



## RESEARCH ARTICLE

# The role of self-compassion and perceived social support in the relationship between five-factor personality traits and general psychological symptomatology

Gozde Tamcan<sup>1</sup>, Ihsan Dag<sup>2</sup>

<sup>1</sup>Hacettepe University, Psychological Counseling Unit, Ankara - Turkey

<sup>2</sup>Hacettepe University, Department of Psychology, Ankara - Turkey

### ABSTRACT

**Objective:** The aim of this study was to investigate the mediating role of self-compassion and perceived social support in the relationship between psychological symptomatology and the five-factor personality traits of extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness.

**Method:** A total of 425 university students were enrolled in the study. Data were collected using a demographic information form, Turkish Adjective-Based Personality Test, the Brief Symptom Inventory (BSI), the Self-Compassion Scale and the Multidimensional Scale of Perceived Social Support. The data recorded were analyzed using correlation and multiple mediation model test (bootstrap) analysis.

**Results:** The relationship between variables was statistically significant. Analysis conducted to explore the mediating role of self-compassion and perceived social support revealed that self-compassion and perceived social support were mediators in the relationship between neuroticism, extraversion, agreeableness, conscientiousness and psychological symptomatology. There was no statistically significant relationship between openness to experience and the BSI ( $r=-0.05$ ,  $p>05$ ).

**Conclusion:** The findings of this study regarding the relationships between the variables were mostly consistent with the results of other studies in the literature. The mediating role of self-compassion and perceived social support in the relationship between personality and psychological symptoms is important to understanding the relationship between personality and psychopathology. The findings also provide additional perspective to the question of how psychotherapy leads to change.

**Keywords:** Five-factor personality traits, perceived social support, psychological symptomatology, self-compassion

## INTRODUCTION

Despite differences in definition and concept, personality and psychopathology have been recognized throughout history and across cultures and have been acknowledged as a universal aspect of human existence

(1). The relationship between personality and psychopathology has been investigated ever since Hippocrates described 4 basic temperament formulations (2). The idea that personality traits may be the underlying cause of psychological disorders, may affect the expression of psychiatric symptoms, or

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**Correspondence:** Gozde Tamcan, Hacettepe University, Psychological Counseling Unit, Ankara - Turkey

**E-mail:** gozdetamcan@hotmail.com

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interact with treatment approaches has made it important to determine explore determine role personality traits in studies on mental health (3).

Although many studies in the literature have concluded that there is a relationship between the five-factor personality traits (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) and psychological disorders (4-6), the underlying mechanism of this relationship has not yet been fully explained. Clark, Watson and Mineka (7) described a "tripartite model" consisting of low positive affectivity, anhedonia, and autonomic hyperarousal components. Magnus and Diener (8) reported that personality traits may affect the experience of life events. Other views on the subject have suggested that an individual's sensitivity to positive or negative stimuli (7,9), rumination level (10), frequency of exposure to stress, type of stressor, assessment of stressor, and coping with stress (11) may differ according to personality traits.

It has been widely observed that many concepts associated with psychological disorders, such as life satisfaction, ability to cope with stress, and subjective well-being may be related to personality traits (8,12-14). Self-compassion is another concept discussed in the literature that may be related to both personality traits and psychological disorders. Self-compassion is defined as being open to the emotions that cause one to suffer and experience pain, approaching oneself with an attentive and kind attitude, understanding of inadequacies and failures, and acceptance negative experiences as a natural process of human life (15). The level of self-compassion has been found to differ according to personality traits (16,17) and greater self-compassion has been seen to have a positive effect on mental health (18-21). Perceived social support is another concept that that may be related to both personality traits and psychological disorders. Prociano and Heller (22) defined perceived social support as an individual's perception that in the event of a threat they will be able to get the information needed to deal with this threat from their social network. It may be that personality traits affect the process of structuring of an individual's social network (23-25) and the reactions from the social network (26,27). There may be a simultaneous influence that affects the development of personality traits and perceived social support (28,29). Researchers have concluded that there may be a relationship between personality traits and perceived social support (25,30,31), and that perceived social

support has a positive effect on individual mental health (32-36).

There are obviously numerous variables related to mental health. Understanding the nature of psychological disorders is important to a full understanding of the etiology of these disorders and formulating a treatment plan. Although there are many studies in the literature that have examined the relationship between psychological symptomatology and the 5-factor personality traits and social support, a review suggested that there were few analyses of the relationship to self-compassion and perceived social support. To the best of our knowledge, this is the first study to examine the 5-factor personality traits, self-compassion, perceived social support, and psychological symptomatology. Self-compassion and perceived social support may be important variables in understanding the relationship between personality traits and psychological disorders.

