THE INVESTIGATION OF THE MEDIATING ROLE OF IMPOSTOR PHENOMENON IN THE RELATIONSHIP BETWEEN MALADAPTIVE PERFECTIONISM AND DEPRESSION AMONG TURKISH RESIDENTS

ELİF ELVAN CEBECİOĞLU

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Name and Surname Of The Student : Elif Elvan Cebecioğlu

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This thesis has been approved by the Institute of Social Sciences which has fulfilled the necessary conditions as Master thesis.

Assoc. Dr. Burak KÜNTAY

Institute Director

I certify that this thesis has fulfilled the necessary requirements as Master thesis.

Program Coordinator

This thesis was read by us, quality and content as a Master's thesis has been seen and accepted as sufficient.

	Title/Name	Signature
Thesis Advisor's	Dr. Öğr. Üyesi Hale Özel Balaban	
Member's	Dr. Öğr. Üyesi Burak Dağ Yol	
Member's	Dr. Öğr. Üyesi. B. Türkçeler Aka	

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Signature:

ABSTRACT

THE INVESTIGATION OF THE MEDIATING ROLE OF IMPOSTOR PPHENOMENON IN THE RELATIONSHIP BETWEEN MALADAPTIVE PERFECTIONISM AND DEPRESSION AMONG TURKISH RESIDENTS

Cebecioğlu, Elif Elvan

M.A., Clinical Psychology

Supervisor: Assist. Prof. Hale Ögel Balaban

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The aim of the current study was to investigate the mediating role of impostor phenomenon in the relationship between maladaptive perfectionism (discrepancy) and depression among residents. Another aim was to investigate whether the relationships between discrepancy, impostor phenomenon and depression differed based on gender. The sample composed of 213 residents (120 female, 93 male). Participants' age ranged between 24 and 42 (M = 27.59, SD = 2.60). Participants were from various fields of medical specialties such as internal medicine, public health, anesthesiology, pediatrics etc. All participants filled out the following forms: Demographic Information Form, Almost Perfect Scale Revised - Discrepancy Subscale, Impostorism Scale and Beck Depression Inventory. Pearson correlation analyses were conducted between discrepancy, impostor phenomenon and depression scores and all variables were found to be significantly and positively correlated.

The regression analyses revealed that impostor phenomenon was a partial mediator in the relationship between discrepancy and depression. No significant gender difference in discrepancy, impostor phenomenon or depression scores was found. These findings suggested that residents with discrepancy, regardless of their gender, are likely to experience impostor phenomenon which thereby partially increases their probability of having depression. They also implied that preventions and interventions focusing on reducing discrepancy and impostor phenomenon can be conducted in order to increase the psychological well-being of residents.

Keywords: Impostor phenomenon, maladaptive perfectionism, depression, residents

ÖZ

UYUMSUZ MÜKEMMELİYETÇİLİK VE DEPRESYON ARASINDAKİ İLİŞKİDE SAHTEKÂRLIK FENOMENİNİN ARACI ROLÜNÜN ASİSTAN DOKTORLARDA ARAŞTIRILMASI

Cebecioğlu, Elif Elvan

Yüksek Lisans, Klinik Psikoloji

Tez Yöneticisi: Dr. Öğr. Üyesi Hale Ögel Balaban

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Bu araştırmanın amacı asistan doktorlarda uyumsuz mükemmeliyetçilik (uyuşmazlık) ve depresyon arasındaki ilişkide sahtekârlık fenomeninin aracı rolünü incelemektir. Bir diğer amacı ise uyuşmazlık, sahtekârlık fenomeni ve depresyon arasındaki ilişkilerin cinsiyete göre farklılık gösterip göstermediğini araştırmaktır. Bu araştırmanın örneklemi 120 kadın ve 93 erkek olmak üzere toplam 213 asistan doktordan oluşmaktadır. Katılımcıların yaşı 24 ile 42 arasındadır (*Ort.* = 27.59, *S* = 2.60). Katılan asistan doktorlar, dâhiliye, halk sağlığı, anestezi ve pediyatri vb. gibi tıbbın farklı uzmanlık dallarında görev yapmaktadır. Bütün katılımcılar Demografik Bilgi Formu, Neredeyse Mükemmel Ölçeği – Uyuşmazlık Alt Ölçeği, Sahtekârlık Ölçeği ve Beck Depresyon Envanteri'ni cevaplamıştır. Uyuşmazlık, sahtekarlık fenomeni ve depresyon değişkenleri arasında Pearson korelasyon analizleri yapılmıştır ve bu değişkenlerin anlamlı ve olumlu bir şekilde ilişkili olduğu bulunmuştur. Regresyon analizleri,

sahtekârlık fenomeninin uyuşmazlık ve depresyon arasındaki ilişkide kısmi aracı rolü olduğunu göstermiştir. Uyuşmazlık, sahtekârlık fenomeni ve depresyon düzeylerinde cinsiyet açısından anlamlı bir fark bulunmamıştır. Bu bulgular, uyuşmazlık yaşayan asistan doktorların, cinsiyet farkı gözetmeksizin, sahtekârlık fenomenini deneyimlemeye yatkın olduklarını ve böylelikle depresyon ihtimallerinin kısmen yükseldiğini göstermektedir. Ayrıca, uyuşmazlık ve sahtekârlık fenomenini azaltmaya yönelik önlemlerin ve müdahalelerin asistan doktorların psikolojik iyiliğinin yükseltilmesinde yararlı olabileceğine işaret etmektedir.

Anahtar kelimeler: Sahtekârlık fenomeni, uyumsuz mükemmeliyetçilik, depresyon, asistan doktorlar

To my family…

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CHAPTER 1

INTRODUCTION

The current study aimed to investigate the mediator role of impostor phenomenon in the relationship between maladaptive perfectionism (discrepancy) and depression among Turkish residents. Another aim of this study was to investigate whether the relationships between discrepancy, impostor phenomenon and depression differed based on gender. This chapter provides information regarding the definition of the variables, the relationships between the variables, the aim, the hypotheses and the importance of the current study.

1.1. Definition of Perfectionism

Early in the literature, perfectionism was construed as a negative unidimensional construct associated with adverse effects. Hamachek (1978) was first to recognize perfectionism as comprising of two categories; neurotic and normal. Even though both neurotic and normal groups had high standards, normal perfectionists were satisfied when they met the high standards while neurotic perfectionists were not satisfied with and even critical of their performance. Later in the literature, perfectionism was conceptualized as a multidimensional construct with possible positive dimensions. According to Frost, Marten, Lahart and Rosenblate (1990) perfectionism included six facets; concern over mistakes, high

personal standards, perception of high parental expectation and high parental criticism, doubts about actions and preference for order and organization. Hewitt and Flett (1991) broadened the multidimensional conceptualization of perfectionism as comprising personal and social components. Three dimensions of perfectionism were identified including self-oriented perfectionism, other-oriented perfectionism and socially prescribed perfectionism. Hill et al. (2004) described perfectionism by developing the Perfectionism Inventory which included two factors and eight dimensions. Particularly, they reported that ‘‘second-order exploratory and confirmatory analyses provide support for the 8-scale Perfectionism Inventory model (concern over mistakes, high standards for others, need for approval, organization, parental pressure, planfulness, rumination, and striving for excellence) as well as support for 2 composite Perfectionism Inventory factors labeled Conscientious Perfectionism and Self-Evaluative Perfectionism.’’ (Hill et al., 2004, p.80).

In an attempt to understand the perfectionism construct better, Slaney and Ashby (1996) conducted a qualitative study with 37 participants who were considered as perfectionists by themselves or close others. Interviews with these participants revealed three common characteristics of perfectionists; high personal standards, order and discrepancy between high standards and actual performance. These common characteristics were later developed into subscales of a measure of perfectionism; Almost Perfect Scale-Revised. High personal standards and order dimensions were identified as adaptive perfectionism whereas the discrepancy dimension was recognized as an indicator of maladaptive perfectionism (Slaney, Rice, Mobley, Trippi, & Ashby, 2001).

With multidimensional conceptualizations, it was recognized that perfectionism could also be positive. In their review, Stoeber and Otto (2006) distinguished between positive and

negative dimensions of perfectionism and indicated that positive perfectionistic strivings included high personal standards, self-oriented perfectionism, and conscientious perfectionism while negative perfectionistic concerns included concerns over mistakes, doubts about actions, socially prescribed perfectionism and perceived discrepancy between high standards and actual performance. It was concluded that ‘‘the dimension of perfectionistic strivings to be related to higher levels of conscientiousness, extraversion, endurance, positive affect, satisfaction with life, active coping styles, and achievement, and to lower levels of external control and suicidal ideation.’’ (Stoeber & Otto, 2006, p.312).

1.2. The Relationship between Maladaptive Perfectionism and Depression

Various studies found that maladaptive perfectionism dimensions (concerns over mistakes, doubts about actions, socially prescribed perfectionism and perceived discrepancy between high standards and actual performance) were associated with psychopathology, especially depression. As the central stone of maladaptive perfectionism, discrepancy was shown to be an important antecedent of and a susceptibility factor for depression. It was reported that discrepancy scores significantly predicted later depression among undergraduates (Rice & Aldea, 2006). In a related study, Sherry, Mackinnon, Macneil and Fitzpatrick (2013) investigated the relationships between discrepancy, neuroticism and depressive symptoms among 127 undergraduates. Results revealed that depressive symptoms were significantly predicted by discrepancy even when neuroticism was controlled. Hewitt, Flett and Endler (1995) examined the relationships between perfectionism, coping and depression among 121 psychiatric patients. It was shown that socially prescribed perfectionism was related to maladaptive emotion-oriented coping and significantly correlated with depression. Rice and Mirzadeh (2000) investigated the differences between groups of perfectionists and the relation of perfectionism to depression, attachment and academic

integration in a sample of university students. Results indicated that adaptive perfectionists reported more secure attachment and better academic integration, whereas maladaptive perfectionists reported higher levels of depression. In a similar study, Rice, Ashby and Slaney (1998) found that discrepancy was positively correlated with depression and negatively correlated with self-esteem among 464 university students. Supporting these previous findings, a recent study by Wang and Zhang (2017) examined the role of adaptive and maladaptive perfectionism (discrepancy, socially prescribed perfectionism) in depression among 236 Chinese undergraduates. The results suggested that adaptive perfectionism was related to positive mental health characteristics such as positive affect, self-esteem and general self-efficacy after maladaptive perfectionism was controlled. Moreover, it was reported that discrepancy and socially prescribed perfectionism significantly predicted depression.

