible mediators in the relationship between EMSs and psychosomatic symptoms. In contrast to the number of studies investigating the relationship between EMSs and psychosomatic symptoms, however, studies that have investigated psychosomatic symptoms within more complex

models that incorporate concepts related to both early life events and psychological well-being have been minimal. In fact, it seems that only two studies have studied such models, both of which have been conducted with Portuguese samples, one consisting of students (Faustino et al., 2020) and the other consisting of a clinical sample (Faustino & Vasco, 2019).

The present study will be investigating the mediation effect of unconditional self-acceptance on the relationship between EMSs and psychosomatic symptoms, and it is significant due to several reasons. Firstly, it will further research on the insufficient empirical base of EMSs and unconditional self-acceptance in terms of psychosomatic symptoms (Davoodi et al., 2018; Faustino et al., 2020). Secondly, it will be investigating specific EMS domains along with a mediating variable in a non-clinical sample, while the previous study looking into specific EMS domains in combination with a mediating variable was conducted in a clinical sample (Faustino & Vasco, 2019). Thirdly, it will be investigating unconditional self-acceptance as a mediator in the relationship between EMSs and psychosomatic symptoms, with specific EMS domains, while the previous study had investigated it as a mediator with EMSs in general (Faustino et al., 2020). Finally, by conducting the study among a sample with similar cultural tendencies, the present study aims to decrease the “the need of the results [being] further validat[ed] through replication and consistency in fundamental research, case reports and outcome studies” (Faustino et al., 2020, pp.154). As a result, the generalizability of prior findings regarding the concepts of EMSs and unconditional self-acceptance in terms of psychosomatic symptoms will become clearer, with significant implications to “the treatment of the growing number of chronic psychosomatic patients with insufficient therapy results” (Henker, et al., 2019, pp.426).

### **1.1. Psychosomatic Symptoms**

Psychosomatic symptoms are defined as physical symptoms that are psychological in origin and are distressing or result in significant disruption of daily life (APA, 2013). Chronic fatigue, sleep disorders, back pain, chest pain, headache, and stress-related diarrhea are among such symptoms, with the potential of these symptoms surfacing and affecting any part of the body (APA, 2013). Studies also demonstrate that there is an excess of such symptoms, as well as psychological morbidity among women, specifically by mid-adolescence (Sweeting, West & Der, 2007), with research providing evidence to the effect that women report more psychosomatic symptoms than men (Jaradat et al., 2016). In addition to focusing on the prevalence, financial impacts, and gender distribution of psychosomatic symptoms (Vingerhoets & Heck, 2009), previous studies on psychosomatic symptoms have looked into the links between psychosomatic symptoms and components such as perceived mental stress (Hange et al., 2013), life satisfaction (Cao et al., 2011), and specific psychological conditions such as anxiety and depression (Hashiro & Okumura, 1997). These studies have demonstrated that higher levels of perceived mental stress and lower levels of life satisfaction are linked to psychosomatic symptom severity and that those suffering from psychosomatic symptoms are more likely to develop anxiety and depression.

### **1.2. Early Maladaptive Schemas**

Early maladaptive schemas (EMSs) are a component of Schema therapy, developed by Young and colleagues (Young & Brown, 1990) as an extension of Cognitive Behavioral Therapy (CBT), and are representative mental structures of beliefs, memories, emotions, and bodily sensations that operate on the deepest level of cognition, usually outside of awareness (Young, Klosko & Weishaar, 2003; Arpacı, 2019). Surfacing in childhood and evolving during one's lifetime (Calvete et al., 2018), EMSs are a reflection of early suffering, which is specified in the form of emotional maltreatment since studies consistently demonstrate that children with unmet core emotional needs in childhood, such as secure attachment to others, go on to develop EMSs. At the same time, a similar type of maltreatment can go on to bring about a wide variety of EMSs, since Young and colleagues found not only one, but eighteen EMSs, which they then categorized into five EMS domains. As presented in Table 1, these EMSs and related EMS domains are as follows: there are five EMSs in the EMS domain Disconnection and Rejection, four EMSs in the EMS domain Impaired Autonomy and Performance, two EMSs in the EMS domain Impaired Limits, three EMSs in the EMS domain Other-Directedness, and four EMSs in the EMS domain Overvigilance and Inhibition.

**Table 1.** Domain and schemas ((Young, Klosko & Weishaar, 2003, p.14-17).

Domain	Definition	Related EMSs
<b>Disconnection and Rejection</b>	“Cognitive patterns associated with difficulties forming secure, satisfying, and nurturing relationships with others. Perpetuates the perception that emotional needs will not be met by others”	Abandonment/Instability Mistrust/Abuse Emotional Deprivation Defectiveness/Shame Social Isolation/Alienation
<b>Impaired Autonomy and Performance</b>	“Cognitive patterns that diminish the perception of one’s ability to live independently and thrive”	Dependence/Incompetence Vulnerability to Harm or Illness Enmeshment/Undeveloped self Failure
<b>Impaired Limits</b>	“Cognitive patterns associated with diminished self-control and long-term goal orientation”	Entitlement/I Grandiosity Insufficient Self-Control/Self-Discipline
<b>Other-Directedness</b>	“Cognitive patterns overly focused on the needs of others at the cost of one’s own needs”	Subjugation Self-Sacrifice Approval Seeking/Recognition Seeking
<b>Overvigilance and Inhibition</b>	“Cognitive patterns associated with over-suppression of impulses and meeting rigid rules and expectations for self”	Emotional Inhibition Unrelenting Standards/Hypercriticalness Negativity/Pessimism Punitiveness

Just as EMSs are perpetuated by “maladaptive coping responses of surrender, avoidance, and overcompensation” (Rafaeli, Bernstein & Young, 2011, p.32), they also cause maladaptive ways of regulation of psychological needs which make them “a construct that may underlie a broad range of psychopathology” (Edwards & Wupperman, 2018, pp.3). Psychosomatic symptoms are among such psychopathologies, with Young and colleagues providing a wide range of explanations to psychosomatic symptoms within the framework of EMSs, in which they underline two domains as being specifically meaningful in terms of those suffering from psychosomatic symptoms: the EMS domain Disconnection and Rejection and the EMS domain Other-Directedness. In terms of the EMS domain Disconnection and Rejection, two EMSs are described as contributing to this EMS domain being significant, the EMS Emotional Deprivation and the EMS Defectiveness. In this regard, according to Young and colleagues, those who have the Emotional Deprivation EMS can have many psychosomatic symptoms as a result of their need for people to notice and care for them, although this is almost always outside of their awareness (Young, Klosko & Weishaar, 2003). As for the Defectiveness EMS, it involves the belief “that the exposure of any flaw is humiliating and will ultimately lead to rejection” (Young, Klosko & Weishaar, 2003, p.374), and consequently, it is stated that when those with this EMS fail to meet a standard, this leads them to collapse from grandiosity to inferiority and feel shame, which can then cause them to develop “depression or other Axis I symptoms such as anxiety and psychosomatic symptoms” (Young, Klosko & Weishaar, 2003, p.374). On the other hand, the two EMSs that make the EMS domain Other-Directedness significant in terms of psychosomatic symptoms are described as the Self-Sacrifice EMS and the Subjugation EMS. In terms of the Self-Sacrifice EMS, Young and colleagues state that there may be circumstances in which self-sacrifice becomes maladaptive, in which case it manifests itself in the buildup of anger and in one experiencing psychosomatic symptoms (Young, Klosko & Weishaar, 2003). Similarly, in the case of the Subjugation EMS, it is noted that upon experiencing invalidation of personal opinions and feelings one may once again experience a buildup of anger, which in this case can manifest itself in maladaptive symptoms “involving uncontrolled outbursts of temper, psychosomatic symptoms, and substance abuse” (Young, Klosko & Weishaar, 2003, p. 16).

