

Does compassion mediate the relationship between attachment style and prosocial behaviour?

Emma Lindsay , School of Psychological Sciences, University of Newcastle, NSW, 2308, Australia

Ross B. Wilkinson* , School of Psychological Sciences, University of Newcastle, NSW, 2308, Australia

Suggested Citation:

Lindsay, E. & Wilkinson, R.B. (2024). Does Compassion mediate the relationship between attachment style and prosocial behaviour?. *Global Journal of Psychology Research: New Trends New Trends and Issues* 14(1)13-25. <https://doi.org/10.18844/gjpr.v14i1.9237>

Received from December 18, 2023; revised from January 18, 2024; accepted from March 25, 2024;

Selection and peer review under responsibility of Prof. Dr. Tulay Bozkurt, Istanbul Kultur University, Turkey.

©2024 by the authors. Licensee Birlesik Dunya Yenilik Arastirma ve Yayıncılık Merkezi, North Nicosia, Cyprus.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract

Prosocial behaviour refers to actions we take that are beneficial to others. Attachment styles range from secure to insecure, with insecure attachment being comprised of either an anxious or an avoidant style. The current research explores the mediating role of both self and other compassion in the relationship of attachment style and prosocial behaviour. Participants were 346 undergraduate psychology students who completed an online survey. Correlation and mediation analyses were conducted. Results revealed that there was no mediation effect of compassion for the self or others with any of the attachment styles and prosocial behaviour. Contrary to expectations, secure attachment was not associated with prosocial behaviour. Compassion for others was the strongest predictor of prosocial behaviour. Implications for clinical practice are discussed.

Keywords: Attachment; Compassion; Mediation; Prosocial

* ADDRESS FOR CORRESPONDENCE: Ross B. Wilkinson, School of Psychological Sciences, University of Newcastle, NSW, 2308, Australia.

E-mail address: Ross.Wilkinson@newcastle.edu.au

1. Introduction

Prosocial behaviour refers to action that is taken with the purpose of benefitting others, such as volunteering, cooperating with others and helping someone in need (Penner et al., 2005). The decision to engage in prosocial behaviour is underpinned by a wide range of factors (Mikulincer & Shaver, 2007). For example, people may help others as they anticipate something in return (egoistic compassion), or they may help purely out of empathic care and concern for the other person (altruistic compassion). Regardless, understanding how such behaviour may be increased at both individual and societal levels is important because it is clearly beneficial and can contribute to individual wellbeing, relationship maintenance, and the welfare of the community. For example, the act of helping a family member with housework may be beneficial for both the individual and that relationship, while the act of giving money to charity or engaging in volunteer work contributes to the wider community. Research indicates that people who engage in frequent prosocial behaviour may also experience a greater sense of psychological wellbeing (Mikulincer & Shaver, 2016). A personal attribute often associated with prosocial behaviour, and a possible target for cultivation, is compassion.

Research indicates that compassion is a motivating factor for prosocial behaviour (Weng et al., 2013). Strauss et al. (2016) argued that compassion is defined by at least five underlying dimensions. These being recognizing suffering, understanding the universality of suffering, feeling for the person suffering, tolerating uncomfortable feelings, and the motivation to act or acting to alleviate the suffering. For example, being with someone and listening when they tell you something emotionally difficult is demonstrating compassion. Other researchers have focussed on differentiating compassion and self-compassion. While compassion can be expressed as kindness directed externally towards others, self-compassion refers to inwardly focussed compassion towards representations of the self (Neff, 2003). Research indicates that compassion for others and self-compassion are not necessarily associated constructs. That is, people with high levels of compassion for others may not necessarily have high levels of compassion for the self (Lopez et al., 2018).

Several studies have explored the relationship between prosocial behaviour and compassion. Leiberg et al. (2011) demonstrated that short term compassion training led to more prosocial behaviour towards strangers. Weng et al. (2013) had participants complete two weeks of compassion training, and then measured prosocial behaviour through a redistribution game, wherein participants witnessed an unfair transaction. The results indicated that participants who had completed the compassion training redistributed more money to the victim than those who did not. Lindsay and Creswell (2014) found that self-compassion was directly associated with prosocial behaviour but the results were somewhat inconsistent as self-compassion was associated with prosocial behaviour only in the observational experiment, and not in the self-report of prosocial behaviour. One of the factors that has been associated with impacting both compassion and prosocial behaviour is attachment style (Shaver et al., 2019; Cassidy & Shaver, 2016).