1.2.1. The Relationship between Maladaptive Perfectionism and Depression among Medical Students and Professionals

Even though perfectionism and depression link was mostly studied among university students, some studies focused on a more susceptible population; medical students and professionals (Crăciun & Dudău, 2014; Craiovan, 2014; Seeliger & Harendza, 2017). Physicians and medical students are especially prone to have perfectionism as the society tends to expect perfection from them (Loxterkamp, 2013). Whether being perfect is good or not for the physicians' well-being, the patients' best interest and for the whole healthcare system had been a topic of research (Wallace, Lemaire, & Ghali, 2009). According to Kelly (2015), perfectionism in orthopedic surgeons could be related with negative characteristics such as less energy and self-care, restrained relationships, procrastination, fear of failure, lower happiness and satisfaction, and negative situations for their patients including referral

of average cases and deferral of challenging cases. Moreover, it was stated that perfectionistic surgeons often have cognitive distortions including ignoring the positive, all or nothing thinking, personalization and labeling.

A study conducted among a nationally representative sample of U.S. medical students indicated that significant levels of distress, depression and suicidal ideation were experienced by nearly one quarter of the participants (Compton, Carrera, & Frank, 2008). Another study showed that the depression and anxiety symptoms among 298 medical students were most strongly predicted by maladaptive perfectionism (Seeliger & Herandza, 2017). Furthermore, a study conducted among 32 physicians and 27 nurses revealed that perfectionism, perceived stress, burnout and psychopathological symptoms were significantly and positively associated (Craiovan, 2014). Craiovan (2014) discussed that the physicians and the nurses with high perfectionism could be more susceptible to perceive situations as more stressful. As they set unrealistically high standards, they may generate stressful situations and become more likely to have burnout and psychopathological disorders including depression.

1.3. Definition of the Impostor Phenomenon

Other than depression, perfectionism had also been found associated with impostor phenomenon (Dudău, 2014; Henning, Ey, & Shaw, 1998). The impostor phenomenon was described as "an internal experience of intellectual phoniness that those who feel fraudulence and worthlessness in spite of outstanding academic or professional accomplishments have" (Clance, 1985, as cited in Fujie, 2010, p.1). Clance and Imes (1978) were first who recognized the impostor phenomenon in their clinical practice with 150 high-achieving women. In Clance's following studies, it was claimed that despite their accomplishments, the women with impostor phenomenon had trouble in internalizing their success, attributed their

success to external or temporary reasons such as error, luck, charm or hard work instead of competence while attributed their failure to internal or stable factors such as lack of intelligence (Clance & O'Toole, 1987). Moreover, these women had fear of failure, difficulty in accepting positive feedback while readily accepting negative feedback as an indicator of their incompetence, dreaded evaluation of their competence and they were afraid that others will eventually find out that they are not as competent as they seem (Clance & O'Toole, 1987).

The development of the impostor phenomenon among women was thought to be associated with the female gender role-socialization in the society and the family (Clance, Dingman, Reviere & Stober, 1995). As the success and competency are more readily attributed to men, women tend to have lower expectancy of success (Deaux, 1976). Deaux (1976) posited that while an expected outcome is attributed to a stable cause, an unexpected outcome is attributed to a temporary cause. Within this attributional framework, when high-achieving women are less expectant of success, they are likely to attribute their success to external or temporary factors (Clance & Imes, 1978). Moreover, according to Clance (1985), once the impostor phenomenon was developed, it was maintained by the impostor cycle in which, when impostors are faced with an achievement-related tasks, they are likely to behave in one of the two ways; overprepare or procrastinate and then put excessive effort in the last minute. When the task is accomplished, they attribute their success to luck (excessive effort in the last minute) or hard work (overpreparation) rather than the true ability which perpetuates the impostor phenomenon.

1.3.1. Gender Difference in Impostor Phenomenon among Medical Students and Professionals

Even though the impostor phenomenon was first recognized as a construct predominantly observed among high-achieving women, evidence regarding the gender difference in impostor phenomenon was mixed. While there were studies indicating that women were more likely to experience impostor phenomenon compared to men (Cusack, Hughes, & Nuhu, 2013; McGregor, Gee, & Posey, 2008), other studies failed to find such a difference (Castro, Jones, & Mirsalimi, 2004; Cokley, McClain, & Enciso, 2013; Cozzarelli & Major, 1990; Leary, Patton, Orlando, & Funk, 2000). However, it is important to draw attention to the fact that the majority of the studies that found no gender difference in impostor phenomenon were conducted among undergraduates. Specifically, studies that were conducted among 213 graduate students (Castro et al., 2004), 240 ethnic minority undergraduates (Cokley et al., 2013), 137 undergraduates (Cozzarelli & Major, 1990) and 95 undergraduates (Leary et al., 2000) found no significant gender difference in impostor phenomenon scores. On the other hand, the studies that included medical students and professionals as participants found significant gender difference that more women reported higher impostor phenomenon scores compared to men (Henning et al., 1998; Legassie, Zibrowski, & Goldszmidt, 2008; Oriel, Plane, & Mundt, 2004; Prata & Gietzen, 2007; Villwock, Sobin, Koester, & Harris, 2016). For example, Villwock et al. (2016) examined the impostor phenomenon among 138 medical students. Results showed that significantly more female participants (49.4%) were repoted to experience impostor phenomenon compared to males (23.7%). Legassie et al. (2008) investigated the impostor phenomenon among 48 internal medicine residents. It was found that 52% of female participants and 31.8% of male participants, accounting for 43.8% of total participants were identified as impostors. Moreover, impostor phenomenon scores were significantly higher among female participants than male participants. Similarly, Prata and Gietzen (2007) assessed the prevalence of

impostor phenomenon among 83 physician assistant graduates and found that 39% of the participants had clinical levels of impostor phenomenon of whom 46% were female and 23% were male. Female participants had significantly higher impostor scores than males. Prata and Gietzen (2007) further asserted that impostor feelings significantly decreased after graduation. Considering this decrease with time, it was suggested that impostor phenomenon can be categorized into two groups including true and transient. True impostor phenomenon continues over time and is not diminished by repeated success or positive feedback whereas transient impostor phenomenon is temporary and decreases with time and experience of success.

In a recent review, Armstrong and Shulman (2019) drew attention to the impostor phenomenon in female physicians in the field of neurology. They discussed that even though female physicians were the majority in neurology, their compensation, promotion and publications fell behind male colleagues and that impostor phenomenon may play a role in this gender difference. They suggested that along with other barriers including family responsibilities, lack of same sex mentorship and cultural stereotypes, impostor phenomenon was also a barrier in female physicians' career development because they feel incompetent to pursue opportunities and likely to skip them.

1.4. The Relationships between Impostor Phenomenon, Maladaptive Perfectionism and Depression

Some studies investigated the relationships between impostor phenomenon, maladaptive perfectionism and depression. Dudău (2014) asserted that perfectionism and impostor phenomenon may coexist as both traits share common features such as perceived underperformance, setting high standards, being detail-oriented and fear of failure. In her research, Dudău (2014) reported that impostor phenomenon was significantly associated with

self-evaluative perfectionism (concern over mistakes, need for approval, rumination) among 129 undergraduate students. In a related study, Thompson, Foreman and Martin (2000) assessed impostor fears and perfectionistic concerns over mistakes with a between subjects design including the level of impostorism (high, low) and the frequency of mistakes in Stroop Colour – Word task (high, low) among 60 undergraduates. Participants with high impostor level showed greater anxiety, negative affect and concerns over mistakes and lower perceived success and control regarding their performance compared to participants with low impostor level. Moreover, Cusack et al. (2013) showed that there was a significant negative relationship between psychological well-being (measured by General Health Questionnaire) and impostor phenomenon whereas perfectionism (measured by Child and Adolescent Perfectionism Scale) was significantly and positively associated with impostor phenomenon among 506 university students.

1.4.1. The Relationships between Impostor Phenomenon, Maladaptive Perfectionism and Depression among Medical Sudents and Professionals

Some of the studies that assessed the relationships between impostor phenomenon, maladaptive perfectionism and depression were conducted among medical students and professionals. Oriel et al. (2004) investigated the prevalence of impostor phenomenon and its relationship with depression and anxiety among 185 family medicine residents. Results showed that 41% of female participants and 24% of male participants were found as impostors and impostor phenomenon was strongly associated with depression and anxiety. Henning et al. (1998) assessed the associations between impostor feelings, perfectionism and psychological distress among 477 medical, dental, nursing and pharmacy undergraduates. Results revealed that approximately 30% of the participants had clinical range of impostor feelings and significantly more female participants reported higher impostor scores than male participants. Moreover, perfectionism, impostor feelings and psychological distress were

found to be strongly associated among each group of students and psychological adjustment was better predicted by perfectionism and impostor feelings compared to related demographic variables. In a recent study, Hu, Chibnall and Slavin (2019) assessed maladaptive perfectionism, impostor phenomenon, depression, anxiety and negative emotions (shame, embarrassment, inadequacy) among 169 medical students. Results indicated that negative emotions were significantly higher among participants with maladaptive perfectionism and participants with impostor phenomenon, separately. Furthermore, higher depression and anxiety were more likely to be reported by participants with high negative emotions than participants without such negative emotions.