In lieu of the emphasis on the significance of EMSs in terms of psychosomatic symptoms, present studies have also focused upon the schematic conceptualization of psychosomatic symptoms, with a growing body of literature supporting the association between EMSs and psychosomatic symptoms (Davoodi et al., 2018; Henker et al., 2019; Manavipour & Miri, 2017). One study investigating EMSs in patients with psychosomatic disorders in comparison to healthy controls and patients with depressive or anxiety disorder found that high psychosomatic symptom scores were associated with generally higher schema activation and that only the EMS of Vulnerability to Harm or Illness, which is part of the EMS domain Impaired Autonomy and Performance was exclusively related to somatization symptoms (Henker et al., 2019). Another study investigating EMSs in patients with psychosomatic disorders and Multiple Sclerosis (MS) in comparison to healthy subjects similarly found that that the average score of the EMS Vulnerability to Harm or Illness in patients with the psychosomatic disorder was higher than the healthy subjects and also found that the average score of the EMSs Emotional Deprivation, Dependence/Incompetence, and Failure, which are part of the EMS domains Disconnection and Rejection and Impaired Autonomy and Performance respectively, in patients with MS was higher than the healthy group (Manavipour & Miri, 2017). Finally, a third study investigated EMSs in individuals

with major depressive disorder and somatization disorder and found that after controlling for levels of current depression, the significant effects of the EMSs in those with major depressive disorder and somatization disorder remained for the EMS domain of Overvigilance and Inhibition and for the EMS Social Isolation/Alienation which is part of EMS domain Disconnection and Rejection (Davoodi et al., 2018). On the other hand, there have been studies that have investigated more specific aspects of psychosomatic symptoms in terms of EMSs. In this regard, for example, in addition to fatigue, pain is the other most common psychosomatic symptom among those suffering from psychosomatic symptoms (O'Sullivan, 2015) and there has been a study that provides an EMS explanation for the pain. According to this study, the EMS of Unrelenting Standards/Hypercriticalness which is part of the domain of Overvigilance and Inhibition, and the EMS of Self-Sacrifice which is part of the domain of Other-Directedness were found as having a stronger motivational effect on one's behaviors than the degree of one's perception of pain (Saariaho et al., 2015).

Considering these findings, it becomes evident that thus far there has not been a study that has found a relationship between the EMS domain Impaired Limits and psychosomatic symptoms. Furthermore, though all other four EMS domains have been linked to psychosomatic symptoms there seems to be more evidence specifically pinpointing the significance of the EMS domain Disconnection and Rejection. On the other hand, the EMS domains Impaired Autonomy and Performance, Overvigilance and Inhibition and Other-Directedness seem to be of similar significance. Yet, from among the studies that discovered these associations, only one was conducted with a non-clinical sample from a culture with collectivistic tendencies, Iran (Manavipour & Miri, 2017) and according to this study, the most significant EMS domain in terms of psychosomatic symptoms was the EMS domain Impaired Autonomy and Performance. Based on the sample of the present study, it is hypothesized that:

*H1. The EMS domain Disconnection and Rejection (H1a) and the EMS domain Impaired Autonomy and Performance (H1b) relate positively with psychosomatic symptoms.*

### **1.3. Unconditional Self-Acceptance**

Unconditional self-acceptance “means that the individual fully and unconditionally accepts herself whether or not [she] behaves intelligently, correctly, or competently and whether or not others approve, respect or love [her]” (Ellis, 1977, p.101). In other words, it is the “tendency to evaluate self-worth or ability to fully accept [herself], regardless of the outcome” (Chamberlain & Haaga, 2001, pp.178). As a result, those with high levels of unconditional self-acceptance are described as having the “ability to be in contact with internal private experience to process it, assimilate and accommodate it in self-knowledge” (Faustino et al., 2020, pp.147), which according to studies has been positively associated with mental health and higher levels of life satisfaction (Chamberlain & Haaga, 2001). Studies have also shown that unconditional self-acceptance is a significant predictor of depression, anxiety and low levels of life satisfaction (Popov, Biro & Radanović, 2016; Popov, 2019), with unconditional self-acceptance being negatively associated with anxiety, depression, symptomatology and low self-esteem (Chamberlain & Haaga, 2001). Similarly, the lack of unconditional self-acceptance is thought to bring about the non-acceptance and invalidation of emotional experiences, which can reinforce negative beliefs towards the emotional experience, not allowing an assignment of adaptive meaning to the experience, and hence promoting an increase in psychosomatic symptoms (Greenberg, 2015). Accordingly, the present study hypothesizes that:

*H2. Unconditional self-acceptance relates negatively to psychosomatic symptoms.*

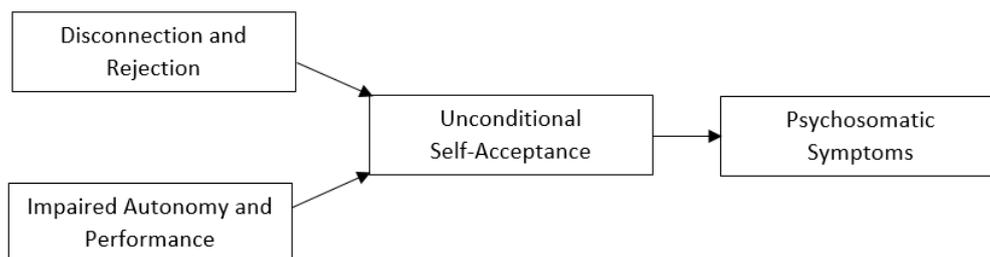
On the other hand, when evaluating unconditional self-acceptance in terms of EMSs, studies have found that EMSs are negatively associated with unconditional self-acceptance. After all, EMSs are associated with “a tendency for experiential avoidance of internal reality, self-rejection/shame and self-criticism which may impair the regulation of psychological needs” (Faustino et al. 2020, p.145) and in turn lower one's level of unconditional self-acceptance. Similarly, EMSs prevent natural modification through corrective emotional experiences, leading them to become enduring trait-like dispositions, which once again has been found to hamper one's unconditional self-acceptance (Rafaeli et al., 2011). Thus, it is hypothesized that:

*H3. The EMS domain Disconnection and Rejection (H3a) and the EMS domain Impaired Autonomy and Performance (H3b) relate negatively to unconditional self-acceptance.*

