



Exploring adult attachment and anxiety: the role of intolerance of uncertainty and social support

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Abstract

The aim of the study is to examine the relationships in between intolerance of uncertainty, perceived social support, insecure adult attachment (anxious and avoidant) and anxiety. The mediator effects of intolerance of uncertainty and perceived social support on the relationship between adult attachment and anxiety have not been examined together yet. Considering the prevalence of anxiety and the etiology of attachment, the outcomes of this study are important in both theoretical and practical contexts. Four hypotheses of the study are built on the assumption that both intolerance of uncertainty and perceived social support will have mediating effects on the relationships between anxious attachment and anxiety, and between avoidant attachment and anxiety. The sample consists of 880 university students between the ages of 18-25. Experiences in Close Relationships Inventory-II-Short Form, Trait Anxiety Form, Intolerance of Uncertainty Scale-Short Form and Multidimensional Perceived Social Support Scale were used. According to the findings, intolerance of uncertainty was found to be in the role of mediator on the relationship between anxious attachment and anxiety, but not on the relationship between avoidant attachment and anxiety. The family and significant other sub-dimensions of perceived social support mediated the relationship between both anxious attachment and anxiety, and avoidant attachment and anxiety.

Keywords Attachment · Intolerance of uncertainty · Perceived social support · Anxiety

Introduction

The purpose of getting attached for infants is being able to form novel behaviors more courageously and therefore, to recognize the environment while feeling safe (Johnson, 2003; Bartholomew, 1990). Initial attachment theory was defined by Bowlby within the framework of the attachment

figure- and the self-model (Bowlby, 1973, p. 204; Fraley, 2019). Primarily, three different attachment styles were defined: Secure, avoidant and resistant/ambivalent (Ainsworth et al., 2015). Avoidant and resistant/ambivalent attachment styles are mainly called as insecure attachment. While insecure attachment is associated with higher uncertainty intolerance, and unfulfilled relationship roles; secure attachment style is associated with lower levels of anxiety and higher relationship satisfaction (Fraley, 2019; Sümer & Güngör, 1999). Secure attachment constitutes a base for psychological well-being (Fraley, 2019).

Attachment extends from childhood to adulthood. Hazan and Shaver developed an adult attachment theory and revealed that adult relationship patterns are resembling those of children (1987). Later on, Bartholomew and Horowitz proposed a comprehensive model that categorizing attachment into four dimensions based on negative or positive images of self and others (1991). These dimensions reveal adult attachment styles, emphasizing a dimensional approach that attachment patterns exist on a continuum. In further elaboration, the anxiety and avoidance dimensions

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introduced within the framework of attachment unveil the attachment systems of adults (Antalyalı & Özkul, 2016). The positions individuals occupy on these dimensions reflect their adult attachment styles. This understanding sheds light on how individuals manifest attachment behaviors based on their levels of attachment anxiety and attachment avoidance. The dimensional approach contributes to a better understanding of adult attachment by recognizing the variability by nature of attachment styles.

The position of an individual in the anxiety dimension of attachment reflects their level of anxiety about the accessibility of the attachment figure when needed (Clark et al., 2020). If the closeness with the attachment figure is threatened by separation, the person experiences anxiety (Mikulincer & Shaver, 2009). Individuals with high degrees of anxious attachment might always be concerned about the other figure in the relationship. On the other hand, individuals with high degrees of avoidant attachment want to be in a close relationship with the attachment figure, but they are also reluctant to make any moves to connect, therefore, those experience high levels of trust problems in the close relationships (Bartholomew, 1990). The essence of the trust problem can be explained by the constant feeling of uncertainty. In years, avoidant attachment style makes individuals more emotionally self-sufficient (Kotler et al., 1994). In short, both anxious and avoidant attachment styles have negative effects on the functioning of individuals and create a general predisposition for psychopathology (Mikulincer & Shaver, 2012).

