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The Relationship between Rejection Sensitivity and Somatization: The Mediator Role of Interpersonal Difficulties

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Abstract

The aim of the current study was to examine the predictive role of somatization and investigate the role of interpersonal difficulties in the relationship between rejection sensitivity and somatization on a group of university students. Participants (298) over the age of 18 were included in the study. Participants completed instruments including Social Demographic form, Rejection Sensitivity Questionnaire, Interpersonal Problems Inventory- Circumplex, Bradford Somatic Inventory (BSI). Results indicated that interpersonal difficulties were positively correlated with rejection sensitivity and somatization. Moreover, interpersonal difficulties had a mediating role in the relationship between rejection sensitivity and somatization. The findings of the current study were discussed according to previous literature. Limitations of the present study and clinical implications of the findings and directions for future studies were stated.

Keywords: Interpersonal difficulties; rejection sensitivity; somatization

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INTRODUCTION

The desire to be accepted and to avoid from rejection is recognized as a central human drive (Baumeister and Leary, 1995; Homey, 1937). People intrinsically tend to establish and sustain relationships (Mitchell and Black, 2016). Acceptance by others brings gains in the struggle for survival (Baumeister and Leary, 1995). People belonging to groups have a better chance of surviving and producing than people not belonging to groups (Leary, 2001). Being part of a community will make it more possible to share food, care for a child, and be mindful of enemies (Baumeister and Leary, 1995). While acceptance is evolutionarily protective of the person psychologically and physiologically; exclusion and rejection by the society lead to negative consequences on the person (Jaremka et al., 2013; Tang and Richardson, 2013). Erözkan (2007) stated that the experience of rejection creates problems in intimate relationships, causes depression and leads to challenging situations like rejection sensitivity. According to Creasey and Mclnnis (2001), Individuals who are rejected by significant others may feel worthless. Although some individuals can cope with it more optimistically when they experience negativities in relationships, in some individuals a small insensitive behavior by others can lead to rejection perception. (Creasey and Mclnnis, 2001). This difference among individuals may be due to rejection sensitivity.

Rejection sensitivity

Downey et al., (1994, p.497) defined rejection sensitivity as “the disposition to anxiously expect, readily perceive, and overreact to rejection in a wide variety of situations.” According to Downey and Feldman (1996), people who are highly sensitive to rejection think of others rejecting them, and they perceive small ambiguous cues as the sings of rejection. These individuals overreact to an absolute or imaginary rejection. The expectations of individuals with high rejection sensitivity are easily triggered by small impressions and lead them to perceive other people's behaviors as rejection easily. According to Downey and Feldman (1996)'s model, individuals who have anxious feelings of rejection tend to complete the following steps in their relationships:

a. Considering partner’s ambiguous behavior as intended rejection

b. Being desperate and insecure in their relationship

c. Reacting to the partner's rejection behavior via hostility, jealousy, and controlling behavior

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Rejection sensitivity has been modeled as arising from early parental rejection and alternatively disrupting relations with significant others later (Downey et al., 1998). Rejection sensitivity Model is basically stemmed from cognitive-affective information-processing models of personality (CAPS) (Mischel and Shoda, 1995) and attachment theory (Bowlby, 1969). In attachment theory, Bowlby (1973) stated that the cognitive schemas of securely attached children are based on trust in others. He stated that when caregivers in early childhood meet the needs of children regularly and warmly, these children develop a secure attachment model and their expectations from others in their interpersonal relationships include a positive approach that they will receive acceptance and support. According to Bowlby (1973), rejection in early childhood can make a person susceptible to rejection in adulthood. At the point where children need assistance by significant others, they create a perception that they may be rejected and do their best to not experience rejection. This lead to form a feeling of anxiety the moment that they need other people (Özdemir, 2017). Being alert to rejection cues makes it easier to perceive as rejection (Levy et al., 2001).

The foremost component of the model is the anxious expectation of rejection. Expectation of rejection and experiencing high anxiety due to rejection indicate high rejection sensitivity (Downey and Feldman, 1996). One of the reasons of occurrence of anxious rejection expectancy is parental rejection. Emotional and physical abuse, raising with authoritarian parents and not getting unconditional love from parents are risk factors for anxious rejection expectancy (Feldman and Downey 1994). Thus, the rejection signal from parents is conveyed to the child through attitudes and behaviors. After anxious expectation of rejection is formed, the behaviors of other people are perceived as rejection with the occurrence of any triggering situation (Downey and Feldman, 1996). Later, intense negative reactions arise with perceived rejection and those hostile and aggressive negative reactions cause a real rejection (Ayduk et al., 2008). Feldman and Downey (1994) conducted a study examining the effects of childhood domestic violence exposure on attachment styles and rejection sensitivity. They suggest that rejection sensitivity in adulthood is associated with avoidant and ambivalent attachment behaviors experienced in childhood, and exposure to violence by parents in childhood creates problems in social relations in adulthood. Similarly, it has been found that interpersonal rejection sensitivity is rooted in experiences in childhood (Butler et al., 2007).