## METHOD

### Participants and Procedure

Before beginning the research, approval was obtained from the Ethics Commission of Hacettepe University on 09, 2017 (no: 35853172). All participation was voluntary, and the participants provided informed consent. The study sample comprised undergraduate students of different departments and graduating classes of Hacettepe University selected through convenience sampling. The scales were administered to the students collectively in the classrooms by the researchers. The scales (other than the demographic information form) were presented in a different sequence so as to minimize the order effect. The initial group consisted of 540 students. Participants who did not answer more than 10% of the questions or who indicated that they had ever received any psychological treatment or a psychiatric diagnosis on the information form were excluded. The analysis was performed using the data of 425 students: 300 (70.6%) of the participants were women and 125 (29.4%) were men. The age of the participants was 17-34 years ( $\bar{X}$ =21.19,  $S$ =2.01).

Pearson's correlation coefficient was used to determine the relationships between the 5-factor personality traits, self-compassion, perceived social support, and psychological symptomatology. The bootstrap method developed by Preacher and Hayes (37) was applied to examine the mediating role of self-compassion and perceived social support in the relationship between the 5-factor personality traits and psychological symptomatology. To determine the

mediating role of a variable, there must be a significant relationship between the predictor variable (5-factor personality traits), the outcome variable (psychological symptomatology), and mediator variables (self-compassion and perceived social support). The correlation between the variables was examined and variables that demonstrated a relationship were included in further analysis. The bootstrap analysis was conducted using Multiple Mediation Model 4 and the PROCESS Macro v3.0 of IBM SPSS Statistics for Windows, Version 23.0 software (IBM Corp., Armonk, NY, USA).

## Measures

**Demographic Information Form:** A form was used to collect details of the participants' age, gender, faculty and department of study, class year, education level of parents, and any previous psychological/psychiatric diagnosis or treatment.

**Adjective-Based Personality Test:** The Adjective-Based Personality Test (ABPT) is a Turkish scale developed by Bacanlı, İlhan, and Aslan based on the 5-factor model. The scale consists of the same 5 subdimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. A 7-point Likert-type scale is used to score 40 items. An evaluation of the construct validity of the scale demonstrated that the 5 factors explained 52.63% of the variance, and the internal consistency coefficients of the scale were 0.73-0.89. The highest internal consistency coefficient was seen in the extroversion subdimension at 0.89, while the lowest was the neuroticism subdimension at 0.73 (38). In this study, the Cronbach's alpha coefficient of the scale varied between 0.71 and 0.86. The highest internal consistency coefficient was observed in the extroversion subdimension at 0.86 and the lowest internal consistency coefficient was that of the neuroticism subdimension at 0.71.

**Brief Symptom Inventory:** In this study, the Brief Symptom Inventory (BSI), a short form of The Symptom Checklist-90, which was developed by Derogatis in 1992 (39), was used to evaluate general psychological symptomatology. A Likert-type scale of 0-4 is used to score 53 items. A high score reflects greater intensity of psychological symptoms. A Turkish adaptation of the scale was tested with a sample of both adults (40) and adolescents (41), and high reliability and validity values were determined. Factor analysis resulted in 5 factors (anxiety, depression, negative self-concept, somatization, and hostility). The internal

consistency coefficients obtained from the adult sample were 0.75-0.87, and the internal consistency coefficients of the adolescent sample were 0.70-0.88. In this research, the Cronbach's alpha coefficient of the scale was 0.96.

**Self-Compassion Scale:** The original form of the Self-Compassion Scale (SCS) developed by Neff (20) consists of 26 items and 6 subdimensions: self-kindness, self-judgment, common humanity, isolation, mindfulness and over-identification. The instrument uses a 5-point Likert-type scale. The internal consistency coefficient of the scale has been reported to be 0.92. The scale also showed a high level of test-retest reliability (0.93 for the whole scale). Confirmatory factor analysis confirmed the 6 subdimensions.

The SCS was adapted to Turkish by Akın et al. in 2007 (42). Confirmatory factor analysis showed that the scale was compatible with the original form. Internal consistency coefficients of the scale were 0.72-0.80, and test-retest reliability coefficients were 0.56-0.69. The adjusted item-total correlations of the scale were 0.48-0.71, and all of the differences between the averages of the lower- and upper-27% groups were significant. In this study, the Cronbach's alpha coefficient of the scale was 0.92.

**The Multidimensional Scale of Perceived Social Support:** The Multidimensional Scale of Perceived Social Support (MSPSS) scale was developed by Zimet, Dahlem, Zimet and Farley (43). A total of 12 items are scored reflecting perceived adequacy of support from 3 sources (4 items each): family, friends, and a significant other, using a Likert-type scale of 1-7. A high score indicates greater perceived social support (44).