At the same time, according to these findings, prior studies have investigated unconditional self-acceptance as a possible mediator in the relationship between EMSs and psychosomatic symptoms. For

example, one study found that EMSs are associated with symptomatology, which included psychosomatic symptoms, and that mindfulness, unconditional self-acceptance, and self-compassion mediated the relationship between EMSs and symptomatology (Faustino et al., 2020). Similarly, another study investigated EMSs more closely, through including EMSs on a domain level and in the relationship between the EMS domains of Disconnection and Rejection, Impaired Autonomy and Performance, Impaired Limits, Other-Directedness and Overvigilance and Inhibition with symptomatology, with cognitive fusion as an expected mediator, the study found that the composite model of the EMS domains Impaired Autonomy and Performance and Other-Directedness with cognitive fusion as a mediator was significant, and accounted for 52% of the variance (Faustino & Vasco, 2019). As of yet, however, there has been no study that has investigated unconditional self-acceptance as a mediator in the relationship between specific EMS domains and psychosomatic symptoms, which is the aim of the present study (See Figure 1).

**Figure 1.** The theoretical model of the relationships among early maladaptive schemas, unconditional self-acceptance, and psychosomatic symptoms.



In addition, the previous study that explored unconditional self-acceptance as a mediator in terms of EMSs and symptomatology was conducted with a Portuguese sample and called for the need for replication in order for the further generalizability of the results (Faustino et al., 2020). Similar to the sample of this study, which was a non-clinical sample and predominantly women (86.8 % of the sample), the present study consists of a non-clinical sample and women. Considering the fact that psychosomatic symptoms are more common among women than men (Jaradet et al., 2016) emphasis on women in terms of psychosomatic symptoms is significant. Furthermore, based on the Hofstede, Hofstede and Minkov (2010) individualism-collectivism criteria Portugal is among the countries classified as collectivistic, with a score of 27, on an individualism scale from 0 (most collectivist) to 100 (most individualist) (Preda, 2012). Hence, in order to examine the applicability of the model for cultures with similar tendencies, the present study was conducted with a sample from Turkey. Turkey is among the list of cultures with collectivistic tendencies and has a score of 37 on the same scale of individualism (Basabe et al., 2002; Caffaro, Ferraris, & Schmidt, 2014; Diener, Diener & Diener, 1995). Even though this study will be the first to investigate unconditional self-acceptance as a mediator in the relationship between specific EMS domains and psychosomatic symptoms, since the prior study investigating unconditional self-acceptance as a mediator found that it was a mediator between EMSs in general and psychosomatic symptoms, this study similarly hypothesizes that:

*H4. Unconditional self-acceptance mediates the relationship between the EMS domain Disconnection and Rejection (H4a) and the EMS domain Impaired Autonomy and Performance (H4b) and psychosomatic symptoms.*

## 2. METHOD

### 2.1. Participants

Between April and May 2019, 149 women, ranging in age from 17 to 68 years (Mean age = 33.63 ± 11.25 years), participated in a single assessment using an online survey. As presented in Table 2, most participants were married (55.0%), had a university education (35.6%), had an average level of income (77.2%), were the first child in their family (38.9%), and were living with their families (81.2%). All participants were Turkish citizens.

**Table 2.** Descriptive statistics of the sample.

N		149
Age	M	33.63
	SD	11.25
Education	Elementary school	8 (5.3%)
	Diploma	17 (11.4%)
	Bachelors	53 (35.6%)
	Masters	27 (18.1%)
	PhD	44 (29.6%)
Marital Status	Single	58 (38.9%)
	Married	82 (55.0%)
	Divorced	7 (4.8%)
	Widow	2 (1.3%)
Level of Income	Low	21 (14.1%)
	Average	115 (77.2%)
	High	13 (8.7%)
Working or not	Working	57 (38.3%)
	Not Working	92 (61.7%)
Number of siblings	1	2 (1.3%)
	2	31 (20.9%)
	3	38 (25.5%)
	4	40 (26.8%)
	>5	38 (25.5%)
Number in line among siblings	1 <sup>st</sup>	58 (38.9%)
	2 <sup>nd</sup>	35 (23.5%)
	3 <sup>rd</sup>	22 (14.8%)
	4 <sup>th</sup> and above	34 (22.8%)
Current place of residence	With family	121 (81.2%)
	With relatives	5 (3.3%)
	With a friend	1 (0.6%)
	Alone	14 (9.3%)
	Dorms	8 (5.6%)

## 2.2. Data Collection Tools

All participants completed a total of four measures. One of these measures aimed at collecting some basic demographic details, while the other three represented the operational definitions of the three variables of the study. Accordingly, Young Schema Questionnaire – Short Form 3 (YSQ-3) was the operational definition of the predictor variable, EMS, Unconditional Self-Acceptance Questionnaire (USAQ) was the operational definition of the hypothesized mediator, unconditional self-acceptance, and Brief Symptom Inventory (BSI) was the operational definition of the outcome variable, psychosomatic symptoms.

## 2.3. Demographic Survey Questionnaire

Each participant completed a demographic survey questionnaire to identify possible factors that may be linked to experiencing psychosomatic symptoms, including their gender, age, education, economic status, marital status, the place in which they currently reside (i.e., with family, dormitory), and whether or not they experienced a traumatic life event (such as an assault) over the past year.

## 2.4. Young Schema Questionnaire – Short Form 3

The Young Schema Questionnaire – Short Form 3 (YSQ-3) is a self-report measure to assess EMSs (Young, 1994). The Turkish version of this questionnaire was used for this study, which similar to previous studies, was found to have acceptable levels of reliability and validity (Soygut, Karaosmanoglu, & Cakir, 2009). Consisting of 90 items, items are rated on a 6-point Likert-type scale (1= “Entirely untrue of me”, 6= “Describes me perfectly”), in which each item represents a certain EMS domain, with the order of the items being organized in a way that the total items of any one domain do not follow one another. The higher one’s total scores are on a certain EMS domain, the more relevant that EMS domain is said to be for that individual.

## 2.5. Unconditional Self-Acceptance Questionnaire

The Unconditional Self-Acceptance Questionnaire (USAQ) (Chamberlain, & Haaga, 2001), is a self-report measure for unconditional self-acceptance. Factor analysis, discriminant validity, internal reliability (Cronbach  $\alpha$  coefficient = .76), test-retest correlation ( $r = .62$ ), and item-total correlation (ranging between .40 – .72) were conducted for the Turkish adaptation of USAQ. Results demonstrated that the tool was valid and reliable for research in Turkey (Kapkiran, & Kapkiran, 2010). Hence, the Turkish version of USAQ was used for this study. Consisting of 19 statements, each statement is rated

on a 7-point Likert-type scale (1 = “almost always untrue”, 7 = “almost always true”), such that a total USAQ score ranges between 19 and 133 points. So far, there have been no systematic epidemiological studies using the USAQ, but “it seems that adult samples of either sex can be expected to average in about the mid-80s, with about two-thirds of respondents scoring between 70 – 100” (Falkenstein, & Haaga, 2013, pp.146).