Rejection sensitivity and Its Characteristics

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Children experiencing rejection have some common characteristics. In their researches, Sobol and Earn (1992) found that rejected children were different from other children in perceiving some social situations (motives, personalities, relationships, efforts of others), and they showed less emphasis on person-situation interaction. It has been observed that children suffering from loneliness attribute social failure to their own personality traits, avoid from social situations, and especially lonely girls have high social anxiety levels. In addition, it has been found that such children are reluctant, introverted, passive, insensitive, superficial and coward in terms of social behavior, and they perceive themselves as negative, shy, depressive, suspicious, lacking emotional depth and assertiveness (Sobol and Earn, 1992). Other studies conducted on rejected students showed that self-esteem, positive social skills and academic skills of the students who were accepted by their peers were higher than the rejected students (Downey et al., 1998; Sad, 2007). It was determined that the students who were rejected by their peers had higher negative social skills, behavioral disorders, anxiety, introversion, attention problems and aggression levels than the accepted students (Sad, 2007). In short, previous experiences of rejection leave a psychological legacy that tends to be susceptible to rejection by significant others. This concept further reveals the potential meaning of rejection sensitivity for close relationships in adolescence/adulthood (Creasey and McLnnis, 2001).

According to Creasey and Mclnnis (2001), rejection-sensitive adults are insecure in their relationships and fail to communicate due to fear of rejection. They avoid from conflicts and close contact in their daily relationships because of anxious expectations of rejection (Creasey and Mclnnis, 2001). Erözkan is one of the pioneers of research on rejection sensitivity in Turkey. According to Erözkan (2004), being accepted in interpersonal relations causes the individual to establish healthy relationships with others, to approach other people, to share his thoughts and feelings while being rejected creates a negativity regarding the individual's feelings of self-worth and self-efficacy beliefs. It is seen that individuals who are accepted can establish healthy and close relationships and get closer to other people. These people may oppose other people to get their ideas accepted. As a result of opposition, these individuals can become self-sufficient when they get away from other people and are alone with themselves. They also know that they can always count on other people's support because they are accepted by others. Rejected individuals, on the other hand, regulate their behaviors according to the need to provide security and are in a constant effort to protect themselves from rejection because they are overwhelmed by feelings of

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inadequacy. As they take action not to provide satisfaction but to be protected, they cannot trust themselves and others at first, and they may feel more and more alone and helpless. In this context, rejection in interpersonal relations has a feature that reduces well-being and impairs interpersonal functionality.

Gender was also associated with rejection sensitivity (Eralp, 2021). While some studies find no difference in terms of gender in rejection sensitvity (e.g., Downey and Feldman, 1996; Harper et al., 2006), some studies show that men have higher rejection sensitivity scores than women (Hafen et al., 2014), and some other studies show that women have greater rejection sensitivity levels than men (Erozkan, 2009). Mellin (2008), in his study concluded that female university students' rejection sensitivity scores were higher than male students. Similarly, Benazzi (2000) concluded that interpersonal rejection sensitivity is more common among women than men.

Rejection sensitivity and relationship variables

According to Downey and Feldman (1996), rejection sensitivity disrupts romantic relationships. It causes people to be insecure and dissatisfied with the relationship. In addition, the partners of individuals with rejection sensitivity find their relationships less satisfying. Sensitivity to rejection affects men and women differently in their relationships (Erözkan, 2004). They observed that whereas men with rejection sensitivity are more jealous in the relationship, try to control their partner's behavior and overestimate their partners' relationship displeasure, women with rejection sensitivity accuse their partners unfairly, show hostile attitudes and act in a way that discourages them (Downey and Feldman, 1996).

Downey et al. (2000) found that abusive men think that by controlling or minimizing their partners' relationships with people they mistakenly assume as rivals, they will prevent their partners from separating from them. At this point, it is stated that rejection sensitivity in men may be a risk factor for physical abuse. Ayduk et al. (1999) stated that men sensitive to rejection and women sensitive to rejection have different reactions towards their rejecting partners, and that rejection causes hostile feelings in women who are sensitive to rejection. In particular, jealousy-related behaviors of male partners cause them to adopt a restrictive attitude towards the female partner and limit the behaviors of the female partner. Although such restrictive behaviors cause withdrawal in female partners and the inability to reveal their potential, they lead to feelings of anger and hostility towards individuals who reject them in a short time. The occurrence of such a situation in women who are sensitive to rejection automatically manifests itself against perceived

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rejection and triggers the negativity of the female partner in the process. Negative behavior patterns cause the real rejection. These situations also clearly show the difference between men and women in terms of reactions to rejection (Erözkan, 2004).

Many researches review that high rejection sensitive people tend to show psychopathology such as borderline personality disorder, depression, (Downey and Feldman, 1996; Feinstein et al., 2012; Rosenbach and Renneberg, 2014), anxiety, loneliness and body dysmorphic disorder (Gao, 2017). Also, rejection sensitivity is a higher risk for sexual victimization (Young and Furman, 2008), emotion regulation problems (Silvers et al., 2012), hostility and aggression (Ayduk et al., 2008). Additionally, some studies show that sensitivity to rejection is related to many personality dispositions like social anxiety, low self-esteem, neuroticism and attachment insecurity (Berenson et al., 2009).

According to Gao et al. (2017), the cognitive-affective processing system could be effective in explaining the relationship between rejection sensitivity and psychopathology. This theory clarifies that how and why people's behavior changes in different situations and how personality is constructed in certain person-situation interactions (Romero-Canyas et al., 2010). Gao et al. (2017) also suggest that another system is the defensive motivational system, which can explain the connection between rejection sensitivity and mental health problems. This system directs the person to avoidant behavior and/or fight-or-flight response, and these behavior responses may lead to emerging of the person's symptoms and or disorders.

