



The influence of Attachment Styles on Empathy and Altruistic Tendencies in Young Adults

¹Prerna Singh

¹Student, Integrated B.A-M.A. (Clinical Psychology), Semester 10, Amity Institute of Psychology and Allied Sciences, Noida, Uttar Pradesh, India

prerna.singh2@s.amity.edu

²Dr. Anita Chauhan

²Associate Professor, Amity Institute of Psychology and Allied Sciences, Noida, Uttar Pradesh, India

anitac@amity.edu

Abstract: The current study aimed to explore the impact of attachment styles on empathy and altruistic tendencies among young adults. A sample of 160 participants was assessed using three standardized instruments: the Experiences in Close Relationships–Revised (ECR-R) to measure attachment styles, the Interpersonal Reactivity Index (IRI) to assess empathy, and the Self-Report Altruism Scale (9-SRA) to evaluate altruistic behaviour. Using correlation analysis, independent t-tests, and ANOVA, the study examined relationships between attachment dimensions (secure, anxious, avoidant), gender, empathy, and altruism. Results revealed a weak, non-significant positive correlation between empathy and altruism, and while secure attachment was associated with slightly higher empathy and altruism, these findings were not statistically significant. Significant gender differences were found only in empathy, with females reporting higher levels. The findings partially support existing literature, suggesting trends toward secure attachment fostering empathy, but call for further research using more diverse samples and

longitudinal designs. This study contributes to understanding how early relational patterns may influence prosocial traits in emerging adulthood.

Keywords: *Attachment styles, empathy, altruism, young adults, ECR-R, IRI, 9-SRA, gender differences, prosocial behaviour.*

1. Introduction

Since humans are sociable by nature, the quality and standard of their interpersonal bonds have a big impact on their emotional and mental health. People's relationships with others have an impact on how they view, react to, and interact with the world from an early age until adulthood. Attachment theory, which holds that early encounters with carers create internal working models that direct future relationships, is one of the most persistent frameworks for comprehending these relational patterns. Attachment patterns can have a significant impact on how people connect with others, show empathy, and participate in prosocial behaviours like generosity throughout the crucial time of young adulthood, which is a time of emotional growth and identity development (Bowlby, 1969).

The purpose of this study is to investigate how various attachment styles affect young adults' empathy and altruistic tendencies in order to advance our knowledge of the psychological understructure of connection and care. Understanding the study's core concepts attachment types, empathy, altruism, and the developmental environment of young adulthood is crucial to gaining a deeper comprehension of this dynamic.

1.1 Attachment Theory and Styles

APA dictionary of Psychology (2000) describes attachment as “an emotional bond between a human infant or a young nonhuman animal and its parent figure or caregiver; it is developed as a step in establishing a feeling of security and demonstrated by calmness while in the parent’s or caregiver’s presence.” Attachment also denotes the tendency to form such bonds with certain other individuals in infancy as well as the tendency in adulthood to seek emotionally supportive social relationships.

Attachment theory describes how emotional ties develop between people, particularly between a child and their primary carer (Salcuni, 2015). Its foundation is the idea that our early connections with our carers have a big influence on how we develop as people. It was first proposed by British psychologist John Bowlby in 1969 (McGarvie, 2024). According to this theory, humans are

physiologically predisposed to build attachments in order to survive, and the nature of these attachments influences how we develop as well as how we experience relationships and life in general (Bowlby, 1979).

Bowlby's colleague Mary Ainsworth (1969) advanced attachment theory with her “Strange Situation” experiment. In the experiment, babies were watched as they interacted with their carers, a stranger, and briefly separated from them. The infant’s responses gave birth to three attachment styles- secure, insecure-avoidant, insecure ambivalent and later a fourth called disorganized attachment (Bartholomew & Horowitz, 1991).

Throughout adulthood, attachment types continue to influence people's relationships. (Domingue & Mollen, 2009). Thus, attachment styles in adulthood are similar to those in childhood. The following is how the attachment styles would appear to an adult (Domingue & Mollen, 2009):

- a) Secure relationships are typically wholesome, dependable, and encouraging.
- b) Anxious-Preoccupied adults frequently yearn for closeness but may also experience feelings of uncertainty and abandonment anxiety.
- c) Dismissive-avoidant adults may value independence above close relationships and steer clear of emotional intimacy.
- d) Adults who are fearful avoidant may yearn for connection yet be afraid of becoming too close, which frequently leads to confusing feelings and shaky relationships.

The above following diameters are seen in the psychological scale Experiences in Close Relationships Revised (Farley, Waller & Brennan, 2000).

1.2 Empathy

APA dictionary of Psychology (2000) describes empathy as “understanding a person from their frame of reference rather than one’s own, or vicariously experiencing that person’s feelings, perceptions, and thoughts. Empathy does not, of itself, entail motivation to be of assistance, although it may turn into sympathy or personal distress, which may result in action.” At every stage of life, empathy is essential to human, social, and psychological interaction. While the general definition of empathy is understood, research has also found that empathy is divided into cognitive, compassionate and emotional empathy (Ekman, 2000).

Cognitive empathy, also known as perspective taking, is the ability to comprehend another person's point of view and gain a feel for what it could be like to walk in their shoes. The ability

to sense another person's emotions, including their bodily feelings, is known as emotional empathy. One can experience compassionate empathy when cognitive and emotional empathy are balanced. When an individual practices compassionate empathy, they are not overpowered by emotion; rather, their empathy motivates them to act in the most prudent manner, one that is rooted in both our hearts and minds, and to support others (Goleman, 1995).