In the Turkish adaptation of the scale, the 3 factors determined by factor analysis (family, friends and a significant other) represented 75.3% of the total variance, the family factor accounted for 45%, the significant other factor for 17.9%, and the friend factor explained 12.4%. Cronbach alpha measurement of internal consistency resulted in values of 0.80-0.95 (44). In the present research, the Cronbach's alpha coefficient of the scale was 0.88.

## RESULTS

### Correlation Analysis

The results of Pearson's correlation analysis are provided in Table 1.

Examination of the relationship between the results of the ABPT and the BSI revealed a positive correlation with neuroticism ( $r=0.47$ ) and a negative correlation

with extraversion ( $r=-0.20$ ), agreeableness ( $r=-0.19$ ), and conscientiousness ( $r=-0.21$ ) ( $p<0.01$ ). There was no significant relationship between openness to experience and the BSI ( $r=-0.05$ ,  $p>0.05$ ).

In the relationship between the ABPT results and the SCS, it was observed that there was a negative correlation between neuroticism ( $r=-0.56$ ) with SCS and a positive correlation between other personality traits with SCS. The correlation coefficients were 0.16-0.28 ( $p<0.01$ ).

Analysis of the relationship between the ABPT and the MSPSS indicated that there was negative correlation between neuroticism ( $r=-0.26$ ,  $p<0.01$ ) with MSPSS and a positive correlation between other personality traits of 0.11 ( $p<0.05$ ) and 0.22 ( $p<0.01$ ).

Examination of the correlation between the BSI with SCS and MSPSS revealed as a negative correlation was observed between the BSI and the SCS ( $r=-0.59$ ,  $p<0.01$ ) and the MSPSS ( $r=-0.34$ ,  $p<0.01$ ).

### Mediator Variable Analysis

The bootstrap method developed by Preacher and Hayes (37) was used to examine the mediating role of self-compassion and perceived social support in the

relationship between 5-factor personality traits and psychological symptomatology. Since there was no significant relationship between openness to experience and psychological symptomatology, that variable was not included in the analysis.

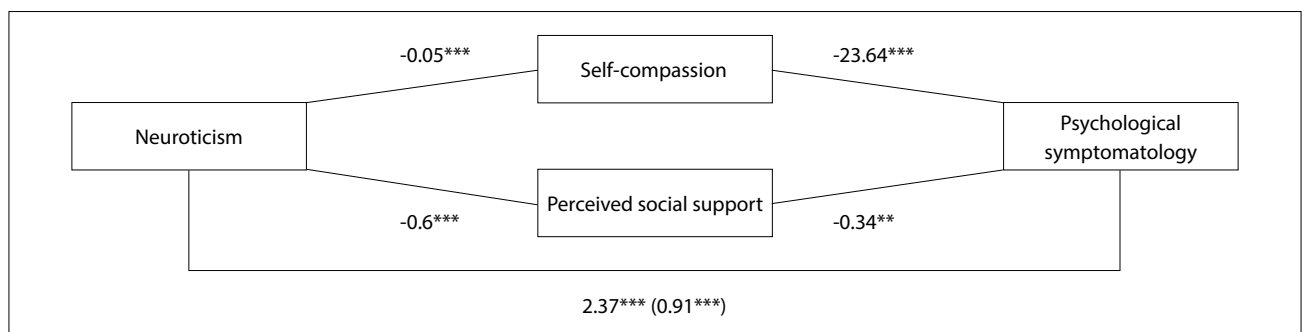
Findings regarding the mediating effects of self-compassion and perceived social support variables in the relationship between neuroticism and psychological symptomatology are illustrated in Figure 1.

Neuroticism had a significant direct effect on psychological symptomatology ( $B=2.37$ ,  $t=10.8$ ,  $p<0.001$ ), self-compassion ( $B=-0.05$ ,  $t=-14.06$ ,  $p<0.001$ ), and perceived social support ( $B=-0.6$ ,  $t=-5.44$ ,  $p<0.001$ ). Self-compassion ( $B=-23.64$ ,  $t=-9.32$ ,  $p<0.001$ ) and perceived social support ( $B=-0.34$ ,  $t=-3.47$ ,  $p<0.01$ ) demonstrated a significant direct effect on psychological symptomatology. When neuroticism and all the other mediating variables were all entered into the analysis, the relationship between neuroticism and psychological symptomatology decreased and remained at 0.001 despite a decrease in the significance value ( $B=0.91$ ,  $t=3.88$ ,  $p<0.001$ ). It was concluded that the mediating variables had a partial mediating effect on the relationship between neuroticism and psychological