Our attachment styles are the result of early experiences with caregivers and the degree to which we felt we could turn to them in times of distress and be comforted by them (Bowlby, 1982; Mikulincer & Shaver, 2005). As a result of these experiences, people develop characteristic expectancies about how significant others react to bids for safety and comfort, with dimensions ranging from 'secure' to 'insecure'. Insecure attachment is comprised of either an avoidant attachment style or an anxious attachment style (Mikulincer & Shaver, 2007). Secure attachment in adulthood is characterised by confidence that attachment figures will be available and supportive in times of distress. However, people with insecure attachment have learnt that their attachment figures will either not be available to them, or that they will be unable to be comforted by them in times of need (Shaver et al., 2019). A person high on the dimension of avoidant attachment in adulthood is likely to be distrustful of others and attempt to maintain emotional independence and distance from attachment figures. By contrast, someone high on the anxious attachment dimension may be excessively worried that attachment

figures will not be available and engage in ongoing attempts to achieve closeness and validation (Shaver & Mikulincer, 2011).

Research has explored the relationship between our attachment system whereby we seek comfort from our attachment figures, and our caregiving system whereby we provide this comfort and support (Bowlby, 1982; Mikulincer & Shaver, 2005). Attachment theory posits that when we are in distress, we seek out comfort from attachment figures before we can provide helpful support to others. That is, we need to feel emotionally secure in ourselves before we can act as a supportive base for others (Mikulincer & Shaver, 2007). Studies indicate that a secure attachment is associated with more frequent engagement in helpful prosocial behaviours, and that these behaviours are more likely to be motivated by altruism than egoism (Mikulincer et al., 2005). Theoretically this may be because securely attached people have a positive model of prosocial behaviours from which to work from, and have a more positive view of themselves, others and the world around them (Cassidy & Shaver, 2016). Kunce and Shaver (1994) developed an adult caregiving questionnaire assessing four domains of caregiving and found that people with a characteristically secure attachment scored higher on a measure of caregiving, and in their romantic relationships they were more supportive of their partner and sensitive to their needs.

Avoidant attachment style, however, has been associated with less frequent prosocial behaviour, perhaps due to a negative and distrusting view of others. People with an avoidant attachment style may be more likely to withdraw from someone who is in distress and even view themselves as superior to the suffering person (Mikulincer et al., 2005), although some research has found that avoidantly attached people may be no less likely to help if helping doesn't foster closeness or arouse an emotional response (Richman et al., 2015). Those with an anxious attachment, on the other hand, have a tendency to engage in compulsive caregiving and offer help when it is not necessarily needed or wanted (Shaver et al., 2019). The motivation for their prosocial behaviour may be to ease their own personal distress and to be liked by others (Cassidy & Shaver, 2016). Along with romantic relationships, a similar pattern has also been found in their prosocial behaviours with strangers. Westmaas and Silver (2001) found that those with avoidant attachment expectancies were rated as less supportive and that anxiously attached participants expressed higher levels of distress and discomfort from the interactions. Overall, the extant research finds that different attachment styles are associated with different degrees and types of prosocial behaviour.

1.1. Attachment and Compassion

The use of secure attachment priming in experiments has been found to boost secure attachment responses and lead to greater compassion, less personal distress, and more frequent prosocial behaviour (Mikulincer & Shaver, 2007). Secure priming involves exposing participants to stimuli that produces a positive mental representation of primary attachment figures. For example, Mikulincer & Shaver (2007) had one group of participants read a story about being supported by a loving attachment figure to enhance feelings of security. Following this priming, participants read a story about a student's parents being killed in a car accident and then rated their levels of compassion. Compared to a control group, the use of security priming increased feelings of compassion. On the other hand, both avoidant and anxious attachment styles have been associated with less compassion for others (Mikulincer & Shaver, 2001). An anxious attachment style has been associated with lower levels of self-compassion and the relationship between attachment avoidance and self-compassion has yielded mixed results in the literature (Wei et al., 2011). People with an avoidant attachment style may report feeling positively about themselves, but this may be due to denial and covering a deep sense of insecurity (Wei et al., 2011). Some research has found a negative relationship between avoidant attachment and self-compassion (Bolt et al., 2019). These studies highlight that the relationship between attachment styles and compassionate responses towards others and the self is complex.