Anxiety is characterized by heightened worry over an anticipation of threat (Butcher et al., 2017). Anxiety has a profoundly fundamental benefit. Cognitive, emotional and behavioral processes caused by anxiety in order to reduce the effect of a potential threat are adaptive if they are in balance (Özmete & Pak, 2020). However, when it exceeds to a certain threshold, it becomes neurotic (May, 2015). The neurotic anxiety has negative and inhibiting effects on the individuals. It is necessary to evaluate anxiety with a holistic approach to fully comprehend the effects.

Anxiety is often associated with intolerance of uncertainty (IOU) (Buhr & Dugas, 2002). Ladouceur and others showed that people with generalized anxiety disorder (GAD) were found to have higher IOU levels compared to individuals with moderate worry (1998). Therefore, a model, which considers IOU as a cognitive vulnerability for anxiety, was constructed for GAD (Sanchez et al., 2016). In one study, insecure attachment types and IOU were found to be positively correlated (Wright et al., 2017). According to the same study, IOU had a mediating effect between anxious attachment and worry. Following this study, Murphy conducted a doctoral thesis which was investigated IOU as a mediator variable in the relationship in question (2021). Murphy stated that IOU fully mediated the relationship between

avoidant attachment and worry; and partially mediated the relationship between anxious attachment and worry. It can be asserted that being able to tolerate uncertainties is a protective factor.

Social support is a lifelong concept which has a protective impact on the individuals (Cobb, 1976). Attachment systems affect interpersonal relationships, and accordingly, the structure and number of resources of social support (Ognibene & Collins, 1998). Attachment theory, essentially, assists in comprehending individual differences that may arise in perceiving social support. Not only one but all perceived social support dimensions (family, friend, significant other) have protective effects on the individuals (Roohafza et al., 2014). Feeling lack of social support has been found to be associated with psychological problems (Cohen & Wills, 1985; Hipkins et al., 2004). For example, based on the results of one study, there is a negative and significant relationship between trait anxiety and social support (Kuscu et al., 2009). This means that individuals with high levels of trait anxiety have low levels of perceived social support from their families, friends or significant others.

The aim of this study is to better understand the role of intolerance of uncertainty and perceived social support in the relationship between insecure (avoidant & anxious) adult attachment and anxiety. The mediating effect of intolerance of uncertainty and perceived social support on the relationship between attachment and anxiety has not been studied yet, therefore, current study has a great importance. The first hypothesis proposes that intolerance of uncertainty mediates the relationship between anxious attachment and anxiety. The second hypothesis suggests that intolerance of uncertainty mediates the relationship between avoidant attachment and anxiety. The third hypothesis posits that perceived social support mediates the relationship between anxious attachment and anxiety. The fourth hypothesis asserts that perceived social support mediates the relationship between avoidant attachment and anxiety.

Methods

Study design and process

In order to test the complex model, structural equation modelling (SEM) was employed. SEM is a comprehensive method which allows testing for multiple specific hypotheses all together, and the basic advantages of using SEM are accounting for measurement errors, developing multivariate models, facilitating estimation and examining indirect effects (Hoyle, 1995; Raykov & Marcoulides, 2006). Data collection was carried out online through Google forms.

Sample

In the case of a normal distribution according to SEM, the medium-ideal sample size is obtained by multiplying the sum of the number of items by 10 (Kline, 2011: 12). In this study, by multiplying 51 item by 10, the minimum sample size was calculated as 510. The initial number of collected data, via random sampling, was 1417. Then, 536 data were excluded due to invalid responses. The actual sample size of this study was 880. The sample consisted of university students in Türkiye aged 18-25.