Somatization

One of the most common mental illnesses is somatoform disorders (Henker et al., 2019). The category of somatic disorders was included in the DSM-III (Diagnostic and Statistical Manual of Mental Disorders – 3) published in 1980 for the first time. In the DSM-3, somatoform disorders contain somatization disorder, hypochondriasis, pain disorder, undifferentiated somatoform disorder, and conversion disorder. All these disorders are physical symptoms in the body, and these symptoms are not clarified with the organic cause (Stuart and Noyes, 1999). In DSM-IV, somatization disorder is included in somatoform disorders. In DSM-IV, it is stated that for the diagnosis of somatization disorder, it must start before the age of 30, the person has many physical complaints, the symptoms cannot be explained medically, or the physical complaints are more than expected even if it is a medical condition. However, this approach has been criticized due to insufficient discriminating diagnostic criteria. Afterwards, the category of Somatic symptoms and

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related disorders was created in DSM-V (American Psychiatric Association, 2013). Below are the diagnostic criteria of somatization according to DSM-V (American Psychiatric Association, 2013). To receive the diagnosis of somatic symptom disorder, a person must have the following symptoms.

A. Having one or more somatic symptoms that are bothering or that significantly interrupt daily life.

B. Enormous notions, emotions, or acts associated with somatic symptoms or accompanying health anxiety, as included by at least one of the following conditions:

1. Permanent thoughts that are disproportionate to the severity of the person's symptoms.
2. A permanently severe anxiety associated with health or symptoms.
3. Excessive time and inner effort is wasted on these symptoms or health concerns.

C. Even if no physical symptoms are constantly existing, the situation of being symptomatic is continuous (for longer than 6 months) (American Psychiatric Association, 2013, p.163)

Many authors in the literature have disagreement on the definition of somatization (Kellner, 1990). Somatization was thought to be associated with conversion diseases in earlier times so internal conflicts are expressed physically (Marin and Carron, 2002). According to this definition, there is a causality between having psychological problems and experiencing somatic symptoms (Craig et al., 1993). In another definition, somatization is explained as experiencing and expressing psychological stress through the body in the absence of the affective experience (Lipowski, 1988) and Lipowski (1988) states that somatization should not be viewed as a disease or disorder. From this point of view, expressing the wishes and conflicts of individuals through the use of the body is a form of nonverbal communication used from the first years of life (for example, a baby's crying when it is hungry) (Ünal, 2002). According to Rodin (1991), many mental illnesses involve somatic symptoms and these somatic symptoms should not always be viewed as pathological. According to studies, it has been observed that the physical health of most individuals who experience psychological stress is also negatively affected (Smith et al., 2009).

Symptoms are mostly seen as pain in different parts of the body (back, waist, head, chest, etc.), disorders in the functioning of organs (gastrointestinal, palpilation, diarrhoea, etc.), fatigue and exhaustion. Individuals generally experience more than one physical symptom, as well as psychosocial disorders (Henningsen, 2007). According to Patel and Sumathipala (2006), common

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symptoms are; fatigue and exhaustion, aches and pains, particularly headache and general body aches, and abdominal pain.

Over the years, many researchers have proposed distinct theories to clarify somatization (Kellner, 1990). According to Stuart and Noyes (1999), two models come to the fore when explaining somatization. First, they stated that occuring of somatization is affected by negative childhood experiences. According to studies, the more negative the parenting that the child experience, the more likely they are to have the somatoform disorder (Lackner et al., 2004; Stuart and Noyes, 1999; Waldinger et al., 2006). Those adverse childhood factors are neglect (Tariq and Kauasr, 2015), sexual and physical abuse (Moeller and Bachman, 1993; Stuart and Noyes, 1999; Tariq and Kauasr, 2015), inadequate care (Tariq and Kauasr, 2015), parental criticism (Claar, Simons et al., 2008), disrupted attachment patterns (Tariq and Kauasr, 2015), conflict with the family (Leary, 2003), exposure to trauma (Stuart and Noyes, 1999), exposure to models of illness behaviour (Mai, 2004; Stuart and Noyes, 1999), rejection by parents and grief (Leary, 2003).

According to another model for the genesis of somatization is proposed by Stuart and Noyes (1999), somatization is a maladaptive learned response when dealing with stress. While illness behavior provides care from other people, it distracts the person's attention from the main issue. The interpersonal context of the individual with somatization includes his family and health workers. and physical symptoms can be an apparent symptom of both family conflicts and doctors' negative attitudes towards somatizing behavior (Stuart and Noyes, 1999). Childhood illness is an important factor for somatization (Stuart and Noyes, 1999). When the child experiences illness, the parents' reactions to them may also facilitate the somatization behavior. When a child falls and injures himself, if the care and attention is not given until the child hurts himself, this reaction will contribute to the somatization behavior (Stuart and Noyes, 1999). According to Bass and Murphy (1995), more than half of patients with somatization disease reported that one or both of their parents had a physical disability. Similarly, Craig et al. (1993) stated that the parents of people with somatization often experience the disease. All these findings show that how the parent copes with the illness, become a model for how the child copes with the illness, and this contributes to somatization.

