



## RESEARCH ARTICLE

# Fearful Attachment and Suicide Probability: The Mediating Role of Psychological Symptoms on Medical School Students

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## ABSTRACT

The mediating role of psychological symptoms in the relationship between fearful attachment and suicide probability was examined. The data were obtained from 192 medical school students. Adult Attachment Styles Scale, Suicide Probability Scale, and Symptom Check List 90R were used to collect the data. Correlation analysis was utilized to examine the relationships between variables, and the mediating role was determined using the bootstrapping method. Findings showed significant relationships between fearful attachment, psychological symptoms, and suicide probability. Moreover, the fearful attachment was associated with increased psychological symptoms and suicide probability. Psychological symptoms were associated with increased suicide probability. Furthermore, psychological symptoms mediated the relationship between fearful attachment and suicide probability. Psychological symptoms are critical in the relationship between fearful attachment and suicide probability. The current research adds to our knowledge of suicide probability by investigating fearful attachment and psychological symptoms. Besides, it underlies and contributes to the antecedents of suicide probability.

Suicide is a common and preventable health problem worldwide. Many individuals die each year due to suicide. Suicide attempts may not result in death in some cases. According to a survey conducted in September 2022 (Suicide Prevention Now, 2022), 26 percent of adults in the United States had contemplated or committed suicide. Today's U.S. adults (59%) are somewhat familiar with suicide, either by knowing someone who committed suicide (33%), having conversations with someone who was contemplating suicide (26%), being concerned about someone who might have been thinking about committing suicide (24%), or by knowing someone who attempted suicide but did not succeed (24%). According to the Centers for Disease Control and Prevention (CDC, 2020) report, suicide is the 12th leading cause of death in the United States. Furthermore, World Health Organization ([WHO], 2021) has reported that approximately 703.000 people die by suicide every year. The second most common cause of death for young people (aged 15 to 29) is suicide. Data from developed countries have shown that the highest suicide rate is among university students (OECD, 2016). According to the 2019 data of the Turkish Statistical Institute (TUIK, 2022), in Turkey, 435.941 people died

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in 2019, and 3.406 (0.7813%) of them were suicide deaths. The crude suicide rate has been increasing in the last four years (TUIK, 2020).

A study conducted by Acar (2009) has shown that based on 139 suicide cases admitted to the emergency service, the second highest age range was 15-24 (42 people, 30.22%). In terms of occupational group, mostly students committed suicide (26 people, 18.71%), and the third highest occupational group was health workers with 17 people. Similarly, examining suicide-related news from 2018 to 2019 in Turkey, İlhan and Akaslan (2019) reported that 38.4% of the individuals who committed suicide were students. In the study conducted by Gürhan et al. (2018), the suicide rate among students of medical faculties and nursing departments was 2.3%, while the rate of students with suicidal ideation was 13.1%. Due to these data, determining the risk factors that cause suicide and understanding the role of psychological processes is essential for the selected research group (i.e., medical school students) (Levi-Belz & Beutrais, 2016). From this point of view, medical faculty students are at intense risk in terms of suicide probability, both in terms of age range and occupational group. Therefore, the sample of the current study consisted of medical faculty students.

Because of the increasing incidence of suicide among physicians and medical school students in recent years, and the wide impact of these suicides on both their families and society, it becomes a must to examine the factors affecting the suicide probabilities of medical school students. Since doctors have high suicide probabilities (see Schernhammer, 2005; Ventriglio et al., 2020), it is thought that raising awareness by conducting studies during medical education can be effective in reducing suicide probabilities. Behind each attempt and suicide, there is a long-term fight for these people, as well as traumatizing events and sorrow among their loved ones. Finding the psychological mechanisms that may underlie suicidal ideation would be a particular area of focus given that suicide is one of the most terrible human actions (Levi-Belz et al., 2019b). Thus, this study aimed to determine the antecedents of suicide probability. In other words, the mediating role of psychological symptoms in the relationship between fearful attachment and suicide probability was examined.