1.5. The Aim of Thesis

In the light of the studies mentioned above, it can be concluded that there were well established relationships between maladaptive perfectionism, impostor phenomenon and depression. Also, these relationships were commonly observed among medical professionals, especially residents. Nonetheless, to my knowledge, no studies specifically investigated the role of impostor phenomenon in the relationship between maladaptive perfectionism and depression among residents. The relationship between maladaptive perfectionism and depression might be partly due to the contribution of impostor phenomenon. Residents' setting high standards may drive doubts about their ability to meet these standards as well as fear that they will come across as frauds if they fail to meet these standards which in turn, exacerbates depression. In other words, the proposed mediation model suggests that maladaptive perfectionism defined as the discrepancy between high standards and the actual performance leads to impostor phenomenon including chronic doubts about ability and feelings of fraudulence despite of high achievements which thereby intensifies depression among residents (See Figure 1.). Therefore, the current study aimed to contribute to the literature of medical professionals by investigating the mediating role of impostor

phenomenon in the relationship between discrepancy and depression among Turkish residents. Another aim of this study was to investigate whether the relationships between discrepancy, impostor phenomenon and depression differed based on gender. As the impostor phenomenon was first recognized as a construct predominantly observed among successful women (Clance & Imes, 1978) and the subsequent literature reported a gender difference in impostor phenomenon among residents (Legassie et al., 2008; Prata & Gietzen, 2007), the relationships between discrepancy, impostor phenomenon and depression were expected to be stronger in female residents compared to male residents.

1.6. Hypotheses

1) Discrepancy would significantly predict depression among residents.

2) Discrepancy would significantly predict impostor phenomenon among residents.

3) Impostor phenomenon would significantly predict depression among residents.

4) Impostor phenomenon would mediate the relationship between discrepancy and depression among residents.

5) The relationships between discrepancy, impostor phenomenon and depression would be stronger among female residents compared to male residents.

1.7. The Importance of Thesis

Even though the impostor phenomenon had been investigated in the literature since it was first conceptualized by Clance and Imes in 1978, Turkish adaptation of the Impostorism Scale (Leary et al., 2000) was conducted by Akın, Yalnız, Akın, and Özçelik in 2015. To my knowledge, there are no other studies on impostor phenomenon in the Turkish literature.

Thus, the current study contributes to the Turkish literature on impostor phenomenon. Secondly, the impostor phenomenon was associated with adverse effects such as maladaptive perfectionism, low self-esteem, anxiety and depression (Cokley et al., 2018; McGregor et al., 2008) and it was commonly observed among medical professionals (Oriel et al., 2004). It is important to examine the impostor phenomenon, because it's presence in medical professionals may not only negatively affect their individual psychological well-being but also the quality of their health care delivery to their patients. Thirdly, because the individuals with high impostor feelings experience fear of failure as well as guilt about success, they may reject opportunities for advancement and become limited in reaching their full potential (Armstrong & Shulman, 2019; Clance & O'Toole, 1987). By understanding impostor phenomenon better, help can be delivered to those who suffer from it.

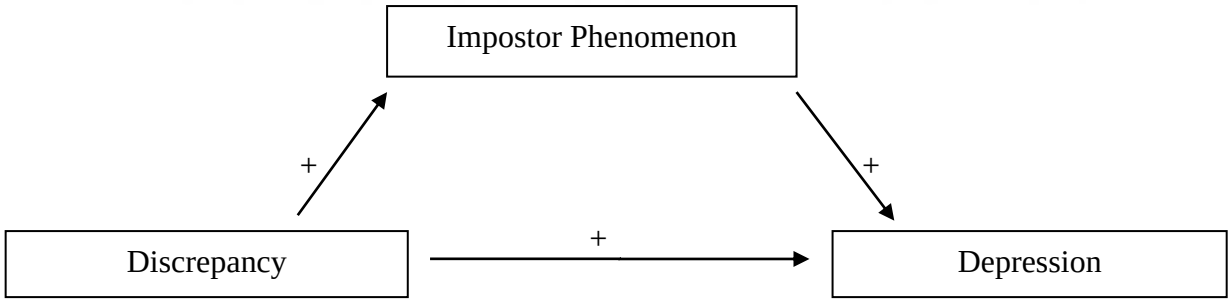


Figure 1. Mediation model of the impostor phenomenon in the relationship between discrepancy and depression

CHAPTER 2

METHOD

This chapter provides information regarding the characteristics of the participants, measurements and the procedure.

2.1. Participants

The sample of the current study was residents from various medical specialties and different hospitals around Turkey. Psychiatry and child and adolescent psychiatry residents were excluded due to their familiarity with the measurements of the current study. Residents with psychiatric diagnosis other than depression were also eliminated.

2.2. Demographics

Two hundred and forty eight residents participated in this study. One hundred and thirty six participants (55%) were female and 112 participants (45%) were male. Participants' age ranged between 23 and 43, with 230 participants (93%) were between 23 and 31 years old (M = 27.69, SD = 2.77). Information regarding the marital status, perceived income and seniority in residency is presented in Table 1. Two hundred and six participants (83%) were residents for the first time and 42 participants (17%) had been residents previously.

Participants were recruited from different hospitals around Turkey; 152 participants (61%) were in İstanbul, 19 participants (8%) were in Ankara, 12 participants (5%) were in Eskişehir and the remaining 26% were in Adana, Afyon, Antalya, Aydın, Balıkesir, Bolu, Bursa, Çanakkale, Düzce, Edirne, Elazığ, Gaziantep, Hatay, Isparta, İzmir, Kayseri, Kırıkkale, Kocaeli, Konya, Muğla, Sakarya, Samsun, Tekirdağ, Trabzon and Zonguldak. Participants were in different fields of residency; internal medicine (23%), public health (16%), anesthesiology and reanimation (10%), pediatrics (9%), orthopedics and traumatology (8%) and the remaining 34% were in various fields including emergency medicine, forensic medicine, family medicine, neurosurgery, etc.

Table 1.

Demographics of the Participants before Elimination

	N	Percentage (%)
Marital Status		
Single	166	66.9
Married	80	32.3
Divorced	2	.8
Perceived Income		
Very Good	5	2
Good	86	34.7
Moderate	135	54.4
Poor	19	7.7
Very Poor	3	1.2
Seniority		
First Year	117	47.2
Second Year	52	21
Third Year	37	14.9
Fourth Year	26	10.5
Fifth Year	16	6.5

The inclusion criteria were not met with 35 participants' data and they were eliminated due to various reasons; 7 participants were not residents, 1 participant was a psychiatry resident, 1 participant was a child and adolescent psychiatry resident, 3 participants' data were

repeated themselves, 23 participants were previously diagnosed with a psychiatric diagnosis other than depression. Among these 23 participants; 10 participants were diagnosed with anxiety disorder, 3 participants were diagnosed with attention deficit hyperactivity disorder, 2 participants were diagnosed with panic disorder, 2 participants were diagnosed with social phobia, 2 participants were diagnosed with obsessive compulsive disorder, 2 participants were diagnosed with obsessive compulsive personality disorder, 1 participant was diagnosed with trichotillomania and 1 participant was diagnosed with generalized anxiety disorder.

After eliminating 35 participants' data, analyses were conducted with 213 participants. Among the remaining participants, 120 participants (56%) were female and 93 participants (44%) were male. Participants' age ranged between 24 and 42 with 194 participants (91%) were between 24 and 30 years old (M = 27.59, SD = 2.60). Information regarding the marital status, perceived income and seniority in residency is presented in Table 2. One hundred seventy eight participants (84%) were residents for the first time and 35 participants (16%) had been residents previously.

Sixty three percent of the participants were in İstanbul, 8% were in Ankara, 5% were in Eskişehir and the remaining 24% were in Adana, Afyon, Antalya, Aydın, Balıkesir, Bolu, Bursa, Çanakkale, Edirne, Elazığ, Gaziantep, Isparta, İzmir, Kayseri, Kırıkkale, Kocaeli, Konya, Sakarya, Samsun, Tekirdağ, Trabzon and Zonguldak. Participants were in different fields of residency; internal medicine (22%), public health (17%), anesthesiology and reanimation (10%), pediatrics (9%), orthopedics and traumatology (8%) and the remaining 34% were in various fields including emergency medicine, forensic medicine, family medicine, neurosurgery, etc. 24 participants (11%) were previously diagnosed with depression and 189 participants (89%) had no psychiatric diagnoses.

Table 2.

Demographics of the Participants after Elimination

	N	Percentage (%)
Marital Status		
Single	142	66.7
Married	69	32.4
Divorced	2	.9
Perceived Income		
Very Good	2	.9
Good	74	34.7
Moderate	119	55.9
Poor	16	7.5
Very Poor	2	.9
Seniority		
First Year	98	46
Second Year	47	22.1
Third Year	34	16
Fourth Year	23	10.8
Fifth Year	11	5.2

2.3. Measurements

Demographic Information Form

The demographic information form tapped on information regarding age, gender, marital status, perceived income, medical specialty, year of the residency and previous psychiatric diagnosis (See Appendix A).