1.2. The Current Study

The current research aims to investigate the mediating role of compassion in the relationship between attachment style and prosocial behaviour. Based on the extant literature, we hypothesise that compassion will have a positive and moderate mediating effect on the relationship between secure attachment and prosocial behaviour (Figure 1). We further hypothesise that self-compassion will have a negative weak mediating effect on the relationship between anxious attachment and prosocial behaviour (Figure 2). Finally, we hypothesise that compassion will have a negative and moderate mediating effect on the relationship between avoidant attachment style and prosocial behaviour (Figure 3). We also expect each attachment style will have direct relationships with compassion and prosocial behaviour. That is, secure attachment style will have the highest association with compassion for the self and others and prosocial behaviour. Anxious attachment will have a weaker association with compassion for others and prosocial behaviour and a negative association with compassion for self. We expect avoidant attachment to be negatively associated with compassion for others and prosocial behaviour. No specific hypotheses are made regarding avoidant attachment and compassion for the self, due to previous research findings yielding inconsistent results regarding this relationship.

Figure 1

Hypothesised Mediation Model: Compassion for the Self and Others Mediating the Relationship Between Secure Attachment and Prosocial Behaviour.

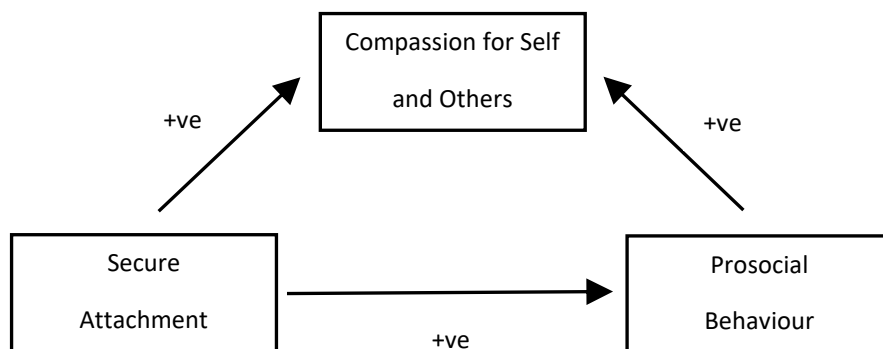


Figure 2

Hypothesised Mediation Model: Compassion for the Self and Others Mediating the Relationship Between Anxious Attachment and Prosocial Behaviour

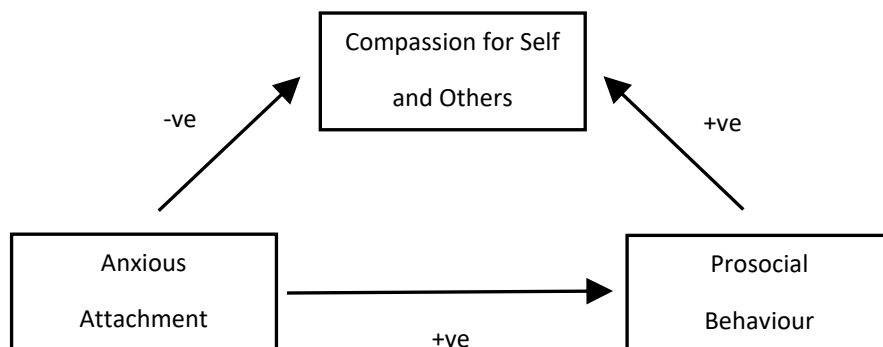
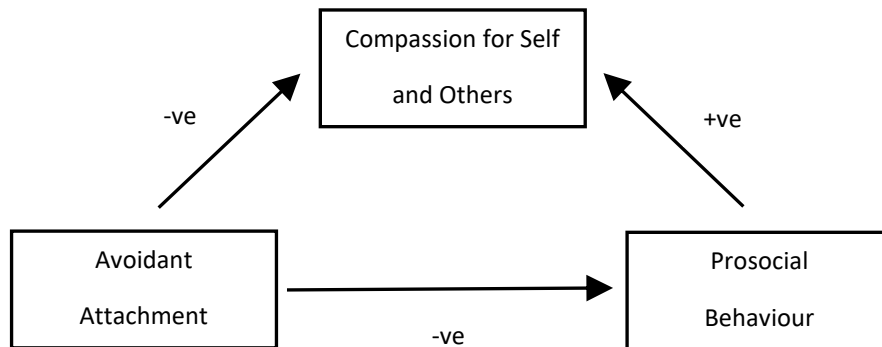


Figure 3

Hypothesised Mediation Model: Compassion for the Self and Others Mediating the Relationship Between Avoidant Attachment and Prosocial Behaviour.