Doctors who experience the physical and emotional stress that is common to their line of work are more likely to commit suicide. These situations could be made worse by emotional tiredness, a dearth of encouraging feedback, isolation at work, and inadequate support systems. Additionally, factors such as long hours, disrupted family relationships, poor work-life balance, as well as system and organizational politics, may magnify hazards (Ventriglio et al., 2020, p. 115). For this reason, it is important to examine the suicide probability of medical school students, since doctors are in a possible risk group for suicide. Although there are many factors that affect suicidal behavior, we focused on psychological symptoms and attachment styles in this study based on the literature review. Since psychopathology is an important risk factor for suicide (Gvion et al., 2015), and attachment styles are related to suicide attempts (Levi-Belz et al., 2013), these variables were included in the study. The rise in the suicide rate among doctors and medical students as well as the widespread effects of these suicides on both their families and society make it necessary to focus on this issue.

In general, it is possible to encounter news reporting suicide in the media. Regarding the medical profession, three news stories (i.e., the suicides of a doctor and two medical school students) have become the agenda in the Turkish media recently. These are the starting points of this study and underline the importance of this study. Therefore, it is essential to examine the probability of suicide among medical professionals. The details of these news stories are as follows:

*“Assistant Doctor M. Y., from the Faculty of Medicine of Bursa Uludag University, left home in February 2021, saying that he was going to go skiing, and then he committed suicide after writing a letter explaining his predicament (Haberturk, 2022). In the letter he left behind, he said (NTV, 2022a), ‘The irony is that I couldn’t stand the fact that people couldn’t stand each other. Those who insult each other, hurt each other and break each other’s hearts for very simple reasons have driven me to despair. I don’t want to deal with such people. The tyrants use their power to establish a kingdom of fear and make the weaker tremble, and nobody can do anything. Because it hurts you too. It walks over everybody...’.*

*Similarly, the suicide note of E. K., a second-year student at the Faculty of Medicine of Elazig Firat University, in January 2022 (BBC, 2022), shows that he could not spare time for other things in life because he was staying in a religious-based community dormitory and therefore committed suicide. He ended his*

*life by jumping from the seventh floor of a building. He states that he was under pressure of the community dormitory, that he was psychologically tired and had no joy in living (NTV, 2022b).*

*Finally, A. H., fourth-year student at the Faculty of Medicine of Akdeniz University, was found dead in May 2022 at home. Police reported that the student had committed suicide (Milliyet, 2022)."*

Regarding suicide behavior, De Leo et al. (2006) stated that although there is no clear definition of suicide, the essence of suicide behavior is clear: the conscious desire to die (Durkheim, 2005). WHO (2019) defines suicide as a complex problem that does not depend on a single cause. The dictionary meaning of suicide refers to taking action to end one's own life under the influence of mental and social reasons (TDK, 2022). According to Freud (1955), the death instinct coexists with the life instinct and exists in the unconsciousness of the individual. Klein (1997) also stated that people have a death instinct, and they are at war with this death instinct within themselves. The death instinct harms and destroys the individual. Therefore, to prevent this power from harming the individual, the death instinct is either hostility or aggression towards others, or it becomes sadism/masochism by combining with the life instinct (Freud, 1955). In suicide, it is seen that this power is directed to the individual and results in the individual's death.

The literature introduces different risk factors regarding the probability of suicide behavior. The present study considers adult attachment styles. According to Levi-Belz et al. (2013) the attachment patterns are one of the crucial elements that may contribute to the facilitation of serious suicide attempts. Besides, insecure attachment (i.e. fearful attachment) increases the risk for suicidal behavior (see Şenses Dinç et al., 2020). General characteristics of people with fearful attachment can be listed as follows: they generally describe other people as insecure and see themselves as worthless and unlovable (Bartholomew & Horowitz, 1991). According to Bartholomew and Horowitz's (1991) quadruple attachment model, individuals with fearful attachment are also those who fear intimacy and avoid social interaction. The literature argues that when the fearful attachment levels of the groups with high suicide probability and low probability are compared, the fearful attachment levels of the group with high suicide probability are significantly higher (Önen et al., 2017; Özer et al., 2015).