Almost Perfect Scale-Revised (APS-R)

Maladaptive perfectionism was measured by Turkish Almost Perfect Scale-Revised (APS-R) Discrepancy Subscale (See Appendix B). It is a self-report measure that was developed by Johnson and Slaney (1996) and later revised by Slaney et al. (2001). APS-R is a 7-point Likert-type scale with 1 indicating being strongly disagreed and 7 indicating being strongly agreed. ARS-R contains 23 items and three subscales; High Standards (7 items), Order (4 items) and Discrepancy (12 items). Factor analyses showed that goodness of fit

index was .92 and factor loadings ranged between .49 - .86. Cronbach's alpha for Discrepancy subscale was .92 (Slaney et al., 2001).

Psychometric properties of Turkish Almost Perfect Scale-Revised were investigated by Ulu, Tezer and Slaney (2012) among 383 undergraduate students. Confirmatory factor analyses confirmed the factor structure proposed by Slaney et al. (2001) with three subscales and 23 items. In Turkish APS-R, Cronbach's alpha for Discrepancy subscale was .87 (Ulu et al., 2012).

As the high personal standards and order dimensions were identified as adaptive perfectionism whereas the discrepancy was recognized as an indicator of maladaptive perfectionism (Slaney et al., 2001), Discrepancy subscale of the APS-R was used to measure maladaptive perfectionism. The possible scores for the Discrepancy subscale range between 12 and 84. In the current study, reliability analysis showed that the Cronbach's alpha for the Discrepancy subscale of the APS-R was .95.

Impostorism Scale (IP)

Impostor phenomenon was measured by Impostorism Scale developed by Leary et al. (2000). Leary et al. (2000) conducted three related studies in order to understand the main theoretical assumptions of the impostor phenomenon. In the first study, impostor phenomenon was measured by Impostor Phenomenon Scale (Harvey & Katz, 1985), Impostor Test (Clance, 1985) and Perceived Fraudulence Scale (Kolligan & Sternberg, 1991) among 238 undergraduate students. Psychometric properties and the construct validity of these three measures were investigated. Significant and high correlations were found between the three measures; the correlation between Impostor Test and Impostor Phenomenon Scale was .70,

the correlation between Impostor Test and Perceived Fraudulence Scale was .86, the correlation between Perceived Fraudulence Scale and Impostor Phenomenon Scale was .76. The Cronbach's alpha values were .90 for the Impostor Test, .72 for Impostor Phenomenon Scale and .88 for Perceived Fraudulence Scale (Leary et al., 2000). From these multidimensional measures, a unidimensional measure that reflected the core aspect of impostorism as feeling like an impostor or fraud was developed. The Impostorism Scale consists of 7 items and it is a 5-point Likert-type scale with 1 indicating not at all characteristic of me and 5 indicating extremely characteristic of me. Cronbach's alpha of the Impostorism Scale was .87 and it was correlated between .70 and .80 with the Impostor Test, the Impostor Phenomenon Scale and the Perceived Fraudulence Scale (Leary et al., 2000).

Turkish adaptation of the Impostorism Scale was conducted by Akın et al. (2015) among 300 undergraduates (See Appendix C). Confirmatory factor analysis supported the original factor structure that 7 items loaded on one factor. The possible scores for the Impostorism Scale range between 7 and 35. The Cronbach's alpha for the Turkish Impostorism Scale was .89. Researchers concluded that the Impostorism Scale was a valid and reliable measure (Akın et al., 2015). In the current study, reliability analysis showed that the Cronbach's alpha for Impostorism Scale was .93.

Beck Depression Inventory (BDI)

Depression was measured by the Beck Depression Inventory originally developed by Beck, Ward, Mendelson, Mock and Erbaugh (1961). Based on the clinical observations, 21 categories of symptoms and attitudes were identified in depressed patients and developed into an inventory measuring depression. Each category taps on a specific indicator of depression and consists of 4 self-report statements ranging in severity from 0 (neutral) to 3 (severe).

Trained interviewer administered the inventory to 226 patients individually. As an external criterion, participants were also interviewed by a psychiatrist and rated for the depth of depression. After 7 months, the study was replicated with 183 patients. Agreement between the psychiatrist's ratings of depth of depression was 97%. The individual category scores were found significantly correlated with the total score and the split-half reliability was .86. The validity of the inventory was supported by the high and significant correlation between the scores of the inventory and the depth of depression ratings. Moreover, the inventory was found sensitive to detect changes in depression in time and to differentiate the patients with different levels of depression (Beck et al., 1961). Later, Beck, Steer and Carbin (1988) reviewed the studies that investigated the psychometric properties of Beck Depression Inventory between the years 1961 and 1986. The internal reliability of Beck Depression Inventory was high for both psychiatric and non-psychiatric participants with a mean of .87 and test-retest reliability higher than .60. The concurrent validity of Beck Depression Inventory in relation with other well-established measures was also high.

Psychometric properties of Turkish Beck Depression Inventory were examined by Hisli (1989) among 259 undergraduate students (See Appendix D). The split-half reliability was .74 and the Cronbach's alpha was .80. Concurrent validity was investigated by using the depression subscale of Minnesota Multiphasic Personality Inventory (MMPI-D) and the correlation coefficient between the two measures was .50. Factor analyses were conducted in two steps. At the first step, analysis was conducted on all participants and 4 factors were found. Secondly, analysis was only conducted on the depressed participants and 7 factors were found. Results showed that the factor structure changed depending on the level of depression among the participants. The possible scores for the Beck Depression Inventory range between 0 and 63. Moreover, it was found that the cut-off point for clinical depression

was 17 (Hisli, 1989). In the current study, reliability analysis showed that the Cronbach's alpha for the Beck Depression Inventory was .92.

2.4. Procedure

Prior to the data collection, all participants provided with informed consent that included information about the study and the confidentiality (See Appendix E). All participants received the measurements in the following order; Demographic Information Form, Almost Perfect Scale-Revised Discrepancy Subscale, Impostorism Scale and Beck Depression Inventory. Participants received these measurements via online. The duration of the completion of the measurements was approximately 15 minutes.

CHAPTER 3

RESULTS

The analyses of the study were descriptive statistics, bivariate correlations, t-test and mediation analysis. Prior to the data analyses, scores from the discrepancy, impostorism and depression scales were examined through IBM SPSS Statistics 23.0 for accuracy of data entry and missing values, Data entry was accurate and no missing values were found.

3.1. Descriptive Statistics of Total Participants

Descriptive statistics of total participants showed that skewness and kurtosis values for each variable were within the acceptable range. Skewness and kurtosis values for discrepancy were .28 and -.88, for impostor phenomenon 1.24 and .93, for depression 1.15 and 1.49, respectively. As the normality was fairly achieved, no outliers were excluded from the data (See Table 3.).

Table 3.

Descriptive Statistics of Total Participants

	N	Min	Max	M	SD
Discrepancy	213	12.00	84.00	42.65	17.78
Impostorism	213	7.00	35.00	13.14	6.66
Depression	213	.00	48.00	12.89	9.41

3.2. Correlations between Discrepancy, Impostorism and Depression Scores among Total Participants

Pearson correlations between the variables were conducted (See Table 4.). Results showed that there was a significant correlation between impostorism and discrepancy $r(211) = .43$, $p = .000$. Impostorism was significantly correlated with depression $r(211) = .37$, $p = .000$. Discrepancy was significantly correlated with depression $r(211) = .63$, $p = .000$. As there were significant correlations between the variables, linearity was achieved.

Table 4.

Correlations between Discrepancy, Impostorism and Depression Scores among Total Participants

	1	2	3
1. Discrepancy	-	.43***	.63***
2. Impostorism		-	.37***
3. Depression			-

Notes. *p <.05, **p<.01, ***p<.001

3.3. Test of the Mediation Model among Total Participants

As the data was normally distributed and there were linear and moderate relationships between the variables, assumptions of the mediation analysis were met. In order to test the mediator role of impostor phenomenon in the relationship between discrepancy and depression, mediation analysis was conducted in three steps as suggested by Baron and Kenny (1986).

Regression analysis in step 1 showed that discrepancy significantly predicted depression $R^2 = .40$, adjusted $R^2 = .40$, $F(1,211) = 139.37$, $p = .000$. This result indicated that 40% of the variance in depression can be explained by discrepancy (See Table 5.).

Regression analysis in step 2 showed that discrepancy significantly predicted impostorism R^2 = .19, adjusted R^2 = .18, $F(1,211) = 48.77$, p = .000. This result indicated that 18% of the variance in impostorism can be explained by discrepancy (See Table 5.).

Regression analysis in step 3 showed that the discrepancy and impostorism significantly predicted depression R^2 = .41, adjusted R^2 = .40, $F(2,210) = 72.73$, p = .000. This result indicated that 40% of the variance in depression can be explained by the discrepancy and impostorism (See Table 5.). Because the regression coefficients in each step were significant, mediation could be established and tested (Baron & Kenny, 1986).

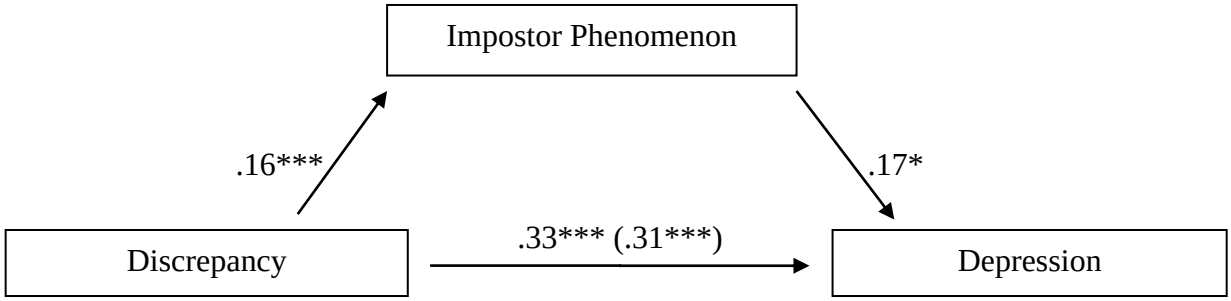
When the B value of discrepancy in step 1 was compared with the B value in step 3, there was a decrease from .33 to .31. This decrease suggests a mediational relationship. Sobel's test was conducted in order to see if there is a full or partial mediation. Sobel's test value was 1.94 which was below 1.96 indicating a partial mediation. The relationship between discrepancy and depression was partially mediated by impostorism (See Figure 2.).

