BHARATI INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & DEVELOPMENT (BIJMRD)

(Open Access Peer-Reviewed International Journal)

DOI Link : https://doi.org/10.70798/Bijmrd/04042032

Available Online: www.bijmrd.com | BIJMRD Volume: 4 | Issue: 04(2) | April 2026 | e-ISSN: 2584-1890

Influence of Adult Attachment Styles on Altruistic Behaviour

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Abstract: *Altruism is defined as a selfless, voluntary, and often costly action aimed at enhancing the welfare of others without expectation of reward. According to Auguste Comte "Altruism is living for others" (Comte, 1851–1854). Attachment styles are psychological patterns of behaviour, emotions, and trust developed in early childhood based on interactions with primary caregivers, which influence how individuals relate to others in adulthood. Based on the findings of the 'Strange Situation experiment' by Mary Ainsworth, there exists three types of attachment styles, namely, Secure attachment, Anxious-ambivalent attachment (resistant attachment) and Avoidant attachment. Later disorganised attachment style was added (Mary Ainsworth: Attachment Theory and the Strange Situation – Attachment Project, 2025). The study comprised of 62 male and 58 female, totalling 120 samples. Once the data were collected, they were analysed using Pearson product moment correlation, independent samples t- tests and one-way ANOVA using SPSS for (version 20.0.), the results consistently suggest that attachment style does not have a statistically significant relationship with altruism in the present study, and the null hypotheses were retained across all analyses. Despite the absence of statistically significant findings, the current research was able to make a significant contribution to the existing body of research by emphasizing the fact that attachment styles do not necessarily serve as direct predictors of altruistic behavior.*

Keywords: *Altruism, Attachment Styles, Anxious Attachment, Avoidant Attachment, Disorganised Attachment.*

Introduction: Attachment styles are psychological patterns of behavior, emotions, and trust developed in early childhood based on interactions with primary caregivers, which influence how individuals relate to others in adulthood. Pioneered by John Bowlby and Mary Ainsworth, attachment styles such as secure, anxious, avoidant, or disorganized attachment shape how people handle intimacy, conflict, and emotional connection in relationships. Anxious attachment style, also called anxious-preoccupied attachment, is a form of insecure interpersonal attachment characterized by a strong desire for closeness combined with high anxiety about being abandoned, rejected, or unloved (Guo & Ash, 2020). In adult attachment research, secure attachment refers to an interpersonal orientation characterized by comfort with intimacy, positive views of oneself and others, and effective emotion regulation within close relationships (Justo-Núñez et al., 2022). Avoidant attachment (dismissive-avoidant attachment) refers to a dimension of adult attachment characterized by discomfort with emotional closeness, deactivation of the attachment system, and a tendency to minimize the importance of close relationships (Uccula et al., 2022). Disorganized attachment, often

referred to as fearful-avoidant attachment in adult attachment research, is an insecure attachment pattern characterized by the simultaneous presence of high attachment anxiety and high attachment avoidance. Individuals with this style experience a fundamental internal conflict: they desire emotional closeness and intimacy but simultaneously fear rejection, distrust others, and avoid vulnerability. Unlike anxious or avoidant attachment, which follow relatively consistent strategies (hyperactivation or deactivation of the attachment system), disorganized attachment reflects a lack of a coherent strategy for managing relational stress (Paetzold et al., 2015).

Altruism refers to behavior intended to benefit another, even when this behavior risks possible sacrifice to the welfare of the actor (Batson, 2011). Altruism is motivation to increase another person's welfare without conscious regard for one's own self-interest (Fehr & Fischbacher, 2003).

According to C. Daniel Batson, altruism is not merely helpful behavior, but a specific motivation to improve another person's welfare for their sake alone. Through decades of experiments on the empathy–altruism hypothesis, Batson argues that when individuals feel empathic concern for someone in need, they may help even when escape from the situation is easy and no rewards are expected. This suggests that genuine altruistic motivation exists and is distinct from egoistic motives such as seeking praise, avoiding guilt, or gaining social approval.