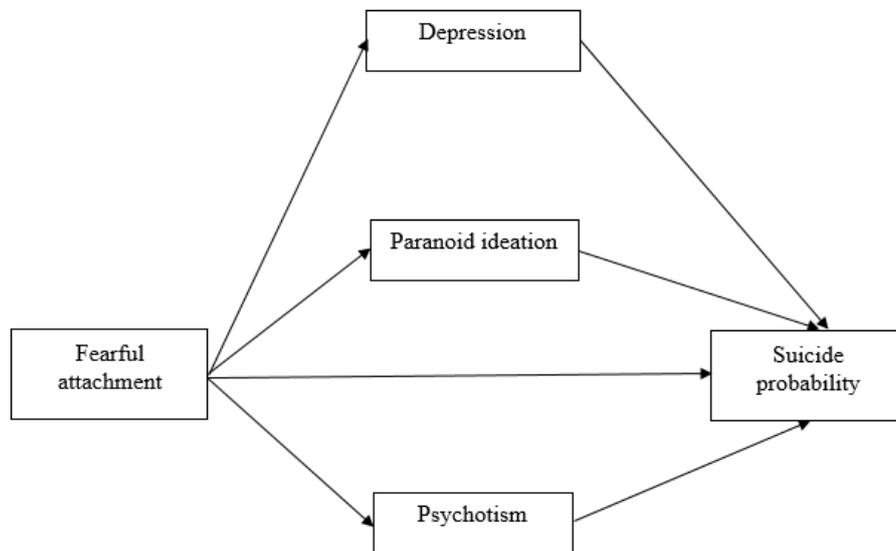
Levi-Belz et al. (2013) have reported that the relationship between insecure attachment styles and the fatality of suicide attempts was moderated by interpersonal conflicts. High degrees of mental pain that are exacerbated by interpersonal conflicts and insecure attachment patterns make up the psychological underpinnings behind suicide behavior. A person's ability to deal with interpersonal problems is compromised by insecure attachment orientations, which raises the risk of suicide. On the other hand, secure attachment functions as a protective factor. Moreover, attachment functions as a susceptibility or protective factor for suicidal thoughts and behaviors when it interacts with other psychological qualities in response to adverse life experiences (Levi-Belz et al., 2013). Based on these findings, only fearful attachment was considered among attachment styles in this study.

The other risk factors taken into consideration in the current study are psychological symptoms (namely, depression, paranoid ideation, and psychoticism). Depression is the most common psychological symptom (Patten et al., 2016) and is associated with mood reluctance, apathy, lack of pleasure, guilt, regret, worthlessness, and pessimism in the cognitive state. It is a mental disorder that includes decreased sexual desire, appetite, and sleep problems (Benazzi, 2006). APA (2013) defines depression as a decrease in general functionality, a depressed mood, and a decrease in pleasure. Paranoid thought can be defined as general distrust and doubt. Individuals with paranoid thoughts become defensive, cautious, and at the same time suspect that other people will harm them (Aggelidou & Georgaca, 2017). Psychoticism is about interpersonal relationships. Individuals with dominant psychotic traits become aggressive, cold, unsympathetic, insecure, selfish, and distant (Eysenck et al., 1985). Many studies have found positive and significant relationships between psychological symptoms and the probability of suicide (e. g., Çaynak & Kutlu, 2016). It can be stated that hopelessness and depression are risk factors for suicidal ideation and suicide attempt (Ribeiro et al., 2018). As a result of a study conducted on individuals who go to a university hospital due to suicide attempts in Eastern Turkey, the main cause of suicide is parental conflicts and, psychiatric and financial problems (Bork et al., 2021). Furthermore, one of the major causes of death among patients with schizophrenia is suicide (Koparal & Hocaoglu, 2019). Studies on suicide attempts reported that 42% of 50 people who went to the hospital with