Stuart and Noyes (1999) propose that somatization behavior can be explained through attachment and interpersonal theory. Attachment is a pattern of behavior focused on seeking care and receiving comfort and reassuring responses from others. If this care-seeking behavior manifests itself as

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illness behavior, the person will tend to continue it into adulthood. The person will learn maladaptive methods to meet their attachment needs. Anxiety and insecure attachment lead the person to look for more care-seeking behavior. The interpersonal reactions of the person to the illness behavior led the person to the care-seeking behavior even more. Simply paying attention to the child's illness and ignoring other attachment needs can create a working model of significant others in which the child believes that care comes only when he or she is physically suffering. A child exposed to such an environment can learn to express emotional stress through physical pain. In adulthood, such a learning style disrupts interpersonal communication, causing them to be less tolerant of stress (Stuart and Noyes, 1999). Several studies have found that somatization is associated with insecure attachment (Ciechanowski et al., 2002; Taylor et al., 2000; Waldinger et al., 2006) and strongest association with fearful attachment style (Ciechanowski et al., 2002; Noyes et al., 2003). Waldinger et al. (2006) found that for women but not men, there is mediating effect of the insecure attachment, especially the fearful attachment, on the relationship between childhood experiences and somatization. According to Stuart and Noyes (1999), although insecure attachment and maladaptive behaviors of individuals with somatization initially reveal a caring behavior, they continue to display persistent care-seeking behavior. As a result, caregivers move away from these people. This interpersonal cycle ultimately results in these people not being able to find the care they seek.

Interpersonal Difficulties

In a study with college students in Turkey, it was found that 27% of college students suffer from the middle and high degree of experiencing depression; 41% had moderate to high anxiety; 27% of them also experienced stress (Bayram and Bilgel, 2008). According to Saleem and Mahmood (2013), many college students are prone to mental health problems with negative consequences. And these years are important for students in terms of setting social relationships and develop the ability to social interactions (Yeun and Woo, 2018). Having problems with social relationships and not being able to develop skills can lead to interpersonal difficulties (Lange and Couch, 2011). Problems that arise in a person's communication with the other person can be called interpersonal difficulties (Horowitz et al., 1993).

Sullivan (1938) argues that individuals inevitably maintain to interact with each other. Accordingly, the human mind and behaviors exist through interactions between individuals. The concept called "personality", on the other hand, is shaped within the framework of repetitive

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interpersonal behaviors in social life, and the individual cannot be understood unless this complex interactive process is taken into account (Sullivan, 1938). According to Sullivan, the basic motivation in interpersonal interaction, in which people affect each other's behavior, arises from the need for security and self-esteem (Akyunus and Gençöz, 2016).

Leary (1957) suggested the concept of "affiliation" instead of the concept of "security", one of the main motivations that shape Sullivan's (1953) interpersonal behaviors, and the concepts of "dominance " instead of the concept of "self-esteem". He also created a circular space consisting of the dimensions of these concepts as interpersonal behavior motivations. In the framework of this model, while the vertical axis represents dominant dimension; horizontal axis represents affiliation in the circumplex (Leary, 1957). The combination of these coordinates is used when describing interpersonal behaviors. (Akyunus and Gençöz, 2016; Alden et al., 1990; Horowitz et al., 2003). Alden et al. (1990) divided the interpersonal circular plane into 8 octants, which are formed from the combination of these two basic axes and define 8 distinct interpersonal problem fields. These octants formed the subscales of the Interpersonal Problems Inventory and those are domineering/controlling, intrusive-needy, self-sacrificing, overly accommodating, nonassertive, socially avoidant, cold-distant and vindictive/self-centered.

People with dominating behaviors are more controlling, manipulative in relationships and try to change others. Vindictive/self-centered people reports problems with distrust and suspicion of others, and problems with ignoring the needs and pleasure of others. Cold/distant people, on the other hand, have difficulty expressing their feelings and loving others. They have difficulty in long-term commitment. It's hard to forgive and get on with others for them. Socially avoidant people feel high anxiety and embarrassment when they are with others. It is problematic for them to commence social interactions, disclose emotions, and socialize with others. Nonassertive people have low self-confidence. They avoid being the center of attention and socially challenging situations. They avoid expressing their wishes for fear of disapproval and negative evaluation. people with overly accommodating problems have difficulty saying no, feeling and showing anger. They are easily persuaded. Self-sacrifice people try to please others, they are overly generous. They give trust and care. They care more about the needs of others than their own. People with intrusive needy behavior are those who need to relate to others, have trouble spending time alone, inappropriately open themselves to others, and have difficulty setting boundaries with others (Alden et al., 1990; Özer, 2017).

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Many studies found that interpersonal problems are related to mental health problems. According to Davila and Beck (2002), isolation has been observed in people who fail in interpersonal relationships. Besides, decreased self-esteem and depression are related to poor interpersonal relationships (Huprich et al., 2016; Katz et al., 2011).

The Current Study

The current study aims to examine the mediating effect of interpersonal difficulties in the relationship between rejection sensitivity and somatization. When the literature is examined, there are some studies examining the relationship between rejection sensitivity and somatization. Nacak et al., (2021) found that individuals with somatoform disorder have a higher sensitivity to rejection than healthy individuals. In addition, another study found the moderation effect of rejection sensitivity between daily stress factors and somatization. In other words, it has been observed that somatization increases as the daily stressors such as conflicts and tension and the sensitivity to rejection increase (Yang, 2023). In the study of Naz and Kausar (2012) with adolescents with somatization, these individuals perceived their parents as rejecting, negligent and aggressive more than the control group. In addition, they indicated that parental rejection and somatization disorder is related. They found that adolescents with somatoform disorders reported their parents as being more rejected. Tarıq and Kausar (2015) also found that conversion disorder is related to interpersonal problems. Especially, patients with conversion disorder reported cold/distant and over-accommodating behaviors.

According to De Panfilis et al. (2013), the relationship between high rejection sensitivity and psychopathology result from impairment of interpersonal relationships and this disruption may result in mental health problems. People with somatoform disorders have reported that they experience stress in interpersonal relationships, and they express this stress with somatic symptoms (Segrin, 2001, as cited in Tariq and Kausar, 2015). Waller and Scheidt (2006) suggest that somatoform diseases continue to exist with interpersonal difficulties. These problems experienced in interpersonal relationships arise from the first attachment relationships (Tariq and Kausar, 2015).