Batson's research distinguishes between:

- Egoistic motivation – helping to reduce ones own distress or gain benefit
- Altruistic motivation – helping purely to increase another's welfare

He concludes that empathy-induced altruism is a real psychological phenomenon supported by experimental evidence (Batson, 2010b).

From an evolutionary psychology viewpoint, altruism is explained through kin selection and reciprocal altruism. W. D. Hamilton (1964) proposed kin selection theory, arguing that individuals may act altruistically toward relatives because helping them increases the survival of shared genes. This is known as inclusive fitness, organisms promote genetic success not only through their own reproduction but also by helping genetically related individuals survive (Hamilton, 1964).

Similarly, Robert Trivers (1971) introduced reciprocal altruism, suggesting that individuals help non-relatives with the expectation that the favor will be returned in the future. This form of altruism evolves in societies where repeated interactions occur (Trivers, 1971).

These perspectives suggest that what appears to be selfless behavior may have deep biological and adaptive roots.

Research in neuroscience suggests that altruistic behavior activates brain regions associated with reward processing. Studies show that helping others can stimulate areas such as the ventral striatum, indicating that altruism may be intrinsically rewarding.

For example, Jorge Moll et al (2006) found that charitable donations activated neural systems linked to pleasure and social bonding. This suggests that altruism may be biologically reinforced through positive emotional experiences (Moll et al., 2006). In addition, findings by Pan at al.(2022) his research paper - "Insecurity and Altruistic Behavior among Chinese Adolescents: Mediating Effect of Different Dimensions of Empathy", shows that Attachment avoidance negatively predicted altruistic behavior, whereas attachment

anxiety had mixed effects via empathic concern and personal distress (Pan et al., 2022). Another such finding by Anduse at al. says higher anxious attachment was linked to lower altruism through increased envy (Anduse et al., 2025). Another finding by Mikulincer et al(2005) in their research on "Attachment, caregiving, and altruism: Boosting attachment security increases compassion and helping" says Participants primed with secure attachment showed greater compassion and willingness to help strangers. Avoidant attachment was associated with lower empathy and reduced helping. Anxious attachment showed helping behavior depending on emotional context (sometimes motivated by distress reduction) (Mikulincer et al., 2005).

Materials and Methods

Participants and Survey: Distribution of selected sample by gender and current living situation

Current Living Situation	**Gender**		**Total**
	male	female	
HOME	44	40	84
HOSTEL	7	9	16
PG	11	9	20
Total	62	58	120

The total sample consisted of 120 participants. They were categorized based on their current living situations into three groups: Home, Hostel and PG. The home group consisted of 44 males and 40 females. The hostel group consisted of 7 males and 9 females and the PG group consisted of 11 males and 9 females. Overall, the sample included 62 male and 58 female.

A cross-sectional design was employed 120 undergraduate students from Mysore. To measure one's attachment styles, Adult Attachment Questionnaire (Simpson et al., 1996) was employed, while the Self Report Altruism Scale (Rushton et al., 1981) was used to assess altruism. The sample consisted of 58 female students (48.33%) and 62 male students (51.67%), totaling 120 participants.

Measures and interpretations

Self–Report Altruism Scale (SRA- scale), developed by J. Philippe Rushton, Roland D. Chrisjohn, & G. Cynthia Fekken and was published in 1981, is a well-known instrument for evaluating altruism.

The SRA-scale was developed to quantify altruistic behaviour in an individual and is commonly employed in research, especially among young adults, including university students. The questionnaire consists of 20 – item scale.

The participants should choose one among 5 options given. The scoring of each item is done on 5-point Likert scale: 1 for Never, 2 for Once, 3 for More than once, 4 for Often and 5 for Very often. Higher scores indicate high level of altruism. Based on the total score, individuals can be categorized into High altruistic tendency if they have scored higher score, Moderate altruistic tendency if they have scored mid-range score and Lower altruistic tendency if they have scored lower score. The scoring is determined by adding the scores of all 20 questions, each of which has a rating between 1 and 5. The range of the overall score is 20 to 100.