2. Methods

2.1. Participants

Participants were 346 volunteer undergraduate psychology students (male $n = 47$, female $n = 297$, 'other' $n = 1$, 'prefer not to say' $n = 1$) from the University of Newcastle. There were no other eligibility requirements or exclusion criteria for participation. Participants ages ranged from 17 to 60 years ($M = 25$, $SD = 9.8$). Most participants identified as Australian ($n = 144$) or European Australian ($n = 133$).

2.2. Measures

Compassion was assessed with the Sussex-Oxford Compassion for Others Scale (SOCS-O) and the Sussex-Oxford Compassion for the Self Scale (SOCS-S; Gu et al., 2020). The SOCS-O and SOCS-S are self-report measures of 20 items each and participants indicate how true each statement is for them on a 5-point Likert scale ranging from 1 (Not at all true) to 5 (Always true). Total scores were obtained by summing scores for each of the 20 items. Example items include "I'm sensitive to other people's distress" (SOCS-O) and "When I'm upset, I try to do what's best for myself" (SOCS-S). Confirmatory factor analysis of the two scales indicated robust psychometric properties (Gu et al., 2020). Both scales demonstrated good reliability in the current sample, ($\alpha = .93$).

Prosocial behaviour was assessed with the 23-item self-report Prosocial Tendencies Measure (PTM; Carlo & Randall, 2002). The PTM assesses six aspects of prosocial behaviour and has demonstrated robust psychometric properties (Carlo & Randall, 2002). Participants are instructed to rate how much each item describes them based on a 5-point scale ranging from 1 (Does not describe me at all) to 5 (Describes me greatly). A total score was obtained by summing the response scores for each item. Example items include "I tend to help people who are in a real crisis or need" and "I often make anonymous donations because they make me feel good". The PTM has demonstrated adequate test-retest reliability and convergent validity with other measures of prosocial behaviour (Carlo & Randall, 2002). The PTM also demonstrated good reliability in the current sample ($\alpha = .82$).

Lindsay, E. & Wilkinson, R.B. (2024). Does Compassion mediate the relationship between attachment style and prosocial behaviour?. *Global Journal of Psychology Research: New Trends New Trends and Issues* 14(1)13-25. <https://doi.org/10.18844/gjpr.v14i1.9237>

Attachment styles were assessed with a 25-item short form of the Attachment Style Questionnaire (ASQ; Feeney et al., 1994). The ASQ is a 40-item self-report measure with participants instructed to indicate the extent to which they agree with items based on a 6-point Likert scale ranging from 1 (Totally disagree) to 6 (Totally agree). The ASQ measures five factors related to attachment including confidence (in the self and others), discomfort with closeness, need for approval, preoccupation with relationships and relationships as secondary (to achievement). Scores were obtained by summing each item score as they corresponded to the five attachment dimensions. Example items include “I am confident that other people will like and respect me” (Confidence in Relationships) and “I worry a lot about my relationships” (Preoccupation). The ASQ is a reliable and valid measure of attachment in adults and has demonstrated high internal consistency and adequate 10-week test-retest reliability (Karantzas et al., 2010). A shortened version, with five items for each subscale, was employed to reduce the overall length of the survey. Items were selected based on the highest loadings in previous factor analyses of the full 40-item ASQ. The secure attachment subscale (Confidence) demonstrated adequate reliability ($\alpha = .69$) in the current sample. The Anxious (Preoccupation with Relationships plus Need for Approval) and Avoidant (Relationships as Secondary plus Discomfort with Closeness) subscales both demonstrated good reliability in the current sample ($\alpha = .86$, $\alpha = .76$, respectively).

