International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2025: 7.089

Adult Attachment Orientations among University Students

Neha Agrawal, Dr. Shivanand Pawar

Abstract: ***This study examines adult romantic attachment among university students, focusing on attachment anxiety and attachment avoidance. A quantitative, descriptive, cross-sectional design was used, involving 50 students aged 18 to 28 years. Data were collected through an online questionnaire using the 12-item Experiences in Close Relationships–Short Form (ECR-S). The results showed moderate attachment anxiety (M = 3.78, SD = 1.03) and low-to-moderate attachment avoidance (M = 3.16, SD = 0.90). A weak positive correlation was observed between the two dimensions (r = .16, p = .264), but the relationship was not statistically significant. Exploratory analysis identified a statistically significant difference in attachment avoidance across years of study, while the observed gender difference in attachment anxiety was not statistically significant. These demographic findings require cautious interpretation because of the small subgroup sizes. Overall, participants reported greater concern about rejection than discomfort with emotional closeness. The findings support examining attachment anxiety and avoidance as distinct dimensions of romantic attachment. However, the small convenience sample, reliance on self-reported responses, and cross-sectional design limit the generalisability of the results. Further research involving larger and more diverse student populations is recommended to examine attachment patterns and their relationship with demographic and interpersonal factors.***

Keywords: Adult Attachment, Attachment Anxiety, Attachment Avoidance, Romantic Relationships, University Students

1. Overview

This study examines adult romantic attachment among university students, focusing on attachment anxiety and attachment avoidance. A quantitative, descriptive, cross-sectional design was used, involving 50 students aged 18 to 28 years. Data were collected through an online questionnaire using the 12-item Experiences in Close Relationships–Short Form (ECR-S). The results showed moderate attachment anxiety (M = 3.78, SD = 1.03) and low-to-moderate attachment avoidance (M = 3.16, SD = 0.90). A weak positive correlation was observed between the two dimensions (r = .16, p = .264), but the relationship was not statistically significant. Exploratory analysis identified a statistically significant difference in attachment avoidance across years of study, while the observed gender difference in attachment anxiety was not statistically significant. These demographic findings require cautious interpretation because of the small subgroup sizes. Overall, participants reported greater concern about rejection than discomfort with emotional closeness. The findings support examining attachment anxiety and avoidance as distinct dimensions of romantic attachment. However, the small convenience sample, reliance on self-reported responses, and cross-sectional design limit the generalisability of the results. Further research involving larger and more diverse student populations is recommended to examine attachment patterns and their relationship with demographic and interpersonal factors.

Suggested Keywords: Adult Attachment, Attachment Anxiety, Attachment Avoidance, Romantic Relationships, University Students

2. Background and Rationale

Attachment theory: Bowlby (1969/1982) proposed that attachment is a behavioural system that motivates people to seek closeness to significant others, especially under distress or threat. Repeated experiences with caregivers shape *internal working models*: expectations about whether others are available and responsive, and about the self as worthy of care. Ainsworth et al. (1978) showed that infants differ in attachment security, which gave the theory its empirical base for individual differences.

Extension to adulthood: Hazan and Shaver (1987) argued that adult romantic bonds share features with early attachment relationships, such as seeking closeness, distress at separation, and using a partner as a source of security. Later work moved from attachment "types" to two continuous dimensions (Brennan et al., 1998):

- **Attachment anxiety:** concern about rejection, abandonment and whether others will remain available.
- **Attachment avoidance:** discomfort with emotional closeness, dependence and vulnerability, often with a preference for self-reliance.

A person can score low on both, high on one, or high on both. These are dimensions of individual difference, not diagnoses, and a score does not show that a relationship is healthy or unhealthy. Adult attachment is also not a simple copy of infant attachment: early experience contributes but does not determine later orientations (Fraley & Roisman, 2019).

Why university students? University life brings new social settings, greater independence and changing close relationships, which makes students a relevant group for describing how young adults approach closeness.