Many researchers have implied that rejection sensitivity creates problems in interpersonal relationships. Sensitivity to rejection is a process that includes anxious expectations of rejection and damage interpersonal relations by revealing difficulties in relationships during adolescence and adulthood (Downey and Feldman, 1996). Persons who sensitive to rejection may respond to

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the behavior which they perceive as rejection with a defensive action. Defensive action leads to ending the relationship or leads to behaviors that prevent the partner from ending the relationship (Fraley and Shaver, 2000). According to Cain et al. (2017), interpersonal problems differ according to the person's sensitivity to rejection. Results indicated that individuals who have a high anxious expectation of rejection sensitivity reported more socially avoidant interpersonal problems. On the other hand, individuals who have low anxious rejection sensitivity reported more vindictive interpersonal problems. In a study by Brookings et al. (2003), it was explored that highly rejection sensitive college students were unassured-submissive and aloof-introverted in relationships. This means that Individuals with high rejection sensitivity withdraw people instead of intimacy to avoid rejection (Cain et al., 2017). Bowlby's attachment theory is an important model explain relationships between early rejection and adulthood relationships (Bowlby, 1969). The most basic need of human beings is to be accepted. According to Bowlby (1969), when this need is not met in childhood, sensitivity to the experience of rejection develops. In this period, when individuals perceive rejection from their parents, they can develop an expectation that they will be rejected over time. With this expectation, they begin to make an effort not to be rejected, and they tend to unconsciously sense the rejection clues. This situation will cause the individual to perceive the situations he encounters negatively, which will further disrupt the social relations of the individual. Ciechanowski and colleagues (2002) suggest that the attachment model should be considered when examining the relationship between how we perceive symptoms and health-seeking behavior. Securely attached people can seek support when they experience stress (Waller et al., 2004). However, people with insecure attachment assume that their needs will not be met and do not expect much from their care-seeking behavior (Ciechanowski et al., 2002). Many studies have found that preoccupied and fearful attachment are associated with more somatization behavior (Ciechanowski et al., 2002; Richardson, 2015). Also, many studies showed that rejection sensitivity is significantly related fearful and preoccupied attachment styles (Ciechanowski et al., 2002; Erözkan, 2009; Khoshkam et al., 2012). While preoccupied people perceive themselves as unworthy or unloved, they have a positive perception of others. They seek love and approval from others. They fear abandonment and have a sticky relationship. Fearfully attached people perceive both themselves and others negatively. They experience themselves as worthless while they experience others as rejecting and untrustworthy. Although these people want to establish close relationships, they are afraid of being abandoned. They are socially avoidant (Bartholomew and

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Horowitz, 1991). They have problems in establishing and maintaining relationships, which makes them susceptible to rejection (Erozkan, 2009). Therefore, these people experience more insecure and inconsistent relationships in interpersonal relationships (Khoshkam et al., 2012). At the same time, people with high-anxious rejection sensitivity were found to display avoidant behavior in their interpersonal relationships (Cain et al., 2017). According to Yang (2023), people with high rejection sensitivity may show more social withdrawal or revenge behavior to reduce the negative feelings they experience in negative social relationships. And this behavior may have contributed to somatization behaviors by causing more internal conflicts to arise. Interpersonal theory states that insecure attachment manifests itself as maladaptive behaviors in interpersonal relationships. These behaviors result in interpersonal problems. These problems cause the person to show more care-seeking behavior (Noyes et al., 2003). This study is based on attachment model and Interpersonal theory. Considering the previous studies and their results, in the current study, it is assumed that people with rejection sensitivity will experience certain interpersonal problems arising from their insecure attachment, and they will express the stress they experience in these interpersonal problems with somatization behavior. That is, individuals with rejection sensitivity experience more interpersonal problems and the stress they experience in these interpersonal relationships leads to more somatic symptoms. When the literature is examined, there is no study investigating the mediating role of interpersonal difficulties between rejection sensitivity and somatization. This study intends to complete this gap in the literature and the current study is the first study in which three variables will be examined together. This study is expected to be useful in understanding the link between rejection sensitivity and somatization.

Hypotheses of the study

This study mainly purposes to explore the mediating role of interpersonal difficulties in the relationship between rejection sensitivity and somatization. In the study, rejection sensitivity was defined as the independent variable, interpersonal difficulties as the mediator variable and somatization as the dependent variable. Based on the main aim three hypotheses question are examined in the study.

1. Is there a significant relationship between the variables of the study?
2. Do interpersonal difficulties have a mediator role in the relationship between rejection sensitivity and somatization?

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Method

Participants

In this study, convenience and criterion sampling was used in order to acquire a research sample. A total of 300 individuals completed the study. Two people were excluded from the data because they were under the age of 18. Participants between the ages of 18 and 53 participated in the study. Detailed demographic information was presented in table 1.

Instruments

In the current study, the participants were given informed consent form, Social Demographic Form, Rejection Sensitivity Questionnaire, Interpersonal Problems Inventory- Circumplex, Bradford Somatic Inventory (BSI) and Debriefing Form.