a suicide attempt in 2005 had paranoid thoughts (Yalvaç et al., 2014). Güleç (2016) stated that a paranoid patient should be considered risky for suicidal behavior. Moreover, in a study on the suicide tendency of young athletes, the youth were divided into two groups: high suicidality and low suicidality. The adolescents in the group with high suicidality were also found to have significantly higher scores of depression, paranoid ideation, psychoticism, problems in interpersonal relationships, and hostility than those in the group with low suicidality (Hussain et al., 2022).

Suicide is a sociological event that does not only affect the individual who commits suicide, but also affects the living environment, family, and society. This study is important in terms of revealing the factors that trigger suicide probability. It is thought that it should be taken as a basis in suicide prevention studies. It is expected to be a guide for field experts to decrease suicide cases by knowing the antecedents of suicide. Given that suicide is not a momentary act, but it starts with the relationships with the parents (i.e., attachment), and is related to the psychological symptoms, this study examines the model given in Figure 1.

**Figure 1.** The Model to be Examined in the Study.



According to Figure 1, the following hypotheses are tested:

H1: Fearful attachment is significantly associated with psychological symptoms.

H2: Fearful attachment is significantly associated with suicide probability.

H3: Psychological symptoms are significantly associated with suicide probability.

H4: Psychological symptoms have a mediator role in the relationship between fearful attachment and suicide probability.

One of the factors that increases the chance of successful suicide is a prior suicide attempt. The concealing of this behavior frequently makes it more difficult to identify and manage suicide risk (Levi-Belz et al., 2019a). Thus, the purpose of this study was to shed insight on the psychological processes that may help medical school students disclose their suicidal thoughts.

## Material and Methods

In this study, quantitative analysis techniques were used.

### Participants

The population consisted of Faculty of Medicine students. The sample included medical students, who were selected randomly. Participants were 192 ( $n_{\text{female}}=107$ ,  $n_{\text{male}}=84$ , one participant did not specify their gender) (141 face-to-face and 51 online [no statistically significant difference was found between the data collected

face-to-face and online]) volunteer medical students. The mean age of the participants was 22.58 and the age-related standard deviation was 1.76. The age range was between 19 and 37 years.

### Data Collection Tools

***Suicide Probability Scale.*** The scale was developed by Cull and Gill (1988) and adapted into Turkish by different researchers in Turkey. Previous adaptations were edited by Şahin and Batıgün (2000). In 2018, Durak-Batıgün and Hisli-Şahin carried out a review of the scale. It consists of 34 items and four factors (anger/impulsivity, social support/self-perception, hopelessness/loneliness, and suicide ideation). A 4-point Likert-type rating (1: sometimes – 4: always) was used. The highest score that can be obtained from the scale is 136 and the lowest score is 34. High scores on the scale indicate a high probability of suicide. Durak Batıgün and Hisli Şahin (2018) reported the internal consistency coefficients as follows: .71 (anger/impulsivity); .81 (social support/self-perception); .73 (hopelessness/loneliness) and .75 (suicide ideation). In this study, Cronbach's alpha for the whole scale was .83.

***Adult Attachment Styles Scale.*** The scale was developed by Griffin and Bartholomew (1994) and adapted into Turkish by Sümer and Güngör (1999). Although the scale has 30 items, 18 items are used to measure four factors (secure, fearful, dismissive-avoidant, preoccupied). A 7-point Likert type rating (1: Does not describe me at all – 7: It describes me completely) was used. A high score from each factor indicates that the related attachment style is high. The highest score that can be obtained from fearful and preoccupied attachment is 28 and the lowest score is 4. The highest score that can be obtained from dismissive-avoidant and secure attachment is 35 and the lowest score is 5. In this study, the “fearful attachment” dimension of the adult attachment styles scale was used. According to the test-retest reliability analysis performed by Sümer and Güngör (1999), the reliability values ranged from .54 to .78. In this study, Cronbach's alpha for fearful attachment was .70.