Rationale: The study is a focused, feasible descriptive project. It uses an established instrument, a small online sample and straightforward statistics. It does not investigate causes, change over time, or outcomes such as relationship satisfaction or mental health, and its results are treated as preliminary.

3. Literature Review and Research Gap

Chapter 2 reviewed 25 sources, grouped here by theme.

- **Foundations:** Bowlby (1969/1982), Ainsworth et al. (1978) and Hazan and Shaver (1987) established attachment theory and its extension to romantic relationships. Bartholomew and Horowitz (1991) proposed a four-category model based on views of self and others.
- **Dimensions versus categories:** Brennan et al. (1998), Fraley and Waller (1998) and Fraley et al. (2000) supported treating anxiety and avoidance as continuous dimensions. This is the approach adopted here, with no arbitrary "secure/anxious/avoidant" groups.
- **Emotion and relationship processes:** Mikulincer and Shaver (2007, 2019) and Simpson and Rholes (2017) linked attachment orientations to emotion regulation and to responses to stress, conflict and life transitions.
- **Measurement:** Wei et al. (2007) developed the ECR-S across six studies and supported a two-factor structure. Ravitz et al. (2010) and Smith and Hadden (2018) stressed choosing a measure whose relationship focus matches the research question. The ECR-S concerns close, romantic relationships.
- **Student samples:** Riva Crugnola et al. (2021) found, among 688 students, that those attending counselling showed more distress and a more insecure attachment profile. Song et al. (2024) linked adult attachment to love-related psychological stress among 813 college students.

Research gap

Studies of distress or relationship functioning cannot tell us the distribution of anxiety and avoidance in a different student group. Instruments differ in what they assess. A small study cannot establish population-wide patterns. The present study therefore offers a deliberately descriptive account of attachment anxiety and avoidance in one defined student sample.

4. Aim, Objectives and Hypotheses

Aim

To describe adult attachment orientations, specifically attachment anxiety and attachment avoidance, among university students aged 18 years and above.

Objectives

- To assess attachment anxiety among university students using a standardised self-report measure.
- To assess attachment avoidance among university students using a standardised self-report measure.
- To calculate and describe the distribution of attachment anxiety and avoidance scores in the sample.
- To examine the relationship between attachment anxiety and attachment avoidance scores.
- To explore whether scores vary across relevant demographic characteristics, where sample size permits.

Hypotheses (non-directional; only the relationship between the two dimensions was tested formally)

- **H_0:** There is no statistically significant association between attachment anxiety and attachment avoidance among the participating students.
- **H_1:** There is a statistically significant association between attachment anxiety and attachment avoidance among the participating students.

5. Research Methodology

Design

Quantitative, non-experimental, descriptive cross-sectional survey with a correlational component. Data were collected once from each participant, online, through Google Forms.

Sample

Non-probability convenience sampling through student groups, university networks and voluntary circulation of the survey. The target and final sample was 50 students.

Inclusion criteria

Aged 18 or over; currently enrolled at a university; able to understand the questionnaire in English; willing to participate voluntarily; informed consent given.

Exclusion criteria

Under 18; not a current student; no consent; substantially incomplete responses that could not be scored; clear duplicate submissions.

Tools

- *Participant information and consent form,* covering purpose, voluntariness, privacy, data handling and the right to stop before submitting.
- *Demographic sheet,* limited to age, year of study and gender (with a "prefer not to say" option). No names, emails or student numbers were collected.
- *ECR-S (Wei et al., 2007),* a 12-item self-report measure with an anxiety subscale and an avoidance subscale. The validation studies reported internal consistency of about .78 for anxiety and .84 for avoidance, a two-factor structure, validity comparable to the original ECR, and test–retest reliability over one month. Scores were kept continuous and not converted into categories.

Statistical analysis

- Means, standard deviations, medians, interquartile ranges, ranges, skewness, kurtosis and Shapiro–Wilk tests for each dimension.
- One-sample t-tests against the scale midpoint (4.0).
- Pearson's correlation for the anxiety–avoidance association, with Spearman's rank correlation as a sensitivity check; two-sided $\alpha = .05$, with 95% confidence intervals and effect sizes.
- Exploratory t-tests, one-way ANOVA with Tukey post hoc tests, and non-parametric equivalents for gender, year of study and age.