Procedure

Before the data collection process start, all of the questionnaires, processes in data collection, and method used in this study were approved and permitted by Yeditepe University Human and Social Research Ethics Committee. The data was collected from participants aged 18 and over the age of 18 via convenience and criterion sampling method. All individuals participate voluntarily through online platforms. Before data collection, informed consent was provided to participants and debriefing form at the end of the study. All scales were filled out in the following order: Social Demographic Form, Rejection Sensitivity Questionnaire, Interpersonal Problems Inventory-Circumplex and, Bradford Somatic Inventory (BSI). It took approximately 20- 25 minutes to fill all scales.

RESULTS

Bivariate Correlations among Variables of the Study

To investigate associations among rejection sensitivity, interpersonal difficulties and somatization Pearson's bivariate correlation analyses were conducted. According to the results, the mediator variable of the study, interpersonal difficulties, was positively and significantly correlated with rejection sensitivity (r = .22, p < .001) and was positively and significantly correlated with somatization (r = .27, p < .001). Finally, it was found that there was no significant correlation between rejection sensitivity and somatization (r = .02, p = .72) (see Table 3).

Mediation Analyses

According to the model in which the mediation analysis first emerged, there must be a significant relationship between the predictor and the outcome variables in order to carry out this analysis

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(Baron and Kenny, 1986). However, Hayes says that even if there is no such relationship, mediator variable analysis can be done. According to Hayes (2018), since the total effect between the variables expresses all of the direct and indirect effects, indirect effects can be significant even though the total effect is not significant. Therefore, although the relationship between the predictor and the outcome variable is not significant, mediator analysis can be conducted (Hayes, 2018).
The outcome variable of the study was somatization, the predictor variable was rejection sensitivity, and the mediator variable was interpersonal difficulties. According to results, rejection sensitivity scores were significantly associated with interpersonal difficulties sores ($\beta = 1.11$, $SE = .027$, $p < .001$). It means that individuals who have rejection sensitivity were more likely to experience interpersonal difficulties. Also, interpersonal difficulties scores were significantly associated with somatization scores ($\beta = .03$, $SE = .007$, $p < .001$). That is, the more individuals have interpersonal difficulties they more likely to experience somatization. When the total effect was examined, it was found that there was no significant relationship rejection sensitivity and somatization ($\beta = .01$, $SE = .03$, $p = .72$). Similarly, direct effect was not significant when interpersonal difficulties variable was included to the analysis ($\beta = -.02$, $SE = .03$, $p = .43$). However, there is a significant indirect relationship between rejection sensitivity and somatization via interpersonal difficulties ($\beta = .04$, $SE = .012$, %95CI [.0184, .0655]) (see Figure 1). According to results, there is a full mediator effect of interpersonal difficulties between rejection sensitivity and somatization. In these regression analyses, 5000 resamples were used in to identify full indirect effects of interpersonal difficulties on the relationship between rejection sensitivity and somatization with a 95% confidence interval.

DISCUSSION

The main aim of the current study is to examine whether interpersonal problems play a mediating role between rejection sensitivity and somatization in participants over the age of 18. In this part of the study, the findings obtained from the statistical analyzes in order to answer the research questions of the study were evaluated in the light of the literature. First, the findings on the relationships between rejection sensitivity, interpersonal problems and somatization variables are discussed. Then, the role of interpersonal problems in the relationship between rejection sensitivity and somatization was examined. Afterward, the limitations of the study and clinical implications will be suggested.

Interpretation of correlational analyses

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The first hypothesis was that whether there is a relationship between the variables. The findings revealed that sensitivity to rejection is positively and significantly related with interpersonal difficulties. That is, individuals who have experience rejection sensitivity, tend to struggle with interpersonal difficulties. People with a high sensitivity to rejection give maladaptive reactions when faced with behavior that includes any hint of rejection. These maladaptive responses can lead to negative results in the relationships of individuals with other people (Romero-Canyas et al., 2010). This conclusion is similar to the results in the study by Brookings et al. (2003) who have founded that students with high rejection sensitivity also showed unassured-submissive and aloof-introverted traits in interpersonal relationships. That is, people with high rejection sensitivity avoid rejection by distancing themselves from other people in the relationship (Cain et al., 2017). Similarly, Cain et al. (2017) examined interpersonal problems separately and their relations with RS, explore that highly anxious rejection sensitive individuals show avoidant behavior in their interpersonal relationships and struggle with severe interpersonal distress. Meeting someone, socializing and getting close are challenging experiences for them. In contrast, people with low anxious rejection sensitivity reported more self-confidence in social interaction and less interpersonal distress.

Another finding was that interpersonal difficulties was significantly and positively correlated with somatization. To explain, the more problems individuals have in their relationships, the more they tend to experience somatization. According to Noyes et al. (2001), interpersonal problems are basic problems for somatoform disorders. According to Waller et al. (2004), interpersonal problems associated with insecure attachment appear in individuals with somatoform disease. In another study, it was found that hypochondriasis is actually related to interpersonal problems. In the study, it was observed that people with Hypochondriasis tended to be introverted, emotionally distant, self-sacrificing, and needy (Noyes et al., 2003). According to Segrin (2001), people with somatoform diseases experience more stress in interpersonal relationships and express stress through somatic symptoms (as cited in Tariq and Kausar, 2015). Tariq and Kausar concluded in their study that interpersonal problems are associated with conversion disease (2015). In addition, another important finding in the same study is that participants who have conversion disease scored more cold/distant, nonassertive, and vindictive/self-centered, overly accommodating behaviors (Tariq and Kausar, 2015). As mentioned before, somatization is based on inadequate care in childhood and experiencing an illness. The child will continue the dysfunctional behaviors learned

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in childhood into adulthood. If the child give care with an illness, he/she will show the dysfunctional behavior that he/she learned in childhood to meet his/her attachment needs, that is, he/she will physically express the negative emotions and this will disrupt the person's interpersonal relationships (Stuart and Noyes, 1999).