The psychometric properties of SRA- scale demonstrates solid reliability and meaningful validity. Internal consistency was strong across different samples, with Cronbach's alpha ranging from.78 to.89, indicating that the items consistently measure the same underlying construct. Peer-rating interrater reliability ranged from r =.39 to.51, reflecting moderate agreement among raters. In terms of validity, the scale showed positive correlations with peer-rated SRA-scale altruism (r =.35) and peer-rated global altruism (r =.21), supporting its convergent validity. Overall, these findings suggest the measure is both dependable and appropriately aligned with related indicators of altruistic behaviour.

Adult Attachment Questionnaire (AAQ), developed by Simpson, Rholes, & Nelligan and was published in 1992 and was later factor analysed in 1996. Originally designed as a part of a comprehensive questionnaire assessing the attachment styles in adults. The scale comprises of 17 questions and the participants responded using the 7- point Likert scale. Items 1, 3, 4, 12, 14, 16, and 17 must be reversed-keyed prior to constructing each scale. The Avoidance scale is comprised of items 1-3 and 5-9. Higher scores on this dimension reflect greater avoidance. The Anxiety scale is comprised of items 4 and 10-17. Higher scores on this dimension reflect greater anxiety. Greater attachment security is defined by lower scores on both scales.

The reliability and validity of the AAQ were examined to determine its psychometric adequacy. Reliability was assessed using Cronbach's alpha coefficients separately for men and women. The Avoidance dimension consisted of 8 items and yielded a Cronbach's alpha of.70 for men and.74 for women, indicating acceptable internal consistency. These values suggest that the items within this dimension are sufficiently interrelated and measure a common underlying construct. The Ambivalence (Anxiety) dimension included 9 items and demonstrated Cronbach's alpha coefficients of.72 for men and.76 for women, reflecting satisfactory internal consistency across both gender groups. Overall, the alpha values for both dimensions fall within the acceptable range for psychological research, with slightly higher reliability observed among women.

Validity was examined through factor analysis to assess the construct validity of the scale. The results revealed two distinct factors corresponding to the Avoidance and Ambivalence (Anxiety) dimensions. The clear loading of items onto their respective factors supports the theoretical structure of the instrument and provides evidence that the scale effectively measures two conceptually distinct dimensions of attachment.

Data Analysis: The data collected from Self –Report Altruism Scale and Adult Attachment questionnaire were analysed using various statistical methods. These included a cross tabulation of current living situation and gender, Chi-square test was conducted to examine association between categorical variables. Additional analyses involved Pearson's correlation to assess relationships between variables, an Independent Samples t-Test, and a t-Test for comparing group means. Furthermore, a One-Way ANOVA was conducted to examine differences across academic streams, along with ANOVA tests to explore variations both within and between groups.

Results

Table 01: ***Distribution of selected sample by gender and current living situation***

Current Living Situation	Gender		Total
	male	female	
HOME	44	40	84
HOSTEL	7	9	16
PG	11	9	20
Total	62	58	120

From the cross - tabulation table on the current living situation and gender, the majority of the respondents live at home, with 70.0% of the total sample. More specifically, 71.0% of the males (n=44) and 69.0% of the females (n=40) live at home. A smaller percentage of the sample lives in hostels, with 11.3% of the males (n=7) and 15.5% of the females (n=9). In addition, 17.7% of the males (n=11) and 15.5% of the females (n=9) live in PGs. In general, the percentage of the sample that lives in different accommodation types seems to be comparable between the two genders, with 62 males and 58 females. No significant gender differences were found.

Table 02: ***Distribution of selected sample by Relationship Status and Attachment Styles***

Relationship status * attachment styles Crosstabulation

Relationship Status		Attachment Styles			Total
		disorganized	avoidant	anxious	
Single	Count	2	20	78	100
Committed	Count	1	3	16	20
Total		3	23	94	120

A cross-tabulation analysis was done to assess the distribution of the participants' attachment styles in relation to their relationship status. A total of 120 participants were included in the study, of which 83.3% (n = 100) were single and 16.7% (n = 20) were in a committed relationship. Of the participants who had a disorganized attachment style (n = 3), 66.7% were single and 33.3% were committed. Of the participants who had an avoidant attachment style (n = 23), 87.0% were single and 13.0% were committed. Of the participants who had an anxious attachment style (n = 94), 83.0% were single and 17.0% were committed. It is evident from the results that the distribution of the participants' relationship status is somewhat similar across the participants with varying attachment styles, with the majority being single in nature. This suggests that the relationship status does not vary to a great extent across the participants with varying attachment styles.