## 2.6. Brief Symptom Inventory

The Brief Symptom Inventory (BSI) is a self-report measure that evaluates the following nine symptom dimensions: Somatization, Obsessive-Compulsive Disorder, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism (Derogatis, 1993). Each symptom dimension is evaluated through a certain set of items, with the evaluation of the nine symptom dimensions adding up to a total of 53 items. BSI was selected from among other psychosomatic symptom questionnaires since the validity and reliability studies for its Turkish version were completed and in addition, the internal consistency and concurrent validity results were found to be similar to those reported in previous studies (Sahin, & Durak, 1994). From among the nine symptom dimensions in the BSI, the Somatization dimension is what coincides with the psychosomatic symptom variable of this study. Consequently, only those items measuring Somatization were included in this study, which was items 2 (“Faintness or dizziness”), 5 (“Trouble remembering things”), 7 (“Pain in the heart or chest”), 8 (“Feeling afraid in open spaces”), 11 (“Poor appetite”), 23 (“Nausea or upset stomach”), 29 (“Trouble getting your breath”), 30 (“Hot or cold spells”) and 33 (“Numbness or tingling in parts of your body”) respectively. Respondents can rate each item on a 5-point Likert-type scale (0 = “Not at all”, 4 = “Extremely”), with rankings characterizing the intensity of distress during the past seven days.

## 2.7. Procedure

Data was collected through an online survey using the Google Forms server. Participants were recruited through postings on social media accounts. Inclusion criteria constituted being female and volunteering to participate in the study, while exclusion criteria constituted having experienced a traumatic life event (such as an assault) over the past year or having a medical illness (such as cancer or diabetes), or having a serious psychiatric or neurological disorder (such as difficulty reading and writing or poor cognitive abilities). Before the assessment, participants were informed of the purpose of the study, the voluntary nature of their participation, data storage, and security and were given the freedom to respond to all questions within their boundaries of comfort, with the option to leave the study at any point desired. Prior to implementation of the study ethical approval was obtained from the Ethical Review Committee of Fatih Sultan Mehmet Vakif University (Date of Approval = 15.04.2019, Document ID = 1943, Ethical Review Committee Meeting ID = 48135570-302.08.01).

## 2.8. Statistical Analyses

Statistical analyses were performed in IBM SPSS Statistics Version 23. Descriptive statistics were used to sample characterization. Normal distribution was assumed ( $N > 30$ ) and multicollinearity was analyzed and showed to be adequate for all analyses [ $VIF < 5$  (1.016 – 2.421);  $T < 2$  (.413 – .985)] (Pallant, 2007). To test the associations between the variables, Pearson product-moment correlation coefficient was used, while the regression coefficient was used to explore the predictive values. Finally, an SPSS macro PROCESS (Hayes, 2013) and the Sobel test (1982) were used to test the mediational model. For all analyses, p values of .05 were accepted as the values of significance.

## 3. RESULTS

The YSQ-3 dimensions displayed good internal consistencies with Cronbach  $\alpha$  coefficients ranging between .76 and .92. The Cronbach  $\alpha$  coefficient of the total scale was .96 and thereby displayed excellent reliability in the present sample. Similarly, USAQ and BSI indicated good consistencies. The Cronbach  $\alpha$  coefficient of USAQ was .78 and that of BSI was .79. Table 3 shows Pearson correlations between EMSs, unconditional self-acceptance and psychosomatic symptoms. All significant correlations ranged from medium (*Unconditional Self-Acceptance* with *Psychosomatic Symptoms*,  $r = -.32$ ,  $p < .01$ ), to strong (*Disconnection and Rejection EMS domain* with *Impaired Autonomy and Performance EMS Domain*,  $r = -.72$ ,  $p < .01$ ). As can be seen in Table 3, results confirmed that the EMS domain Disconnection and Rejection (H1a) and the EMS domain Impaired Autonomy and Performance (H1b) relates positively with psychosomatic symptoms as hypothesized in hypothesis 1, that unconditional self-acceptance relates negatively with psychosomatic symptoms as hypothesized in hypothesis 2, and that the EMS domain Disconnection and Rejection (H3a) and the EMS domain

Impaired Autonomy and Performance (H3b) relates negatively with unconditional self-acceptance as hypothesized in hypothesis 3.

**Table 3.** Descriptive statistics and reliabilities

Scale	Construct	M	SD	$\alpha$	1	2	3	4
YSQ-3	1.DR	53.66	21.21	.92	-	-	-	-
	2.IAP	40.42	15.52	.88	.72**	-	-	-
USAQ	3.US-A	77.46	14.80	.78	-.57**	-.51**	-	-
BSI	4. PSS	7.67	6.06	.79	.56**	.61**	-.32**	-

**Note:** The abbreviations are as follows: DR= Disconnection and Rejection; IAP= Impaired Autonomy and Performance, US-A= Unconditional Self-Acceptance; PSS= Psychosomatic symptoms. N=149, \*\*  $p < .01$ .

To test the predictive power of EMSs and unconditional self-acceptance on psychosomatic symptoms, a stepwise hierarchical regression analysis was used. The EMS domains of Disconnection and Rejection and Impaired Autonomy and Performance were the only two EMS domains that were significant and accounted for 40% of the variance ( $R^2 = .40$ ,  $F = 49.513$ ,  $p < .001$ , see Table 4). However, the hypothesized composite model of the EMS domain of Disconnection and Rejection, the EMS domain of Impaired Autonomy and Performance and unconditional self-acceptance predicting psychosomatic symptoms turned out to be insignificant, whereby when unconditional self-acceptance was added to the model the variables accounted for only 0.2% of the variance ( $R^2 = .00$ ,  $F = .485$ ,  $p = .487$ ).

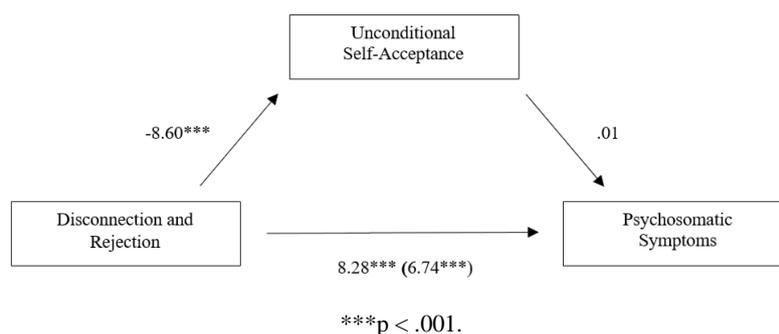
**Table 4.** Stepwise hierarchical regression analysis of the best predictive model with EMS domains as predictors of psychosomatic symptoms (N = 149).