Table 5.

Mediation Analysis among Total Participants

Steps	Variables	B	*B*	t	P
Step 1	Discrepancy	.33	.63	11.81	.000
Step 2	Discrepancy	.16	.43	6.98	.000
Step 3	Discrepancy	.31	.58	9.84	.000
	Impostorism	.17	.12	2.02	.045

Notes. Mediation analysis in step 1 (depression predicted by discrepancy), in step 2 (impostorism predicted by discrepancy) and in step 3 (depression predicted by discrepancy and impostorism) are presented.



Notes. The unstandardized regression coefficient between discrepancy and depression controlling for the impostor phenomenon is in parantheses.
*p <.05, **p<.01, ***p<.001

Figure 2. Mediation model among total participants with unstandardized regression coefficients for the relationship between discrepancy and depression mediated by impostor phenomenon

3.4. Test of the Gender Difference in Discrepancy, Impostorism and Depression Scores

In order to test whether male and female participants significantly differ on discrepancy, impostorism and depression scores, independent samples t-test was performed. Homogeneity of variance was satisfactory for impostorism $F(211) = 3.46$, $p = .06$ and depression $F(211) = .83$, $p = .36$; however, it was not satisfactory for discrepancy $F(211) = 10.50$, $p = .001$. Independent samples t-test results indicated that male participants did not significantly differ from female participants on discrepancy $t(211) = 1.85$, $p = .07$, impostorism $t(211) = 1.16$, $p = .25$ and depression scores $t(211) = .96$, $p = .34$. As the independent samples t-test revealed no gender difference, the hypothesis that the relationships between discrepancy, impostor phenomenon and depression would be stronger among female residents compared to male residents could not tested.

CHAPTER 4

DISCUSSION

The **c**urrent study aimed to investigate the mediating role of impostor phenomenon in the relationship between discrepancy and depression among Turkish residents. Another aim was to investigate whether the relationships between discrepancy, impostor phenomenon and depression differed based on gender.

The results of the current study indicated that there were significant and positive relationships between discrepancy, impostor phenomenon and depression. Discrepancy significantly predicted depression and impostor phenomenon, and impostor phenomenon significantly predicted depression. Moreover, the relationship between discrepancy and depression was partially mediated by impostor phenomenon. However, female participants did not significantly differ on discrepancy, impostor phenomenon or depression scores compared to male participants.

The findings that there were significant and positive relationships between discrepancy, impostor phenomenon and depression and that discrepancy significantly predicted depression and impostor phenomenon, and impostor phenomenon significantly predicted depression were in accordance with previous research that adopted discrepancy

subscale of APS-R as the measure of maladaptive perfectionism. Specifically, Cokley et al., (2018) reported that discrepancy was significantly and positively associated with impostor phenomenon. Moreover, nearly 51% of the variance in impostor phenomenon was explained by discrepancy and self-esteem among 468 undergraduates. Wang and Zhang (2017) found that discrepancy was a significant predictor of baseline depression among 206 Chinese undergraduates. Discrepancy was also examined in relation to depression across three time points among undergraduates by Rice and Aldea (2006). Positive and significant associations were found between discrepancy and depression both within a time point and across time points and discrepancy significantly predicted later depression. In a similar longitudinal study conducted among 127 undergraduates, Sherry et al. (2013) reported that discrepancy was a significant predictor of depression even after neuroticism was controlled. Along with the current findings, these studies supported the vulnerability model which implies that discrepancy increases susceptibility to depression (Rice & Aldea, 2006; Sherry et al., 2013). Concordantly, Craiovan (2014) discussed that the physicians and the nurses with high perfectionism, measured by the Perfectionism Inventory (Hill et al., 2004), could be more susceptible to perceive situations as more stressful. As they set unrealistically high standards, they may generate stressful situations and become more likely to have psychopathological disorders including depression.

Results of the two studies were in line with the current findings that there was a significant and positive relationship between impostor phenomenon and depression. Specifically, McGregor et al. (2008) assessed the relationship between impostor phenomenon and depression among 186 undergraduates based on the similarities in the cognitive processes of people who experience impostor phenomenon and people with depression such as self-doubt. It was shown that impostor phenomenon was significantly and positively associated

with depression. Similar findings were reported by Oriel et al., (2004) in their study with 185 family medicine residents that impostor phenomenon was significantly and positively related to depression.

Recently, a comprehensive study of maladaptive perfectionism and impostor phenomenon was conducted by Hu et al. (2019) among 169 medical students. Researchers explored the cognitive behavioral model in which discrepancy and impostor phenomenon were considered as dysfunctional thoughts that may lead to negative emotions (shame, embarrassment, inadequacy) and thereby possibly increase the likelihood of psychopathology (depression). Maladaptive perfectionism was operationalized as a score higher than 42 on high standards and discrepancy subscales of APS-R combined and high-intense level of impostor phenomenon was operationalized as a score higher than 61 on Clance Impostor Phenomenon Scale (CIPS). Results showed that greater negative emotions were significantly more likely to be reported by participants with maladaptive perfectionism and participants with high-intense levels of impostor phenomenon, separately. Moreover, moderate-severe levels of depression were significantly more likely to be reported by participants with high negative emotions compared to participants without such negative emotions.

In accordance with these previous findings, the significant and positive relationship patterns found in the current study suggest that both impostor phenomenon and discrepancy share a common ground in predicting depression. Similar to people who experience discrepancy between the high standards they set for themselves and their actual performance, people with impostor phenomenon experience a discrepancy between how highly others perceive their abilities and how poorly they perceive their own abilities. As distorted

perceptions seem to play a major role, cognitive behavioral approach suggested by Hu et al. (2019) could be useful in conceptualization of these traits in relation to depression.

The hypothesis that the impostor phenomenon would mediate the relationship between discrepancy and depression was partly supported. It was found that discrepancy was directly and indirectly (through impostor phenomenon) related to depression among residents. However, the influence of impostor phenomenon, as a partial mediator, in the relationship between discrepancy and depression was not found to be as strong as it was hypothesized. This finding implied that impostor phenomenon partially explained the potential for residents to have depression when they experience discrepancy between high standards and actual performance. Residents' setting high standards may drive doubts about their ability to meet these standards as well as fear that they will come across as frauds if they fail to meet these standards which in turn, partially exacerbates depression. In other words, experiencing discrepancy between high standards and actual performance may lead residents to experience impostor phenomenon including chronic doubts about ability and feelings of fraudulence which thereby partially intensifies depression. This finding that impostor phenomenon was a partial mediator rather than a full mediator, may be explained by the fact that residents were reluctant to report their impostor feelings whereas perfectionism, as a praised trait in the medical culture (Kelly, 2015; Seeliger & Harendza, 2017), could be easier to reveal.

Lastly, the hypothesis that the relationships between discrepancy, impostor phenomenon and depression would be stronger in female residents compared to male residents was not supported. It was found that discrepancy, impostor phenomenon and depression scores did not significantly differ based on gender. This finding implied that male residents experienced discrepancy, impostor phenomenon and depression as much as female

residents. This finding was unexpected as previous studies showed that female residents reported significantly higher impostor scores compared to male residents (Legassie et al., 2008; Oriel et al., 2004; Prata & Gietzen, 2007). However, in all three studies that found gender difference, impostor phenomenon was measured by Clance Impostor Scale. Moreover, the samples of these studies were somewhat restricted in terms of the specialty of medicine or the institution; 185 family medicine residents in Wisconsin (Oriel et al., 2004), 83 students and former graduates of the Pasific University School of Physician Assistant Studies (Prata & Gietzen, 2007) and 48 internal medicine residents in the Schulich School of Medicine (Legassie et al., 2008). Given that the measurement of the impostor phenomenon in the current study (Impostorism Scale) was different from these previous studies and the sample of the current study consisted of residents from diverse fields of specialties and different institutions around Turkey could be accounted for the current finding that there was no gender difference in impostor phenomenon. Moreover, in support of the current finding, a recent study conducted among 88 general surgeons and general surgery residents showed that there was no significant gender difference among participants with clinical levels of impostor phenomenon (Leach, Nygaard, Chipman, Brunsvold & Marek, 2018). However, the participants of this study comprised of 70% males who were all from general surgery specialty of two hospitals. Unequal sample size in terms of gender may have hindered the true nature of the results (Leach et al., 2018). Thus, gender difference in impostor phenomenon among residents continues to be a research topic with mixed evidence. Nevertheless, it is important to note that according to Clance & O'Toole (1987), even if men also experience impostor phenomenon, women are more restricted by it because while men are encouraged to have a job and take challenges, women are expected to nurture for their family.

In accordance with the current finding, three studies conducted among Turkish residents reported no gender difference in depression scores (Başpınar, Cihan & Kutlu, 2016; Demiral, Akvardar, Ergör & Ergör, 2006; Ünal, 2008). Specifically, Ünal (2008) investigated depression using the Beck Depression Inventory among 127 resıdents (48.8% male, 51.2% female). The results showed that female residents did not significantly differ from male residents on depression scores. Demiral et al. (2006) examined depression among 73 residents and 80 faculty members in a university hospital. It was found that even though the prevalence of depression was higher in female participants (33.3%) compared to male participants (20.8%), this difference was not statistically significant. In a similar study, Başpınar et al. (2016) assessed depression among 165 residents (39.4% female, 60.6% male). The results revealed that depression scores did not significantly differ based on gender, age, marital status, having children or BMI. These studies support the current finding that male residents were likely to experience depression as much as female residents.