Materials

Data collection tools were socio-demographic form, Intolerance of Uncertainty Scale-Short Form (IUS-12), Multidimensional Scale of Perceived Social Support (MSPSS), The Experiences in Close Relationship Scale (ECR)-short form, and The State-Trait Anxiety Inventory-Trait Anxiety (STAI TX – 2). The questions asked to the participants within the socio-demographic form was suitable with the hypotheses. Originally, IUS is a 27-item scale developed by Freeston et al. (1994). Later, Carleton, Norton, and Asmundson developed a 5-point rating 12-item short form based on the original version (2007). Adaptation of the scale into Turkish including validity and reliability studies were carried out by Sarıçam et al. (2014). According to the confirmatory factor analysis, the structural validity is well-established as the 12 items load onto the two pre-identified factors with a good fit. As the scale has achieved the necessary fit values, it is considered suitable for use in Turkish. The second scale, MSPSS, is a 12-item tool developed to evaluate the perceived social support (Zimet et al., 1988). This 7-point scale has 3 factors: family, friends and significant other. The validity and reliability studies of Turkish version were conducted by Eker and Arkar, and results supported the cross-cultural stability of the factor structure (1995). MSPSS has high internal consistency and showed satisfactory construct validity (Eker & Arkar, 1995).

The ECR is a scale developed by Fraley, Waller, and Brennan to measure the dimensions of adult attachment (2000). The short form of the scale was developed, because the original version was lengthy and included only romantic relationships (Fraley et al., 2006). The short form is consisted of 9 items and 2 sub-dimensions with a 7-point rating system. The adaptation of the scale into Turkish was carried out by Antalyalı and Özkul (2016). The validity and reliability analyses were conducted by the same authors and the Turkish version of the scale was found as having high construct validity and reliability. The State-Trait Anxiety Inventory, was developed by Spielberger as a 4-point rating scale to evaluate state and trait anxiety (1983). Öner and Lecompte adapted the scale into Turkish (1983). The

reliability values of the Turkish version were found higher than the reliability values of the original version. The construct validity of the scale were found to be appropriate in the Turkish version. The Trait Anxiety Subscale of The State-Trait Anxiety Inventory was used in the current study.

Statistical analyses

IBM SPSS Statistics 26 and IBM SPSS Amos 24 were utilized. Following the frequency analyses to identify demographic characteristics, normality and reliability analyses were conducted. Confirmatory factor analysis was performed to establish the foundation of SEM. Examining the relationships between all dimensions was held by SEM, which reveals the applied models of the individual and overall relationships. Subsequently, mediation tests were employed on the newly constructed model to assess the mediating effects of variables.

Results

Frequency analysis

The results of the frequency analysis performed to determine the demographic characteristics of the participants are given in Table 1.

Correlation analysis

According to the results of the correlation analysis (see Table 2), anxious attachment is positively correlated with avoidant attachment, IOU and trait anxiety. There are negative relationships between anxious attachment and perceived social support from significant other, family and friends. Avoidant attachment is positively correlated with IOU and trait anxiety, while negatively correlated with all perceived social support dimensions. IOU and trait anxiety are negatively correlated with perceived social support from friends and family. There is a negative relationship between IOU and trait anxiety. Although relationships between all variables emerge, path coefficients need to be examined for significance.

The standardized path coefficients are given in the Table 3. It is evident that anxious attachment was negatively correlated with perceived social support including all the dimensions (family, friends and significant other) ($p < 0.01$). There are significant negative correlations between avoidant attachment and perceived social support (family, friends and significant other) ($p < 0.01$). When the path coefficients of anxious attachment and IOU were examined, a positive significant correlation was found ($p < 0.01$). Any statistically significant relationship did not appear between