	$\beta$	SE	95% CI	t	Sig.
Disconnection and Rejection	.254	.027	.020 – .125	2.714	.007**
Impaired Autonomy and Performance	.432	.036	.097 – .240	4.631	.000***

\*\*  $p < .01$ , \*\*\*  $p < .001$

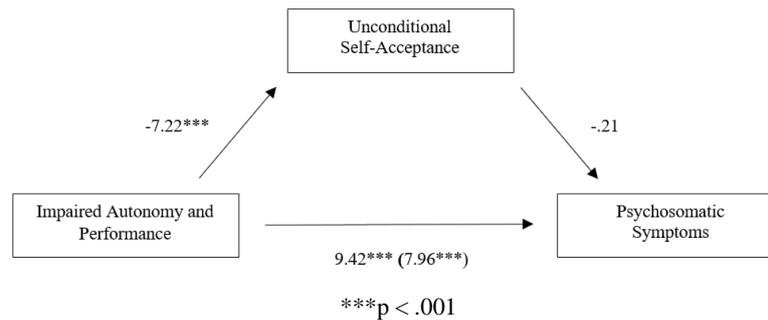
Sobel test was used to perform the mediational analyses. For the analysis of H4a, in which the EMS domain Disconnection and Rejection and unconditional self-acceptance together predict psychosomatic symptoms the model was statistically significant  $F(2, 146) = 34.1175$ ,  $p < .001$ ,  $R^2 = .3185$ , with the predictors accounting for approximately 31% of the variance. Yet, from among the predictors unconditional self-acceptance did not predict psychosomatic symptoms (path b):  $b = .0005$ ,  $t(146) = .0153$ ,  $p = .9878$ , while the EMS domain Disconnection and Rejection did predict psychosomatic symptoms (path c'):  $b = .1615$ ,  $t(146) = 6.7442$ ,  $p < .001$  (See Figure 2). This meant the rejection of H4a, and Sobel test results also confirmed this:  $Z = -.0294$ ,  $p = .976$ ,  $x^2 = .0137$ .

**Figure 2.** Standardized regression coefficients for the relationship between the EMS domain Disconnection and Rejection and psychosomatic symptoms as mediated by unconditional self-acceptance.



Finally, for the analysis of H4b in which the EMS domain Impaired Autonomy and Performance and unconditional self-acceptance together predict psychosomatic symptoms, the model was statistically significant  $F(2, 146) = 44.1468$ ,  $p < .001$ ,  $R^2 = .3769$ , with the predictors accounting for approximately 37% of the variance. Yet, from among the predictors unconditional self-acceptance did not predict psychosomatic symptoms (path b):  $b = -.0066$ ,  $t(146) = -.2106$ ,  $p = .8335$ , while the EMS domain Impaired Autonomy and Performance did predict psychosomatic symptoms (path c'):  $b = .2365$ ,  $t(146) = 7.9632$ ,  $p < .001$  (See Figure 3). This meant the rejection of H4b and Sobel test results also confirmed this:  $Z = .2256$ ,  $p = .8214$ ,  $x^2 = .0151$ .

**Figure 3.** Standardized regression coefficients for the relationship between the EMS domain Impaired Autonomy and Performance and psychosomatic symptoms as mediated by unconditional self-acceptance.



In sum, according to the results, the relationship between the EMS domain Disconnection and Rejection and psychosomatic symptoms, as well as the relationship between the EMS domain Impaired Autonomy and Performance and psychosomatic symptoms, was not mediated by unconditional self-acceptance (See Table 5).

**Table 5.** Mediation tests for unconditional self-acceptance

Effect Modeled	Model 1: X→Y		Model 2: X→M		Model 3: X,M→Y		
	c	Adjusted R <sup>2</sup>	a	Adjusted R <sup>2</sup>	c'	b	Adjusted R <sup>2</sup>
DR→US-A→PSS	-.1613***	.3185	-.4041***	.3352	.1615***	.0005	.3185
IAP→US-A→PSS	.2307***	.3767	-.4881***	.2619	.2365***	-.0066	.3769

*Note:* The abbreviations are as follows: DR= Disconnection and Rejection; US-A= Unconditional Self-Acceptance; PSS= Psychosomatic Symptoms; IAP= Impaired Autonomy and Performance; X= Predictor variable; Y= Outcome variable; M= Mediator variable. \*\*\* p < .001.

#### 4. DISCUSSION

The current study examined the effect of unconditional self-acceptance on the association between specific EMS domains and psychosomatic symptoms among a sample of women in Turkey via a mediation model, in which unconditional self-acceptance was the hypothesized mediator. It is noteworthy to report that unconditional self-acceptance was not low in the sample of the present study ( $M = 77.46$ ,  $SD = 14.80$ ). As had been mentioned, “adult samples of either sex [are] expected to average in about the mid-80s, with about two-thirds of respondents scoring between 70 – 100” (Falkenstein & Haaga, 2013, pp.146). This finding is in line with prior literature since previous studies have demonstrated that Turkish men and women have higher levels of unconditional self-acceptance compared to levels in other countries (Cenkseven & Akbas, 2007), and that Turkish women have higher levels of unconditional self-acceptance in comparison to Turkish men (Kuyumcu & Rohner, 2018). In addition, regarding the outcome variable, 96.7% of the sample reported having experienced at least one psychosomatic symptom, with “hot or cold spells” (55.7% of the sample) being the most frequently reported psychosomatic symptom.

Similar to previous findings the present study confirmed that the EMS domains Disconnection and Rejection and the EMS domain Impaired Autonomy and Performance relate positively with psychosomatic symptoms, that unconditional self-acceptance relates negatively with psychosomatic symptoms and that the EMS domain Disconnection and Rejection and the EMS domain Impaired Autonomy and Performance relates negatively with unconditional self-acceptance. These results have three important implications. Firstly, high levels of unconditional self-acceptance may be seen as a protective factor in terms of psychosomatic symptom severity, among women suffering from psychosomatic symptoms, which is a finding that is in line with prior literature. For instance, studies have found that there is a significant positive relationship between one’s level of unconditional self-acceptance and one’s ability to forgive oneself (Dixon, Earl, Lutz-Zois & Goodnight, 2014), and one’s rational beliefs (Davies, 2008). Moreover, unconditional self-acceptance has been linked to psychological well-being (Farber & Lane, 2001). Secondly, results demonstrate that unconditional self-acceptance must be taken into consideration in women who have the EMS domains Disconnection and Rejection and Impaired Autonomy and Performance, with the likelihood of psychotherapeutic techniques increasing levels of unconditional self-acceptance being of benefit. After all, the EMS

domain Disconnection and Rejection represents “the expectation that one’s needs for security, safety, stability, nurturance, empathy, sharing of feelings, acceptance, and respect will not be met in a predictable manner” (Young, Klosko & Weishaar, 2003, pp.14) while the EMS domain Impaired Autonomy and Performance includes “the expectations about oneself and the environment that interfere with one’s perceived ability to separate, survive, function independently, or perform successfully” (Young, Klosko & Weishaar, 2003, pp.14). Therefore, individuals with these EMS domains are not only left with their own skills to cope with psychological needs such as empathy and nurturance but are also left with the likelihood of their choices of skill not succeeding as their environment may interfere in them pursuing such choices, which may explain why methods developing levels of unconditional self-acceptance would be useful. Finally, since results confirmed that higher scores on the EMS domains Disconnection and Rejection (accounted for 31% of the variance) and Impaired Autonomy and Performance (accounted for 37% of the variance) coincide with higher psychosomatic symptom severity, women with psychosomatic symptoms may benefit from Schema therapy that focuses on the treatment of these EMS domains.