**Table 1: Correlation coefficients between variables**

	1	2	3	4	5	6	7	8
<b>1. BSI</b>	1							
<b>2. SCS</b>	-0.59**	1						
<b>3. MSPSS</b>	-0.34**	0.34**	1					
<b>4. Neuroticism</b>	0.47**	-0.56**	-0.26**	1				
<b>5. Extraversion</b>	-0.20**	0.20**	0.21**	-0.15**	1			
<b>6. Openness to Experience</b>	-0.05	0.16**	0.11*	-0.11*	0.59**	1		
<b>7. Agreeableness</b>	-0.19**	0.28**	0.17**	-0.29**	0.16**	0.26**	1	
<b>8. Conscientiousness</b>	-0.21**	0.18**	0.22**	-0.14**	0.41**	0.29**	0.26**	1

\* $p<0.05$ , \*\* $p<0.01$ . BSI: Brief Symptom Inventory, SCS: Self-Compassion Scale, MSPSS: The Multidimensional Scale of Perceived Social Support



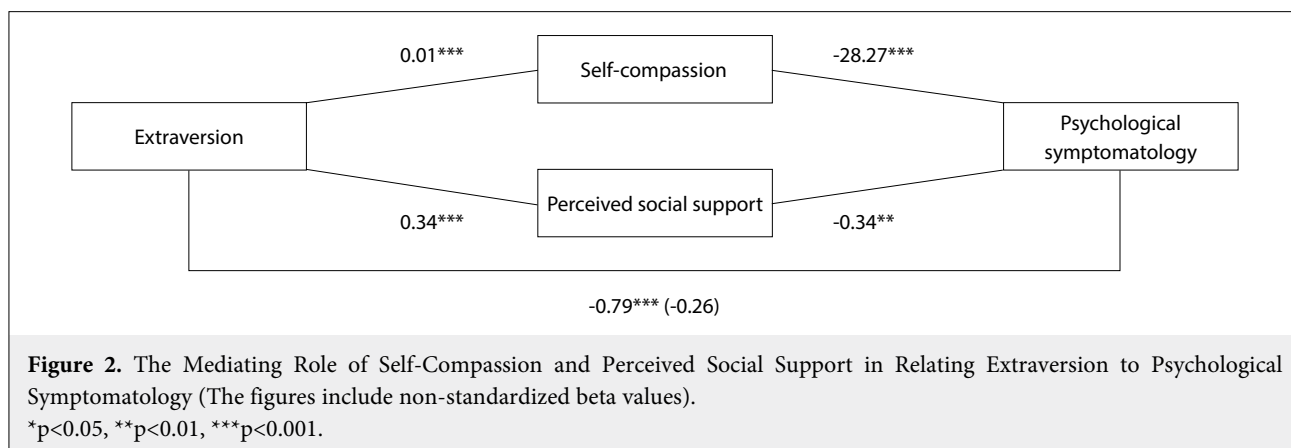
**Figure 1.** The Mediating Role of Self-Compassion and Perceived Social Support in Relating Neuroticism to Psychological Symptomatology (The figures include non-standardized beta values).

\* $p<0.05$ , \*\* $p<0.01$ , \*\*\* $p<0.001$ .

**Table 2: Point estimations and confidence intervals for indirect effects of mediating variables on psychological symptomatology**

	Point estimation	SE	95% Confidence interval	
			Low	High
<b>Total<sup>1</sup></b>	1.46	0.18	1.1204	1.8144
<b>Self-compassion<sup>1</sup></b>	1.27	0.17	0.9487	1.6113
<b>Perceived social support<sup>1</sup></b>	0.18	0.07	0.0741	0.3322
<b>Total<sup>2</sup></b>	-0.52	0.12	-0.7587	-0.2835
<b>Self-compassion<sup>2</sup></b>	-0.41	0.11	-0.6162	-0.1979
<b>Perceived social support<sup>2</sup></b>	-0.11	0.04	-0.2028	-0.0437
<b>Total<sup>3</sup></b>	-0.75	0.13	-1.0020	-0.5091
<b>Self-compassion<sup>3</sup></b>	-0.63	0.12	-0.8815	-0.4159
<b>Perceived social support<sup>3</sup></b>	-0.11	0.04	-0.2100	-0.0394
<b>Total<sup>4</sup></b>	-0.63	0.17	-0.9566	-0.2963
<b>Self-compassion<sup>4</sup></b>	-0.48	0.15	-0.7708	-0.1916
<b>Perceived social support<sup>4</sup></b>	-0.15	0.06	-0.2749	-0.0557

1. 1. The mediating effects of self-compassion and perceived social support in the relationship between neuroticism and psychological symptomatology. 2. The mediating effects of self-compassion and perceived social support in the relationship between extraversion and psychological symptomatology. 3. The mediating effects of self-compassion and perceived social support in the relationship between agreeableness and psychological symptomatology. 4. The mediating effects of self-compassion and perceived social support in the relationship between conscientiousness and psychological symptomatology



symptomatology. In addition, it was observed that the model was significant ( $F_{1,423} = 116.53$ ,  $p < 0.001$ ,  $R^2 = 0.22$ ) and explained 22% of the total variance.