Table 03: Distribution of selected sample by Altruism and Attachment Styles and results of Descriptive Statistics

	N	***Mean***	***Std. Deviation***	***Std. Error***
disorganized	3	44.6667	9.81495	5.66667
avoidant	23	52.9565	13.67638	2.85172
anxious	94	53.8511	10.64577	1.09803
Total	120	53.4500	11.26447	1.02830

Altruism

The descriptive statistical results reveal that the mean altruism score varies between the groups. The mean altruism score for the individuals with the disorganized attachment style, where the sample size was 3, was found to be 44.67 (SD = 9.81), which is relatively low compared to the other groups. The mean altruism score for the individuals with the avoidant attachment style, where the sample size was 23, was found to be

52.96 (SD = 13.68). The mean altruism score for the individuals with the anxious attachment style, where the sample size was 94, was found to be the highest at 53.85 (SD = 10.65). The mean altruism score for the entire sample, where the sample size was 120, was found to be 53.45 (SD = 11.26). These results reveal that the individuals in the avoidant and anxious groups had relatively similar levels of altruism, while the individuals in the disorganized group had relatively low levels of altruism.

Table 04: ***Results of Pearson moment Correlation between Altruism and Attachment styles***

		Avoidant	Anxious	Attachment style	Altruism
Avoidant	Pearson correlation	1	.058	-.503**	-.042
	Sig. (2-tailed)		.527	.000	.646
	N	120	120	120	120
Anxious	Pearson correlation	.058	1	.328**	.089
	Sig. (2-tailed)	.527		.000	.336
	N	120	102	120	120
Attachment style	Pearson correlation	-.503	.328	1	.099
	Sig. (2-tailed)	.000	.000		.284
	N	120	120	120	120
Altruism	Pearson correlation	-.042	.089	.099	1
	Sig. (2-tailed)	.646	.336	.284	
	N	120	120	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

Pearson's product moment correlation analysis was used to study the correlation between attachment style and altruism among the participants (N = 120). It was observed that there was no significant correlation between attachment style and altruism (r =.099, p =.284). It was also observed that avoidant attachment had no significant correlation with altruism (r = –.042, p =.646), and anxious attachment had no significant correlation with altruism (r =.089, p =.336). However, avoidant attachment had a significant moderate negative correlation with overall attachment style (r = –.503, p <.001), and anxious attachment had a significant moderate positive correlation with overall attachment style (r =.328, p <.001). These results suggest that although the dimensions of attachment have significant correlations with the overall attachment style, altruism has no significant correlation with the attachment style.

Table 05: ***Distribution of selected sample by Altruism and Attachment Styles and results of One-way ANOVA***

Altruism

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	252.162	2	126.081	.994	.373
Within Groups	14847.538	117	126.902		
Total	15099.700	119			

In order to analyse whether there was any significant difference between the altruism scores of the three groups, a one-way ANOVA was carried out. The results of the analysis showed that the difference was not significant, as the p-value was more than 0.05, i.e., p =.373, F(2, 117) = 0.99, p=.373. Hence, the null hypothesis is retained, showing that there is no significant difference between the altruism scores of the groups.

The results show that the difference in altruism scores is not due to the group, as the p-value is more than.05, indicating that the difference is due to individual differences between the members of the groups.

Table 06: Result of t-test between Altruism and Relationship Status

		T-test for Equality of Means		
	t	df	Sig. (2-tailed)	Mean Difference
altruism	1.442	118	.152	3.96000

Independent Samples Test: An independent sample t-test was carried out to determine the difference in altruism score based on relationship status, single, and committed. The Group Statistics revealed that the altruism score of single participants was higher than the altruism score of the committed participants, as the single participants had a higher mean score (M = 54.11, SD = 11.02, N = 100) than the committed participants (M = 50.15, SD = 12.19, N = 20). The Independent Samples Test, however, revealed that the altruism score of single participants was not significantly higher than the altruism score of the committed participants, as the difference was not statistically significant, t(118) = 1.42, p = 0.152.

