

# SOCIAL INTERACTION ANXIETY AMONG UNIVERSITY STUDENTS: TRAUMATIC EXPERIENCES, PARENTAL BONDING AND PSYCHOLOGICAL RESILIENCE

PERINBANAYAKHAM, H.<sup>1</sup> – ISMAIL, A.<sup>1\*</sup> – AMAT, M. A. C.<sup>1</sup>

<sup>1</sup> *Department of Counselor Education and Counseling Psychology, Universiti Putra Malaysia, Selangor, Malaysia.*

*\*Corresponding author  
e-mail: asmahis[at]upm.edu.my*

(Received 23<sup>rd</sup> February 2026; revised 20<sup>th</sup> April 2026; accepted 02<sup>nd</sup> May 2026)

**Abstract.** Social interaction anxiety is a prevalent concern among university students, often shaped by early traumatic experiences and parental bonding styles. Understanding these psychological mechanisms is essential for promoting resilience in academic settings. This study investigates the roles of traumatic experiences, parental bonding, and psychological resilience in the development of social interaction anxiety among university students. A systematic literature review was conducted using PsycINFO, PubMed, Scopus, and Google Scholar. Studies published between 2015 and 2025 were screened based on relevance to trauma, parental bonding, resilience, and social anxiety in university populations. Findings reveal that adverse childhood experiences and insecure parental bonding significantly contribute to social interaction anxiety. Psychological resilience emerged as a protective factor, moderating the impact of trauma and maladaptive bonding on social functioning. Findings reveal that adverse childhood experiences and insecure parental bonding significantly contribute to social interaction anxiety. Psychological resilience emerged as a protective factor, moderating the impact of trauma and maladaptive bonding on social functioning.

**Keywords:** *social interaction anxiety, university students, traumatic experiences, parental bonding, psychological resilience*

## Introduction

Social interaction anxiety is characterised by persistent fear and discomfort in interpersonal situations in which individuals anticipate scrutiny, embarrassment, rejection, or negative evaluation. Among young people, these concerns may lead to avoidance of conversations, group activities, presentations, and unfamiliar social situations (Jefferies and Ungar, 2020; Mattick and Clarke, 1998). Such symptoms can significantly impair students' ability to participate in group discussions, deliver presentations, and engage in peer interactions, activities essential for academic success, leadership development, and personal growth. University life represents a critical developmental phase marked by academic challenges, shifting peer dynamics, and exposure to diverse social environments. These difficulties may undermine students' classroom participation, academic engagement, social integration, and educational achievement across the university years (Brook and Willoughby, 2015). The competitive nature of higher education, coupled with increased expectations for independence and interpersonal competence, places students at heightened risk for anxiety-related disorders. While academic stressors contribute to the onset and maintenance of SIA, psychological antecedents rooted in early life experiences play a more foundational role in its development. Adverse childhood experiences and dysfunctional parental bonding may contribute to social anxiety by influencing emotional regulation, interpersonal trust, threat perception, and expectations of rejection

(Heshmati et al., 2024). These experiences shape individuals' internal working models of self and others, often leading to distorted perceptions of social threat and diminished self-worth. For university students, unresolved trauma may manifest as hypervigilance in social settings, fear of embarrassment, and chronic avoidance of interpersonal engagement.

Parental bonding, particularly in the form of overprotective, authoritarian, or emotionally distant parenting styles, further influences the development of SIA. Attachment theory posits that early caregiver relationships form the blueprint for future social interactions and emotional regulation. Insecure attachment patterns, such as anxious or avoidant styles, may leave individuals feeling ineffective, rejected, or overly dependent in social scenarios. These relational templates often persist into adulthood, shaping how students interpret peer feedback, manage conflict, and navigate group dynamics. In contrast, psychological resilience, the capacity to adapt to stress and recover from adversity, emerges as a protective factor in this context. Resilient students demonstrate greater emotional flexibility, problem-solving skills, and social competence, enabling them to manage social stressors more effectively. Insecure attachment may also be associated with lower psychological resilience, whereas resilience can provide students with greater self-confidence and adaptive capacity when responding to interpersonal and academic stressors (Parpottas et al., 2024). However, resilience is not uniformly distributed across student populations and may be influenced by cultural, familial, and institutional factors. Despite growing recognition of SIA among university populations, limited research has explored the complex interplay between traumatic experiences, parental bonding, and psychological resilience. Most existing studies examine these variables in isolation, overlooking their cumulative and interactive effects. This study addresses this gap by synthesizing recent literature to examine whether traumatic experiences during childhood or adolescence correlate with social anxiety among university students. It also investigates how parental attachment styles, particularly overprotective or neglectful patterns, contribute to the development of SIA. Finally, the study assesses the moderating role of psychological resilience in the relationship between trauma and social anxiety, proposing that resilience may buffer trauma's impact on students' social functioning and interpersonal confidence.