When the relationship between sensitivity to rejection and somatization was examined, no direct significant relationship was found between these two variables. There is very little research in the literature examining the relationship between these two variables (Yang, 2023). According to Yang (2023), people with rejection sensitivity tend to perceive rejection and are more open to biological responses caused by stress. Yang (2023) found that somatization and rejection sensitivity were related and that rejection sensitivity had a mediating role between daily stressors and somatization. According to Yang, when people with rejection sensitivity experience negativities in social interactions, they have more social withdrawal or feelings of revenge in order to cope with that emotion. In such a situation, these people internalize the conflicts more, which leads to more somatization. Another study found that people with somatoform disease experience more rejection sensitivity than healthy people (Nacak et al., 2021). As stated in the literature review, rejection sensitivity is a condition that disrupts interpersonal relationships. At this point, after these people develop sensitivity to rejection, they experience certain interpersonal problems in relationships, and the negative emotions and conflicts that these problems create in the person may lead to the emergence of somatization behavior. In the current study, it was found that the relationship between these two variables became significant through interpersonal problems.

Interpretation of Mediation Analysis

When the connection between sensitivity to rejection and somatization was examined, no direct significant relationship was found between these two variables. However, when the interpersonal problem was included in the relationship, it was found that the interpersonal problems had a full mediator effect between the two variables. In the model tested in the study, interpersonal problems were found to be mediator. In other words, it was found that rejection sensitivity was indirectly related to somatization through interpersonal problems. Therefore, individuals with high rejection sensitivity experience interpersonal difficulties in their relationships, this in turn lead these individuals to have more somatizing behavior.

When relevant literature was examined, no study was found examining the mediator role of interpersonal difficulties on the relationship between rejection sensitivity and somatization.

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However, there are study results that are similar to the current study findings. Many studies found that rejection sensitivity had mediating roles in the relationship between perceived rejection from parents and psychological symptoms (Abacı, 2018; İnce,2020; Saleem et al., 2019). Another study was conducted with conversion patients that try to explore the relationship between interpersonal problems and parental rejection/control in individuals with conversion disease. Results of the study showed that perceived rejection from the mother was related to interpersonal problems. It was also found that individuals with conversion disease were significantly more vindictive/self-centered, non-assertive, overly accommodating and cold/distant (Tariq and Kausar, 2015).

In the light of all these studies, it is seen that individuals with rejection sensitivity behave distantly in their relations with other people in order to avoid rejection. At the same time, meeting new people and socializing are stressful situations for these people. (Cain et al., 2017). According to Cain et al., (2017), although these people are socially avoidant, they actually attach importance to bonding and intimacy with others. Again, in the light of studies, as mentioned in the introduction section, individuals with somatoform disease were found to be more introverted, emotionally distant, self-sacrificing, needy (Noyes et al., 2003), vindictive, nonassertive, overly accommodating, and cold distant. When we look at the results of the current study, it can be a stressful situation for people with rejection sensitivity to be distant in their relations with others because they actually need to establish relationships and bonds, but are afraid of rejection. As Segrin (2001) said, these people with high sensitivity to rejection may express the stress they experience in interpersonal relationships with somatic symptoms (as cited in Tariq and Kausar, 2015).

According to Stuart and Noyes, although anxious and dysfunctional attachment behaviors of people with somatization initially reveal caring behavior, people with an insecure attachment, especially a fearful attachment, will have problems in interpersonal relationships because these individuals continue to seek help persistently and unsatisfiedly. They propose that somatization behavior is best understood in interpersonal relationships that arise from the insecure attachment. Rejection, which is perceived and experienced by important people in one's life, encourages somatization behavior. This person tries to get attention and care through somatization behavior. However, this behavior cycle results in a real rejection and further increases the person's somatization behavior (Stuart and Noyes, 1999).

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These people experience more interpersonal problems due to rejection sensitivity and therefore they develop somatization. According to the results of this research, people with high sensitivity to rejection experience somatization when they experience problems in interpersonal relationships. However, not every person with rejection sensitivity exhibits somatization behavior. Perhaps, people who have improved in interpersonal relationships and have more functional interpersonal relationships may not have shown somatization behavior because they did not experience stress in interpersonal relationships.

Clinical Implications

In the present study, the relationship between sensitivity to rejection and somatization and the concept of rejection sensitivity, which is thought to be effective for this relationship, were studied. According to results of the study, it was found that when individuals with high rejection sensitivity experienced interpersonal problems they more tend to have somatization. For this reason, it is thought that it is important to consider the sensitivity of rejection and interpersonal problems when addressing the somatic symptoms of people who apply to psychotherapy. Considering that these variables may also be effective in the problems of people who apply to us in the clinical setting, it is necessary to plan and conduct the interviews and structure the necessary interventions by taking these variables into account. According to Stuart and Noyes (2006), interpersonal psychotherapy is one of the effective treatments for individuals with somatization behavior. This therapy method aims to relieve the person's immediate symptoms and increase their interpersonal functionality. It provides this by regulating an individual's interpersonal relationships and changing their perceptions of other people. This method teaches the person to receive the support they need from others in healthier ways by focusing on the patient's attachment relationships and improve the interpersonal relationships (Stuart and Noyes, 2006). To protect university students from various negative outcome of rejection sensitivity, early and timely intervention and awareness programs are needed. Examining whether individuals with rejection sensitivity experience interpersonal problems and, if they do, applying interventions to regulate these relationships will protect them against developing somatization.