Ethics

Informed consent; voluntary participation without pressure; right to withdraw before submission; anonymity and secure data storage; minimising discomfort by allowing participants to exit; clear statement that the questionnaire is a research measure and not a diagnosis; accurate and responsible reporting.

6. Results

6.1 Sample characteristics

Participants (N = 50) were aged 18–28 years (M = 21.28, SD = 2.43). By gender, 27 (54%) were female, 20 (40%) male, 1 (2%) non-binary and 2 (4%) preferred not to say. By year of study, 11 (22%) were first-year, 16 (32%) second-year, 8 (16%) third-year, 6 (12%) fourth-year and 9 (18%) postgraduate students.

6.2 Objective 1: Attachment anxiety

The mean was 3.78 (SD = 1.03; 95% CI 3.49–4.08), the median 4.00 (IQR 2.87–4.50) and the range 1.00–5.83. Using illustrative bands, 13 students (26%) scored low (below 3), 32 (64%) moderate (3 to below 5) and 5 (10%) high (5 or above); 24 (48%) scored above the midpoint. The mean did not differ significantly from the midpoint, $t(49) = -1.48$, $p = .144$. Anxiety was therefore moderate overall, with considerable individual variation.

6.3 Objective 2: Attachment avoidance

The mean was 3.16 (SD = 0.90; 95% CI 2.91–3.42), the median 3.17 (IQR 2.50–3.67) and the range 1.33–5.17. Nineteen students (38%) scored low, 30 (60%) moderate and 1 (2%) high; only 8 (16%) scored above 4. The mean was significantly below the midpoint, $t(49) = -6.54$, $p < .001$. Avoidance was low to moderate, and most students described themselves as comfortable with closeness and dependence.

6.4 Objective 3: Distribution of scores

Both dimensions were approximately normally distributed (skewness −0.36 and −0.01; kurtosis −0.07 and −0.44; Shapiro–Wilk $p = .271$ for anxiety and .796 for avoidance), and neither had outliers. Anxiety scores were higher and more dispersed than avoidance scores. Means and standard deviations, and parametric tests, were therefore appropriate.

6.5 Objective 4: Relationship between anxiety and avoidance

The two dimensions showed a weak positive correlation that was not statistically significant: Pearson $r(48) = .16$, 95% CI [−.12, .42], $p = .264$, $r^2 = .026$; Spearman $\rho = .10$, $p = .495$. Anxiety explained only about 2.6% of the variance in avoidance. With N = 50, the study had about 80% power only for correlations of roughly r = .38 or larger, so a small association cannot be ruled out.

6.6 Objective 5: Demographic variation (exploratory)

- **Gender (female n = 27, male n = 20):** Women reported higher anxiety (M = 4.05) than men (M = 3.49), a medium-sized difference (d = 0.55) that did not reach significance ($t(45) = 1.86$, $p = .070$; Mann–Whitney $p = .123$). Avoidance did not differ (women 3.06, men 3.26; d = −0.23, $p = .436$). The non-binary participant and the two who preferred not to say were too few to analyse.
- **Age:** Not meaningfully related to anxiety ($r = .12$, $p = .397$) or avoidance ($r = -.04$, $p = .758$).
- **Year of study:** Anxiety did not differ significantly ($F(4, 45) = 1.37$, $p = .258$, $\eta^2 = .11$). Avoidance did ($F(4, 45) = 3.94$, $p = .008$, $\eta^2 = .26$; Kruskal–Wallis $p = .009$). Fourth-year students (M = 4.06) scored higher than second-year students (M = 2.80; $p = .019$) and postgraduates (M = 2.67; $p = .018$). With groups of only 6 to 16 students and no correction for multiple tests, this finding is tentative.