4.1. Clinical Implications of the Findings

Residency training is a time with various physical, cognitive, emotional and social challenges as the residents are expected to keep in mind large amounts of information, work long hours with little or no sleep, have little time for recreation and self-care, deal with patients and patients' relatives and attend to orders requested by senior residents and professors (Aysan et al., 2008). Along with these challenges, current findings revealed that residents were also likely to experience inner difficulties such as discrepancy, impostor phenomenon and depression. Assessing discrepancy and impostor phenomenon is important in identifying residents who may be at risk for depression. Also, in the treatment of depressed residents, considering the possibility that they may also experience impostor phemomenon and/or discrepancy between their high standards and actual performance would be important.

As the discrepancy was found to increase susceptibility to depression, Rice and Aldea (2006) asserted that without attending to decrease of perfectionistic discrepancy, depressed individuals may fall back into depression. Preventions and interventions are needed to address these traits for residents' well-being. Henning et al. (1998) suggested that providing definition and open discussion about impostor phenomenon and maladaptive perfectionism in the residency orientation could be helpful. In order to reduce professional isolation, information about the prevalence of these traits among residents could be shared (Prata & Gietzen, 2007). Residents with impostor phenomenon may benefit from positive, frequent and specific feedback given by the faculty members with an emphasis on the behavior done well (Oriel et al., 2004). Mentoring programs that enable residents to share their personal and professional concerns are also recommended (Armstrong & Shulman, 2019; Seeliger & Harendza, 2017; Villwock et al., 2016). Moreover, within the cognitive behavioral framework, when the discrepancy and impostor phenomenon were conceptualized as dysfunctional thoughts, identifying and disputing these thoughts may be helpful in alleviating negative emotions (Hu et al., 2019). Thus, individual or group cognitive behavioral therapy could be implemented in residency programs.

4.2. Limitations of the Current Study and Suggestions for Future Studies

The facts that the sample size in terms of gender (120 females, 93 males) was similar and participation of residents from diverse specialties of medicine all around Turkey were the strengths of the current study. Yet, there were some limitations. Firstly, generalizability of the findings was restricted due to relatively small sample size and convenience sampling. Secondly, although some patterns of relationships were indicated, causal inferences could not be made as the design of the current study was correlational. Thirdly, even though the responses were anonymous and the measures were reliable and valid, results were based on self-report questionnaires and the social desirability bias may have played a role.

Adaptive perfectionism dimensions of APS-R (high standards, order) were not measured in the current study. Thus, the role adaptive perfectionism dimensions may play in relation to impostor phenomenon and depression was not investigated. In their extensive review, Stoeber and Otto (2006) showed that adaptive perfectionism dimensions (high standards, conscientious perfectionism, self-oriented perfectionism, perfectionistic strivings, order, organization) were associated with positive characteristics including higher extraversion, conscientiousness, endurance, self-esteem, subjective well-being, perceived ability and social support especially when maladaptive perfectionism dimensions (concern over mistakes, doubts about actions, socially prescribed perfectionism, discrepancy) were controlled. This review and other studies which indicated that adaptive perfectionism dimensions were associated with positive characteristics and unrelated or negatively related to adversities such as depression (Rice et al., 1998; Slaney et al., 2001; Wang & Zhang, 2017) suggest that adaptive perfectionism can play a protective role against depression. Hence, it is important that future studies measure adaptive dimensions of perfectionism.

In the literature, the impostor phenomenon was dominantly operationalized as the score from the Clance Impostor Phenomenon Scale (CIPS) with a cuf-off score to identify clinical level of impostor phenomenon whereas no cut-off score was delineated in the Impostorism Scale used in the current study. Due to this difference, the direct comparison of the current findings with the previous studies is not possible, even though the Impostorism Scale was highly correlated with CIPS. Thus, Turkish adaptation of the CIPS would be an important contribution to the literature on impostor phenomenon.

As a variable highly related to maladaptive perfectionism, impostor phenomenon and depression, future studies should investigate self-esteem. Preusser, Rice and Ashby (1994)

reported that the relationship between socially prescribed perfectionism and depression was mediated by self- esteem. Similarly, Cokley et al. (2018) showed that the relationship between discrepancy and impostor phenomenon was partially mediated by self-esteem.

4.3. Conclusion

The **c**urrent study investigated the mediating role of impostor phenomenon in the relationship between discrepancy and depression among Turkish residents. Whether the relationships between discrepancy, impostor phenomenon and depression differed based on gender was also investigated.

The results showed that there were significant and positive relationships between discrepancy, impostor phenomenon and depression. Discrepancy significantly predicted depression and impostor phenomenon, and impostor phenomenon significantly predicted depression. Moreover, the relationship between discrepancy and depression was partially mediated by impostor phenomenon. However, female participants did not significantly differed on discrepancy, impostor phenomenon or depression scores compared to male participants.

These findings suggested that residents with discrepancy, regardless of their gender, are likely to experience impostor phenomenon which thereby partially increases their probability of having depression. Thus, it can be concluded that discrepancy and impostor phenomenon were important traits when considering the psychological well-being of residents.

REFERENCES

Akın, A., Yalnız, A., Akın, Ü., & Özçelik, B. (2015). Sahtekârlık Ölçeği Türkçe Formu: Geçerlik ve Güvenirlik Çalışması. *Akademik Bakış Uluslararası Hakemli Sosyal Bilimler Dergisi*, (50), 309-315.

Armstrong, M. J., & Shulman, L. M. (2019). Tackling the imposter phenomenon to advance women in neurology. *Neurology: Clinical Practice*, *9*(2), 155-159.

Aysan, E., Köroğlu, G., Türkeli, V., Özgönül, A., Özyaşar, A., Gülümser, Ç., Kılıç, K., Ertürk, T., Özdemir, Ö., Alpaslan, A. H., & Bayrak, S. (2008). Resident physicians in Turkey: results of a survey of 1069 residents from 11 provinces. *Turkish Journal of Medical Sciences*, *38*(1), 35-42.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.

Başpınar, R., Cihan, F., & Kutlu, R. (2016). Tıpta uzmanlık öğrencisi hekimlerde depresyon sıklığı ve etkileyen faktörlerin değerlendirilmesi. *Mustafa Kemal Üniversitesi Tıp Dergisi*, *7*(25), 1-9.

Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical psychology review*, *8*(1), 77-100.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of general psychiatry*, *4*(6), 561-571.

Castro, D. M., Jones, R. A., & Mirsalimi, H. (2004). Parentification and the impostor phenomenon: An empirical investigation. *The American Journal of Family Therapy*, *32*(3), 205-216.

Clance, P. R. (1985). *The impostor phenomenon: Overcoming the fear that haunts your success*. Peachtree Pub Ltd.

Clance, P. R., Dingman, D., Reviere, S. L., & Stober, D. R. (1995). Impostor phenomenon in an interpersonal/social context: Origins and treatment. *Women & Therapy, 16*(4), 79-96.

Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice, 15*(3), 241.

Clance, P. R., & O'Toole, M. A. (1987). The imposter phenomenon: An internal barrier to empowerment and achievement. *Women & Therapy, 6*(3), 51-64.

Cokley, K., McClain, S., Enciso, A., & Martinez, M. (2013). An examination of the impact of minority status stress and impostor feelings on the mental health of diverse ethnic minority college students. *Journal of multicultural counseling and development, 41*(2), 82-95.

Cokley, K., Stone, S., Krueger, N., Bailey, M., Garba, R., & Hurst, A. (2018). Self-esteem as a mediator of the link between perfectionism and the impostor phenomenon. *Personality and Individual Differences, 135*, 292-297.

Compton, M. T., Carrera, J., & Frank, E. (2008). Stress and depressive symptoms/dysphoria among US medical students: results from a large, nationally representative survey. *The Journal of nervous and mental disease, 196*(12), 891-897.

Cozzarelli, C., & Major, B. (1990). Exploring the validity of the impostor phenomenon. *Journal of social and clinical psychology, 9*(4), 401-417.

Crăciun, B., & Dudău, D. P. (2014). The relation between perfectionism, perfectionistic self-presentation and coping strategies in medical employees. *Procedia-Social and Behavioral Sciences, 127*, 509-513.

Craiovan, P. M. (2014). Correlations between perfectionism, stress, psychopathological symptoms and burnout in the medical field. *Procedia-Social and Behavioral Sciences, 127*, 529-533.

Cusack, C. E., Hughes, J. L., & Nuhu, N. (2013). Connecting Gender and Mental Health to Imposter Phenomenon Feelings. *Psi Chi Journal of Psychological Research, 18*(2).

Deaux, K. (1976). *The behavior of women and men*. Wadsworth Pub Co.

Demiral, Y., Akvardar, Y., Ergör, A., & Ergör, G. (2006). Üniversite hastanesinde çalışan hekimlerde iş doyumunun anksiyete ve depresyon düzeylerine etkisi. *Dokuz Eylül Üniversitesi Tıp Fakültesi Dergisi*, *20*(3), 157-164.

Dudău, D. P. (2014). The relation between perfectionism and impostor phenomenon. *Procedia-Social and Behavioral Sciences*, *127*, 129-133.

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive therapy and research*, *14*(5), 449-468.

Fujie, R. (2010). Development of the State Impostor Phenomenon Scale. *Japanese Psychological Research*, 52(1), 1-11.

Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*.

Harvey, J. C., & Katz, C. (1985). *If I'm so successful, why do I feel like a fake?: The impostor phenomenon*. St. Martin's Press.