The university period is the year when individuals have the most social interaction. In particular, this period will be one of the most suitable times to compensate for the negative experiences and insecure attachment behaviors of people in childhood. For this reason, recognizing the mechanisms that are effective in the formation and continuity of interpersonal problems in university students

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can support the creation of intervention plans to reduce or control problematic behaviors. Including practices regarding attachment styles and interpersonal emotion regulation strategies in clinical intervention programs may support the reduction of problematic behaviors in the social context.

Limitations and Future Directions

In the study, the variable of interpersonal problems, which may be important in the relationship between rejection sensitivity and somatization, was examined and a model was created. More comprehensive studies are needed to have more information about the development of somatization and the effect of rejection sensitivity on it and to plan more effective interventions. Current research variables have not been examined before in the literature. For this reason, it will be important to address the limitations of the study and future directions while discussing the findings. The first and most fundamental limitation of the study is that its generalizability is limited due to the sample group. Since the study was conducted with university students, it can be generalized to the education group that has the characteristics of this sample group. For future research on this subject, it may be recommended to work with different education groups or to conduct a longitudinal study. By examining the long-term interpersonal relationships of people with rejection sensitivity in childhood, it can be examined how they differ in terms of somatization in the different ages. Thus, by investigating the relationships between these variables in more depth, it would be understood whether they will differ developmentally.

Another suggestion that can be made at this point may be to work with a clinical sample. This will enable to reach more detailed findings about somatization. In the future, similar studies can be carried out in different countries and with different sample groups, so that a supracultural perspective can be approached and universally valid findings can be reached. Clinicians and researchers working in the field can evaluate these variables by looking beyond culture, language, and traditional features. This study includes measurements based on self-report. In future studies, various qualitative methods can be used to investigate these variables that may affect somatization in more detail. Thus, the disadvantages of the self-report approach will be avoided. These methods can also be important in revealing culture-specific features. Although the relationship between the expectations of rejection and possible negative consequences of people with rejection sensitivity is supported by studies, not everyone with rejection sensitivity experiences the same interpersonal problem and is not affected by this sensitivity to the same degree. Thus, while creating a treatment plan for individuals with high somatization and rejection sensitivity in the clinical setting, it will

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be beneficial for clinicians to include the sub-dimensions of interpersonal problems in the research and to obtain results for future studies.

Another limitation in this regard is the high number of scale items used. This situation causes unwillingness or inability to maintain their attention in the participants and increases data loss. No matter how eager they are to participate in the study, fatigue and boredom can be observed in the participants, and there is always the possibility that this will affect their answers to the questions and that they have marked them randomly. Paying attention to the number of questions in the research may be a recommendation for further research. Another methodological weakness of the study is that it is a relational and cross-sectional study. When evaluating the results of the study, the nature of the study should be considered and causal conclusions should not be drawn.

Also, it has been observed that individuals with anxious rejection expectation and angry rejection expectation have different behavioral samples (Gao et al., 2019). It would be important to examine how these different behavioral patterns affect interpersonal problems and somatization.

CONCLUSION

The current study purpose to investigate the mediating role of interpersonal difficulties between rejection sensitivity and somatization. According to results, interpersonal difficulties had full mediation effect in association between rejection sensitivity and somatization. To our knowledge, no research has been found in the literature examining the mediator role of interpersonal difficulties in the relationship between rejection sensitivity and somatization. For this reason, this research is a useful study in terms of closing this gap in the literature and clinical settings. The present study is considered to be unique in the literature, as it is the first study to examine the variables of rejection sensitivity, somatization, and interpersonal problems together. As a result of the analyses, it is thought that it will be important for other clinical psychology studies investigating similar concepts. It is thought that this study makes a contribution to the fields of psychopathology and clinical work by showing the importance of interpersonal relationships.

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Tables and Figures

Tables

Table 1.

Pearson's Correlation Coefficients of the Study Variable

	1	2	3
1.Rejection Sensitivity	1	.228*	.021
2.Interpersonal Difficulties	.228*	1	.275*
3.Somatization	.021	.275*	1

**p<0.01*

Figures

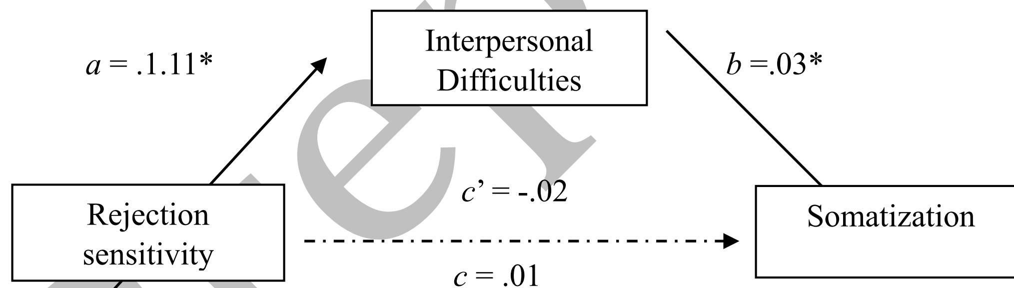

Figure 1. *Mediation model of rejection sensitivity, interpersonal difficulties, and somatization (Model 4, Hayes, 2018)*

Note. *p < .001; a is effect of rejection sensitivity on interpersonal difficulties; b is effect of interpersonal difficulties on somatization; c is total effect of rejection sensitivity on somatization; c' is direct effect of rejection sensitivity on somatization.

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