## Materials and Methods

The search strategy and synthesis procedures were informed by recent systematic-review approaches used to evaluate psychological resilience interventions among university students (Abulfaraj et al., 2024). This study employed a systematic literature review to investigate psychological factors contributing to Social Interaction Anxiety (SIA) among university students, with particular emphasis on traumatic experiences, parental bonding, and psychological resilience. A literature review was chosen as the methodological approach to synthesize existing empirical findings and identify consistent patterns, theoretical gaps, and implications for mental health interventions in higher education settings. The review was guided by the central research question: What are the roles of traumatic experiences, parental bonding, and psychological resilience in social interaction anxiety among university students? To ensure comprehensive coverage, a structured search was conducted across four major electronic databases: PsycINFO, PubMed, Scopus, and Google Scholar. These databases were selected for their breadth of psychological, medical, and interdisciplinary research. The search was

limited to peer-reviewed journal articles published between January 2015 and August 2025, ensuring the inclusion of recent and relevant studies. Keywords used in the search included combinations of “social interaction anxiety,” “social anxiety,” “university students,” “trauma,” “adverse childhood experiences,” “parental bonding,” “attachment styles,” “psychological resilience,” and “coping.” Boolean operators (AND, OR) and truncation symbols were applied to refine the search results. Additionally, reference lists of key articles were manually screened to identify further studies not captured through database searches.

Inclusion criteria required that studies focus on university or college student populations and examine psychological predictors or moderators of social anxiety, specifically trauma, parental bonding, or resilience. Only empirical research articles published in English were considered, encompassing quantitative, qualitative, and mixed-methods designs. Studies were excluded if they focused exclusively on clinical populations with diagnosed social anxiety disorder or unrelated anxiety conditions, lacked university-aged participants, or were theoretical papers, editorials, or conference abstracts without empirical data. The initial search yielded 1,243 articles. After removing duplicates, 1,015 titles and abstracts were screened for relevance. Of these, 142 full-text articles were reviewed in detail. Following the application of inclusion and exclusion criteria, 38 studies were deemed eligible for thematic synthesis. The screening process was conducted independently by two reviewers, with discrepancies resolved through discussion and consensus. This rigorous selection process ensured that only high-quality, relevant studies were included in the final analysis.

Data extraction was performed using a structured coding sheet that captured key information from each study, including author(s), year, country of origin, sample characteristics (e.g., age, gender, sample size), study design, psychological constructs examined, measurement instruments used, reliability coefficients, and key findings. A thematic synthesis approach was employed to analyze the extracted data. This involved identifying recurring patterns, conceptual overlaps, and theoretical linkages across studies. Thematic categories were developed inductively and refined iteratively to capture the nuanced relationships between trauma, parental bonding, resilience, and SIA. The synthesis was organized around three core themes: (1) the impact of traumatic experiences on social anxiety, (2) the role of parental bonding in shaping social functioning, and (3) the moderating effect of psychological resilience. These themes were selected based on their prevalence in the reviewed literature and their relevance to the research question. To complement the narrative synthesis, a summary table was developed to present the key psychological constructs examined in the reviewed studies. The table includes the instruments commonly used to measure each construct, such as the Parental Bonding Instrument (PBI), Childhood Trauma Questionnaire (CTQ), the Connor-Davidson Resilience Scale (CD-RISC), and the Social Interaction Anxiety Scale (SIAS), along with their reported reliability coefficients and sample items. By exploring these interconnected psychological factors, the study aims to deepen understanding of the roots of SIA and inform targeted interventions for university mental health services. The findings are expected to contribute to the growing body of literature on social anxiety in university settings and highlight potential strategies for mitigating its impact, particularly through resilience-enhancing approaches and trauma-informed practices that support students in managing anxiety and engaging more effectively in academic and social life (*Table 1*).