The significance of the partial mediating effect of the variables was examined on the 5000 people bootstrap sample and the results are given in Table 2. The total indirect effect of all mediating variables was significant (point estimation = 1.46, 95% confidence interval [CI] [1.204, 1.8144]). When the mediating variables were examined separately, it was seen that the partial mediating effect of self-compassion (point estimation = 1.27, 95% CI [0.9487, 1.6113]) and perceived social support (point estimation = 0.18, 95% CI [0.0741, 0.3322]) was significant.

Findings regarding the mediating effects of self-compassion and perceived social support variables in

the relationship between extraversion and psychological symptomatology are given in Figure 2.

As seen in Figure 2, extraversion had a significant direct effect on psychological symptomatology ( $B = -0.79$ ,  $t = -4.26$ ,  $p < 0.001$ ), self-compassion ( $B = 0.01$ ,  $t = 4.18$ ,  $p < 0.001$ ), and perceived social support ( $B = 0.34$ ,  $t = 4.33$ ,  $p < 0.001$ ). Self-compassion ( $B = -28.27$ ,  $t = -12.79$ ,  $p < 0.001$ ) and perceived social support ( $B = -0.34$ ,  $t = -3.46$ ,  $p < 0.01$ ) had a significant direct effect on psychological symptomatology. When extraversion and all of the mediating variables were entered into the analysis, the relationship between extraversion and psychological symptomatology ceased to be significant ( $B = -0.26$ ,  $t = -1.7$ ,  $p > 0.05$ ). It was concluded that mediating variables had a full mediating effect in the relationship between extraversion and psychological

symptomatology. In addition, it was observed that the model was significant ( $F(1-423)=18.11, p<0.001, R^2=0.04$ ) and explained 4% of the total variance.

The significance of the full mediating effect of the mediating variables was examined on the 5000 people bootstrap sample and the results are given in Table 2. The total indirect effect of all mediating variables was significant (point estimation=-0.52, 95% CI [-0.7587, -0.2835]). When the mediating variables were examined separately, it was found that the full mediating effect of self-compassion (point estimation=-0.41, 95% CI [-0.6162, -0.1979]) and perceived social support (point estimation=-0.11, 95% CI [-0.2080, -0.0437]) were significant.

Findings regarding the mediating effects of the self-compassion and perceived social support variables in the relationship between agreeableness and psychological symptomatology are provided in Figure 3.

Agreeableness had a significant direct effect on psychological symptomatology ( $B=-0.83, t=-4.07, p<0.001$ ), self-compassion ( $B=0.02, t=5.99, p<0.001$ ), and perceived social support ( $B=0.31, t=3.6, p<0.001$ ). Self-compassion ( $B=-28.55, t=-12.63, p<0.001$ ) and perceived social support ( $B=-0.36, t=-3.69, p<0.001$ ) had a significant direct effect on psychological symptomatology. When agreeableness and all mediating variables were entered into the analysis together, the relationship between agreeableness and psychological symptomatology was no longer significant ( $B=-0.08, t=-0.46, p>0.05$ ). It was concluded that mediating variables had a full mediating effect in the relationship between agreeableness and psychological symptomatology. In addition, it was observed that the model was significant ( $F(1-423)=16.57, p<0.001, R^2=0.04$ ) and explained 4% of the total variance.