The p-value of the result was higher than the level of significance, which was set at 0.05, and therefore the null hypothesis was retained, which means that altruism score has no significant difference between single and committed participants.

Table 07: Chi-Square Tests

Result of Chi-Square Tests between Altruism and Attachment styles

	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	.826	2	.662

A Chi-square test was conducted to examine the association between the variables. The value was 0.826, and the Asymp. Sig. (2-sided) was 0.662. As the significance value is greater than 0.05, the result is not statistically significant. Therefore, it can be concluded that there is no significant association between the variables in the present study.

Discussion

Major Findings

- The cross-tabulation analysis between current living situation and gender did not show any clear or meaningful association between the two variables.
- In a similar manner, the cross-tabulation between relationship status and attachment style also failed to indicate any significant relationship.

- The descriptive statistics suggested that while there were slight variations in altruism scores across groups, these differences were within a normal range.
- The one-way ANOVA further confirmed that altruism did not significantly differ across the various attachment style groups.
- Pearson's correlation analysis supported this finding by indicating that attachment style was not significantly related to altruism.
- The independent samples t-test likewise showed that altruism levels did not significantly vary based on relationship status.
- Additionally, the Chi-square analysis did not reveal any significant association among the categorical variables.
- Overall, when considered together, these results consistently suggest that attachment style does not have a statistically significant relationship with altruism in the present study, and the null hypotheses were retained across all analyses.

In the study titled Attachment and Political Personality Are Heritable and Distinct Systems, and Both Share Genetics with Interpersonal Trust and Altruism, Kleppesto et al. (2024) examined the relationship between adult attachment styles and altruism using a large twin sample of 1,987 participants. The findings indicated that although both attachment dimensions and altruistic behavior are heritable traits, they function as largely distinct psychological systems. Importantly, the study did not find substantial shared environmental overlap between attachment style and altruism, suggesting that early attachment experiences may not directly predict altruistic tendencies.

Furthermore, while attachment and altruism were each modestly associated with broader interpersonal traits such as trust, the overall pattern of results demonstrated minimal covariance between attachment orientations and altruistic behavior. These findings support the view that attachment style and altruism may operate independently rather than being strongly correlated. This is consistent with the present study, which similarly found no statistically significant relationship between attachment style and altruism (Kleppesto et al., 2024)

Conclusion: There are certain limitations associated with the current study that need to be addressed. Firstly, the current study was conducted on a somewhat homogeneous sample, which may have restricted the generalization of the results to more diverse groups of people. Secondly, the unequal number of participants from certain groups, such as relationship status, may have restricted the statistical power of the results. Moreover, the self-report nature of the current study may have led to certain biases, such as social desirability and subjectivity of the results. Last but not least, the current study was based on a cross-sectional design, which may have restricted the ability to make causal interpretations of the results on the relationship between altruism and attachment style.

These limitations could be addressed by future studies using a larger sample to increase the generalizability of the findings. Longitudinal studies could be used to gain a better insight into the development of altruism tendencies and attachment styles. Further, using mixed-methods approaches could be beneficial to gain a better insight into the relationship between altruism and attachment styles. Further, the mediating or moderating factors, such as empathy, emotions, and culture, which could explain the relationship between altruism tendencies and attachment styles, could be explored by future researchers.

Despite the absence of statistically significant findings, the current research was able to make a significant contribution to the existing body of research by emphasizing the fact that attachment styles do not necessarily serve as direct predictors of altruistic behavior. The study results also highlight the significance of reporting non-significant findings since they play an important role in the development and refinement of

scientific knowledge and theoretical assumptions. Overall, the study provides an important foundation for future research studies examining the complex relationships between attachment and prosocial behavior.