***Symptom Check List 90R (SCL-90-R).*** The check list was developed by Derogatis and Clearly (1977). The psychometric properties of the scale were examined by Kılıç (1987) and Dağ (1991) in Turkey. It consists of 90 items and ten dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid thought, psychoticism, guilt feelings, eating and sleep disorders). A Likert-type rating of 1: none to 5: extreme was used. In this study, “depression”, “paranoid ideation” and “psychoticism” dimensions were used. The Cronbach's alpha internal consistency coefficient ranged from .77 to .90. In this study, the Cronbach's alpha for depression was .87; for paranoid ideation was .66 and for psychoticism was .80.

***Demographic Information Form.*** A form developed by the researchers was used to obtain information about the demographic characteristics of the participants. This form includes information such as gender and age.

### Data Analysis and Procedure

Data were collected both online (Google Forms) and face-to-face using convenience and snowball sampling methods between June and July 2022. The link of Google Forms was shared through online communication platforms (i.e., WhatsApp). Face-to-face data were collected in students' classrooms and in the library. The necessary ethical permissions (Number: e-60263016-050.06.04-159551) were obtained from the university's ethics committee, and the dean of the medical faculty was informed formally before applying the scales. Participation was voluntary, and a participant could leave the research at any time, without having to give a reason. The questionnaires took approximately 15 minutes to complete. The informed consent form clearly described the rights of the participants (e.g., participation in the study is voluntary, they can withdraw from the research at any time without any favorable consequences, the data obtained in the study will be used only within the scope of scientific study, and there are no identifying values that can link the information to the participant). Participants were not questioned about their personal information, and the data were examined anonymously. Participants were informed that there were no right or wrong answers to the questions in order to prevent socially acceptable responses. Skewness and kurtosis values were evaluated to examine whether the data set had a normal distribution. There exists normal distribution when these values are between -2 and +2 (Gravetter et al., 2020). As a result of the analysis, it was determined that in this study, the skewness and

kurtosis values were between +1 and -1. The skewness and kurtosis values confirmed normal distribution. There is no missing value in the data collected both online and face to face. Descriptive statistics and Pearson correlation analysis were performed as part of the preliminary analyses. To test mediation, the Hayes Process Macro (v 3.1) model was utilized using SPSS 25. The software created by Hayes and Preacher (2013) was utilized in conjunction with the bootstrapping method to test the mediating effect. The dependent variable of the study was suicide probability, while the independent variable was fearful attachment. On the other hand, the mediator variable was psychological symptoms (i.e., depression, paranoid ideation, and psychoticism) (see Figure 1).

### Results

First, the relationships between the variables were examined and presented in Table 1.

**Table 1.** The relationships among the variables of the study.

Variables	N	M	S	1	2	3	4	5
1. Fearful Attachment	192	3.92	1.19	1	.43*	.49*	.32*	.45*
2. Depression	192	2.43	.76		1	.70*	.68*	.67*
3. Paranoid ideation	192	2.55	.73			1	.71*	.66*
4. Psychoticism	192	1.88	.67				1	.64*
5. Suicidal Probability	192	1.98	.41					1

\*p < .01

Table 1 shows the significant correlations between the variables of the study. Fearful attachment is positively related to both psychological symptoms and suicide probability. Similarly, psychological symptoms are positively related to suicide probability.

Second, the findings of mediation analysis are given in Figure 2.