The development of empathetic responsiveness is influenced by both biological and social factors, according to Hoffman (2000), who also highlighted empathy as a crucial process in moral growth and prosocial motivation. Attachment theory and empathy theory asserts that securely attached people are more likely to exhibit emotional attunement, whereas avoidantly attached people may exhibit emotional suppression and less empathic concern (Wei et al., 2005).

The ability to feel empathy has numerous positive applications. Being empathetic enables one to establish social bonds with other people. One can react effectively in social circumstances by being aware of what other people are thinking and experiencing. It also teaches an individual how to control their own feelings. Helping behaviours are encouraged by empathy. Additionally, empathy for others not only increases the likelihood of acting in a helpful manner, but it also increases the likelihood that others will assist you (Cherry, 2024).

There has been a rising shift in the last ten years towards the idea that empathy is a multifaceted construct. The four distinct facets of empathy-perspective taking, fantasy, empathic concern and personal distress-that are measured by the Interpersonal Reactivity Index (IRI; Davis, 1980) are explained, and its correlations with social functioning, self-esteem, emotionality, and sensitivity to others are evaluated (Davis, 1983).

1.3 Altruism

When an individual's actions are driven by a desire to help someone else for their own gain, they are typically characterized as altruistic. However, the term is occasionally used more widely to describe actions that help others, regardless of the motivation behind them (Kraut, 2025). The term was first given by French philosopher Auguste Comte who described it as the exact antithesis of "egoism," stressing the moral duty to put other people's well-being first. For example, *Ogotua*, or pleading for assistance, is a custom among the Maasai herders of the Serengeti plain. The tribe has a tradition of being obligated to assist as long as it does not endanger their survival. Additionally, it can entail parting with some of their herd without

anticipating compensation or anything else in exchange (Holmes, 2016). Research indicates that similar acts of kindness are also seen elsewhere, from Fijians to Texan cattle ranchers. We can't predict when a catastrophe will strike or when we'll require assistance (Holmes, 2016).

The Self-Report Altruism (SRA) scale is a 20-item measure that Rushton and colleagues developed to evaluate people's altruistic behaviour. The 9-SRA is a more economical tool for evaluating altruism and for use in empirical research centered on prosocial and human behaviour. It also exhibits sufficient reliability and validity. The benefits and possible uses of the new scale are covered in the article (Manzur & Olavarrieta, 2021).

2. Review of Literature

Lacomba-Trejo, et al. (2024) in their study of 420 young Spanish studied individuals' psychopathic and altruistic qualities in relation to coping mechanisms, ACEs, and demographic factors. The findings revealed that higher levels of psychopathic traits, especially in men, were associated with ACEs and avoidant emotion-focused coping. On the other hand, ACEs and problem-focused coping were linked to higher levels of benevolence, particularly in women. The study emphasized how crucial it is to support safe childhood settings and flexible coping mechanisms to lessen psychopathy and increase altruism, particularly in high-SES settings.

Lenghart and Čerešník (2024), in their study explored at how Slovak adults' prosocial attitudes towards the LGBTQIA+ population are influenced by their attachment types and maladaptive caregiving techniques. The findings from 1,000 participants indicated that all prosocial behaviours were positively predicted by secure attachment, whereas insecure attachments were associated with less prosocial tendencies and maladaptive parenting techniques. While deactivation techniques negatively predicted all prosocial behaviours, hyperactivation techniques predicted some of them. The results emphasize the value of adaptive parenting and secure connection in promoting prosocial views towards minority groups.

Chen et al. (2023) examined how prosocial behavior impacted by childhood abuse and neglect in a sample of 1,569 Chinese college students. The Prosocial Tendencies Measure, Interpersonal Reactivity Index, and Childhood Trauma Questionnaire were filled out by the participants. Prosocial behaviour was found to be significantly influenced by emotional neglect both directly and indirectly, as seen by decreased empathy and perspective-taking. Prosocial

behaviour was solely impacted by emotional maltreatment through heightened personal discomfort. On the other hand, there was little impact from physical neglect, sexual abuse, or physical abuse. The results point to specific emotional abuse pathways that hinder prosocial growth and empathy.

Henschel, Nandrino and Doba (2022) investigated the effects of various adult attachment types on affective and cognitive empathy as well as emotion regulation (ER). 168 of the 870 participants were chosen based on their self-report scores and attachment style. The results indicated that compared to secure or avoidant people, nervously attached people reported higher degrees of personal discomfort and imagination, as well as more ER issues. Partial least square modelling showed that, depending on the empathy dimension and attachment style, ER acted as a mediator in the relationship between attachment and empathy. The study emphasizes how crucial ER and connection are in forming an adult's capacity for empathy.

Out of 703 publications, 16 research were found to be eligible for this systematic review, which looked at the relationship between prosocial behaviour and attachment security in kids and teens. There were conflicting findings about the direct relationships between prosocial behaviour and parental attachment, but there were more reliable connections between empathy and attachment quality. In six investigations, the association between prosocial behaviour and secure attachment was mediated by empathy. These results provide credence to the idea that attachment helps develop empathy, which in turn encourages prosocial behaviour. In addition, the review identifies methodological flaws and makes recommendations for further study (Costa Martins et al., 2022).