Table 1 Descriptive characteristics of the study sample

| Variables | Dimensions | N | % |
|---|---------------|-----|------|
| Age | 18 | 29 | 3.3 |
| | 19 | 92 | 10.5 |
| | 20 | 194 | 22.0 |
| | 21 | 233 | 26.5 |
| | 22 | 158 | 18.0 |
| | 23 | 106 | 12.0 |
| | 24 | 44 | 5.0 |
| | 25 | 24 | 2.7 |
| | Total | 880 | 100 |
| Gender | Male | 251 | 28.5 |
| | Female | 629 | 71.5 |
| | Total | 880 | 100 |
| Number of Siblings | 0 | 38 | 4.3 |
| | 1 | 321 | 36.5 |
| | 2 | 281 | 31.9 |
| | 3 | 131 | 14.9 |
| | 4 | 53 | 6.0 |
| | 5 + | 56 | 6.4 |
| Total | 880 | 100 | |
| Prior Mental Disorder Diagnosis | Yes | 93 | 10.6 |
| | No | 787 | 89.4 |
| | Total | 880 | 100 |
| Treatment Related to Prior Mental Diagnosis | Yes | 78 | 8.9 |
| | No | 451 | 51.3 |
| | Missing Value | 351 | 39.9 |
| | Total | 880 | 100 |

avoidant attachment and IOU ($p > 0.05$). Results provided a positive relationship between anxious attachment and trait anxiety ($p < 0.01$). In between the two sub-dimensions of perceived social support, (family and significant other), and trait anxiety, negative relationships were detected ($p < 0.01$; $p < 0.05$). However, no significant relationship was found between perceived social support from friends, and trait

anxiety ($p > 0.05$). It is seen that there was a positive relationship between IOU and the trait anxiety ($p < 0.01$). There was no significant relationship between avoidant attachment and trait anxiety ($p > 0.05$). In short, the findings of correlation analyses show consistent and significant associations between anxious attachment and perceived social support, and between anxious attachment and IOU. Similarly, avoidant attachment seems to have a significant relationship between perceived social support. Also, anxious attachment and IOU; trait anxiety and IOU; trait anxiety and perceived social support have significant relationships. However, a noteworthy indication is that the absence of a significant relationship between trait anxiety and avoidant attachment.

The model and mediation analysis

The model (see Fig. 1) provides goodness of fit values (see Table 4).

Mediation analyses were carried out to observe the indirect effects of IOU and perceived social support in SEM. It was examined whether IOU and perceived social support mediated the relationship between anxious attachment and trait anxiety; and the relationship between avoidant attachment and trait anxiety. A new model was established to test the mediation effects on a single model and the mediation analysis results are given in Table 5.

It was observed that IOU had a mediating role on the relationship between anxious attachment and trait anxiety. In this case, the first hypothesis which stated that IOU mediates the relationship between anxious attachment and anxiety was supported. The mediating effect of IOU in the relationship between avoidant attachment and anxiety was the second hypothesis. As any mediating effect of IOU in the association between avoidant attachment and trait anxiety was not revealed, this hypothesis was not supported. It was observed that the perceived social support from significant other had a mediating effect on the relationship between anxious attachment and trait anxiety.

Table 2 Correlation coefficients of dimensions

| Dimensions | Anxious Attachment | Avoidant Attachment | PSS- Significant other | PSS- Family | PSS- Friends | IOU | Trait Anxiety |
|------------------------|--------------------|---------------------|------------------------|-------------|--------------|---------|---------------|
| Anxious Attachment | 1 | | | | | | |
| Avoidant Attachment | 0.219** | 1 | | | | | |
| PSS- Significant other | -0.256** | -0.203** | 1 | | | | |
| PSS- Family | -0.281** | -0.181** | 0.333** | 1 | | | |
| PSS- Friends | -0.370** | -0.532** | 0.333** | 0.448** | 1 | | |
| IOU | 0.284** | 0.061 | -0.057 | -0.150** | -0.146** | 1 | |
| Trait Anxiety | 0.499** | 0.201** | -0.274** | -0.443** | -0.353** | 0.458** | 1 |