Henning, K., Ey, S., & Shaw, D. (1998). Perfectionism, the impostor phenomenon and psychological adjustment in medical, dental, nursing and pharmacy students. *Medical education*, *32*(5), 456-464.

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: conceptualization, assessment, and association with psychopathology. *Journal of personality and social psychology*, *60*(3), 456.

Hewitt, P. L., Flett, G. L., & Endler, N. S. (1995). Perfectionism, coping, and depression symptomatology in a clinical sample. *Clinical Psychology & Psychotherapy*, *2*(1), 47-58.

Hill, R. W., Huelsman, T. J., Furr, R. M., Kibler, J., Vicente, B. B., & Kennedy, C. (2004). A new measure of perfectionism: The Perfectionism Inventory. *Journal of personality assessment*, *82*(1), 80-91.

Hisli, N. (1989). A reliability and validity study of Beck Depression Inventory in a university student sample. *Journal of Psychology.*, *7(23)*, 3-13.

Hu, K. S., Chibnall, J. T., & Slavin, S. J. (2019). Maladaptive perfectionism, impostorism, and cognitive distortions: threats to the mental health of pre-clinical medical students. *Academic Psychiatry*, 1-5.

Johnson, D. P., & Slaney, R. B. (1996). Perfectionism: Scale development and a study of perfectionistic clients in counseling. *Journal of College Student Development*.

Kelly, J. D. (2015). Your Best Life: Perfectionism—The Bane of Happiness. *Clinical Orthopaedics and Related Research®*, *473*(10), 3108-3111.

Kolligian Jr, J., & Sternberg, R. J. (1991). Perceived Fraudulence in Young Adults: Is There an'Imposter Syndrome'?. *Journal of personality assessment*, *56*(2), 308-326.

Leach, P. K., Nygaard, R. M., Chipman, J. G., Brunsvold, M. E., & Marek, A. P. (2019). Impostor Phenomenon and Burnout in General Surgeons and General Surgery Residents. *Journal of surgical education*, *76*(1), 99-106.

Leary, M. R., Patton, K. M., Orlando, A. E., & Wagoner Funk, W. (2000). The impostor phenomenon: Self-perceptions, reflected appraisals, and interpersonal strategies. *Journal of personality*, *68*(4), 725-756.

Legassie, J., Zibrowski, E. M., & Goldszmidt, M. A. (2008). Measuring resident well-being: impostorism and burnout syndrome in residency. *Journal of general internal medicine*, *23*(7), 1090-1094.

Loxterkamp, D. (2013). What do you expect from a doctor? Six habits for healthier patient encounters. *The Annals of Family Medicine*, *11*(6), 574-576.

McGregor, L. N., Gee, D. E., & Posey, K. E. (2008). I feel like a fraud and it depresses me: The relation between the imposter phenomenon and depression. *Social Behavior and Personality: an international journal*, *36*(1), 43-48.

Oriel, K., Plane, M. B., & Mundt, M. (2004). Family medicine residents and the impostor phenomenon. *FAMILY MEDICINE-KANSAS CITY-*, *36*(4), 248-252.

Prata, J., & Gietzen, J. W. (2007). The imposter phenomenon in physician assistant graduates. *The Journal of Physician Assistant Education*, *18*(4), 33-36.

Preusser, K. J., Rice, K. G., & Ashby, J. S. (1994). The role of self-esteem in mediating the perfectionism-depression connection. *Journal of college student development*.

Rice, K. G., & Aldea, M. A. (2006). State dependence and trait stability of perfectionism: A short-term longitudinal study. *Journal of Counseling Psychology*, *53*(2), 205.

Rice, K. G., Ashby, J. S., & Slaney, R. B. (1998). Self-esteem as a mediator between perfectionism and depression: A structural equations analysis. *Journal of counseling psychology*, *45*(3), 304.

Rice, K. G., & Mirzadeh, S. A. (2000). Perfectionism, attachment, and adjustment. *Journal of counseling psychology*, *47*(2), 238.

Seeliger, H., & Harendza, S. (2017). Is perfect good?–Dimensions of perfectionism in newly admitted medical students. *BMC medical education*, *17*(1), 206.

Sherry, S. B., Mackinnon, S. P., Macneil, M. A., & Fitzpatrick, S. (2013). Discrepancies confer vulnerability to depressive symptoms: A three-wave longitudinal study. *Journal of Counseling Psychology*, *60*(1), 112.

Slaney, R. B., & Ashby, J. S. (1996). Perfectionists: Study of a criterion group. *Journal of Counseling & Development*, *74*(4), 393-398.

Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and evaluation in counseling and development*, *34*(3), 130.

Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and social psychology review*, *10*(4), 295-319.

Thompson, T., Foreman, P., & Martin, F. (2000). Impostor fears and perfectionistic concern over mistakes. *Personality and Individual Differences*, *29*(4), 629-647.

Ulu, İ. P., Tezer, E., & Slaney, R. B. (2012). Investigation of adaptive and maladaptive perfectionism with Turkish Almost Perfect Scale—Revised. *Psychological reports, 110*(3), 1007-1020.

Ünal, F. E. (2008). Bakırköy Dr. Sadi Konuk Eğitim ve Araştırma Hastanesi'nde Çalışan Tıpta Uzmanlık Öğrencilerinde Depresyon ve Anksiyete Sıklığının Saptanması ve Sosyodemografik Faktörlerin Araştırılması. Yayımlanmamış uzmanlık tezi, Dr. Sadi Konuk Eğitim ve Araştırma Hastanesi, İstanbul, Türkiye.

Villwock, J. A., Sobin, L. B., Koester, L. A., & Harris, T. M. (2016). Impostor syndrome and burnout among American medical students: a pilot study. *International journal of medical education*, *7*, 364.

Wallace, J. E., Lemaire, J. B., & Ghali, W. A. (2009). Physician wellness: a missing quality indicator. *The Lancet, 374*(9702), 1714-1721.

Wang, Y., & Zhang, B. (2017). The dual model of perfectionism and depression among Chinese University students. *South African Journal of Psychiatry*, *23*(1), 1-7.

APPENDIX A

DEMOGRAFIC INFORMATION FORM

Cinsiyetiniz:

Yaşınız:

Medeni durumunuz:

Evli Bekâr Boşanmış

Size göre gelir seviyeniz nedir?

Çok iyi İyi Orta Kötü Çok kötü

Asistan doktor musunuz?

Evet Hayır

İlk asistanlığınız mı?

Evet Hayır

Çalıştığınız hastanenin adı:

Asistanlığını yaptığınız bölüm:

Asistanlığınızın kaçıncı yılındasınız?

1 2 3 4 5

Bugüne kadar herhangi bir psikiyatrik tanı aldınız mı?

Evet Hayır

Eğer aldıysanız, nedir?

APPENDIX B

ALMOST PERFECT SCALE–REVISED (APS-R) DISCREPANCY SUBSCALE

Aşağıdaki ifadeler kişilerin kendilerine, kendi performanslarına ve diğer insanlara yönelik tutumlarını ölçmeyi amaçlamaktadır. Lütfen ifadeleri aklınıza ilk gelen şekilde puanlayınız, üzerinde çok fazla düşünmeyiniz. Her bir ifadenin size ne kadar uyduğunu aşağıdaki ölçek üzerinde belirtiniz. Size uygun rakama (X) işareti koyunuz.

	Hiç Katılmıyorum						Tamamen Katılıyorum
1.Hedeflerime ulaşamadığım için kendimi çoğu zaman engellenmiş hissederim.	☐	☐	☐	☐	☐	☐	☐
2.Elimden gelenin en iyisi bana asla yeterince iyi gibi gelmez.	☐	☐	☐	☐	☐	☐	☐
3.Yüksek standartlarıma nadiren ulaşırım.	☐	☐	☐	☐	☐	☐	☐
4.Elimden gelenin en iyisini yapmak hiçbir zaman yeterli gelmez.	☐	☐	☐	☐	☐	☐	☐
5.Başarılarım beni asla tatmin etmez.	☐	☐	☐	☐	☐	☐	☐
6.Beklentilerimi karşılayamayacağıma ilişkin sık sık endişe yaşarım.	☐	☐	☐	☐	☐	☐	☐
7.Performansım standartlarımı nadiren karşılar.	☐	☐	☐	☐	☐	☐	☐
8.Elimden gelenin en iyisini yapmış olduğumu bildiğim zaman bile bundan doyum sağlamam.	☐	☐	☐	☐	☐	☐	☐
9.Sahip olduğum yüksek performans hedeflerine nadiren ulaşabilirim.	☐	☐	☐	☐	☐	☐	☐
10.Performansımdan oldukça zor doyum sağlarım.	☐	☐	☐	☐	☐	☐	☐
11.Yapmış olduğum şeyin yeterince iyi olduğunu oldukça zor hissederim.	☐	☐	☐	☐	☐	☐	☐
12.Bir işi bitirdikten sonra sıkça hayal kırıklığı yaşarım çünkü daha iyisini yapabileceğimi bilirim.	☐	☐	☐	☐	☐	☐	☐

APPENDIX C

IMPOSTORISM SCALE (IS)

Aşağıda bazı ifadeler yer almaktadır. Her sorunun karşısında bulunan; (**1) Bana hiç uygun değil (2) Bana uygun değil (3) Kararsızım (4) Bana uygun ve (5) Bana tamamen uygun** anlamına gelmektedir. Lütfen her ifadeye tek yanıt veriniz ve kesinlikle boş bırakmayınız. Her bir ifadenin size ne kadar uyduğunu aşağıdaki ölçek üzerinde belirtiniz. Size uygun rakamı işaretleyiniz.