McGinley and Evans (2020) examined the relationship between emerging adults' prosocial behaviours and mental health and their relationships to their parents, peers, and mothers. Maternal attachment was directly associated with internalizing symptoms (stress, anxiety, and depression) and peer attachment among 189 college students. With the exception of anonymous and public assistance, peer attachment moderated the majority of the relationships between maternal attachment and prosocial behaviours. Including maternal attachment had no discernible influence on paternal attachment. These findings highlight how important peer and parental bonds are in determining early adult socioemotional outcomes.

Van De Groep et al. (2020) studied the impact of the initial weeks of the COVID-19 lockdown on the mood, empathy, and prosocial behaviour of Dutch teenagers (N = 53; N = 36 without

attrition) was investigated in this exploratory longitudinal study. The results indicated that while social value orientation and altruism was constant, there were decreases in empathic concern, tension, and opportunity for prosocial behaviours. It's interesting to see that during lockdown, vigour and perspective-taking rose. Adolescents contributed more to worthy (doctor: 78%) and needy (COVID-19 patients: 69%) targets in fictitious Dictator Games than to friends (51%), or unfamiliar peers (39%). The study emphasizes teenagers' resiliency and social-emotional difficulties during lockdown.

Using the dictator and ultimatum games, this study investigated the connection between Chinese individuals' altruistic sharing behaviour and empathy. The findings showed that in both games, altruistic behaviour was significantly predicted by cognitive empathy rather than affective empathy. Furthermore, it was discovered that generosity was influenced by subjective family wealth, with those from lower-income homes exhibiting greater generosity in the ultimatum game. The results point to the significance of taking cultural context into account in empathy research by indicating cultural variations in the empathy-altruism link (Li et al., 2019).

Lampridis and Papastyliaou (2017) studied 484 Greek undergraduates' prosocial behavioural inclinations and their relationship to individualism and collectivism were examined. Public prosocial activities were least favoured, but altruistic and conforming behaviours were most favoured. While males and science students tended towards individualism, females and students studying the social sciences demonstrated greater collectivist orientation and stronger prosocial attitudes. Individualism only showed a positive correlation with public assistance, whereas collectivism was favourably associated with the majority of prosocial behaviours. Prosocial attitudes were strongly predicted by gender, age, collectivism, field of study, and religiosity, according to regression analysis.

Mikulincer and Shaver (2017) examined the caring and attachment processes that underpin behaviors that involve providing and requesting support. It examines studies on adult attachment that demonstrate how attachment styles affect empathy and providing care in intimate partnerships. Global prosocial behaviour is covered, including assisting strangers and treating compassion fatigue in medical settings. Secure attachment consistently improves compassion and altruistic behaviour, according to studies that use both self-reported and induced attachment security. All things considered; the data shows that attachment security raises the probability of compassionate reactions to those in need.

Nosrati et al. (2017), in their study investigated 993 college and seminary students' devotion to God, benevolence, forgiveness, and mental health were compared by gender. The findings indicated that female students exhibited greater degrees of forgiveness, altruism (particularly compassion), and solid devotion to God. Additionally, they saw God more as a source of peace and comfort. Male students demonstrated greater interpersonal sensitivity, whereas female students reported more somatization symptoms. Overall, the results support earlier studies by indicating that female students exhibit higher levels of spirituality and emotional stability.

Whalen (2017) studied the connections between 274 individuals' life happiness, empathy, and attachment style. Higher life satisfaction was predicted to be predicted by secure attachment and empathy. Secure attachment was favourably connected with both empathy and life contentment, however regression analysis revealed that attachment and empathy did not significantly explain the overall variance in life satisfaction. Despite the entire model's weak predictive ability, these findings imply that those with stable attachment likely to be more empathic and report higher levels of life satisfaction.

Lim and DeSteno (2016) investigated the potential relationship between more empathy and the intensity of prior suffering. The results of two research employing MTurk and lab-based techniques demonstrated that increased empathy was predicted by more hardship, which in turn promoted a consistent propensity to feel sympathy for other people. Prosocial actions meant to alleviate the pain of others were closely linked to this compassion. The findings imply that adversity can foster empathy-driven compassion and generosity rather than only resulting in negative repercussions.

Using self-compassion as a potential mediator, this study examined the relationship between mothers' attachment types and mindful parenting (N = 290). According to findings from structural equation modelling, attachment anxiety had an indirect impact on mindful parenting by lowering self-compassion, but attachment avoidance directly predicted less mindful parenting. Higher anxiety levels among mothers were associated with decreased levels of self-compassion and, consequently, mindful parenting. These results underline the need of encouraging self-compassion in parenting therapies by indicating that anxiety and attachment-related avoidance both have a detrimental effect on parenting, albeit through distinct processes (Moreira et al., 2016)

Among 191 participants, this study investigated the effects of emotion control, humility, social desirability, and attachment type on empathy. Significant relationships between empathy

and humility were discovered, despite the fact that social desirability did not influence empathy as expected. It has been demonstrated that the relationship between empathy and performance on an emotional go/nogo test, as well as between attachment and empathy, is mediated by emotion control. Associations between emotion regulation, attachment anxiety/avoidance, and empathy types were found by correlational analysis. Overall, the results lend credence to the notion that better emotion management abilities resulting from stable attachment increase empathy (Ventura, 2016).

Smith (2015) In this study, 155 emerging adult college students' reasons to volunteer were examined in relation to their attachment patterns. Regression analysis revealed that selfless motivations such as values, comprehension, and care for the community were predicted by secure connection. Both relational and self-serving goals, such as boosting one's self-esteem and personal growth, have been connected to anxious-ambivalent attachment. Understanding was also predicted by dismissing-avoidant attachment. Overall, research suggests that whereas insecure attachment types are associated with more self-centered motivations, secure people are more likely to volunteer for altruistic causes.