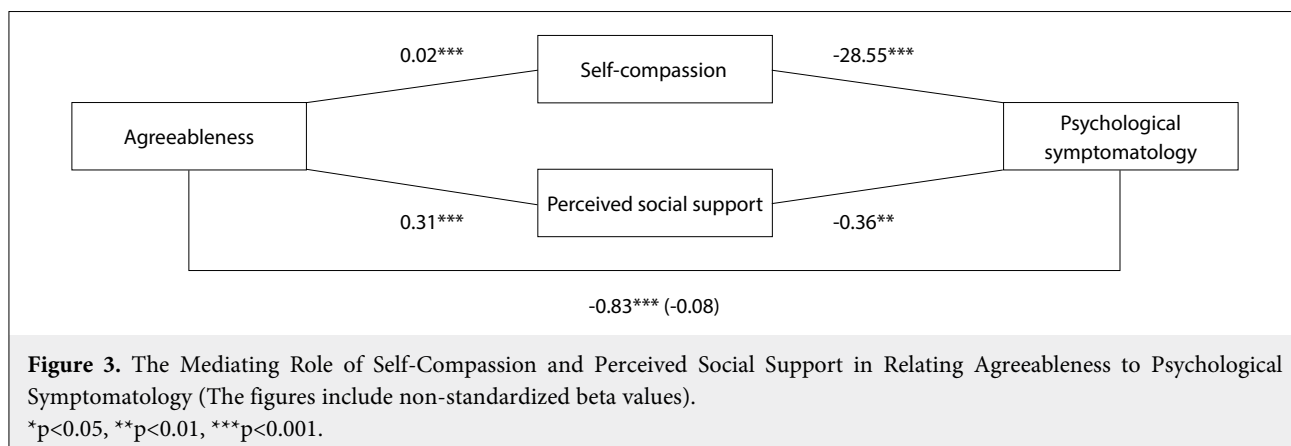
Whether the full mediating effect of the mediating variables is significant was examined on the 5000 people

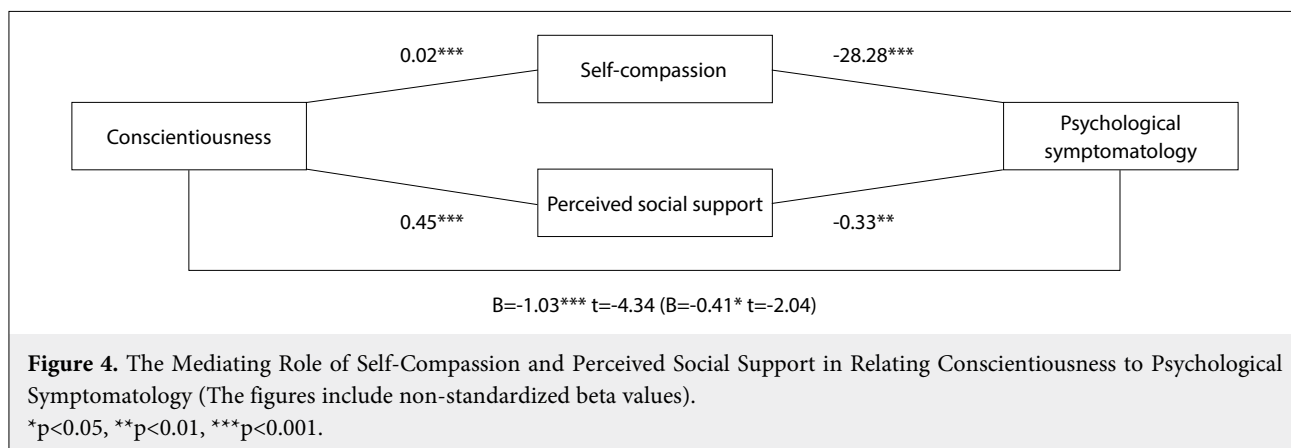
bootstrap sample and the results are given in Table 2. The total indirect effect of all mediating variables was significant (point estimation=-0.75, 95% CI [-1.0020, -0.5091]). When the mediating variables were examined separately, it was found that the full mediating effect of self-compassion (point estimation=-0.63 and 95% CI [-0.8815, -0.4159]) and perceived social support (point estimation=-0.11, 95% CI [-0.2100, -0.0394]) was significant.

Findings regarding the mediating effects of self-compassion and perceived social support variables in the relationship between conscientiousness and psychological symptomatology are provided in Figure 4.

Conscientiousness had a significant direct effect on psychological symptomatology ( $B=-1.03, t=-4.34, p<.001$ ), self-compassion ( $B=0.02, t=3.78, p<0.001$ ), and perceived social support ( $B=0.45, t=4.53, p<0.001$ ). Self-compassion ( $B=-28.28, t=-12.85, p<0.001$ ) and perceived social support ( $B=-0.33, t=-3.37, p<0.01$ ) demonstrated a significant direct effect on psychological symptomatology. When conscientiousness and all mediating variables were entered into the analysis together, the relationship between conscientiousness and psychological symptomatology decreased ( $B=-0.41, t=-2.04, p<0.05$ ). It was concluded that mediating variables had a partial mediating effect on the relationship between conscientiousness and psychological symptomatology. It was observed that the model was significant ( $F(1-423)=18.83, p<0.001, R^2=0.04$ ) and explained 4% of the total variance.