6.7 Hypothesis testing

Pearson's correlation gave $r(48) = .16$, $p = .264$, which exceeds .05. **H_0 was not rejected and H_1 was not supported.** This means no statistically significant association was detected in this sample. It does not prove that no relationship exists, because the confidence interval is wide and the sample small.

7. Discussion

Anxiety (Objective 1): Students reported moderate worry about rejection and the availability of others, close to the scale midpoint. Nearly half scored above it, yet only five scored in the high band, so most variation lay in the middle of the scale. The midpoint is a reference point and not a population norm, and a moderate score is not a sign of disorder or unhealthy dependence. The ECR-S asks about romantic relationships (Smith & Hadden, 2018), so students with limited romantic experience may have answered from past or anticipated relationships.

Avoidance (Objective 2): Avoidance was the clearest finding: the mean was well below the midpoint and few students scored high. A low self-reported score does not rule out avoidant tendencies, because avoidance involves playing down attachment needs (Mikulincer & Shaver, 2007), and the study had no measure of social desirability. Only one student fell in the high-avoidance band, so the study says almost nothing about strongly avoidant students.

Distribution (Objective 3): The near-normal, continuous distributions fit the dimensional view of attachment (Brennan et al., 1998; Fraley & Waller, 1998; Fraley et al., 2000) and justify keeping continuous scores. Concern about relationships was descriptively more prominent than discomfort with closeness, but the difference between the two means was not formally tested. Normality tests have limited power with 50 participants.

Relationship between the dimensions (Objective 4): The weak association agrees with the idea that anxiety and avoidance are conceptually distinct. Knowing a student's anxiety told us very little about their avoidance. The result is best read as "no clear association detected", because the estimate is imprecise. Detecting a correlation of .16 with 80% power would need roughly 300 participants.

Demographic variation (Objective 5): The gender difference in anxiety is a medium-sized trend that needs a larger sample. The year-of-study difference in avoidance is the only significant demographic result. It is close to a

Bonferroni-adjusted threshold of about .008 for six primary tests, so it is not obviously a chance finding, but the groups are small and different students were measured in each year, so it cannot be read as change over time. One possible explanation, which this study could not test, is that final-year students face transitions in independence, career and living arrangements (Simpson & Rholes, 2017; Mikulincer & Shaver, 2019).

Integrated view: The typical student was comfortable with closeness and reported a middling, variable level of worry about being valued. The strongest results were the low-to-moderate avoidance and the shape of both distributions. The weakest were the correlation, which was imprecise, and the demographic comparisons, which were exploratory.

Implications

- *Theory:* limited, sample-specific support for treating anxiety and avoidance as separate continuous dimensions.
- *Method:* a brief standardised measure works in a small online student study, but only large effects can be detected with 50 participants, so confidence intervals and effect sizes matter.
- *Practice:* students differ in degree and in combination of attachment concerns, so psychoeducation can address worry about rejection as well as independence. Scores must not be used to label individuals, and the tentative gender and year-of-study results do not justify targeted interventions.

Comparison with previous studies: The findings are consistent with the measurement literature on two distinct, continuous dimensions (Brennan et al., 1998; Fraley et al., 2000; Wei et al., 2007). They cannot be compared numerically with Riva Crugnola et al. (2021), who studied a counselling-seeking group with a different attachment measure and a distress measure, or with Song et al. (2024), who measured love-related stress. The study did not use published ECR-S norms, so the comparison is conceptual. It supports Fraley and Roisman's (2019) caution that current scores should not be read as evidence about early experience.

8. Limitations

1) **Small sample.** With 50 participants, power was adequate only for large effects, so estimates are imprecise and non-significant results are not evidence of no effect.
2) **Convenience sampling.** Volunteers may be more interested in or comfortable with the topic, so the sample is not representative.
3) **Self-report.** Limited self-awareness and social desirability may affect answers, especially on avoidance.
4) **Cross-sectional design.** No causal conclusions, origins or change over time can be drawn.
5) **Reliability not reported for this sample.** Only the published estimates (Wei et al., 2007) are available, and each subscale has just six items.
6) **Romantic focus without relationship information.** Relationship status and history were not collected.
7) **Exploratory subgroup analyses.** Groups were small, hypotheses were not specified in advance, and there was no correction for multiple comparisons. Three participants could not be included in the gender comparison.
8) **Descriptive reference points.** The midpoint and the low/moderate/high bands are illustrative, and the anxiety–avoidance difference in means was not formally tested.
9) **Language and culture.** The survey was in English, and the ECR-S was not validated for this specific context.
10) **Limited variables.** Satisfaction, distress and emotion regulation were not measured.