In a study of 145 Mexican American college students in the United States participated in this study, which looked at the relationships between social behaviours, empathy, and attachment. Results indicated that prosocial and physically aggressive behaviours were linked to both peer and parent bonds. The association between these behaviours and peer attachment was mediated by empathy, especially in men. The study emphasizes how social results for this under-represented minority are shaped by connection and empathy. It highlights the need for additional studies on the positive elements of development among Latino communities (Carlo et al., 2012).

Falvo et al. (2012) studied the effects of three different attachment styles—secure, avoidant, and anxious—on hospital staff members' attitudes, intentions, and perceptions were investigated in this study. The findings indicated that affective organizational commitment mediated the relationship between secure attachment and reduced intentions to leave and job burnout. While avoidant attachment was linked to higher levels of fatigue and cynicism, secure attachment was also strongly connected with helpful behaviours towards coworkers and superiors. The results emphasize how crucial it is to incorporate adult attachment theory into research on organizational behaviour.

Barry et al. (2008) studied how prosocial inclinations in emerging adults ($N = 228$; ages 18 to 25) are influenced by the quality of mother-child relationships. Through the use of structural equation modelling, researchers discovered that young adults who had a positive mother-child relationship also had better internal regulation of prosocial values. This internal control, in turn, predicted reduced tendencies driven by a need for other people's approval and more prosocial, unselfish tendencies. The results demonstrate the ongoing significance of parental influence on moral and social development when a person enters adulthood.

According to recent studies based on Bowlby's (1969/1982) attachment theory, empathy, cognitive openness, self-transcendent values, and tolerance are all fostered by both naturally occurring and experimentally increased attachment security. Altruism in daily life and selfless motivations for helping are associated with secure attachment. Priming attachment security enhanced altruistic behaviour and compassion in five trials conducted in the United States and Israel. Compassion and assisting, on the other hand, were adversely affected by anxiety and avoidance associated with attachment. The results imply that while insecure attachment styles impede caregiving behaviours, secure attachment styles promote them (Mikulincer et al., 2005).

2.2 Research Gap

Even though a lot of research has been done on the connections between prosocial or altruistic behaviours, empathy, and attachment styles, there is still a lot to learn about how these concepts interact in the developmental stage of young adulthood. Many studies based on attachment theory have highlighted that while insecure attachment styles, especially anxious and avoidant ones, tend to impair emotion regulation and diminish empathic and caregiving capacities, secure attachment fosters emotional attunement, empathy, self-transcendence, and altruistic behaviour (Mikulincer et al., 2005; Mikulincer & Shaver, 2017; Henschel, Nandrino, & Doba, 2022).

While those with insecure attachments are frequently motivated by more self-focused or approval-seeking goals, research has repeatedly demonstrated that secure attachment is linked to other-focused motivations for helping (Smith, 2015; Barry et al., 2008). However, very few of these studies target young adults, a demographic that faces socioemotional challenges, such as identity exploration, increased autonomy, and changing relational patterns. Instead, most of these studies concentrate on general adult populations, adolescents, or children (Carlo et al., 2012; Costa Martins et al., 2022).

Examining how attachment dynamics function throughout this crucial developmental period is therefore necessary, especially as young individuals start to form their own social networks and acquire moral principles, empathy, and helpful behaviours.

Furthermore, although some research has looked at empathy as a mediator between prosocial behaviour and attachment (Ventura, 2016; Carlo et al., 2012), the complexity of empathy—cognitive versus affective—has frequently been disregarded. Particularly in culturally diverse communities, few studies have specifically examined the ways in which these multiple types of empathy interact with different attachment styles to promote altruistic tendencies (Li et al., 2019; Lampridis & Papastylanou, 2017). Furthermore, while strategies like emotion regulation and self-compassion have been identified as connecting attachment insecurity to less empathic or mindful parenting outcomes (Moreira et al., 2016; Pepping et al., 2015), these mediating factors have not been thoroughly investigated in connection to prosocial or altruistic behaviours in emerging adults.

Furthermore, despite reports of gender differences in empathy and prosocial behaviour, which frequently imply that socialisation and emotional sensitivity make women more altruistic and empathic (Lampridis & Papastylanou, 2017; Nosrati et al., 2017), this dimension is still not well understood in relation to attachment styles. Particularly in non-Western or culturally varied environments, very few research has thoroughly investigated how gender may modify the relationships between various attachment styles (such as anxious or avoidant) and prosocial tendencies. Carlo et al. (2012), for example, discovered gendered variations in the mediating function of empathy between social behaviour and attachment; however, these subtleties have seldom ever been repeated or elaborated in larger samples.

2.3 Rationale of the Research

Building compassionate societies and promoting positive interpersonal connections require an understanding of the elements that lead to empathy and altruistic behaviour. Young adulthood is a critical developmental stage characterized by emotional development, identity creation, and a greater sense of social autonomy. People start defining their moral compass and navigating intricate social roles throughout this era, which shapes their long-term emotional and relational patterns. There is still much to learn about the relationship between adult attachment styles—especially anxious and avoidant dimensions—and empathy and altruistic tendencies in this age

group, despite the fact that a large body of research supports the fundamental role that early attachment experiences play in forming emotional and social competencies.