**Figure 2.** Observed mediation model.

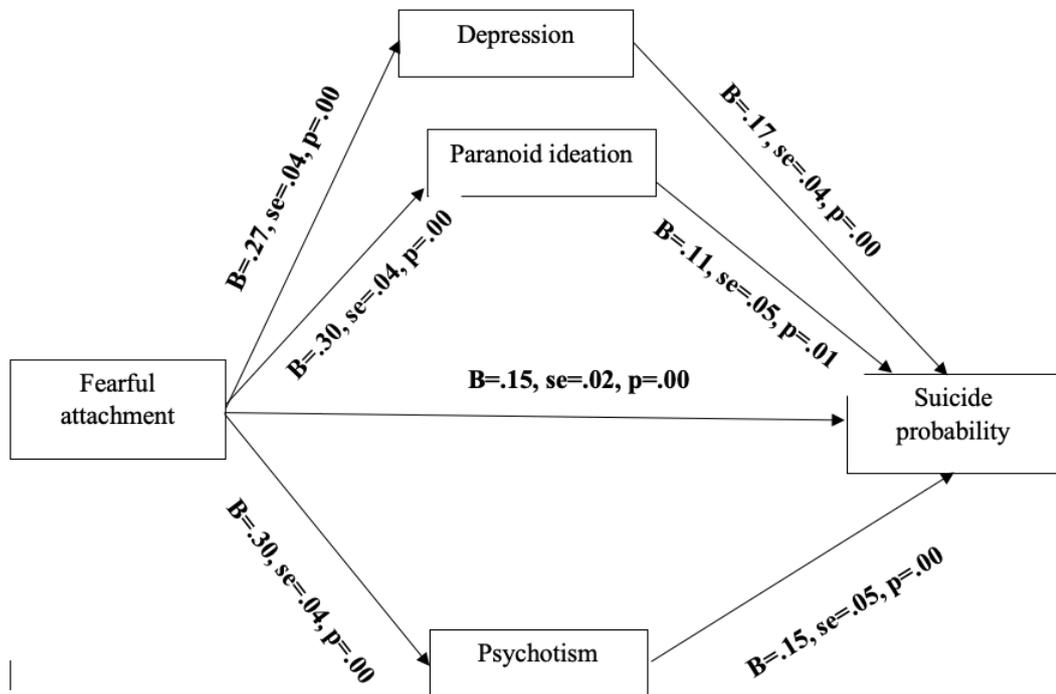


Figure 2 shows that fearful attachment is significantly (positive) related to depression ( $\beta = 0.27, SE = 0.04, p < .05$ ), suggesting that individuals with higher score on fearful attachment are more likely to have depression;

fearful attachment is significantly related to paranoid ideation ( $\beta = 0.30, SE = 0.04, p < .05$ ) suggesting that individuals with higher score on fearful attachment are more likely to have paranoid ideation; fearful attachment is significantly related to psychoticism ( $\beta = 0.18, SE = 0.04, p < .05$ ), suggesting that individuals with higher on fearful attachment are more likely to have psychoticism. Furthermore, depression is significantly (positive) related to suicide probability ( $\beta = 0.17, SE = 0.04, p < .05$ ), suggesting that individuals with higher score on depression are more likely to have a higher suicide probability. Paranoid ideation is significantly (positive) related to suicide probability ( $\beta = 0.11, SE = 0.05, p < .05$ ), suggesting that individuals with higher score on paranoid ideation are more likely to have a higher suicide probability. Psychoticism is significantly (positive) related suicide probability ( $\beta = 0.15, SE = 0.05, p < .05$ ), suggesting that individuals with higher score on psychoticism are more likely to have a higher suicide probability. Fearful attachment is significantly (positive) related to suicide probability ( $\beta = 0.15, SE = 0.02, p < .05$ ), suggesting that individuals with higher score on fearful attachment are more likely to have higher suicide probability scores. The direct effects in the path model are reflected in these coefficients. It can be concluded that the group’s indirect effect is zero because it falls between the lower and upper bounds of the 95% confidence range. When there is no “0” in the confidence intervals generated using this method, the mediating effect’s importance is verified (Preacher & Hayes, 2008). Since the null, or zero, does not lie between the lower and upper ranges of the 95% confidence interval (LLCI-ULCI 0.0097-0.0868) we infer that the total effect of fearful attachment on suicidal probability ( $\beta = 0.15, SE = 0.02$ ) is significantly different from zero (see Table 2). This model accounted for 20% of the variance of suicidal probability.