**Table 1.** Summary of study variables and instruments.

Variable	Instrument Used	Reliability (Cronbach's $\alpha$ )	Sample Item Example
Parental Bonding	Parental Bonding Instrument (PBI) (Parker et al., 1979)	.85	"My parent was affectionate toward me."
Trauma Exposure	Childhood Trauma Questionnaire (CTQ) (Bernstein et al., 1994)	.89	"I experienced emotional neglect."
Social Interaction Anxiety	Social Interaction Anxiety Scale (SIAS) (Mattick and Clarke, 1998)	.91	"I feel nervous when meeting new people."
Resilience	Connor-Davidson Resilience Scale (CD-RISC) (Connor and Davidson, 2003)	.87	"I am able to adapt when changes occur."

## Results and Discussion

### *Overview of social interaction anxiety*

Social Interaction Anxiety (SIA) commonly emerges during the transition to university, a developmental phase marked by heightened academic demands, evolving peer relationships, and exposure to diverse social environments. Students are expected to engage in group discussions, presentations, and campus events, activities that may provoke anxiety in individuals predisposed to SIA. Such anxiety can hinder social inclusion, academic performance, and emotional well-being. Recent studies suggest that post-pandemic social reintegration has intensified these challenges, with students reporting increased fear of negative evaluation and social withdrawal. While previous research has documented the prevalence and manifestations of SIA, this study specifically examined the psychological factors contributing to its development, focusing on traumatic experiences, parental bonding, and psychological resilience.

### *The role of traumatic experiences*

Childhood and adolescent trauma were identified as significant predictors of SIA. Adverse experiences, including physical abuse, emotional neglect, teasing, isolation, or bereavement, can impair an individual's ability to engage socially without fear. These early stressors shape perceptions of interpersonal interactions, often resulting in hypervigilance, avoidance behaviours, and heightened emotional reactivity. Trauma survivors frequently adopt avoidance as a coping mechanism, which offers temporary relief but reinforces long-term social discomfort. Feelings of shame, fear of rejection, and diminished self-worth were commonly reported among trauma-exposed students. Mental vulnerability, defined as the tendency to perceive ordinary social situations as threatening, mediates the relationship between trauma and social anxiety. Gender plays a moderating role in this dynamic. Women, disproportionately affected by trauma types such as sexual harassment or relational aggression, often develop heightened vigilance and emotional sensitivity in social contexts. This increased awareness can amplify avoidance behaviours and emotional distress, leading to more severe SIA symptoms. Longitudinal studies underscore the importance of trauma-informed approaches tailored to gender-specific experiences. Moreover, recent neuropsychological research suggests that trauma exposure may alter brain regions associated with social cognition and threat perception, further complicating recovery.

### *The role of parental bonding*

Parental bonding significantly influences emotional regulation and social competence from early life. Secure attachment fosters emotional stability, whereas

insecure attachment, often resulting from neglect or overprotection, increases susceptibility to anxiety disorders, including SIA. Students from overprotective or emotionally inconsistent parenting environments face challenges in autonomy and coping. Overprotective parenting was linked to inhibited psychological growth by limiting exposure to age-appropriate challenges, leading to low self-efficacy, poor decision-making, and reduced social assertiveness, factors that intensify social anxiety. Cultural gender expectations further complicate these effects. Women frequently encounter heightened relational and emotional demands, increasing their sensitivity to parental overprotection or inconsistency. This may explain the higher SIA symptoms reported by female students linked to disrupted parental bonding. Although cross-sectional studies such cannot establish causality, they provide valuable insights into the relational roots of SIA and emphasize the need for gender-responsive prevention strategies. Recent findings also suggest that parental bonding interacts with trauma exposure, compounding vulnerability to anxiety symptoms.