According to attachment theory, early interactions with carers create internal working models that affect how people view and react to those in need. While insecure attachments tend to impede the development of these qualities, secure attachment is consistently linked to increased empathy, prosocial drive, and other-oriented helping behaviours. Although earlier studies have connected attachment security to prosocial behaviour in general or helping reasons, young people have received less attention because most of this research has concentrated on children, parents, or larger adult groups. Furthermore, empathy is a complex concept with both emotive and cognitive elements, and its potential function as a conduit for the influence of attachment on altruism has not received enough attention.

Additionally, during emerging adulthood, these linkages may be moderated in particular ways by interpersonal, emotional, and cultural factors. Examining the neural underpinnings of prosocial behaviour in a population actively influencing the future is crucial given the increasing significance of empathy and compassion in today's societal issues, which range from social justice movements to international humanitarian disasters.

This study aims to close a significant gap in the knowledge by investigating the ways in which adult attachment patterns impact cognitive and affective empathy and, in turn, altruistic tendencies. Additionally, it seeks to provide useful insights for community-based, educational, and therapeutic interventions intended to improve young people's emotional intelligence, interpersonal sensitivity, and compassionate participation.

3. Methodology

To comprehend the link between the variables that were chosen, this chapter highlights the research design, sample and sampling technique, different instruments utilized, and statistical methodologies used.

3.1 Aim

To investigate how different attachment styles (secure, preoccupied, fearful-avoidant, and dismissive-avoidant) influence empathy and altruistic tendencies in young adults.

3.2 Research Objectives

- a) To assess the relationship between attachment styles (secure, anxious-preoccupied, dismissive-avoidant and fearful-avoidant) and empathy levels in young adults.
- b) To assess how attachment styles influence altruistic tendencies in adolescents

3.3 Hypothesis

- 1. Adolescents with higher secure attachment will exhibit greater empathy than those with lower secure attachment.
- 2. Secure attachment will be positively correlated with empathy levels and altruistic tendencies
- 3. Avoidant attachment will be negatively correlated with empathy levels and altruistic tendencies
- 4. There are no significant gender differences between male and female

3.4 Research Design

This study employs a quantitative, correlational research design to examine the influence of attachment styles—secure, preoccupied, fearful-avoidant, and dismissive-avoidant—on empathy and altruistic tendencies among young adults aged 18 to 29 years.

3.5 Sample and Sample Selection

160 participants between the ages of 18 and 29 were selected using convenience sampling, a method frequently employed in psychological studies. There were (n=126) female responses and (n=34) male responses out of the 160 total responses in the sample. Convenience sampling was selected because it is a viable method of effectively contacting enough developing adults. The selection of participants was based on their availability and desire to take part. Even though this approach might restrict generalizability, it is especially appropriate for the study's time and resource constraints, enabling quick data gathering.

3.6 Measures

The Experiences in Close Relationships–Revised (ECR-R) Questionnaire (Fraley, Waller & Brennan, 2000) is a popular tool for evaluating adult attachment styles. The 36 items on the scale are separated into two subscales: attachment avoidance and attachment anxiety. A 7-point Likert scale, with 1 denoting "strongly disagree" and 7 denoting "strongly agree," is used by participants to score their agreement with each topic. High internal consistency has been shown by the ECR-R, with Cronbach's alpha values for both subscales generally falling between 0.90 and 0.94 (Sibley

& Liu, 2004). The scale has demonstrated great construct validity and has been validated in a variety of cultural contexts. It also has good correlations with other measures of emotional regulation and relational stability. In studies involving attachment, its strong psychometric qualities make it a trustworthy tool for evaluating attachment aspects.

The Interpersonal Reactivity Index (IRI) (Davis, 1980/1983) is a multifaceted indicator of empathy that takes into account both affective and cognitive aspects. Each of the four subscales of the IRI—Perspective Taking, Empathic Concern, Fantasy, and Personal Distress—has seven items, totaling 28 items. On a 5-point Likert scale, responses are scored from 0 (does not describe me well) to 4 (describes me very well). The IRI has continuously demonstrated strong internal reliability, with Cronbach's alpha values generally falling between 0.70 and 0.78 for all subscales (Davis, 1983). Additionally, it has shown good discriminant and convergent validity, retaining subscale individuality while exhibiting a significant correlation with prosocial behaviour, emotional intelligence, and altruism. The IRI is a robust and dependable instrument for evaluating empathy in young adult populations because of its multidimensional structure and strong psychometric qualities.

The Self-Report Altruism Scale (SRA) (Rushton, Chrisjohn and Fekken, 1981) was developed in order to measure regular altruistic actions. The original 20-item scale was shortened and validated to create the 9-item short version (SRA-9), which aims to improve usability while preserving high psychometric quality. On a 5-point Likert scale, which normally goes from 1 (never) to 5 (very often), respondents indicate how frequently they perform altruistic acts (such as giving instructions or helping someone carry a load). SRA-9 has shown satisfactory internal consistency, with Cronbach's alpha values often recorded between 0.78 and 0.81 (Carlo & Randall, 2002). The scale has demonstrated strong test-retest reliability over time, strong criterion validity, and a high correlation with volunteerism and other measures of prosocial behaviour. The SRA-9 is an effective and dependable instrument for evaluating altruism in research settings because of its conciseness, ease of use, and empirical backing.

3.7 Procedure

A brief presentation was first created for the current study, giving the university-assigned guide a concise rundown of the investigation and obtaining their consent. 160 participants between the ages of 18 and 29 were chosen using convenience sampling. Each participant gave their informed consent after being briefed on confidentiality procedures. After completing the ECR-R, IRI, and

SRA-9, they were asked for some demographic information. During this process, individuals were asked to reflect on their relationships with others, as well as their own positive actions and self-worth.

3.8 Statistical Analysis

Jamovi (Version 2.3) was used to analyze the data that was gathered. To determine whether there were significant differences in empathy and altruistic tendencies among the four attachment styles—secure, preoccupied, fearful-avoidant, and dismissive-avoidant—a series of one-way ANOVA tests were performed. Additionally, the association between empathy and altruistic tendencies was evaluated using Pearson's correlation analysis. Both variables were subjected to independent samples t-tests in order to further investigate any possible gender disparities. A significance criterion of $p < 0.05$ was applied to all statistical tests.

4. Result

Table 1: *Correlation Matrix Relationship between Empathy and Altruism*

		Total Altruism	Empathy Total
Total Altruism	Pearson's r	-	
	df	-	
	p-value	-	
Empathy Total	Pearson's r	0.08	-
	df	158	-
	p-value	0.333	-

This table presents the Pearson correlation between empathy and altruism scores among young adults. The correlation coefficient ($r = 0.08$) suggests a very weak positive relationship, and the p-value (0.333) indicates that the relationship is not statistically significant. This implies that, within this sample, higher levels of empathy do not necessarily correspond with higher altruistic behavior in a meaningful or reliable way.

Table 2: *One-Way ANOVA – Attachment Styles and Total Altruism*

Source	F	Df1	Df2	p-value
Total Altruism	0.84	3	156	0.473

This ANOVA result examines whether different attachment styles significantly affect levels of altruism. The p-value (0.473) indicates that the differences in altruistic behavior across different attachment styles (e.g., secure, avoidant, anxious) are not statistically significant. This means that, according to this data, attachment style does not have a measurable impact on altruism in young adults.

Table 3: *One-Way ANOVA – Attachment Styles and Empathy*

Source	F	Df1	Df2	p-value
Empathy Total	2.10	3	156	0.102

Here, the ANOVA was used to test if empathy levels differ across attachment styles. While the result approaches significance ($p = 0.102$), it still exceeds the conventional alpha level of 0.05, suggesting that the observed differences in empathy between attachment groups may not be strong or consistent enough to rule out the role of chance. However, this could be indicative of a trend worth exploring further.

Table 4: *Independent Samples t-Test – Gender Differences in Empathy*

Statistic	df	p-value
Student's t	3.10	158

This t-test compares empathy levels between male and female participants. The result is statistically significant ($p = 0.002$), indicating that females in the sample reported significantly higher levels of empathy compared to males. This result challenges the hypothesis that there are no significant gender differences in empathy.

Table 5: *Independent Samples t-Test – Gender Differences in Altruism*

Statistic	df	p-value
Student's t	-0.87	158
Welsch's t	-0.88	52.80

This test evaluates gender differences in altruistic tendencies. The p-values from both t-tests (standard and Welch's) are well above 0.05, indicating no significant difference in altruism

between males and females. This supports the hypothesis that gender does not play a significant role in influencing altruistic behavior.

5. Discussion

The goal of the current study was to examine how young adults' attachment styles affect their empathy and altruistic tendencies. This study was based on human social development. Harmonious interpersonal interactions and community functioning depend on empathy, which is the capacity to comprehend and share another person's feelings, and altruism, which is the unselfish concern for another person's well-being. Bowlby's (1969/1982) initial conceptualization of attachment theory offers a potent framework for comprehending these characteristics. Early caregiving connections develop attachment styles, which influence how people relate to others on an emotional and social level throughout their lives. While those with anxious or avoidant attachment frequently struggle with intimacy and trust, securely attached people typically experience emotional closeness more readily, which may have an impact on their altruistic behaviour and empathic responsiveness.

Three standardized self-report tools were used in the study to evaluate these constructs. The Experiences in Close Relationships–Revised (ECR-R) questionnaire (Fraley, Waller & Brennan, 2000), which assesses anxiety and avoidance, the two main aspects of adult attachment, was used to examine attachment styles. The Interpersonal Reactivity Index (IRI), a multifaceted scale that measures both cognitive and affective components of empathy, including perspective-taking, empathic concern, and personal pain, was used to gauge empathy (Davis, 1980/1983). The Self-Report Altruism Scale (9-SRA) (Rushton, Chrisjohn and Fekken, 1981), a quick and validated tool that measures self-perceived prosocial behaviours in daily life, was used to evaluate altruistic tendencies. When combined, these resources offered a thorough framework for investigating the intricate relationships among altruism, empathy, and attachment.

These relationships have been examined in an expanding corpus of literature. In a series of tests carried out in Israel and the United States, it was discovered that empathy and altruistic behaviour were greatly enhanced by both stimulated and naturally occurring attachment security. Prosocial behaviour was less common among those with high anxiety or avoidance, whereas those with stable attachment orientations showed greater compassion and a willingness to assist.

According to these results, those who have a stable attachment experience an internal sense of security that makes it easier for them to notice other people's needs (Mikulincer et al., 2005).

People with anxious attachment styles reported higher levels of emotional dysregulation and personal discomfort, which hindered their ability to empathize. The research emphasized emotion regulation as a key mediating factor that connects empathy and attachment (Nandrino & Doba, 2022). In a similar vein through a wealth of data demonstrating that secure attachment improves caregiving behaviours towards both strangers and intimate partners, supporting the notion that secure people are typically more prosocial was explained (Mikulincer & Shaver, 2017). Additionally, it was found that prosocial behaviour in Mexican American college students was associated with both parental and peer attachments, with empathy acting as a mediating factor, particularly in males (Carlo et al., 2012).

The intersections of gender, setting, and culture with these variables have been studied by other scholars. Prosocial inclinations were more prevalent in women and were highly impacted by collectivist values, indicating that altruistic behaviour is driven by both gender and cultural orientation (Lampridis & Papastyliaou, 2017). It was also discovered that female students reported higher degrees of safe connection and benevolence, attributing these tendencies to their increased spiritual grounding and emotional sensitivity (Nosrati et al., 2017). In his research on volunteer motivations, insecure styles were linked to more self-serving motivations, whereas secure connections predicted altruistic motivations including values and understanding (Smith, 2015). A multifaceted picture of the interactions between these factors is supported by with further confirmation that emotion regulation plays a mediating function, particularly between attachment anxiety and empathy (Ventura, 2016).

The hypotheses were somewhat validated by the findings. Altruism and empathy had a modest and non-significant correlation ($r = 0.08$, $p = 0.333$), according to correlational analysis, suggesting that these traits may not be as tightly related as previously thought, at least not in this population. This runs counter to research by Ventura (2016), who discovered a stronger correlation through emotion regulation pathways, and Li et al. (2019), who found that cognitive empathy was a substantial predictor of altruistic behaviour. The current outcome could be a reflection of differences in cultural or developmental circumstances or sample-specific traits.

Analysis of variance (ANOVA) did not reveal significant differences in empathy ($F = 2.10$, $p = 0.102$), although the latter was close to significance, or in altruism across attachment styles ($F =$

0.84, $p = 0.473$). These findings imply that although there may be a trend towards increased empathy in secure attachment, the effect was not statistically significant in this particular population. This stands in contrast to more consistent findings in the literature, like those made by Smith (2015) and Mikulincer et al. (2005), who found that stable connection has definite prosocial effects. Nevertheless, methodological elements like sample diversity or measurement sensitivity may be to blame for these disparities.

Disparities in gender yielded intriguing results. In line with earlier research by Nosrati et al. (2017) and Lampridis and Papastylianou (2017), there was a significant difference in empathy scores between males and females ($t = 3.10$, $p = 0.002$). Females scored higher. Though emotional attunement may vary by gender, prosocial behaviour does not always follow the same pattern, as evidenced by the lack of a significant gender difference in altruism ($p = 0.386$). This is consistent with findings from McGinley and Evans (2020), who also found no gender influence on altruism, and partially supports the fourth theory.

6. Conclusion

The purpose of this study was to investigate (a) whether there are gender-related differences in young adults' empathy and altruism, and (b) the association between attachment styles on empathy and altruism. Although empathy and altruism may be conceptually related, the results showed a small but positive, non-significant connection between the two attributes, indicating that this relationship may not be clearly seen in self-report data. Additionally, females had much higher levels of empathy than males, even though there were no discernible gender-based variations in altruistic tendencies. Furthermore, while lower empathy and altruism ratings were linked to secure attachment, these differences were not statistically significant, suggesting a pattern that is consistent with other research but does not have strong empirical backing in this population. All things considered, this study adds to the expanding corpus of research examining the ways in which prosocial behaviours in emerging adulthood are influenced by early emotional ties.

This study's use of well-researched and validated psychometric tools—the 9-SRA to measure self-reported altruistic behaviours, the IRI to evaluate cognitive and affective empathy, and the ECR-R to measure adult attachment—is one of its main strengths. The conceptual relevance and dependability of the measured constructs are guaranteed by this methodological basis. Furthermore, as this developmental period entails significant changes in emotional, relational, and

moral identity, the emphasis on emerging adults adds significantly to the body of existing work. This study provides useful insights for educators, therapists, and youth development professionals that seek to promote emotional intelligence and prosocial ideals in young populations by investigating the ways in which attachment styles impact empathy and altruism.

Despite its benefits, there are a few things to keep in mind. First, convenience sampling was used in the study, which would have limited how broadly the results can be applied. In terms of socioeconomic status, educational diversity, and cultural background, the sample might not fairly represent larger populations. Second, social desirability bias may be introduced by using only self-report measures, especially when it comes to reporting altruistic behaviour. Peer-report data or behavioural observations could be used in future studies to triangulate results. Third, regression or path analysis could provide a more nuanced understanding of whether attachment styles significantly predict empathy and altruism while controlling other factors like emotion regulation or family dynamics, even though the current analysis focused on correlations and group differences. In order to evaluate how attachment and prosocial development change over time and in various environmental contexts, future research may also investigate longitudinal approaches.

All things considered, this study emphasizes the intricate relationship between attachment, empathy, and altruism as well as the impact of gender on empathic sensitivity. Despite the findings' limited robustness, they are consistent with more general psychological theory and offer encouraging avenues for further research and practical intervention.