PSS Perceived Social Support, IOU Intolerance of Uncertainty

Table 3 Parameter estimate values

| Parameters | β | P |
|---------------------------------------|---------|------------|
| Anxious Attachment → PSS Friends | -0.313 | *** |
| Anxious Attachment → PSS Significant | -0.264 | *** |
| Anxious Attachment → PSS Family | -0.313 | *** |
| Avoidant Attachment → PSS Family | -0.144 | *** |
| Avoidant Attachment → PSS Significant | -0.166 | *** |
| Avoidant Attachment → PSS Friends | -0.522 | *** |
| Anxious Attachment → IOU | 0.382 | *** |
| Avoidant Attachment → IOU | -0.012 | $p > 0.05$ |
| Anxious Attachment → Trait Anxiety | 0.246 | *** |
| PSS Family → Trait Anxiety | -0.340 | *** |
| PSS Significant → Trait Anxiety | -0.071 | ** |
| PSS Friends → Trait Anxiety | -0.036 | $p > 0.05$ |
| IOU → Trait Anxiety | 0.385 | *** |
| Avoidant Attachment → Trait Anxiety | 0.071 | $p > 0.05$ |

Significance: (***= $p < 0.01$), (**= $p < 0.05$), Not significant: ($p > 0.05$). PSS Perceived Social Support, IOU Intolerance of Uncertainty

It has been observed that the perceived social support from significant other had a mediating effect in the relationship between avoidant attachment and trait anxiety. Likewise, it was observed that the perceived social support from family mediated both relationships in between insecure attachment types and anxiety. It was observed that perceived social support from friends, had a mediating effect on the relationships between insecure attachments and anxiety. Perceived social support from friends were not to be found as a mediator in any relationship. The third hypothesis posited that perceived social support mediates the relationship between anxious attachment and anxiety, which is not the case for the perceived social support from friends partially supported. The fourth hypothesis was that perceived social support mediates the relationship between avoidant attachment and anxiety was also partially supported. In conclusion, the findings highlight the mediating role of IOU in the relationships in question. As for perceived social support, this effect was identified as well, albeit in a partial manner.

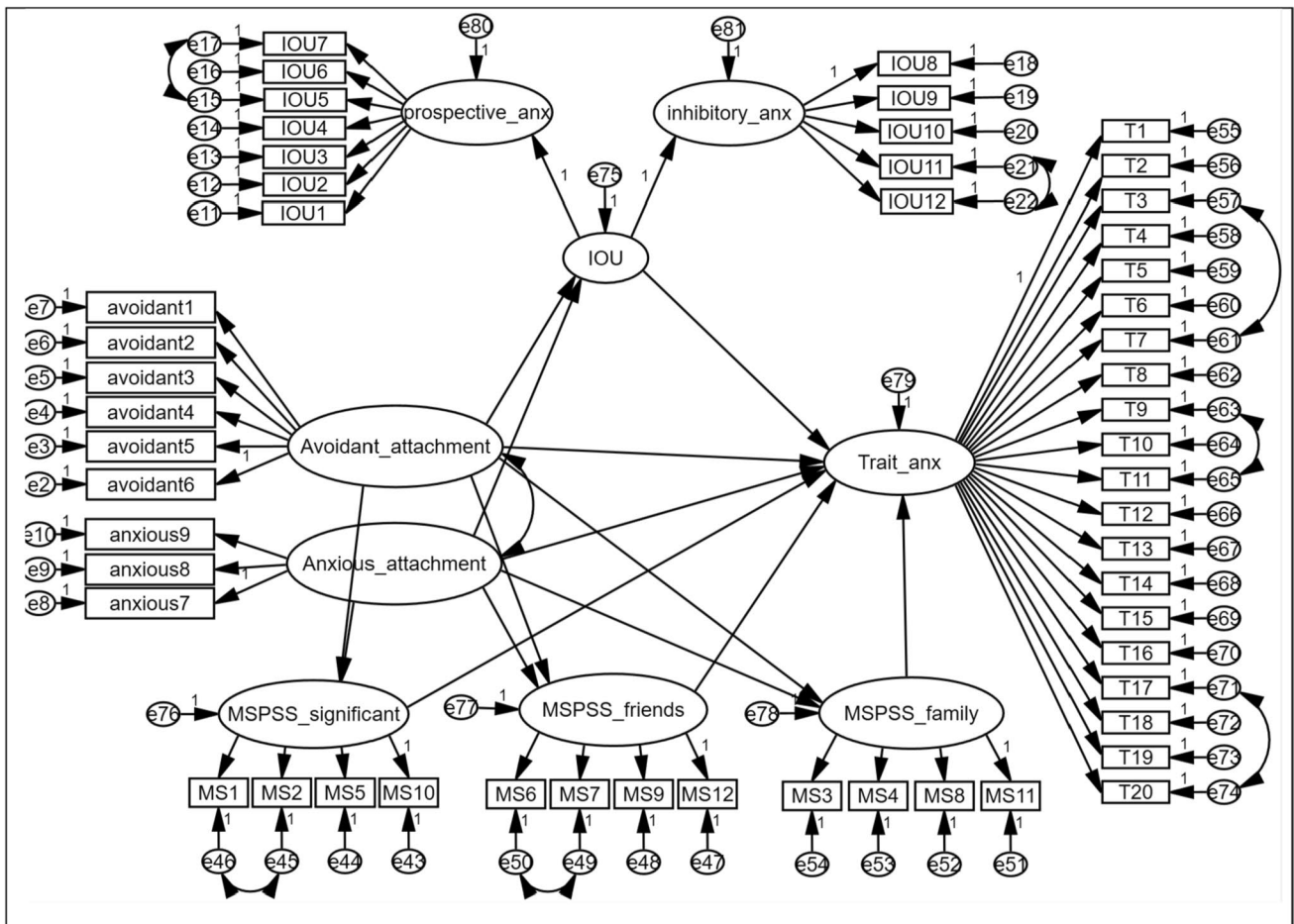


Fig. 1 The structural equation model

Table 4 Model fit values and descriptions

| Values | Good Fit | Acceptable Fit | Model Values | Fit Descriptions |
|---------|----------|-----------------|--------------|------------------|
| CMIN/DF | <3 | 3 < CMIN/DF < 5 | 2.596 | Good Fit |
| RMSEA | <0.05 | <0.10 | 0.04 | Good Fit |
| GFI | >0.95 | >0.80 | 0.86 | Acceptable Fit |
| CFI | >0.95 | >0.90 | 0.92 | Acceptable Fit |
| AGFI | >0.95 | >0.80 | 0.85 | Acceptable Fit |
| NFI | >0.95 | >0.80 | 0.87 | Acceptable Fit |

Sources: MacCallum et al., 1996; Forza & Filippini, 1998; Tabachnick & Fidell, 2013; Kline, 2015

Discussion

The aim was to investigate the relationship between adult insecure attachment and anxiety in a model in which intolerance of uncertainty (IOU) and perceived social support as mediators. Adult insecure attachment was examined in the scope of two subtypes; avoidant and anxious. It was assumed that avoidant or anxious attachment would be positively related to anxiety levels, and IOU and perceived social support would have a mediating effect in this relationship.

The first hypothesis pointed out the mediating role of IOU in the relationship between anxious attachment and anxiety was supported. IOU was presented in the literature as associated with anxious attachment (Alfasi, 2023). In the study of Wright and others, a predicted effect was found for mediator IOU in the relationship between worry and anxious attachment (2017). Since it is known that anxiety is characterized by worry (APA, 2013), the mediating role of IOU in the questioned relationship of the first hypothesis was convenient with previous findings. The current study found that participants who reported higher levels of anxious attachment, also reported higher levels of IOU, which was associated with higher levels of anxiety. Literature suggests that insecure attachment types

are predisposition for psychopathology and lower general well-being (Mikulincer & Shaver, 2012; Deng et al., 2022; Tammilehto et al., 2023). It is reasonable to anticipate that individuals with an anxious attachment pattern will generally doubt the existence of the attachment figure in the times of need, therefore their IOU will be high, and so their general anxiety level.

The second hypothesis indicating that the mediating role of IOU in the relationship between avoidant attachment and anxiety was not supported. Murphy found that IOU was a mediator in the relationship between avoidant attachment and worry (2021). Though, IOU has not been studied as a mediator variable in the relationship between avoidant attachment and anxiety, in line with the connectedness of worry and anxiety, it was expected that IOU would have a mediating effect between avoidant attachment and anxiety. Although there is a study conducted to test the mediator role of IOU on the relationship between avoidant attachment and stress exhibited non-significant results (Alfasi, 2023), the second hypothesis was built on the expectation that since the direct relationship between avoidant attachment and anxiety was not found as significant, it could be argued that this variable display a full mediating effect. The avoidant attachment pattern is characterized by attachment figures that cannot be predicted to be present when needed in childhood. Trust problems may cause a pattern of staying away from any relationship and network in general in order to avoid any uncertainty (Bartholomew, 1990). In this case, it may be concluded that the mediator role of IOU had no effect on the anxiety level of the individual who closes himself to any relationship with the possibility of uncertainty. However, this relationship requires further research.

In the literature, a negative relationship between insecure attachment and perceived social support was presented (Pourmand et al., 2023). Likewise, a negative relationship between perceived social support and anxiety was presented previously (Hipkins et al., 2004). In the current study, the third hypothesis positing that perceived social support mediates the relationship between anxious attachment and anxiety was partially supported. Perceived social support

Table 5 Mediation effect values

| Independent Variables | Mediator Variables | Dependent Variables | β | Lower | Upper |
|-----------------------|--------------------|---------------------|---------|--------|-------|
| Anxious Attachment | → IOU | → Trait Anxiety | 0.130 | 0.041 | 0.071 |
| Avoidant Attachment | → IOU | → Trait Anxiety | -0.006 | -0.013 | 0.009 |
| Anxious Attachment | → PSS Significant | → Trait Anxiety | 0.019 | 0.003 | 0.015 |
| Avoidant Attachment | → PSS Significant | → Trait Anxiety | 0.012 | 0.002 | 0.011 |
| Anxious Attachment | → PSS Friends | → Trait Anxiety | 0.012 | -0.004 | 0.014 |
| Avoidant Attachment | → PSS Friends | → Trait Anxiety | 0.019 | -0.007 | 0.024 |
| Anxious Attachment | → PSS Family | → Trait Anxiety | 0.107 | 0.033 | 0.058 |
| Avoidant Attachment | → PSS Family | → Trait Anxiety | 0.049 | 0.011 | 0.036 |

PSS Perceived Social Support, IOU Intolerance of Uncertainty

from significant other and family sub-dimensions mediated the relationship between anxious attachment and anxiety. No mediation effect was observed in the perceived social support from friend sub-dimension. This means that in the relationship between anxious attachment and anxiety, perceived social support from family and significant others act as buffers. Previous findings support the view that social support acts as a buffer for psychological well-being (Cohen & Wills, 1985; Deng et al., 2022). In this case, if anxiously attached individuals have strong perceptions that they receive social support from their families or significant others, anxiety levels would be lower. Therefore, the mediating effect of the family and significant other sub-dimensions of perceived social support are suitable for intervention studies.

The fourth hypothesis of the study suggests that perceived social support acts as a mediator between avoidant attachment and anxiety. The family and significant other sub-dimensions of perceived social support were mediating the relationship between avoidant attachment and anxiety. According to this finding, participants who reported higher levels of avoidant attachment, reported lower levels of perceived social support from family and significant other, which was associated with higher levels of anxiety. Li, Sun, and Li also found a mediator effect of perceived social support in this relationship (2022). The reason behind reporting lower levels of perceived social support in time might be due to the characteristics of avoidant attachment. Since individuals with avoidant attachment demand less support from their environment over time because of earned emotional self-sufficiency (Kotler et al., 1994), the rate of perceived social support may have decreased. The involvement of perceived social support in this relationship aligns with literature indicating social support as buffering. When individuals lacking suitable social environments, they become more inclined to experience negative emotional states like anxiety (Eldeleklioglu, 2006). To conclude, the identified role of perceived social support in moderating the relationship between attachment and psychological well-being, consistent with literature, psychologically protective role of social support for individuals.

The presented research findings uncovered the mediator role of intolerance of uncertainty and perceived social support (family and significant other subdimensions) in the relationship between anxious attachment and anxiety. Perceived social support (family and significant other subdimensions) also mediated the relationship between avoidant attachment and anxiety. Translating research findings into action strategies in clinical practice has a great importance. In the treatment or intervention of anxiety-related disorders, intolerance of uncertainty and perceived social support should be targeted specifically. Interventions may include cognitive-behavioral strategies on being able to tolerate uncertainties and boosting social support resources, especially family

members and significant others. By tailoring interventions with these attachment-related concepts, the effectiveness of anxiety treatments can be enhanced.

It is important to evaluate the results of the present study in the context of its limitations. Although the sample size is quite large, the fact that the sample of the research consists of university students between the ages of 18-25 is a limitation in terms of generalizability. As a result of similar studies with groups with different socio-demographic characteristics, generalizable results can be obtained. Another limitation regarding the sample characteristics is that the rate of female participants is higher than that of male participants. However, it was not possible to control the gender in a quite large sample in which the participants were collected by random sampling method. This study, which has adopted the relational research design presented in the literature, forms a basis for further studies.

Conclusion

The study findings enable to comprehend the relationship between adult attachment and anxiety in a newly developed model. Anxiety levels of individuals with high levels of anxious attachment changes with the levels of intolerance of uncertainty and perceived social support from family and significant other. These two sub-dimensions of perceived social support are significant buffers for individuals. The same mediation effect of perceived social support from family and significant other is found to be valid for the relationship between avoidant attachment and anxiety. These two sub-dimensions act as mediators, revealing that lower levels exacerbate anxiety in individuals with avoidant attachment. Contrary to the expectation, the mediating role of intolerance of uncertainty in the relationship between avoidant attachment and anxiety did not receive empirical support. There are controversial results regarding this issue, so that, the nuanced nature of intolerance of uncertainty in the relationship between avoidant attachment and anxiety warrants further investigation. In a clinical context, for enhancing anxiety-related treatments and interventions, targeting intolerance of uncertainty related thoughts and acts, and supporting the boost of social support are crucial.

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Data availability Data supporting the findings of this study are available from the corresponding researcher and raw data is available upon request.

Declarations

This study has no financial and personal relationships to be disclosed in the declaration of interest.

Ethics approval This study was conducted in accordance with the ethical principles specified by the Süleyman Demirel University Social and Human Sciences Ethics Committee and received ethical approval with decision no. 32 of the meeting no. 106 on 15th of April, 2021. The study was found to comply with all relevant ethical guidelines and regulations. Throughout this study, the rights of all participants were meticulously protected, informed consent forms were obtained from all participants, and confidentiality rules were observed in data processing and reporting. There were no deviations from the approved protocol.

Informed consent form In order to collect data for the master's thesis titled "The Mediating Effect of Intolerance of Uncertainty and Perceived Social Support in the Relationship Between Insecure Adult Attachment and Anxiety" conducted at Süleyman Demirel University, you will be asked some questions. The aim of our study is to better understand the relationship between adult attachment, intolerance of uncertainty, perceived social support, and anxiety. During the survey, it is estimated that approximately 15-20 minutes of your time will be required. Following the survey, you may ask the researcher questions for clarification regarding the study. Your responses will be used solely for research purposes, and your personal information will be kept confidential. You have the right to withdraw from the study at any point before or during the study. Participation in the study is entirely voluntary. Reading, agreeing to, and answering the survey questions within the regard of this Informed Consent Form implies that you are volunteering to participate in the research.

Thank you for participating in our research.

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