2.3. Procedure

Participants were recruited through an online research participation system and received course credit for their participation. The online survey collected demographic information and presented the different questionnaires and took approximately 30 minutes to complete. Participants could access the survey from any smart device. This research was approved by the University’s Human Research Ethics Committee (protocol H-2020-0118).

3. Results

Data was analysed using Jamovi software (The jamovi project, 2021). Data screening, descriptive statistics, correlations, and mediation analyses were conducted and are presented below. Prior to data analysis, three cases were deleted based on non-completion of items, leaving data from 346 participants. Univariate assumption testing showed each variable was acceptably distributed and free from univariate outliers. Univariate means, standard deviations, kurtosis and skewness are displayed in Table 1.

Table 1
Descriptive Statistics: Means, Standard Deviations, Skewness and Kurtosis of all Scales

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Secure Attachment	19.5	3.89	-0.24	0.32
Anxious Attachment	37.8	9.25	-0.35	-0.51
Avoidant Attachment	32.1	6.68	-0.13	0.03
Compassion for Others	85.4	8.75	-0.43	-0.06
Compassion for Self	71.0	12.9	-0.12	-0.13
Prosocial behaviour	59.8	10.2	-0.14	-0.08

Correlations between variables are shown in Table 2. As predicted, secure attachment had a positive, although weak correlation with compassion for others and a positive moderate correlation with self-compassion. Contrary to our hypothesis, secure attachment was not significantly correlated with prosocial behaviour. Anxious attachment was not significantly correlated with compassion for others and had a strong negative correlation with compassion for the self, which was predicted. As hypothesised, anxious attachment had a positive weak correlation with prosocial behaviour. Avoidant attachment had a weak negative correlation with compassion for others and a weak to moderate negative correlation with compassion for the self. While we predicted a negative relationship between avoidant attachment and prosocial behaviour, results indicated that there was no correlation between the two variables. Self-compassion had a weak positive correlation with prosocial behaviour. As hypothesised, compassion for others had a moderate positive correlation with prosocial behaviour.:

Table 2
Pearson Zero-Order Correlations Between Variables

	Compassion for Others	Compassion for Self	Prosocial Behaviour	Avoidant Attachment	Anxious Attachment
Compassion for Self	.299**	-			
Prosocial Behaviour	.308**	.115*	-		
Avoidant Attachment	-.162*	-.242**	-.044	-	
Anxious Attachment	-.009	-.461**	.142*	.406**	-
Secure Attachment	.185**	.481**	.046	-.489**	-.573**

Note* significant at $p < 0.01$, ** significant at $p < 0.05$.

3.1. Secure Attachment

Mediation analysis was conducted to explore the potential mediating role of compassion for the self and others in the relationship between attachment styles and prosocial behaviour. Compassion for the self was a statistically significant mediating variable between secure attachment and prosocial behaviour (see Table 3) but this indirect effect was very weak. Unexpectedly, compassion for the self was not a significant mediator between secure attachment and prosocial behaviour. Contrary to our hypothesis, the total effect of secure attachment on prosocial behaviour was not significant and there was no significant direct relationship between secure attachment and prosocial behaviour (see Table 3.). There was a significant and moderate path from secure attachment to compassion for the self, and a significant but weak path from secure attachment to compassion for others. There was no significant direct path from self-compassion to prosocial behaviour. However, there was a significant weak to moderate path from compassion for others to prosocial behaviour. Overall, the model accounted for little variance in prosocial behaviour.

Table 3

Lindsay, E. & Wilkinson, R.B. (2024). Does Compassion mediate the relationship between attachment style and prosocial behaviour?. *Global Journal of Psychology Research: New Trends New Trends and Issues* 14(1)13-25. <https://doi.org/10.18844/gjpr.v14i1.9237>

Mediation Results for Secure Attachment

Type	Effect	Estimate	SE	β	p
Indirect	Secure Attachment \Rightarrow Compassion for Self \Rightarrow Prosocial behaviour	0.049	0.08	0.019	.536
	Secure Attachment \Rightarrow Compassion for Others \Rightarrow Prosocial Behaviour	0.147	0.051	0.056	.004
Component	Secure Attachment \Rightarrow Compassion for self	1.600	0.167	0.481	< .001
	Compassion for Self \Rightarrow Prosocial Behaviour	0.0301	0.049	0.039	.532
	Secure Attachment \Rightarrow Compassion for Others	0.416	0.118	0.185	< .001
	Compassion for Others \Rightarrow Prosocial Behaviour	0.353	0.07	0.3022	< .001
Direct	Secure Attachment \Rightarrow Prosocial Behaviour	-0.076	0.152	-0.029	.617
Total	Secure Attachment \Rightarrow Prosocial Behaviour	0.12	0.142	0.046	.397