References

- Barry, C. M., et al. (2008). The impact of maternal relationship quality on emerging adults' prosocial tendencies: Indirect effects via regulation of prosocial values. *Journal of Youth and Adolescence*, 37, 581-591.
- Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61(2), 226-244.
- Bowlby, J. (1979). The Bowlby-Ainsworth attachment theory. *Behavioral and Brain Sciences*, 2(4), 637-638.
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence*, 31(1), 31-44.
- Carlo, G., et al. (2012). Empathy as a mediator of the relations between parent and peer attachment and prosocial and physically aggressive behaviors in Mexican American college students. *Journal of Social and Personal Relationships*, 29(3), 337-357.
- Chen, P., et al. (2023). How do childhood abuse and neglect affect prosocial behavior? The mediating roles of different empathic components. *Frontiers in psychology*, 13, 1051258.
- Cherry, K. (2024). What is Empathy? *Verywell mind*.
- Costa Martins, M., Santos, C., Fernandes, M., & Verissimo, M. (2022). Attachment and the development of prosocial behavior in children and adolescents: A systematic review. *Children*, 9(6), 874.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10, 85.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113-126.
- Domingue, R., & Mollen, D. (2009). Attachment and conflict communication in adult romantic relationships. *Journal of Social and Personal Relationships*, 26(5), 678-696.
- Falvo, R., et al. (2012). Attachment styles in organizations: A study performed in a hospital. *TPM: Testing, Psychometrics, Methodology in Applied Psychology*, 19(4).
- 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, 350-365.

- Henschel, S., Nandrino, J. L., & Doba, K. (2020). Emotion regulation and empathic abilities in young adults: The role of attachment styles. *Personality and Individual Differences*, 156, 109763.
- Holmes, B. (2016). The kindness paradox: Why be generous? *New Scientist*.
- Kraut, R. (2025). Altruism. *The Stanford Encyclopaedia of Philosophy*.
- Lacomba-Trejo, L., Quezada-Gaibor, K., Gomis-Pomares, A., Prado-Gascó, V., & Villanueva, L. (2024). Adverse childhood experiences and coping strategies: do they make a difference in psychopathic traits and altruism for young adults?. *Current Psychology*, 43(39), 30926-30936.
- Lampridis, E., & Papastyliou, D. (2017). Prosocial behavioural tendencies and orientation towards individualism–collectivism of Greek young adults. *International Journal of Adolescence and Youth*, 22(3), 268-282.
- Lenghart, D., & Čerešník, M. (2024). The Relationship between Attachment Styles, Maladaptive Caregiving Strategies, and Public Prosocial Tendencies toward the LGBTQIA+ Community: A Cross-sectional Study among Slovak Adults. *The Open Psychology Journal*, 17(1).
- Li, Z., et al. (2019). Associations between empathy and altruistic sharing behavior in Chinese adults. *The Journal of general psychology*, 146(1), 1-16.
- Lim, D., & DeSteno, D. (2016). Suffering and compassion: The links among adverse life experiences, empathy, compassion, and prosocial behavior. *Emotion*, 16(2), 175.
- Manzur, E. & Olavarrieta, S. (2021). The 9-SRA Scale: A Simplified 9-Items Version of the SRA Scale to Assess Altruism. *EconPapers*, 13(13), 1-15.
- McGarvie, S. (2024). Attachment Theory, Bowlby's Stages & Attachment Styles. *PositivePsychology*.
- McGinley, M., & Evans, A. M. (2020). Parent and/or peer attachment? Predicting emerging adults' prosocial behaviors and internalizing symptomatology. *Journal of Child and Family Studies*, 29, 1833-1844.
- Mikulincer, M., & Shaver, P. R. (2017). An attachment perspective on compassion and altruism. In *Compassion* (pp. 187-202). Routledge.

- Mikulincer, M., et al. (2005). Attachment, caregiving, and altruism: boosting attachment security increases compassion and helping. *Journal of personality and social psychology*, 89(5), 817.
- Moreira, H., et al. (2016). Exploring the link between maternal attachment-related anxiety and avoidance and mindful parenting: The mediating role of self-compassion. *Psychology and Psychotherapy: Theory, Research and Practice*, 89(4), 369-384.
- Nosrati, F., et al. (2017). Gender differences in quality of attachment to God, forgiveness, altruism, and mental health in college and seminary school students. *Cultural and Religious Studies*, 5(2), 70-84.
- Pepping, C. A., et al. (2015). Individual differences in self-compassion: The role of attachment and experiences of parenting in childhood. *Self and Identity*, 14(1), 104-117.
- 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.
- Salcuni, S. (2015). New frontiers and application of attachment theory. *Frontiers in Psychology*, 6.
- Sibley, C. G., & Liu, J. H. (2004). Short-term temporal stability and factor structure of the revised Experiences in Close Relationships (ECR-R) measure of adult attachment. *Personality and Individual Differences*, 36(4), 969–97.
- Smith, J. R. (2015). Attachment style and motivation to volunteer among emerging adult college students. *Mississippi State University*.
- Srinivasan, M. (2022). What are the three types of empathy? *McGraw Hill*.
- van de Groep, S., Zanolie, K., Green, K. H., Sweijen, S. W., & Crone, E. A. (2020). A daily diary study on adolescents' mood, empathy, and prosocial behavior during the COVID-19 pandemic. *PloS one*, 15(10), e0240349.
- Ventura, N. L. P. (2016). *The measurement and development of empathy and its association with attachment and positive traits*. Biola University.
- Wang, Z., Liang, J., & Chen, W. W. (2024). Grandpa and grandma told me so: The mediating role of empathy on the relationship between grandparental involvement and adult Grandchildren's prosocial tendencies. *Journal of Adult Development*, 1-12.
- Wei, M., et al. (2005). Adult attachment, empathy, and emotional intelligence. *Journal of Counseling Psychology*, 52(3), 368–377.

Whalen, E. J. (2017). *Understanding the relationship between attachment, empathy and life satisfaction* (Doctoral dissertation, College of Saint Elizabeth).