Whether the partial mediating effect of the mediating variables is significant was examined on the 5000 people bootstrap sample and the results are given in Table 2. The total indirect effect of all mediating variables was significant (point estimation=-0.63, 95% CI [-0.9566, -0.2963]). When the mediating variables were examined separately, it was determined that the partial mediating effect of self-compassion (point





estimation=-0.48, 95% CI [-0.7708, -0.1916]) and perceived social support (point estimation=-0.15, 95% CI [-0.2749, -0.0557]) was significant.

## DISCUSSION

This study examined the relationships between 5-factor personality traits, psychological symptomatology, self-compassion, and perceived social support. Correlation analyses revealed a positive correlation between neuroticism and psychological symptomatology, and a negative correlation between with psychological symptomatology and extraversion, agreeableness, and conscientiousness. No significant relationship between openness to experience and psychological symptomatology was observed. In other words, the level of psychological symptoms increased as the level of neuroticism increased, and the level of psychological symptoms decreased as the level of extraversion, agreeableness, and conscientiousness increased. There are numerous studies in the literature that support these findings (45-47).

When the relationship between the 5-factor personality traits and self-compassion and perceived social support was analyzed, we observed that neuroticism was negatively related to self-compassion and perceived social support, while other personality traits were positively related. In the other words, the level of self-compassion and perceived social support decreased as the level of neuroticism increased, and the level of self-compassion and perceived social support increased as the level of extraversion, openness to experience, agreeableness, and conscientiousness increased. The findings are consistent with previous research findings (48-50).

When the relation between psychological symptomatology and self-compassion and perceived social support is examined, both variables appear to be

negatively related to psychological symptomatology. That is, as the level of self-compassion and perceived social support increases, the level of psychological symptoms decreases. Review of the relevant literature suggests that these findings are consistent with those of previous research (20,51-53).

In this study, the mediating role of self-compassion and perceived social support in the relationship between the five-factor personality traits and psychological symptomatology was investigated. Since there was no relationship between openness to experience and psychological symptomatology, openness to experience was not included in the analysis. As a result of the analysis, it was concluded that the mediating variables have a partial mediating effect in the relationship between neuroticism and conscientiousness with psychological symptomatology, and that there is a full mediating effect in the relationship between extraversion and agreeableness with psychological symptomatology. When the literature is analyzed, no study was found in which the mediating effect of self-compassion in the relationship between personality traits and psychological symptomatology was examined, but it was observed that the mediating effect of perceived social support in the relationship between personality traits and depression is examined by Finch and Graziano (49). Findings from this study was consistent with those obtained by Finch and Graziano (49). Finch and Graziano (49) stated that their findings on the mediating effect of perceived social support might emerged because of individuals with high neurotic level had negative social interactions and were not satisfied with social support. In addition, it can be thought that the findings obtained in this study are related to the relationship between neuroticism and perceived social support with stress coping, emotional balance, problem solving behaviors and positive affect. It is stated that individuals with high neuroticism tend

to be exposed to more negative life events, threatening perceptions, insufficient coping resources, and negative affect, unlike individuals with high perceived social support (7,8,11,54,55). It can be thought that the findings on the mediating effect of self-compassion on the relationship between neuroticism and psychological symptomatology are associated with reverse relationship between neuroticism and self-compassion, on one hand and rumination, negative affect and stress sensitivity, on the other hand (7,9,10,11,15,16,20,56). Neff, Kirkpatrick, and Rude (51) stated that the increase in self-compassion level reduced the level of rumination and negative affect by acting as a buffer in situations threatening the ego.

As for the effects of mediating variables on the relationship between extraversion and psychological symptomatology, the findings can be explained by increased social support satisfaction of individuals with high levels of extraversion (49). In studies examining the relationship between personality and psychopathology, it was stated that the negative correlation between extraversion and psychopathology stemmed from the positive correlation between extraversion with positive affect, positive evaluation of coping resources, and the tendency to experience positive life events (7,8,9,11). Similarly, it has been stated that individuals with high self-compassion have more positive affect (20) and individuals with high perceived social support tend to evaluate coping resources positively and experience positive life events (54,55). For this reason, it can be thought that the findings about the effect of mediating variables in the relationship between extraversion and psychological symptomatology stem from the positive relationship of mediating variables with positive affect, positive evaluation of coping resources, and the tendency to experience positive life events.

It is thought that the findings obtained on the effect of mediating variables in the relationship of agreeableness to psychological symptomatology may result from individuals with high agreeableness to behave more socially and to perceive social behavior of other individuals as less aggressive. In addition, it was stated that individuals with low agreeableness level experienced more conflict and exposure to stresses due to their distant and opposing attitudes in social settings (11,15,57).