**Table 2.** Direct and total effects.

Fearful Attachment-Suicide Probability	$\beta$	SE	p	95% Confidence Interval	
				LLCI	ULCI
Direct efekt	.05	.02	.01	.0097	.0868
Total effect	.15	.02	.00	.1106	.1990

### Discussion

This study aimed to test the mediating effect of psychological symptoms in the relationship between fearful attachment and suicide probability among medical school students. Overall, the results supported the mediating effect of psychological symptoms in the relationship between fearful attachment and suicide probability for Turkish medical school students and the hypothesized relationships between the variables.

Findings of the current study showed that fearful attachment was positively associated with suicide probability, suggesting that individuals with higher fearful attachment were more likely to attempt suicide. This result supports previous findings (see Kidd & Shahr, 2008; Nagra et al., 2016) reporting a relationship between fearful attachment and suicide probability. For example, in a study conducted with university students, Zeyrek et al. (2009) found a positive relationship between fearful attachment and suicide. Similarly, a study on high-risk psychiatric inpatients shows that only fearful attachment was found to be a significant predictor of suicidal behaviors after being discharged from the hospital (Li et al., 2017). Moreover, this finding shows the importance of the early relationship with parents (i.e., attachment) on suicide probability. Individuals with a fearful attachment style have low self-worth (Pistole, 1996) which is positively related to suicide behavior (Reinherz et al., 1995). Individuals with a high probability of suicide may have negative thoughts about themselves and problems in their close relationships. In these aspects, fearfully attached individuals and those with a high probability of suicide are similar to each other.

Fearful attachment is positively associated with psychological symptoms, suggesting that fearfully attached individuals experience more psychological symptoms. Various studies report a positive relationship between attachment styles and psychological symptoms (see Güvendiren, 2020; Mikulincer & Shaver, 2012; Uzbař Uğur, 2021). Also, previous research shows a positive relationship between fearful attachment and depression (Gündüz, 2013; Güvendiren, 2020; Murphy & Bates, 1997); paranoid ideation (Pearce et al., 2017; Ponizovsky

et al., 2013), and psychoticism (Strand et al., 2015). Nevertheless, some studies indicate no significant relationship between fearful attachment and depression (e.g., Strand et al., 2015). Furthermore, psychological symptoms (depression [i.e., thinking negatively about oneself, being apathetic and hopeless], psychoticism [i.e., having problems in interpersonal relationships], and paranoid ideation [i.e., state of constant doubt]) share similar features with the fearfully attached individuals. Suspicion/fear predominates in individuals with fearful attachment, and therefore they may have problems in their interpersonal relationships, avoid social environments, and are similar to depressed individuals with these characteristics.

Furthermore, psychological symptoms are positively associated with suicide probability, indicating that individuals who experience more psychological symptoms are more likely to commit suicide. This finding shows the predictive effect of psychological symptoms on suicide probability. Likewise, Avcı et al. (2016) found that psychological symptoms could predict suicide. Other studies found a positive relationship between the probability of suicide and depression (see Gürhan et al., 2019; Gvion et al., 2015; O’Neill et al., 2021). Haynes and Marques (1984) examined the relationship between the possibility of suicide and paranoid thoughts among 29 individuals who committed suicide. The results showed that 66% of the participants had paranoid thoughts. Similarly, Freeman et al. (2011) stated that suicidal ideation could accompany paranoid thoughts. In another study, Lolas et al. (1991) investigated the relationship between suicide ideation and psychoticism by comparing individuals who attempted suicide and those who did not attempt suicide. According to the findings, psychoticism scores of individuals who attempted suicide were higher than the other group. Finally, Yıldız Miniksar et al. (2022) found a strong positive relationship between suicide ideation and psychoticism. These findings are important in that they consistently show that psychological symptoms are antecedent variables for suicide probability.