### ***The role of psychological resilience***

Psychological resilience, the capacity to adapt and recover from adversity, acts as a protective buffer against SIA. Resilient individuals demonstrate greater emotional regulation, self-efficacy, and optimism, which collectively reduce fear of negative evaluation and promote confident social engagement. Psychological resilience may be strengthened through structured interventions incorporating mindfulness, cognitive-behavioural principles, psychoeducation, emotional-regulation strategies, and adaptive coping skills (Abulfaraj et al., 2024; Galante et al., 2018). Nevertheless, resilience development is influenced by sociocultural factors. Gender-specific stressors, such as societal expectations for women to prioritize relational harmony and emotional conformity, can impact self-efficacy and coping strategies. Consequently, resilience-building programs may require adaptation to address these gendered experiences. Experimental studies reinforce this approach. Structured resilience programs significantly reduced SIA symptoms, with some gender-based differences in effectiveness. A systematic review further supports the efficacy of resilience interventions in improving mental health outcomes among university students.

### ***Integrated insight and recommendations***

Taken together, the findings reveal that SIA among university students is shaped by a complex interplay of psychological and relational factors. Traumatic experiences during childhood and adolescence contribute to maladaptive social perceptions and avoidance behaviors, while insecure parental bonding, particularly overprotective or neglectful styles, further impairs emotional regulation and social competence. In contrast, psychological resilience emerges as a protective factor, enabling students to manage anxiety and engage more confidently in social contexts. Gender-specific patterns were evident across all domains, highlighting the importance of culturally and socially responsive interventions. These integrated insights provide a foundation for trauma-informed, resilience-enhancing strategies aimed at improving students' emotional well-being and social functioning. University mental health services should implement comprehensive strategies addressing both symptoms and underlying vulnerabilities. Structured CBT programs should be prioritized to target maladaptive cognitions and avoidance behaviours. Mindfulness training can be integrated into wellness initiatives to

enhance emotional regulation and reduce stress. Peer-led support networks offer valuable opportunities for social connectedness, self-esteem building, and interpersonal skill development.

Resilience-building interventions, including coping skills workshops and psychological flexibility training, should be embedded within student development or orientation programs to strengthen protective factors against SIA. Cultivating socially supportive campus environments through staff training in empathetic communication and early anxiety identification is essential for fostering psychological safety. Future research should explore the long-term effects of resilience-based interventions using longitudinal methodologies. Investigating gender-specific outcomes, especially concerning resilience and mindfulness programs, will ensure that interventions are culturally and socially responsive. Comparative studies examining individual versus group-based CBT and hybrid delivery models may address accessibility challenges for students reluctant to seek face-to-face support. Finally, research exploring social intelligence and emotional competence as mediators of intervention efficacy may guide the development of targeted mental health strategies.

## Conclusion

Social Interaction Anxiety (SIA) is a debilitating psychological condition that significantly impairs university students' academic performance, social adjustment, and overall well-being. Characterized by persistent fears of rejection, embarrassment, or negative evaluation, SIA often manifests through avoidance behaviours, emotional withdrawal, and physiological distress in social contexts. These symptoms can hinder students' participation in group discussions, presentations, and campus activities, core components of academic and personal development. Feelings of shame, isolation, and fear of judgment frequently prevent students from forming meaningful peer relationships and engaging confidently in academic environments. This study identified three key psychological predictors of SIA: traumatic experiences, parental bonding, and psychological resilience. Early-life trauma, including emotional neglect, bullying, and bereavement, was associated with maladaptive social perceptions and heightened avoidance behaviours. These experiences shape internal working models of self and others, often leading to hypervigilance and diminished self-worth in interpersonal settings. Insecure parental bonding, particularly characterized by overprotection or emotional inconsistency, was linked to poor emotional regulation and increased vulnerability to social anxiety. Conversely, secure attachments fostered emotional stability, autonomy, and social competence, enabling students to navigate social challenges more effectively.