9. Recommendations

Future research

- Use larger, more diverse samples (around 300 or more across institutions) and more systematic recruitment.
- Test the gender and year-of-study findings as pre-specified hypotheses in new samples.
- Add relationship status and outcomes such as relationship satisfaction, psychological distress and love-related stress.
- Consider longitudinal designs to separate change from differences between cohorts.
- Make sure gender-diverse students are included in sufficient numbers to be analysed.

Methodology

- Report Cronbach's alpha for each subscale from the researcher's own data.
- Report effect sizes and confidence intervals, and correct for multiple comparisons or label analyses as exploratory.
- Compare results with published ECR-S data from comparable student groups, and consider a social desirability measure or a longer instrument such as the ECR-R.

Universities and practice

- Offer psychoeducation that presents attachment anxiety and avoidance as dimensions, not labels or disorders.
- Treat questionnaire scores as research data and not as diagnoses.
- Review how visible counselling and peer support are for final-year and postgraduate students, recognising that the supporting evidence is tentative.
- Facilitate ethically approved, anonymous surveys that allow larger samples.

10. Conclusion

Within the limits of a small convenience sample, the students described themselves as generally comfortable with closeness while reporting moderate and varied concern about rejection and the availability of others. Anxiety and avoidance behaved as separate, continuously distributed dimensions, with no statistically significant association (H_0 not rejected). Differences by gender and year of study are possible but unconfirmed and are best treated as questions for future research. The findings describe these 50 students, are not diagnoses, and say nothing about causes. Their value

lies in a transparent description that later studies with larger, more diverse and more systematically recruited samples can build on.

References

[1] Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Lawrence Erlbaum.

[2] Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*(2), 226–244.

[3] Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed.). Basic Books. (Original work published 1969)

[4] Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). Guilford Press.

[5] Fraley, R. C., & Roisman, G. I. (2019). The development of adult attachment styles: Four lessons. *Current Opinion in Psychology, 25*, 26–30.

[6] Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns: A test of the typological model. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 77–114). Guilford Press.

[7] Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*(2), 350–365.

[8] Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511–524.

[9] Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. Guilford Press.

[10] Mikulincer, M., & Shaver, P. R. (2019). Attachment orientations and emotion regulation. *Current Opinion in Psychology, 25*, 6–10.

[11] Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research, 69*(4), 419–432.

[12] Riva Crugnola, C., Bottini, M., Madeddu, F., Preti, E., & Ierardi, E. (2021). Psychological distress and attachment styles in emerging adult students attending and not attending a university counselling service. *Health Psychology Open, 8*(1), 1–9. https://doi.org/10.1177/20551029211016120

[13] Simpson, J. A., & Rholes, W. S. (2017). Adult attachment, stress, and romantic relationships. *Current Opinion in Psychology, 13*, 19–24.

[14] Smith, C. V., & Hadden, B. W. (2018). Romantic attachment. In T. K. Shackelford & V. A. Weekes-Shackelford (Eds.), *Encyclopedia of evolutionary psychological science*. Springer. https://doi.org/10.1007/978-3-319-16999-6_1714-1

[15] Song, M., Hu, X., & Liu, S. (2024). Adult attachment and love psychological stress among college students: The mediating role of core self-evaluation and the moderating role of meaning in life. *BMC Psychology, 12*, Article 478. https://doi.org/10.1186/s40359-024-01990-5

[16] Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity, and factor structure. *Journal of Personality Assessment, 88*(2), 187–204.