		Bana hiç uygun değil	Bana uygun değil	Kararsızım	Bana uygun	Bana tamamen uygun
1	Bazı zamanlar "gerçekte kim olduğumun" ortaya çıkmasından korkuyorum.	1	2	3	4	5
2	Kendimi sahtekâr gibi hissediyorum.	1	2	3	4	5
3	Benim için önemli olan insanların aslında onların düşündüğü kadar yetenekli olmadığımı anlamalarından korkuyorum.	1	2	3	4	5
4	Bazı durumlarda kendimi sahtekâr gibi hissediyorum.	1	2	3	4	5
5	Bazı zamanlar diğer insanların ne kadar bilgisiz ve beceriksiz olduğumu anlamalarından korkuyorum.	1	2	3	4	5
6	Bazı durumlarda kendimi "büyük bir taklitçi" gibi hissediyorum, yani diğer insanların düşündüğü kadar dürüst olmadığımı.	1	2	3	4	5
7	Bazı durumlarda bir sahtekâr gibi davranıyorum.	1	2	3	4	5

APPENDIX D

BECK DEPRESSION INVENTORY (BDI)

Aşağıda, gruplar halinde cümleler verilmektedir. Her gruptaki cümleleri dikkatle okuyarak, bugün dahil geçen hafta içinde kendinizi nasıl hissettiğini en iyi anlatan cümleyi seçiniz. Lütfen her ifadeye tek yanıt veriniz ve hiçbir ifadeyi kesinlikle boş bırakmayınız.

1) 0 Kendimi üzgün hissetmiyorum.
   1 Kendimi üzgün hissediyorum.
   2 Her zaman için üzgünüm ve ve kendimi bu duygudan kurtaramıyorum.
   3 Öyle üzgünüm ki artık dayanamıyorum.

2) 0 Gelecekten umutsuz değilim.
   1 Gelecek konusunda umutsuzum.
   2 Gelecekten beklediğim herhangi bir şey yok.
   3 Benim için gelecek olmadığı gibi bu durum düzelmeyecek.

3) 0 Kendimi başarısız görmüyorum.
   1 Herkesten daha fazla başarısızlıklarım oldu.
   2 Geriye dönüp baktığımda birçok başarısızlıklarım olduğunu görüyorum.
   3 Kendimi bir insan olarak tümüyle başarısız görüyorum.

4) 0 Her şeyden eskisi kadar zevk alabiliyorum.
   1 Her şeyden eskisi kadar zevk alamıyorum.
   2 Artık hiçbir şeyden gerçek bir zevk alamıyorum.
   3 Beni doyuran hiçbir şey yok, her şey can sıkıcı.

5) 0 Kendimi suçlu olarak hissetmiyorum.
   1 Arada bir kendimi suçlu hissettiğim oluyor.
   2 Çoğunlukla kendimi suçlu hissettiğim oluyor.
   3 Kendimi her an için suçlu hissediyorum.

6) 0 Kendimi diğer insanlardan daha kötü durumda görmüyorum.
1 Kendimi zayıflıklarım ve hatalarım için eleştiriyorum.
2 Kendimi hatalarım için her zaman suçluyorum.
3 Her kötü olayda kendimi suçluyorum.

7) 0 Kendimi hayal kırıklığına uğratmadım.
1 Kendimi hayal kırıklığına uğrattım.
2 Kendimden hiç hoşlanmıyorum.
3 Kendimden nefret ediyorum.

8) 0 Kendimi öldürmek gibi düşüncelerim yok.
1 Bazen kendimi öldürmeyi düşünüyorum ama böyle bir şey yapamam.
2 Kendimi öldürmeyi çok isterdim.
3 Fırsatını bulsam kendimi öldürürdüm.

9) 0 Herkesten daha fazla ağladığımı sanmıyorum.
1 Eskisine göre şimdilerde daha çok ağlıyorum.
2 Şimdilerde her an ağlıyorum.
3 Eskiden ağlayabilirdim şimdi istesem de ağlayamıyorum.

10) 0 Eskisine göre daha sinirli ve tedirgin sayılmam.
1 Herzamankinden biraz daha fazla tedirginim.
2 Çoğu zaman sinirli ve tedirginim.
3 Şimdilerde her an için tedirginim ve sinirliyim.

11) 0 Çevremdeki insanlara ilgimi kaybetmedim.
1 Eskisine göre insanlarla daha az ilgiliyim.
2 Diğer insanlara karşı ilgimin çoğunu kaybettim.
3 Diğer insanlara karşı hiç ilgim kalmadı.

12) 0 Eskisi gibi kolay ve rahat karar verebiliyorum.
1 Eskisine kıyasla şimdilerde karar vermeyi erteliyorum.
2 Eskisine göre karar vermekte oldukça güçlük çekiyorum.
3 Artık hiç karar veremiyorum.

13) 0 Eskisinden daha kötü bir dış görünüşüm olduğunu sanmıyorum.
1 Sanki yaşlanmış ve çekiciliğimi kaybetmişim gibi düşünüyor ve üzülüyorum.
2 Dış görünüşümde artık değişmesi mümkün olmayan ve beni çirkinleştiren değişiklikler hissediyorum.
3 Kendimi oldukça çirkin hissediyorum.

14) 0 Eskisi kadar iyi çalışabiliyorum.
1 Bir işe başlayabilmek için eskisine göre daha fazla çaba harcıyorum.
2 Ne iş olursa olsun, yapabilmek için kendimi çok zorluyorum.
3 Hiç çalışamıyorum.

15) 0 Eskisi kadar kolay ve rahat uyuyabiliyorum.
1 Eskisi gibi rahat uyuyamıyorum.
2 Eskisinden 1-2 saat daha erken kalkıyorum ve tekrar uyumakta güçlük çekiyorum.
3 Her zamankinden daha erken uyanıyorum ve tekrar uyuyamıyorum.

16) 0 Eskisine oranla daha çok yorulmuyorum.
1 Eskisinden daha çabuk ve kolay yoruluyorum.
2 Şimdilerde nerdeyse her şeyden kolay ve çabuk yoruluyorum.
3 Artık hiçbir şey yapamayacak gibi yoruluyorum.

17) 0 İştahım her zamankinden daha farklı değil.
1 İştahım her zamanki gibi iyi değil.
2 Geçmişe göre iştahım çok kötü.
3 Artık iştahım hiç yok.

18) 0 Son zamanlarda kilo kaybettiğimi düşünmüyorum.
1 Son zamanlarda istemeden 2,5 kilo verdim.
2 Son zamanlarda 5 kilodan fazla kaybettim.
3 Son dönemlerde 7 kilodan fazla kaybettim.

19) 0 Sağlığım konusunda endişeli değilim.

1 Ağrı, sancı, mide bozukluğu veya kabızlık gibi sıkıntılarım var.

2 Ağrı sızı gibi bu sıkıntılarım beni epey endişelendirdiği için başka şeyleri düşünmek zor geliyor.

3 Bu tür sıkıntılar beni öylesine endişelendiriyor ki artık başka şeyleri düşünemiyorum.

20) 0 Son zamanlarda cinsel yaşantımda dikkatimi çeken bir şey yok.

1 Eskisine göre cinsel konularla daha az ilgileniyorum.

2 Şimdilerde cinsellikle pek ilgili değilim.

3 Artık cinsellikle hiç ilgim kalmadı.

21) 0 Cezalandırılıyormuşum gibi bir hissim yok.

1 Sanki bazı şeyler için cezalandırılıyormuşum gibi duygular içindeyim.

2 Cezalandırılacak gibi duygular yaşıyorum.

3 Bazı şeyler için cezalandırılıyorum

APPENDIX E

INFORMED CONSENT

Bu çalışma, Bahçeşehir Üniversitesi Klinik Psikoloji Yüksek Lisans Programı öğrencisi Elif Elvan Cebecioğlu tarafından yüksek lisans tezi kapsamında, Dr. Öğretim Üyesi Hale Ögel Balaban danışmanlığında yürütülmektedir. Bu çalışmada bazı kişilik özellikleri ve duygu durum arasındaki ilişkiler incelenecektir. Çalışmaya katılım tamamen gönüllülük temeline dayanmaktadır ve çalışma süresince katılımcılardan kimlik belirleyici herhangi bir bilgi istenmemektedir.

Araştırma yaklaşık olarak 10 dakika sürecektir. Lütfen soruların başındaki yönergeleri dikkatlice okuyunuz ve her soruyu size en yakın olan cevabı vererek yanıtlayınız. Araştırma içinde yer alan soruların doğru ya da yanlış cevapları yoktur. Vermiş olduğunuz cevaplar gizli tutulacak ve yalnızca araştırma amacına yönelik kullanılacaktır. Çalışmaya katılmaktan herhangi bir an vazgeçebilirsiniz veya çalışmayı yarım bırakabilirsiniz. Çalışma ile ilgili bir sorunuz olduğu takdirde aşağıdaki e-mail adresi üzerinden araştırmacı ile iletişime geçebilirsiniz. Katılımınız için teşekkür ederim.

Elif Elvan Cebecioğlu

Bahçeşehir Üniversitesi Psikoloji Bölümü Yüksek Lisans Öğrencisi

E-mail: eecebecioglu@gmail.com Telefon: 0545 834 46 90

Tez Danışmanı: Dr. Öğretim Üyesi Hale Ögel Balaban

Bahçeşehir Üniversitesi Psikoloji Bölümü

E-mail: hale.ogelbalaban@eas.bau.edu.tr Telefon: 0212 381 56 37

Yukarıdaki metni okudum ve anladım. Bu çalışmaya tamamen gönüllü olarak katılmayı kabul ediyorum.

Evet ☐ **Hayır** ☐

Katılımcının imzası: