

# Feeling Connected, Feeling Less Anxious: Self-Esteem, Social Connectedness, And Social Anxiety in Adults

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How individuals evaluate themselves and to what extent social ties play an important role in their lives may show differences across cultures. The present study examined whether social connectedness mediated the relationship between self-esteem and social anxiety symptoms, controlling for anxiety disorder diagnosis, gender, and age in a Turkish sample, who reflect combination of both individualistic and collectivistic cultural characteristics. A sample of 402 adults (78.1% female, 21.9% male), aged 18 to 65 years ( $M = 28.72$ ,  $SD = 8.07$ ), participated in the study. Correlational analyses revealed that self-esteem was negatively associated with social anxiety and positively associated with social connectedness. Social connectedness was also negatively associated with social anxiety. Mediation analyses indicated that self-esteem significantly predicted both social connectedness ( $b = 0.96$ ,  $p < .001$ ) and social anxiety ( $b = -1.41$ ,  $p < .001$ ). Additionally, social connectedness significantly predicted lower social anxiety ( $b = -0.56$ ,  $p < .001$ ). Social connectedness partially mediated the relationship between self-esteem and social anxiety, as shown by a significant indirect effect ( $b = -0.54$ , 95% CI  $[-0.78, -0.32]$ ). Together, self-esteem and social connectedness accounted for 32% of the variance in social anxiety symptoms. These findings underscore the importance of interventions aimed at enhancing both self-esteem and social connectedness to reduce social anxiety, with implications for psychological counseling and mental health services.

**Keywords:** Social connectedness, social anxiety, self-esteem, mental health


Self-esteem is a key psychological construct that significantly influences an individual's mental health and overall well-being (Arslan, 2016). It reflects individuals' evaluations of their competence and self-worth, shaping how they perceive themselves and interact with the world around them (Isserow, 2023; Li et al., 2024). High self-esteem is consistently associated with positive aspects of mental health, including life satisfaction and happiness (Salavera et al., 2020; Szcześniak et al., 2021; Orth & Robins, 2022). In contrast, low self-esteem is strongly linked to negative mental health outcomes such as depression, anxiety, and even suicidal ideation (Nguyen et al., 2019; Rosenthal & Tobin, 2022; Fernandes et al., 2022).


More specifically, previous research identifies low self-esteem as a trait commonly associated with social anxiety, one of the most prevalent forms of anxiety (e.g., Holas et al., 2021; Holas et al., 2023; Lowe & Harris, 2019; Ilyas & Khan, 2023). Social anxiety is characterized by an intense fear of social interactions, driven by concerns about potential embarrassment or humiliation under the observation of others (American Psychiatric Association, 2013).

This condition typically emerges during adolescence and affects approximately 36% of young adults, although prevalence rates vary across countries (Rapee et al., 2022; Jefferies & Ungar, 2020). Its onset and persistence are influenced by several factors, with peer relationships and parental attitudes identified as significant environmental contributors (Kapoor, 2020).

According to Sociometer Theory (Leary & Baumeister, 2000; Leary, 2012), self-esteem functions as an internal indicator that reflects an individual's sense of being valued and accepted within their social environment. Thus, the concept itself emerges as an indicator of perceived social connectedness. Thus, prior studies suggest that self-esteem influences social anxiety through its effect on individuals' social behaviors. For instance, Shang et al. (2025) reported a negative relationship between self-esteem and social avoidance, noting that individuals with low self-esteem often find social situations highly stressful, leading them to avoid such interactions. This distress may stem from a fear of rejection, which hampers their ability to engage socially and contributes to social withdrawal (Zhou et al., 2020; Zimmer-Gembeck et al., 2021). A lack of social engagement is further associated with a decline in mental health, including increases in various forms of anxiety, particularly social anxiety (Li et al., 2024; Nguyen et al., 2024).

The detrimental impact of low self-esteem on mental health may be partly due to diminished social skills, as withdrawal from social relationships limits opportunities to develop and practice these abilities, thereby exacerbating anxiety in social contexts (Hawes et

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al., 2021). Similarly, Calin et al. (2021) noted that individuals with low self-esteem often lack confidence in their social competence, which further contributes to social anxiety. In summary, the existing literature highlights the negative effects of low self-esteem on individuals' social functioning, ultimately fostering social anxiety and impairing psychological well-being. Although the link between self-esteem and social anxiety is well established, research examining factors that mediate this relationship remains relatively limited and continues to emerge. In addition to that, overall average self-esteem is likely to change across different cultures (Hamamura, 2020). People in individualistic cultures are more prone to report higher self-esteem compared to ones in collectivistic cultures (Cai et al., 2007). Indeed, several factors like socio-economic or cultural value indicators may fluctuate self-esteem level based on where a person lives (Bleidorn et al., 2016). Hence, investigations of self-esteem, social relations and related psychological factors should be culture specific. Therefore, the present study aimed to examine mediating role of social connectedness in the relationship between self-esteem and social anxiety in Turkish adults.

### **Social Connectedness as a Mediator**

Social connectedness, defined as “the subjective awareness of being in close relation with the social world,” has been identified in previous research as a mediating factor between self-esteem and social anxiety (Lee & Robbins, 1998, p. 338; Lee et al., 2008). Importantly, social connectedness is conceptually distinct from loneliness— which refers to the subjective experience of isolation— and from social support, which relates to the perceived availability of help from one's social environment (Arslan, 2018; Lee & Robbins, 1995). Although research directly investigating how social connectedness influences the relationship between self-esteem and social anxiety is limited, a growing body of literature suggests that this subjective sense of connection may function as a mediator between the two variables.

Previous studies indicate that self-esteem significantly shapes individuals' subjective experience of social connectedness. Forest et al. (2023) found that individuals with low self-esteem often struggle to form meaningful relationships due to difficulty with vulnerability in close relationships. Moreover, such individuals tend to seek support through indirect or maladaptive communication strategies— such as whining or sulking— which may elicit negative responses from others (Don et al., 2019). As a result, their attempts to express distress are often met with criticism or blame (Marigold et al., 2020). Additionally, individuals with low self-esteem are more likely to interpret others' responses as unsupportive, which further contributes to their perceived lack of social support (Richter & Finn, 2021). Taken together, these patterns lead individuals with low self-esteem to view their social relationships through a negative lens. Consequently, they are more likely to experience dissatisfaction in their relationships, feelings of loneliness, and a lack of acceptance— ultimately diminishing their sense of social connectedness (Don et al., 2019; De Moor et al., 2021; Van Tonder et al., 2023; Enting et al., 2024).

Conversely, individuals with higher levels of self-esteem tend to report stronger feelings of connectedness in their relationships. They are generally more willing to disclose personal and vulnerable information, which facilitates the development of strong, supportive

social bonds (Forest et al., 2023). These individuals also tend to perceive others' responses as more supportive, further reinforcing their sense of connection (Köhler et al., 2024). According to Harris and Orth (2019), individuals with high self-esteem benefit from a positive feedback loop that may originate in early childhood. Positive parental relationships can foster self-esteem in children, which in turn supports the development of healthy peer relationships during adolescence and adulthood, enhancing their experience of social connectedness. Thus, existing literature highlights self-esteem as a critical factor influencing perceived social connectedness. In turn, social connectedness—or the lack thereof—has a significant impact on individuals' physical and mental well-being. Among older adults, the subjective experience of isolation has been strongly associated with higher levels of depression and fatigue (Cho et al., 2018). This subjective sense of isolation has also been found to mediate the relationship between objective social isolation and poor mental health outcomes, including symptoms of depression and social anxiety (Fiordelli et al., 2020; Santini et al., 2020). Similarly, experiences of loneliness during childhood and adolescence have been shown to contribute to long-term increases in social anxiety (Maes et al., 2019).

Taken together, the literature suggests that social connectedness may serve as a linking mechanism between self-esteem and social anxiety. Lee et al. (2008) proposed a model in which self-esteem reduces social anxiety by enhancing social connectedness—a model later supported by Fatima et al. (2017) in a study conducted in Pakistan. According to this model, self-esteem plays a central role in shaping individuals' subjective sense of connectedness with others, which in turn influences the development of social anxiety. This framework suggests that individuals with high self-esteem are more likely to feel accepted and valued in social relationships, fostering a stronger sense of social connectedness that serves as a protective factor against social anxiety. Conversely, individuals with low self-esteem may experience difficulty forming meaningful social bonds, often perceiving social interactions through a negative lens. Supporting this model, Forest et al.'s (2023) Self-Esteem's Impact on Intimacy Building (SIIB) model posits that individuals with low self-esteem struggle to be vulnerable in close relationships, fearing rejection and seeking to protect their negative self-views. This lack of vulnerability restricts opportunities for emotional closeness, leading to reduced social connectedness. Furthermore, these individuals often misinterpret others' responses as unsupportive, which reinforces their withdrawal and deepens social disconnection. These theoretical perspectives converge to highlight that self-esteem influences how individuals engage in social contexts and perceive their social relationships—factors that are critical in shaping their sense of connectedness and, ultimately, their vulnerability to social anxiety.

### **The Present Study**

Building on prior theoretical and empirical work, the present study investigates whether social connectedness mediates the relationship between self-esteem and social anxiety among Turkish adults, while controlling for anxiety disorder diagnosis, gender, and age. Early theoretical approaches (e.g., sociometer theory and terror management theory) underlined the link between self-esteem and building healthy social relations. Level of self-esteem plays a vital role in whether individuals facilitate or hinder formation of social

relations as well as determines whether people look for extrinsic approval from others to evaluate their worth (Cuming & Rapee, 2010). Hence, it is plausible to infer from both theory and research an association between self-esteem and social anxiety, but it would be valuable to explore mechanisms that buffer this association. Although related constructs such as social support, social networks, and social isolation have been widely examined in relation to mental health outcomes, research specifically targeting social connectedness—as defined by the subjective sense of belonging and connection to others—remains limited (Lee & Robbins, 1998; Wickramaratne et al., 2022). Furthermore, while general anxiety and depression have often been explored in relation to social connectedness, social anxiety has received comparatively less attention (Wickramaratne et al., 2022). The current study seeks to address this gap by applying Lee et al.'s (2008) mediation model, which posits that self-esteem influences individuals' experiences of social connectedness, and that this sense of connectedness, in turn, impacts the development of social anxiety.

While this model has been previously validated in the Pakistani context (Fatima et al., 2017), the current research extends its cross-cultural applicability by testing it within the Turkish context. This is particularly important given cultural variations in self-esteem, social connectedness, and social anxiety (Stein et al., 2017; Hidalgo et al., 2024). According to Hofstede's (1980) individualism-collectivism dimension, these core variables are influenced by cultural orientation, with collectivistic cultures generally prioritizing social harmony and group cohesion, while individualistic cultures emphasize autonomy and personal achievement. As such, individuals from collectivistic cultures often report lower self-esteem but higher social connectedness yet may also be more susceptible to social anxiety due to cultural disapproval of shy or withdrawn behavior (Heu et al., 2018; Krieg & Xu, 2023). While Pakistan is strongly collectivistic, Türkiye represents a hybrid cultural profile, particularly among younger generations who increasingly adopt individualistic values (Yaqoob et al., 2023; Tandoğmuş et al., 2024). Hofstede and Hofstede (2005) report an individualism score of 14 for Pakistan and 37 for Türkiye, supporting this cultural distinction. Given these differences, applying Lee et al.'s (2008) model in Türkiye provides an opportunity to evaluate its relevance in a distinct sociocultural setting. Thus, the main hypothesis of this study is that social connectedness mediates the relationship between self-esteem and social anxiety, such that higher self-esteem predicts greater social connectedness, which in turn is associated with lower levels of social anxiety among Turkish adults.

## Method

### Participants

A total of 402 adults participated in this study, including 314 women (78.1%) and 88 men (21.9%). Participants ranged in age from 18 to 65 years ( $M = 28.72$ ,  $SD = 8.07$ ). Regarding relationship status, 164 participants (40.8%) reported being single, 96 (23.9%) were in a relationship, 126 (31.3%) were married, and 16 (4.0%) were divorced. Participation was entirely voluntary. No monetary compensation, course credit, or other incentives were provided. Furthermore, no participants under the age of 18 completed the survey, and all data were collected from adults who consented to

participate.

These sociodemographic characteristics reflect a diverse sample, with the majority identifying as women and single. While the sample includes individuals from diverse sociodemographic backgrounds, it is important to note that women are overrepresented. This imbalance likely reflects the convenience sampling strategy used (i.e., online recruitment via social media), which tends to attract more female participants. As such, the sample may not fully represent the gender distribution of the broader Turkish adult population. To account for potential confounding effects, gender and other demographic variables were statistically controlled for in the main analyses.

### Measures

**Rosenberg Self-Esteem Scale.** The Rosenberg Self-Esteem Scale (RSES), developed by Morris Rosenberg in 1979, is a widely used instrument for measuring self-esteem. It consists of 10 items rated on a 4-point Likert scale, with response options ranging from "Strongly Agree" to "Strongly Disagree." On this scale, higher total scores indicate lower self-esteem, while lower scores reflect higher self-esteem. Items 1, 2, 4, 6, and 7 are positively worded, whereas items 3, 5, 8, 9, and 10 are negatively worded and require reverse scoring. An example item is as it follows: "I feel that I am a person of worth". The scale was adapted into Turkish by Çuhadaroglu (1986), who reported a Cronbach's alpha of .88. In the present study, the scale demonstrated excellent reliability, with a Cronbach's alpha of .93.

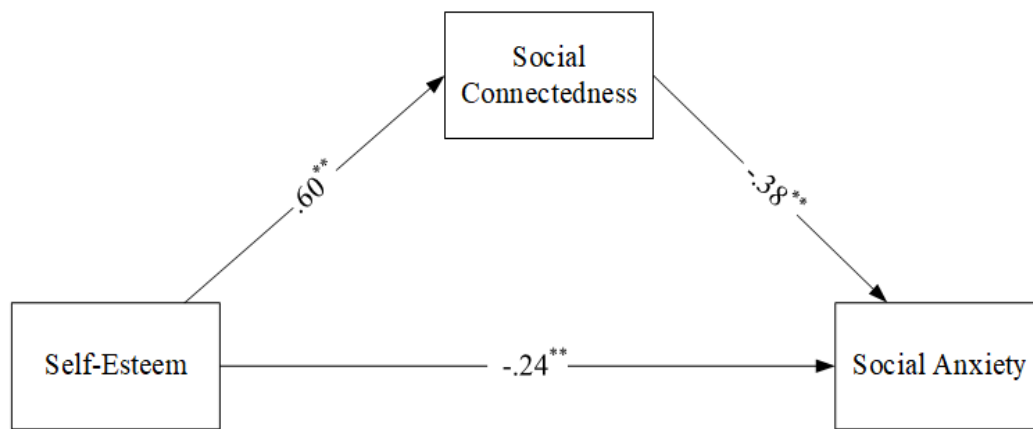
**Social Connectedness Scale.** The Social Connectedness Scale (SCS) was developed by Lee and Robbins (1995) and adapted into Turkish by Duru (2007). It consists of 8 items rated on a 6-point Likert scale, with responses ranging from "Strongly Agree" to "Strongly Disagree." Higher scores reflect a stronger sense of social connectedness. An example items from the scale is: "I am able to connect with other people". The Turkish version of the scale has demonstrated strong internal consistency, with a Cronbach's alpha of .91. In the current study, the scale showed good reliability, with a Cronbach's alpha of .88.

**Liebowitz Social Anxiety Scale.** The Liebowitz Social Anxiety Scale (LSAS), originally developed by Liebowitz et al. (1987), was translated and validated for Turkish samples by Soykan et al. (2003). The scale includes two subdimensions—anxiety and avoidance—and measures the intensity of social anxiety symptoms. Participants respond to 24 situations that may lead to social anxiety such as "eating in public places" and "Participating in small groups". Higher scores indicate greater levels of social anxiety. The Turkish adaptation has shown good reliability, with a Cronbach's alpha of .88. In the present study, the scale demonstrated excellent internal consistency, with a Cronbach's alpha of .95.

### Data Collection and Analyses

Prior to data collection, ethical approval was obtained from the Ethics Committee of Hasan Kalyoncu University in November 2024. Participants were recruited using various social media platforms, including Instagram and WhatsApp, through a convenience sampling method, targeting individuals who were easily accessible. The survey was administered via Google Forms, and informed consent was obtained from all participants prior to their participation.





**Figure 1.** The mediation model of social connectedness between self-esteem and social anxiety

*Standardized estimates for the mediation model, \*\* $p < .001$*

Particularly, individuals with elevated self-esteem tend to experience greater social connectedness, which is linked to reduced social anxiety. Together, self-esteem and social connectedness explained 32% of the variance observed in social anxiety. These findings emphasize the role of social connectedness in shaping the connection between self-esteem and social anxiety.

### Discussion

This study examined whether social connectedness mediates the relationship between self-esteem and social anxiety in Turkish adults, controlling for anxiety disorder diagnosis, age, and gender. The findings revealed that self-esteem significantly predicted both social connectedness and social anxiety. Furthermore, social connectedness significantly predicted social anxiety and served as a mediator between self-esteem and social anxiety.

**Table 3.** Unstandardized total, direct, and indirect effects of self-esteem on social anxiety

Effect	<i>b</i>	SE	<i>t</i>	<i>p</i>	LL	UL
Total effect	-1.95	0.16	-11.81	<.001	-2.27	-1.62
Direct effect	-1.41	0.20	-7.09	<.001	-1.80	-1.02
Indirect effect	-0.54	0.12	–	–	-0.78	-0.32

Bootstrap results for indirect effect (5,000 samples with 95% CI).

These findings are consistent with previous research emphasizing the inverse relationship between self-esteem and social anxiety. For instance, He (2022) reported a significant negative association between self-esteem and social anxiety in a sample of college students. Similar relationships have been documented among Jordanian, Pakistani, and Palestinian college students (Murad, 2020; Kainaat et al., 2024; Ayed et al., 2024). Importantly, this study extends those findings to a Turkish context, thereby enhancing the intercultural validity of the observed relationship.

The results underscore the role of self-esteem as a protective factor against social anxiety. Prior research suggests that self-esteem may buffer individuals from social anxiety by fostering more positive social interactions. For example, several studies have shown that higher self-esteem is associated with greater perceived social support (Poudel et al., 2020; Yıldırım et al., 2024). Supporting this, Orth and Robins (2022), in a meta-analytic review, found that individuals with higher self-esteem tend to experience more

satisfying relationships characterized by closeness, warmth, and support.

The mediation analysis confirmed that social connectedness mediates the link between self-esteem and social anxiety. This finding supports the model proposed by Lee et al. (2008), demonstrates its applicability within the Turkish cultural context, and contributes to its international generalizability. The results are also consistent with findings from Fatima et al. (2017), who reported a similar mediating role of social connectedness in a Pakistani sample. Although numerous studies have explored the impact of social support and social isolation on mental health (Wickramaratne et al., 2022), the role of social connectedness—defined as an individual's subjective experience of connection with others—has been less extensively investigated (Lee & Robbins, 1998; Wickramaratne et al., 2022). Similarly, while self-esteem has been linked to social withdrawal and loneliness, its association with social connectedness remains relatively underexplored (Cruz et al., 2023; Yuan et al., 2023).

This gap in the literature underscores the importance of examining social connectedness as a mediator between self-esteem and social anxiety. Although prior research has identified mediators such as self-compassion and interpersonal trust (He, 2022; Holas et al., 2023), the present study contributes by identifying social connectedness as an additional, significant mediator. The findings suggest that individuals' subjective sense of social connectedness is shaped by their self-esteem and, in turn, influences the development of social anxiety. While few studies have directly investigated social connectedness, the current findings align with prior research showing that perceived loneliness is related to higher levels of social anxiety (Hoffman et al., 2020). Moreover, Nguyen et al. (2024) found that among different types of isolation—interpersonal, structural, and subjective—subjective isolation was most strongly associated with various anxiety disorders, including social anxiety disorder.

In conclusion, the findings of this study highlight social connectedness—the subjective feeling of meaningful connection with others—as a key mechanism through which self-esteem influences social anxiety. These results underscore the importance of interventions aimed at enhancing self-esteem and fostering social connectedness in efforts to reduce social anxiety, particularly by addressing individuals' personal experiences of social integration.

As an ending conclusion, Türkiye reflects a culturally hybrid society, where collectivist values such as familial obligation and social harmony coexist with increasing individualistic tendencies, particularly among younger and urban populations. In this cultural context, self-esteem may be influenced both by personal accomplishments (typically emphasized in individualistic cultures) and by maintaining positive social relationships, which are central in collectivist traditions. Likewise, social connectedness may function not only as a protective factor but also as a culturally embedded expectation, where being part of close social networks helps reduce fears of negative evaluation. These cultural dynamics may help explain the observed associations among social anxiety, self-esteem, and social connectedness in our findings.

### Limitations and Future Directions

Although this study provides valuable insights, several limitations should be acknowledged. First, the reliance on a non-clinical sample restricts the generalizability of the findings to individuals with a formal diagnosis of social anxiety disorder. Second, the relatively modest sample size may have limited the statistical power to detect more subtle or complex effects. Third, the exclusive use of self-report measures introduces the potential for bias, including participants' limited self-awareness and the influence of social desirability, which may have affected the accuracy of the responses. Moreover, replicating the hypotheses with longitudinal research designs to explore causal pathways over time would provide more robust test of the present mediation model. Even adding potential moderators such as measuring the cultural dimensions of individualism and collectivism would draw a better picture of the cultural context. Finally, as stated earlier, incorporating more diverse and clinical populations should be considered for future research to increase generalizability.

Despite these limitations, this study contributes to the literature by exploring the mediating role of social connectedness between self-esteem and social anxiety in a Turkish adult sample, thereby extending the applicability of Lee et al.'s (2008) model. Given that the sample included participants from diverse regions of Türkiye, the findings offer a broad cultural perspective. Nonetheless, future research should replicate this study in different cultural contexts to further test the model's generalizability. Additionally, future studies should examine whether the mediation effect of social connectedness applies to clinical populations with diagnosed social anxiety disorder. Longitudinal research would also be valuable in establishing causal relationships and exploring how self-esteem and social connectedness interact over time to influence the development or reduction of social anxiety.

The findings of this study also have important implications for both clinical practice and public health initiatives. Enhancing self-esteem and fostering a strong sense of social connectedness should be central components of interventions aimed at reducing social anxiety. Mental health professionals working within the Turkish cultural context are encouraged to incorporate strategies that build meaningful social bonds alongside traditional therapeutic approaches. Additionally, prevention programs in schools and communities could benefit from promoting social skills and opportunities for social engagement to strengthen individuals' subjective experience of connectedness. By addressing these factors,

it may be possible to not only alleviate social anxiety symptoms but also enhance overall mental well-being. Future research and policies should continue to emphasize the role of social connectedness in mental health, supporting culturally sensitive and holistic approaches to anxiety prevention and treatment. For instance, interventions could emphasize the enhancement of self-esteem not only through individual skill-building but also through strengthening social support systems and interpersonal harmony, which are culturally valued. Group-based interventions, family involvement, and community-based mental health programs may be especially effective in fostering social connectedness and reducing anxiety.

### Compliance with Ethical Standards

**Disclosure of Potential Conflicts of Interest.** The authors declare no conflicts of interest related to the research, authorship and/or publication of this article.

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**Ethical Approval.** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Ethical approval was received from Hasan Kalyoncu University Ethics Board with decision date/number: 20.11.2024/ 2024-38.

**Informed Consent.** Consent was obtained from all participants included in the study.

**Data Sharing Statement.** The data file for this study is available upon request.

**Author Contributions.** Iida Henriikka Vedenpää conceptualized and designed the study, collected the data, and drafted the initial literature review and discussion sections. Mustafa Batuhan Kurtoglu conducted the data analysis, interpreted the results, and prepared the methods and results sections. All authors contributed to the editing and revision of the manuscript and approved the final version for submission.

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