Lastly, psychological symptoms mediated the relationship between fearful attachment and suicide probability. Fearful attachment was associated with higher scores on psychological symptoms, and suicide probability. Psychological symptoms were associated with increased suicide probability. Upon reviewing the research on medical faculty students, no papers were reached that used psychological symptoms as mediator variables. Psychological symptoms are nonetheless taken into account as outcome factors in certain research (e.g., Hu et al., 2022; Kapikiran & Acun-Kapikiran, 2016; Shi et al., 2015).

This study is an original study in terms of its variables. Although studies have focused on attachment styles and suicide probability (e.g., Özer et al., 2015), psychological symptoms and suicide probability (e.g., Özer et al., 2015; Prinstein et al., 2000), and attachment styles and psychological symptoms (e.g., Uzbaş Uğur, 2021), no research has examined the mediating role of psychological symptoms in the relationship between fearful attachment and suicide probability. In the study conducted by Prinstein et al. (2000), depression played a mediating role in the relationship between family problems and suicidal ideation. Özer et al. (2015) found that the act of committing suicide was more frequent in patients with depression, who were fearfully attached. Uzbaş Uğur (2021) reported a direct positive effect between avoidant attachment and psychological symptoms. While sharing similar findings with the previous research, the current study provides an understanding of suicide probability by demonstrating for the first time that psychological symptoms mediate the relationship between fearful attachment and suicide probability. Furthermore, this study draws attention to the antecedents of suicide probability. Since the suicide rates are increasing, it is essential to know its antecedents, which is a strength of this study. This important role of psychological symptoms in the relationship between fearful attachment and suicide probability indicates that the study has implications in both academic and practical fields. Regarding academic research, more studies on psychological symptoms should be conducted to deepen our knowledge of the topic. Considering practice, suicide probability may decrease if psychologists, psychiatrists, and other mental health professionals pay attention to the psychological symptoms of the clients. It is recommended that the mental health of medical faculty students and doctors should be followed up at regular intervals. In this way, psychological support can be offered to individuals with high psychological symptoms.

The study is not free of limitations. First, we chose a cross-sectional design that provides data gathered over a predetermined period. For more information, longitudinal studies may be more appropriate. Secondly, there were no open-ended questions which could have yielded more detailed responses. Finally, the number of

participants in the study was limited because students had final exams and the upper classes had clinical internships during the data collection process.

### Conclusion

The present study highlights the important role of psychological symptoms as a mediating variable in the relationship between fearful attachment and suicide probability. Given the whole findings reported above, we suggest that reducing the psychological symptoms is important in reducing the suicide probability. Therefore, it is recommended that authorities should consider psychological symptoms in reducing suicide attempts in their public communications.

Since attachment styles are one of the determinants of suicidal behaviour and early prevention reduces the likelihood of suicidal behaviour (Boroujerdi et al., 2019), parenting skills training and communication training can be provided to parents for early prevention. Screening studies on risky behaviours can be conducted among medical students every year.

Although attachment styles are relatively consistent structures, some studies (see Crowell et al., 2002; Dansby Olufowote et al., 2020; Davila et al., 1997) suggest that insecure attachment styles can be transformed into secure attachment styles. Considering the significant relationship of attachment styles with both suicide probability and psychological symptoms, it can be recommended that professionals working in the clinical field (i.e., clinical psychologists, psychiatrists, etc.) focus on insecure attachment styles to reduce both psychological symptoms as well as suicide probability.

The aforementioned studies (see O'Neill et al., 2021; Yıldız Miniksar et al., 2022) consistently have underlined a significant relationship between psychological symptoms and suicidal behavior. Therefore, to reduce the possibility of suicide, it is recommended to measure psychological symptoms at regular intervals, especially, in medical school students and in students who are generally identified as the risky age group.

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