References

- Anduse, M., Kart, M. E., & Çakır, E. (2025). Banka çalışanlarında haset duygusunun özgeci davranış üzerindeki etkisinde kaygılı bağlanma stilinin aracı rolü. *Çalışma ve Toplum, 4*(87), 1569–1600. https://doi.org/10.54752/ct.1666675

- Batson, C. D. (2010). *Altruism in humans*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195341065.001.0001

- Comte, A. (1851–1854). *System of positive polity* (J. H. Bridges, Trans.). Longmans, Green, and Co. (Original work published 1851–1854)

- Fehr, E., & Fischbacher, U. (2003). The nature of human altruism. *Nature, 425*(6960), 785–791. https://doi.org/10.1038/nature02043

- Guo, L., & Ash, J. (2020). Anxiety and attachment styles: A systematic review. In *Proceedings of the 2020 4th International Seminar on Education, Management and Social Sciences (ISEMSS 2020)*. https://doi.org/10.2991/assehr.k.200826.207

- Hamilton, W. D. (1964). The genetical evolution of social behaviour. I. *Journal of Theoretical Biology, 7*(1), 1–16. https://doi.org/10.1016/0022-5193(64)90038-4

- Justo-Núñez, M., Morris, L., & Berry, K. (2022). Self-report measures of secure attachment in adulthood: A systematic review. *Clinical Psychology & Psychotherapy, 29*(6), 1812–1842. https://doi.org/10.1002/cpp.2756

- Kleppesto, T. H., Czajkowski, N. O., Vassend, O., Røysamb, E., Eftedal, N. H., Sheehy-Skeffington, J., Ystrom, E., Kunst, J. R., Gjerde, L. C., & Thomsen, L. (2024). Attachment and political personality are heritable and distinct systems, and both share genetics with interpersonal trust and altruism. *Behavior Genetics, 54*(4), 321–332. https://doi.org/10.1007/s10519-024-10185-y

- Mary Ainsworth: Attachment theory and the strange situation. (2025, October 2). *Attachment Project*. https://www.attachmentproject.com/attachment-theory/mary-ainsworth/

- Mikulincer, M., Shaver, P. R., Gillath, O., & Nitzberg, R. A. (2005). Attachment, caregiving, and altruism: Boosting attachment security increases compassion and helping. *Journal of Personality and Social Psychology, 89*(5), 817–839. https://doi.org/10.1037/0022-3514.89.5.817

- Moll, J., Krueger, F., Zahn, R., de Oliveira-Souza, R., & Grafman, J. (2006). Human fronto–mesolimbic networks guide decisions about charitable donation. *Proceedings of the National Academy of Sciences, 103*(42), 15623–15628. https://doi.org/10.1073/pnas.0604475103

- Paetzold, R. L., Rholes, W. S., & Kohn, J. L. (2015). Disorganized attachment in adulthood: Theory, measurement, and implications for romantic relationships. *Review of General Psychology, 19*(2), 146–156. https://doi.org/10.1037/gpr0000042

- Pan, Y., Liang, S., & Shek, D. T. L. (2022). Attachment insecurity and altruistic behavior among Chinese adolescents: Mediating effect of different dimensions of empathy. *International Journal of Environmental Research and Public Health, 19*(16), 10371. https://doi.org/10.3390/ijerph191610371

- Rushton, J. P., Chrisjohn, R. D., & Fekken, G. C. (1981). The altruistic personality and the self-report altruism scale. *Personality and Individual Differences, 2*(4), 293–302. https://doi.org/10.1016/0191-8869(81)90084-2
- Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology, 71*(5), 899–914. https://doi.org/10.1037/0022-3514.71.5.899
- Trivers, R. L. (1971). The evolution of reciprocal altruism. *The Quarterly Review of Biology, 46*(1), 35–57. https://doi.org/10.1086/406755
- Uccula, A., Mercante, B., Barone, L., & Enrico, P. (2022). Adult avoidant attachment, attention bias, and emotional regulation patterns: An eye-tracking study. *Behavioral Sciences, 13*(1), 11. https://doi.org/10.3390/bs13010011

Citation: **Thanmayi SB, Mohsina Sultana, Johnson W S.,** (2026) "Influence of Adult Attachment Styles on Altruistic Behaviour", *Bharati International Journal of Multidisciplinary Research & Development (BIJMRD)*, Vol-4, Issue-04(2), April-2026.