In terms of the EMS domain Disconnection and Rejection, as mentioned, it represents a lack of belief that one’s need for security, safety, stability, nurturance, empathy, sharing of feelings, acceptance, and respect will be met predictably, and accordingly its significance can be interpreted in terms of the human need for consistency. In this regard, in an attempt to prevent the adverse feelings EMSs produce, individuals tend to engage in interactions, circumstances, and inattentive decisions that stimulate and stabilize their EMSs, while at the same time preventing interactions that lead to EMS regeneration (Young, Klosko & Weishaar, 2003). Consequently, it is common for those who have adopted EMSs that are a part of the EMS domain Disconnection and Rejection, to choose environments that will not provide safety, since those bearing this domain, as noted, believe that this need will never be met by their surroundings (Estevez, Ozerinjauregi & Herrero-Fernández, 2016). In lieu of this fact, several studies, for example, have demonstrated that women who are victims of intimate partner violence have higher scores on EMSs in the EMS domain Disconnection and Rejection (Falihatdoost, Dolotshahi, Mohammadkhani & Nouri, 2013; Rahme, et al., 2020). Therefore, since this EMS domain has the potential of shattering the interpersonal realm of those who have endorsed EMSs within it, it can be expected that women who endorse this EMS domain will have an increased need to communicate with their surroundings in a nonverbal manner, such as through psychosomatic symptoms, as a means of coping with their everyday life. As for the domain Impaired Autonomy and Performance, since it involves the expectation that the environment will interfere with one’s perceived ability to separate, survive, function independently, or perform successfully, its connection with psychosomatic severity may be understood through the demands of collectivistic cultures. In this regard, since the needs of the group are emphasized more so than the needs of the individual in cultures with collectivistic tendencies, with distancing from the group being associated with higher levels of psychosocial load (Essau & Trommsdorff, 1996; Vingerhoets & Heck, 2009), these women may have become victims of psychosocial load. In turn, bearing the EMS domain Impaired Autonomy and Performance they may have been unable to separate, individuate, and find unique ways to cope with the psychosocial load they were experiencing, or go to seek help even if they did find ways to cope with it, which most likely increased the likelihood of this strain affecting their body physically, in this case in the form of developing psychosomatic symptoms. This will be in line with previous research that has demonstrated that psychosocial load is a lead contributor to psychosomatic symptoms (Essau & Trommsdorff, 1996), as well as with research on coping strategies, where it has been found that women tend to use more emotion-focused coping. Similar to the impacts of increased psychosocial load, studies on coping strategies demonstrate that emotion-focused coping is specifically preferred in collectivistic cultures, with women who use this strategy having higher scores on psychosomatic symptom checklists (Vingerhoets & Heck, 2009).

Contrary to previous findings in which unconditional self-acceptance mediated the relationship between EMSs in general and symptomatology (Faustino et al., 2020), however, unconditional self-acceptance did not have a mediation effect on the relationship between the EMS domain Disconnection and Rejection and the EMS domain Impaired Autonomy and Performance (non-confirmation of hypothesis 4) in the sample of the present study. Consequently, “the need of the results [being] further validat[ed] through replication and consistency in fundamental research, case reports and outcome studies” (Faustino et al., 2020, pp.154) was a beneficial recommendation for future research. After all, the results

of the present study demonstrate that unconditional self-acceptance may not be a mediating variable among women in all collectivistic cultures in which the relationships between EMSs, unconditional self-acceptance and psychosomatic symptoms are considered. One of the most significant reasons for unconditional self-acceptance not being a mediator in the sample of the present study may be related to the cultural norms towards gender roles in Turkey. In this regard, even though Turkey has been a secular state since the early 1920s with the adoption of the Parliamentary Democratic Government System patriarchal norms are still predominant in Turkey, in which “Turkey has a very traditional culture and patriarchal norm system, which put[s] additional constraints on women” (Aycan, 2004). In this regard, for example, in a study that investigated the desirable characteristics of future spouses, the most common response of male participants was that they did not want to marry a woman who had more schooling than them, and/or earned more money than them. It is noted that this attitude came from the old patriarchal values where women’s status is limited to the traditional gender roles (Atasoy, 2016). Consequently, women in this society may be having to work harder to gain respect within the society in comparison to men. In fact, this seems to also be obvious in one of the statements made by Atatürk, the founder of the modern Turkish Republic, in which he declared: “Our women must be even more enlightened, more virtuous, and more knowledgeable than our men!” (Aycan, 2004, pp.455). As a result, women who have developed unconditional self-acceptance within this society most likely did so after a great deal of effort. This in turn could ultimately make them protective of anything that may give the impression of them being weak in any sense of the term. Psychosomatic symptoms could have the potential of giving such an impression. Hence, even though EMSs were negatively associated with unconditional self-acceptance, in the case of the women in this population this relationship did not present itself in higher levels of psychosomatic symptoms as had been expected.

#### **4.1. Limitations and Future Directions**

It is important to note that this study has some significant limitations. First of all, data was collected from a rather small number of participants, based on convenience sampling and therefore lacks the potential of generalizability to women in general. Moreover, being a study with a cross-sectional design, causality needs to be interpreted cautiously when concluding the associations provided in this study. Finally, as data was collected through the method of self-report, data may have inflated the associations between the predictor variables and outcome variables (Schnurr & Green, 2004), reducing the reliability of the associations between these variables. Future studies are necessary to further understand the significance of unconditional self-acceptance in terms of EMSs and psychosomatic symptoms. Several lines of future research may be to evaluate the concepts examined in this study with samples that are larger, collect data from both men and women, consider variables other than unconditional self-acceptance as possible mediators in the relationship between EMSs and psychosomatic symptoms, and replicate studies in other cultural contexts, for further cross-cultural comparisons and generalizability of findings.

#### **4.2. Conclusion**

Psychosomatic symptoms inflicting 20% of patients worldwide, irrespective of culture or system of healthcare, with serious costs on the healthcare systems globally, and with its treatment depending more so on psychological treatment methods than medical ones, the present study aimed at investigating EMSs and unconditional self-acceptance as predictors of psychosomatic symptoms in order to provide possible psychological therapeutic implications for women suffering from psychosomatic symptoms. In doing so, it also aimed to decrease the insufficient empirical base of EMSs and unconditional self-acceptance in terms of psychosomatic symptoms, as well as increase the generalizability of prior findings regarding these concepts. Results demonstrated that unconditional self-acceptance may be seen as a protective factor in terms of psychosomatic symptom severity among women with psychosomatic symptoms and that an emphasis on the EMS domains Disconnection and Rejection and Impaired Autonomy and Performance via the use of Schema therapy may be of benefit in women suffering from psychosomatic symptoms, not only in terms of decreasing psychosomatic symptom severity but also in terms of increasing unconditional self-acceptance.