Although there is no research in the literature on the effect of mediating variables in the relationship between conscientiousness and psychological symptomatology, it can be thought that the findings obtained in this study stem from the positive correlation between

conscientiousness, self-compassion, and perceived social support with low stress level and protective behaviors. In previous studies, it was stated that individuals with high levels of conscientiousness, self-compassion and perceived social support are exposed to less stress and have protective behaviors in some areas such as finance, health and relationship that may lead to negative situations (11,15,55).

When the findings of this research are analyzed in general, it is seen that the role of self-compassion and perceived social support is important in the relationship between personality traits and psychological symptomatology. Considering the relationship between personality traits and psychological disorders (4,5,6,58,59), and the stable nature of personality traits (60), it is important to evaluate the findings in terms of questioning about how psychotherapies are effective.

Kazdin (61) stated that after years of psychotherapy research, there is no evidence-based explanation about how even well-studied interventions lead change. Regarding the subject, Frank (62) stated in his study on the common characteristics of psychotherapy and psychotherapy patients that patients considered themselves inadequate in terms of their coping skills, diffident and unsuccessful and also felt guilt and shame. In addition, he stated that patients considered themselves isolated and separated from society because they thought that other individuals could not help or want to help them. In this context, Frank stated that psychotherapies provide patients with the skills and safety feeling they need to deal with their problems thanks to the therapeutic relationship and the therapeutic environment. He also stated that the conceptualization of the patient's condition and behavior helped to overcome the sense of isolation and increase hope, skill and belonging.

It is noteworthy that the concepts expressed by Frank (62) as a common feature of psychotherapy and psychotherapy patients coincide with the concept of self-compassion. Neff (15) stated that self-compassion requires the individual's experiences to be aware of human sharing, instead of experiencing them as their own unique experiences, otherwise they separate themselves from other individuals when faced with painful life events. It has also been stated that self-compassion decreases the sense of failure and shame, increases the sense of security, behavioral motivation, problem-oriented steps and coping with stress (15,51,63).

The views put forward by Frank (62) about psychotherapy can also be associated to the concept of perceived social support. Prociano and Heller (22)



defined perceived social support as an individual's perception that they can provide the information and help they need to deal with this threat from the social network in case of a threat. Frank (62), on the other hand, stated that psychotherapy patients think that other individuals can not help or want to help them, and that psychotherapy increases the belonging by decreasing decomposition and isolation thanks to therapeutic relationship and conceptualization. Although social support and psychotherapy are methodologically, practically and historically different concepts, it is stated that they have many common features such as help, active listening, empathetic reaction and modeling (64). In addition to these common features, psychotherapy is thought to positively affect the individual's perception that they can get help and provide emotional support as well as information and listening support.

Considering the studies showing that the increase in the level of self-compassion and perceived social support is negatively related to the psychological symptom level, it is believed that the findings obtained in the present study provide a different perspective to the question of how psychotherapy leads to change in addition to the views on the relationship between personality traits and psychological symptoms. Finally, this study, which examines the mediating role of self-compassion and perceived social support in the relationship between personality traits and psychological symptomatology, is thought to make an important contribution to the literature, since there is no similar study known in the literature. In the light of the findings obtained in this study, it is thought that it is important for mental health professionals to consider individuals' self-compassion and perceived social support levels when addressing psychological symptoms. In addition, interventions can be applied to increase self-compassion and social support. In previous studies, it has been stated that programs to increase self-compassion are effective in reducing the level of psychological symptoms (63,65,66). In another study examining the relationship between working alliance, social support and psychological symptomatology, it was concluded that the change in social support was the best predictor of symptom change (67). Considering these research findings, it is thought that protective and preventive programs can be organized to increase the level of self-compassion and perceived social support among university students. In previous studies, it has been stated that self-compassion and perceived social support have a protective effect

against psychological disorders (18,19,55). However, the limitations of the study are that the sample consists of only university students, the use of self-report scales, and the exclusion of participants who previously received psychological/psychiatric diagnosis and treatment. The collection of data only from university students and a healthy group prevents the generalizability of the findings obtained in this study. For this reason, it is recommended to collect data from individuals in different age groups and clinical samples with appropriate observation and interview techniques in addition to self-report scales in future studies.

Contribution Categories		Author Initials
Category 1	Concept/Design	G.T., I.D.
	Data acquisition	G.T.
	Data analysis/Interpretation	G.T.
Category 2	Drafting manuscript	G.T., I.D.
	Critical revision of manuscript	G.T., I.D.
Category 3	Final approval and accountability	G.T., I.D.
Other	Technical or material support	G.T.
	Supervision	I.D.

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