3.2. Anxious Attachment

There was a positive and significant, but weak, direct effect from anxious attachment to prosocial behaviour (Table 4). As predicted, anxious attachment negatively moderately predicted self-compassion. There was a weak and positive significant pathway from self-compassion to prosocial behaviour. The path from anxious attachment to compassion for others was not significant, but there was a weak, positive and significant path from compassion for others to prosocial behaviour. While self-compassion significantly mediated the relationship between anxious attachment and prosocial behaviour, the effect size was very small. Compassion for others did not have a mediating effect in the relationship between anxious attachment and prosocial behaviour. Overall anxious attachment, compassion for the self and compassion for others accounted for around 13% of the variance in prosocial behaviour.

Table 4

Mediation Results for Anxious Attachment

Type	Effect	Estimate	SE	β	p
Indirect	Anxious Attachment \Rightarrow Compassion for self \Rightarrow Prosocial Behaviour	0.065	0.034	0.06	.052
	Anxious Attachment \Rightarrow Compassion for others \Rightarrow Prosocial Behaviour	0.003	0.017	0.003	.864
Component	Anxious Attachment \Rightarrow Compassion for Self	-0.644	0.066	-0.461	< .001
	Compassion for Self \Rightarrow Prosocial Behaviour	0.101	0.0504	0.129	.045
	Anxious Attachment \Rightarrow Compassion for Others	-0.009	0.052	-0.009	.863
	Compassion for Others \Rightarrow Prosocial Behaviour	0.317	0.068	0.274	< .001
Direct	Anxious Attachment \Rightarrow Prosocial Behaviour	0.225	0.069	0.206	< .001
Total	Anxious Attachment \Rightarrow Prosocial Behaviour	0.157	0.059	0.142	.008

3.3. Avoidant Attachment

Contrary to our hypothesis, there was no effect of avoidant attachment on prosocial behaviour (see Table 5). Avoidant attachment, however, was a significant, weak and negative predictor of both compassion for others and for the self. In this model there was no significant pathway from self-

compassion to prosocial behaviour. While the results did indicate a significant negative mediation effect of compassion for others in the relationship between avoidant attachment and prosocial behaviour, the effect size was very small. Avoidant attachment, compassion for others, and compassion for the self accounted for only around 1% of the variance in prosocial behaviour.

Table 5
Mediation Results for Avoidant Attachment

Type	Effect	Estimate	SE	β	p
Indirect	Avoidant Attachment \Rightarrow Compassion for Self \Rightarrow Prosocial behaviour	-0.01	0.022	- 0.007	.636
	Avoidant Attachment \Rightarrow Compassion for Others \Rightarrow Prosocial Behaviour	-0.0745	0.03	-0.049	.013
Component	Avoidant Attachment \Rightarrow Compassion for self	-0.468	0.109	-0.242	<.001
	Compassion for Self \Rightarrow Prosocial Behaviour	0.022	0.044	0.028	.622
	Avoidant Attachment \Rightarrow Compassion for Others	-0.212	0.072	-0.162	.003
	Compassion for Others \Rightarrow Prosocial Behaviour	0.352	0.065	0.302	<.001
Direct	Avoidant Attachment \Rightarrow Prosocial Behaviour	0.017	0.083	0.011	.836
Total	Avoidant Attachment \Rightarrow Prosocial Behaviour	-0.068	0.082	-0.044	.412

4. Discussion

The current research aimed to investigate the potential mediating role of compassion in the relationship between attachment style and prosocial behaviour. Compassion for others played a very weak mediating role in the relationship between both secure attachment and avoidant attachment with prosocial behaviour. However, compassion for others did not play a mediating role in the relationship between anxious attachment and prosocial behaviour. Contrary to our hypotheses, compassion for the self didn't mediate the relationship of any of the attachment styles to prosocial behaviour. However, various expected and unexpected relationships were identified between each of the variables and are discussed below.