## REFERENCES

- AMERICAN PSYCHIATRIC ASSOCIATION [APA]. (2013). *American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders*, Arlington, VA, American Psychiatric Association.
- ARPACI, I. (2019). Relationships between Early Maladaptive Schemas and Smartphone Addiction: the Moderating Role of Mindfulness. *International Journal of Mental Health and Addiction*, 1 - 15.
- ATASOY, B. S. (2016). Female Labour Force Participation in Turkey: The Role of Traditionalism. *The European Journal of Development Research*, 29(4), 675–706.
- AYCAN, Z. (2004). Key Success Factors for Women in Management in Turkey. *Applied Psychology*, 53(3), 453–477.
- BARSKY, A. J., ORAV, E. J. & BATES, D. W. (2005). Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. *Archives of General Psychiatry*, 62(8), 903–910.
- BASABE, N., PAEZ, D., VALENCIA, J., GONZALEZ, J. L., RIMÉ, B. & DIENER, E. (2002). Cultural dimensions, socio-economic development, climate, and emotional hedonic level. *Cognition and Emotion*, 16, 103–125.
- BRILL, S. R., PATEL, D. R. & MACDONALD, E. (2001). Psychosomatic disorders in pediatrics. *The Indian Journal of Pediatrics*, 68(7), 597–603.
- BURTON, C. (2003). Beyond somatization: A review of understanding and treatment of medically unexplained physical symptoms (MUPS). *British Journal of General Practice*, 53(488), 231–239.
- CAFFARO, F., FERRARIS, F. & SCHMIDT, S. (2014). Gender Differences in the Perception of Honour Killing in Individualist versus Collectivistic Cultures: Comparison between Italy and Turkey. *Sex Roles*, 71, 296–318.
- CALEVETE, E., GÁMEZ-GUADÍX, M., FERNÁNDEZ-GONZALEZ, L., ORUE, I. & BORRAJO, E. (2018). Maladaptive schemas as mediators of the relationship between previous victimizations in the family and dating violence victimization in adolescents. *Child abuse & neglect*, 81, 161-169.
- CAO, H., SUN, Y., WAN, Y., HAO, J. & TAO, F. (2011). Problematic internet use in Chinese adolescents and its relation to psychosomatic symptoms and life satisfaction. *BMC Public Health*, 11, 802.
- CENKSEVEN, F. & AKBAS, T. (2007). Examining the Predictors of Subjective and Psychological Well-Being of University Students. *Turk Psikolojik Danisma ve Rehberlik Dergisi*, 3(27), 43-65.
- CHAMBERLAIN, J. M. & HAAGA, D. A. F. (2001). Unconditional self-acceptance and responses to negative feedback. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 19(3), 177-189.
- DAVIES, M. F. (2008). Irrational beliefs and unconditional self-acceptance. III. The relative importance of different types of irrational beliefs. *Journal of Rational-Emotive and Cognitive Behavior Therapy*, 26(2), 102.
- DAVOODI, E., WEN, A., DOBSON, K. S., NOORBALA, A. A., MOHAMMADI, A. & FARAHMAND, Z. (2018). Early Maladaptive Schemas in Depression and Somatization Disorder, *Journal of Affective Disorders*, 1(253), 82-89.
- DEROGATIS, L. R. (1993). *BSI: Administration, scoring, and procedures manual for the brief symptom inventory (4th ed.)*. Minneapolis, MN: National Computer Systems.
- DIENER, E., DIENER, M. & DIENER, C. (1995). Factors predicting the subjective well-being of nations. *Journal of Personality and Social Psychology*, 69, 851–864.
- DIXON, L. J., EARL, K. A., LUTZ-ZOIS, C. J. & GOODNIGHT, J. A. (2014). Explaining the link between perfectionism and self-forgiveness: The mediating role of unconditional self-acceptance and rumination. *Individual Differences Research*, 12(3), 101-111.
- EDWARDS, E. & WUPPERMAN, P. (2018). Research on emotional schemas: A review of findings and challenges. *Clinical Psychologist*, 23, 3-14.

- ELLIS, A. (1977). Psychotherapy and the value of a human being. In A. Ellis & R. Grieger (Eds.), *Handbook of Rational Emotive Therapy* (pp. 99-112). New York, NY: Springer.
- ESSAU, C. A. & TROMMSDORFF, G. (1996). Coping with university-related problems: A cross-cultural comparison. *Journal of Cross-Cultural Psychology*, 27, 315-328.
- ESTÉVEZ, A., OZERINJAUREGI, N. & HERRERO-FERNÁNDEZ, D. (2016). Maladaptive schemas as mediators in the relationship between child sexual abuse and displaced aggression. *Journal of Child Sexual Abuse*, 25(4), 449-465.
- FALAHATDOOST, M., DOLATSHAHI, B., MOHAMMADKHANI, P. & NOURI, M. (2013). Identifying the role of early maladaptive schemas in a variety of domestic violence against women with the experience of violence. *Practice in Clinical Psychology*, 1(4), 219-225.
- FALKENSTEIN, M. J. & HAAGA, D. A. F. (2013). Measuring and characterizing unconditional self-acceptance. In M. E. Bernard (Ed.), *The strength of self-acceptance theory, practice, and research* (pp.139-151). New York: Springer.
- FARBER, B. A. & LANE, J. S. (2001). Positive regard. *Psychotherapy, Theory, Research, Practice, Training*. 38(4), 390-395.
- FAUSTINO, B. & VASCO, A. B. (2019). Early maladaptive schemas and cognitive fusion on the regulation of psychological needs. *Journal of Contemporary Psychotherapy: On the Cutting Edge of Modern Developments in Psychotherapy*, 50(2), 105-112.
- FAUSTINO, B., VASCO, A. B., SILVA, A. N. & MARQUES, T. (2020). Relationships between Emotional Schemas, Mindfulness, Self-Compassion and Unconditional Self-Acceptance on the Regulation of Psychological Needs. *Research in psychotherapy (Milano)*, 23(2), 442.
- FAVA, G. A. & SONINO, N. (2000) Psychosomatic medicine: emerging trends and perspectives. *Psychotherapy and Psychosomatic*, 69(4), 184-97.
- GRABE, H. J., BAUMEISTER, S. E., JOHN, U., FREYBERGER, H. J. & VÖLZKE, H. (2009). Association of mental distress with healthcare utilization and costs: A 5-year observation in general population. *Social Psychiatry and Psychiatric Epidemiology*, 44(10), 835–844.
- GREENBERG, L. S. (2015). *Emotion-focused therapy: Coaching clients to work through their feelings* (Second ed.). Washington, DC: American Psychological Association.
- HANGE, D., MEHLIG, K., LISSNER, L., GUO, X., BENGTSSON, C., SKOOG, I. & BJÖRKEKELUND, C. (2013). Perceived mental stress in women associated with psychosomatic symptoms, but not mortality: Observations from the population study of women in Gothenburg, Sweden. *International Journal of General Medicine*, 6, 307-315.
- HASHIRO, M. & OKUMURA, M. (1997). Anxiety, depression, and psychosomatic symptoms in patients with atopic dermatitis: Comparison with normal controls and among groups of different degrees of severity. *Journal of Dermatological Science*, 14(1), 63-67.
- HAYES, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- HENKER, J., KELLER, A., REISS, N., SIEPMANN, M., CROY, I. & WEIDNER, K. (2019). Early maladaptive schemas in patients with somatoform disorders and somatization. *Clinical Psychology and Psychotherapy*. 26(4), 418-429.
- HOFSTEDE, G., HOFSTEDE, G. J. & MINKOV, M. (2010). *Cultures and organizations: Software of the mind* (Third ed.). New York: McGraw-Hill.
- JARADAT, Y., NIJEM, K., LIEN, L., STIGUM, H., BJERTNESS, E. & BAST-PETTERSEN, R. (2016). Psychosomatic symptoms and stressful working conditions among Palestinian nurses: a cross-sectional study. *Contemporary nurse*, 52(4), 381–397.
- KAPKIRAN, N. & KAPKIRAN, S. (2010). Koşulsuz kendini kabul ölçeği: Üniversite öğrencileri için geçerliliği ve güvenilirliği. *Kriz Dergisi*, 18(1), 33-44.