Psychological resilience emerged as a protective factor, moderating the impact of trauma and maladaptive bonding on social functioning. Students with higher resilience demonstrated greater emotional flexibility, self-efficacy, and optimism, which buffered anxiety symptoms and promoted adaptive coping. These findings underscore the necessity of trauma-informed and relationally sensitive interventions within university settings. Therapeutic strategies that foster resilience, address unresolved trauma, and strengthen interpersonal skills hold promise for reducing anxiety and enhancing social functioning. Mindfulness-based interventions, cognitive-behavioural therapy (CBT), and peer-led support programs have shown efficacy in promoting emotional regulation and social confidence among students with SIA. Despite the valuable insights offered,

the study's reliance on cross-sectional data limits causal inference. Longitudinal research is needed to examine the developmental trajectory of SIA and the sustained impact of early trauma and parental bonding across time. Additionally, future studies should explore the role of cultural, gender, and institutional factors in shaping resilience and anxiety outcomes. Comparative research across diverse university populations may reveal context-specific vulnerabilities and inform culturally responsive interventions.

By addressing both the psychological roots and social dimensions of anxiety, universities can create inclusive, supportive environments that promote academic success, personal growth, and long-term mental health. Institutional efforts should prioritize early identification of anxiety symptoms, staff training in empathetic communication, and integration of resilience-building programs into student development initiatives. A holistic approach that combines therapeutic support, peer engagement, and structural inclusivity can empower students to overcome social fears and thrive within academic communities. Ultimately, fostering psychological safety and emotional resilience is not only essential for individual well-being but also for cultivating a vibrant, connected, and mentally healthy university culture.

### **Acknowledgement**

This research is self-funded. The authors thank those involved for support in preparing this review.

### **Conflict of interest**

The authors confirm that there is no conflict of interest involve with any parties in this research study.

### **REFERENCES**

- [1] Abulfaraj, G.G., Upsher, R., Zavos, H.M.S., Dommett, E.J. (2024): The impact of resilience interventions on university students' mental health and well-being: A systematic review. – *Education Sciences* 14(5): 25p.
- [2] Bernstein, D.P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., Sapareto, E., Ruggiero, J. (1994): Initial reliability and validity of a new retrospective measure of child abuse and neglect. – *American Journal of Psychiatry* 151(8): 1132-1136.
- [3] Brook, C.A., Willoughby, T. (2015): The social ties that bind: Social anxiety and academic achievement across the university years. – *Journal of Youth and Adolescence* 44(5): 1139-1152.
- [4] Connor, K.M., Davidson, J.R.T. (2003): Development of a new resilience scale: The Connor-Davidson Resilience Scale. – *Depression and Anxiety* 18(2): 76-82.
- [5] Galante, J., Dufour, G., Vainre, M., Wagner, A.P., Stochl, J., Benton, A., Lathia, N., Howarth, E., Jones, P.B. (2018): A mindfulness-based intervention to increase resilience to stress in university students: The Mindful Student Study, a pragmatic randomised controlled trial. – *The Lancet Public Health* 3(2): e72-e81.
- [6] Heshmati, R., Seyed Yaghoubi Pour, N., Haji Abbasoghli, P., Habibi Asgarabad, M. (2024): Adverse childhood experience, parental bonding, and fatherhood as parenting vulnerabilities to social anxiety severity. – *European Journal of Investigation in Health, Psychology and Education* 14(7): 2057-2073.

- [7] Jefferies, P., Ungar, M. (2020): Social anxiety in young people: A prevalence study in seven countries. – PLoS ONE 15(9): 18p.
- [8] Mattick, R.P., Clarke, J.C. (1998): Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. – Behaviour Research and Therapy 36(4): 455-470.
- [9] Parker, G., Tupling, H., Brown, L.B. (1979): A parental bonding instrument. – British Journal of Medical Psychology 52(1): 10p.
- [10] Parpottas, P., Vogazianos, P., Pezirkianidis, C. (2024): Attachment, resilience and life satisfaction of university students in Cyprus after the fourth wave of COVID-19. – International Journal of Environmental Research and Public Health 21(1): 14p.