A key finding of the current research is that people with a higher secure attachment were no more likely to engage in prosocial behaviour than people who scored more on dimensions of insecure attachment. This is inconsistent with previous research that has found that secure attachment is associated with prosocial behaviour (Kunce & Shaver, 1994; Westmaas & Silver, 2001). One possible explanation for this is that the current research used different measures for both attachment and prosocial behaviour than previous studies. It is possible that these measures are assessing different conceptual dimensions of attachment and/or prosocial behaviour. For example, many studies on attachment used the Experience in Close Relationships Scale, which does not measure secure attachment directly but conceptualises secure attachment as low scores on anxious and avoidant attachment (Mikulincer et al., 2005). On the other hand, the ASQ Confidence in Relationships scale, which aligns with the secure attachment dimension, has established construct validity (Feeney et al., 1994; Karantzas et al., 2010). Another possible explanation is that some items on the PTM, while still measuring prosocial behaviour, may be less likely to be indicated by people with a secure attachment. For example, people with a secure attachment may be more likely to indicate prosocial items that align with altruism, but only five items on the PTM indicate the altruistic type of helping. Furthermore, this

Lindsay, E. & Wilkinson, R.B. (2024). Does Compassion mediate the relationship between attachment style and prosocial behaviour?. *Global Journal of Psychology Research: New Trends New Trends and Issues* 14(1)13-25. <https://doi.org/10.18844/gjpr.v14i1.9237>

finding may suggest that activation of the caregiving system is more important than the state of the attachment system when it comes to prosocial behaviour. That is, people may not necessarily need be always feeling secure within their attachments to help others.

As expected, people with a secure attachment style were more compassionate for themselves than those on the insecure attachment dimensions. This is in line with previous research that has found an association between secure attachment and compassion for the self (Wei et al., 2011). This finding also further emphasises the importance of developing secure attachments in early life to improve the ability to show compassion towards oneself in later life. This is clinically important as it may indicate that interventions that work on attachment may serve to increase one's sense of self compassion. However, while secure attachment was significantly associated with compassion for others, this effect was so small that it was not meaningful. This is contrary to prior research that has found that security priming significantly increased people's compassionate responses toward others (Mikulincer et al., 2005). This inconsistency may be indicative of differences in the operationalisation of compassion between the current study and previous research or the difference between trait secure attachment (style) and state secure attachment (primed).

While anxious attachment was weakly associated with prosocial behaviour, this effect was very weak. This is consistent with some previous research showing that people with an anxious attachment style may still engage in prosocial behaviour, but their motivation to do so may be more egoistic, such as to ease their own distress (Cassidy & Shaver, 2016). However, some research has also found that people with an anxious attachment style engage in less prosocial behaviour than those with a secure attachment (Mikulincer et al., 2005). Furthermore, there was no relationship between anxious attachment and compassion for others. This is consistent with some previous research that has found that people with an anxious attachment style are not necessarily any less compassionate for others (Cassidy & Shaver, 2016). However, as hypothesized, anxious attachment was associated with lower levels of compassion for the self, indicating that people with an anxious attachment style find it difficult to express kindness towards themselves. This is consistent with previous findings that people with attachment anxiety reported more self-critical statements and were preoccupied with their own distress (Westmaas & Silver, 2001). This may indicate that anxiously attached people have little ability to comfort and soothe themselves and therefore excessively seek closeness and validation from others. This is important as interventions that aim to decrease anxious attachment may also increase a person's self-compassion, which is associated with enhanced psychological wellbeing (Lopez et al., 2016).

Contrary to our hypothesis, avoidant attachment was not associated with prosocial behaviour. That is, the more avoidantly attached people were, their prosocial tendencies were not necessarily greater or lesser. Similarly, to secure attachment, this finding may also be due to different measures being used in the current study compared to previous research. Further, it may be the case that people with an avoidant attachment were likely to indicate items on the PTM such as "I tend to help needy others most when they do not know who helped them". This would be in line with previous research that has found that people with an avoidant attachment style may still engage in prosocial behaviour, however only when it is guaranteed that they will not get closer to the person they are helping (Richman et al., 2015).