- KROENKE, K. (2003). Patients presenting with somatic complaints: Epidemiology, psychiatric comorbidity and management. *International Journal of Methods in Psychiatric Research*, 12(1), 34–43.
- KUYUMCU, B. & ROHNER, R. P. (2018). The relation between remembered parental acceptance in childhood and self-acceptance among young Turkish adults. *International Journal of Psychology*, 53(2), 126-132.
- LÁNG, A. (2015). Machiavellianism and early maladaptive schemas in adolescents. *Personality and Individual Differences*, 87(12), 162–165.
- LEONIDOU, C., PANAYIOTOU, G., BATI, A. & KAREKLA, M. (2016). Coping with psychosomatic symptoms: The buffering role of psychological flexibility and impact on quality of life. *Journal of Health Psychology*, 24(2), 175-187.
- MANAVIPOUR, D. & MIRI L. S. (2017). Early Maladaptive Schemas in Patients with Psychosomatic Disorder and Multiple Sclerosis. *The Neuroscience Journal of Shefaye Khatam*, 5(1), 40-47.
- O’SULLIVAN, S. (2015). *Is it All in Your Head? True Stories of Imaginary Illness*. Chatto & Windus, London.
- Pallant, J. (2007). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (Version 15)*. Berkshire: Open University Press, McGraw Hill Education.
- PIKO, B. F., BARABAS, K. & BODA, K. (1997). Frequency of common psychosomatic symptoms and its influence on self-perceived health in a Hungarian student population. *European Journal of Public Health*, 7(3), 243-247.
- POPOV, S., BIRO, M. & RADANOVIĆ, J. (2016). Unconditional self-acceptance and mental health in ego-provoking experimental context. *Suvremena psihologija*, 19(1), 71–80.
- POPOV, S. (2019). When is Unconditional Self-Acceptance a Better Predictor of Mental Health than Self-Esteem? *Journal of Rational-Emotive Cognitive-Behavior Therapy*, 37, 251–261.
- PREDA, O. (2012). Hofstede’s Dimensions in Portugal. *Romanian Economic Business Review*, 7(4), 62-69.
- POURSHARIFI, H., BIDADIAN, M., BAHRAMIZADEH, H. & SALEHINEZHAD, M. (2011). The Relationship between Early Maladaptive Schemas and Aspects of Identity in Obesity. *Procedia - Social and Behavioral Sciences*, 30(2), 517-523.
- RAFAELI, E., BERNSTEIN, D. P. & YOUNG, J. (2011). *The CBT distinctive features series. Schema therapy: Distinctive features*. New York: Routledge/Taylor & Francis Group.
- SAARIAHO, A. S., SAARIAHO, T. H., MATTILA, A. K., KARUKIVI, M. & JOUKAMAA, M. I. (2015). Alexithymia and early maladaptive schemas in chronic pain patients. *Scandinavian Journal of Psychology*, 56(4), 428-437.
- SHAW, J. & CREED, F. (1991). The cost of somatization. *Journal of Psychosomatic Research*, 35(2–3), 307–312.
- SO, J. K. (2008). Somatization as cultural idiom of distress: Rethinking mind and body in a multicultural society. *Counselling Psychology Quarterly*, 21(2), 167–174.
- RAHME, C., HADDAD, C., AKEL, M., KHOURY, C., OBEID, H., HALLIT, S. & OBEID, S. (2020). Correlation between early maladaptive schemas and violence against women among a representative sample from a Lebanese population: Results of a cross-sectional study. 10.21203/rs.2.21667/v1.
- SAHIN, N. H. & DURAK, A. (1994). Kısa Semptom Envanteri (Brief Symptom Inventory-BSI): Türk Gençleri için Uyarlanması [A study of the Brief Symptom Inventory in Turkish Youth]. *Türk Psikoloji Dergisi*, 9(31), 44–56.
- SCHNURR, P. P. & GREEN, B. L. (2004). Understanding relationships among trauma, post-traumatic stress disorder, and health outcomes. *Advances in Mind-Body Medicine*, 20(1), 18–29.

- SMULEVICH, A. B., SYRKIN, A. L., KOZYREV, V. N., DROVIZHEV, M. Iu., IBANOV, S. V., ZELENINA, E. V., KRAEVA, I. K., . . . DOBROVOL'SKII, A. V. (1999). Psychosomatic disorders (clinical picture, epidemiology, therapy, and models of health services). *Zhurnal Nevrologii Psikiatrii Imeni S. S. Korsakova*, 99(4), 4-16.
- SOBEL, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology*, 1982 (pp.290-312). San Francisco: Jossey-Bass.
- SOYGUT, G., KARAOSMANOGLU, A & CAKIR, Z. (2009). Assessment of Early Maladaptive Schemas: A Psychometric Study of the Turkish Young Schema Questionnaire-Short Form-3. *Turkish Journal of Psychiatry*, 20(1), 75-84.
- SWEETING, H. N., WEST, P. B. & DER, G. J. (2007). Explanations for female excess psychosomatic symptoms in adolescence: evidence from a school-based cohort in the west of Scotland. *BMC Public Health*, 7, 298.
- VINGERHOETS, A. J. J. M. & HECK, G. L. (2009). Gender, coping, and psychosomatic symptoms. *Psychological Medicine*, 20(1), 125-135.
- YOUNG, J. E. & BROWN, G. (1990). *Young schema questionnaire*. New York: Cognitive Therapy Center of New York.
- YOUNG, J. E. (1994). Young Şema Ölçeği – Kısa Form. *Unpublished manuscript*.
- YOUNG, J. E., KLOSKO, J. S. & WEISHAAR, M. E. (2003). *Schema therapy: A practitioner's guide*. New York: Guilford Press.