While avoidant attachment was negatively associated with compassion for others, this effect was very weak. Previous research found that attachment avoidance did predict less compassion for others (Mikulincer et al., 2005). Interestingly, we found that avoidant attachment was negatively associated with compassion for the self. This is in line with previous research that found a negative association between avoidant attachment and self-compassion (Bolt et al., 2019). Theoretically, this may be because people with attachment avoidance have become so self-reliant that they have high expectations for themselves which, when not met, may lead to negative self-judgements (Wei et al 2011).

Lindsay, E. & Wilkinson, R.B. (2024). Does Compassion mediate the relationship between attachment style and prosocial behaviour?. *Global Journal of Psychology Research: New Trends New Trends and Issues* 14(1)13-25. <https://doi.org/10.18844/gjpr.v14i1.9237>

As hypothesised, compassion for others was associated with prosocial behaviour and was its strongest predictor in our models. This is consistent with previous research that has found that compassion training increased people's engagement in prosocial behaviour (Leiberg et al., 2011 & Weng et al., 2013). This finding is important as it indicates that clinically, therapies that focus on enhancing compassionate responses may function to also increase prosocial behaviour. Compassion for the self was also statistically correlated with prosocial behaviour, but this association was very weak. This is inconsistent with at least one study that identified a stronger link between compassion for the self and prosocial behaviour (Lindsay & Creswell, 2014). Compassion for others and compassion for the self were associated with each other, which is somewhat inconsistent with previous research that has indicated that the two constructs are not necessarily related (Lopez et al., 2018). However, this may be because the current study was using newly developed measures of compassion which are reportedly more comprehensive, compared to previous measures (Gu et al., 2020).

5. Limitations and Future Research

A limitation of the current research is that it is correlational only, and thus, causal claims cannot be made. Thus we are unable to claim that having an anxious attachment style causes people to have less compassion for themselves. What we can state is that these factors are associated and are related in a negative direction. Another limitation is that the data in our research were based on self-report measures. Some of the measures may be prone to social desirability, wherein participants may indicate greater levels of compassion or prosocial behaviour than is accurate. To accurately self-report, participants also need to have an accurate understanding of themselves, be paying sufficient attention to the task and understand the questions. However, all of the measures employed have well established construct validity.

Future research may wish to replicate the current study using the same measures to further explore the relationships between attachment, compassion and prosocial behaviour or extend on the current correlational methodology and use experimental manipulations to explore these relationships. For example, manipulating attachment with security priming followed by having participants complete a compassion measure such as the SOCS-O and SOCS-S and then assessing prosocial behaviour. Further research may also be warranted in exploring the relationship between attachment styles and the different motivations that underpin prosocial behaviour. For example, it may be hypothesised that secure attachment is associated with the altruistic type of helping, anxious attachment may be associated with easing personal distress and avoidant attachment may be associated with helping behaviour that does not result in interpersonal closeness. Future research may also investigate different directions of the relationship between these variables. For example, levels of compassion could be measured after participants engage in an act of prosocial behaviour, to determine if a relationship exists in this direction.

6. Conclusion

The current research highlights that the relationships between attachment dimensions, compassion and prosocial behaviour are complex and warrant further investigation. Understanding the mechanisms that underpin prosocial behaviour is important due to its associations with wellbeing and benefit for both interpersonal relationships and contribution to society. Compassion for others may be one of the strongest predictors of people's engagement in prosocial behaviour and may be a more important contributor than secure attachment. That is, a secure attachment system may not be as significant in facilitating prosocial behaviour as previously thought, and greater emphasis may be placed on the state of the caregiving system. An implication of the current research is that, clinically, therapies that focus on enhancing compassionate responses may function to also increase prosocial behaviour. Our findings also highlight the importance of facilitating a secure attachment from an early

Lindsay, E. & Wilkinson, R.B. (2024). Does Compassion mediate the relationship between attachment style and prosocial behaviour?. *Global Journal of Psychology Research: New Trends New Trends and Issues* 14(1)13-25. <https://doi.org/10.18844/gjpr.v14i1.9237>

age in order to facilitate compassion for the self. The findings of the current research contribute to the literature on attachment, compassion and prosocial behaviour and challenge previous conceptualisations over the links between these variables.

Declaration of Conflict of Interest

The authors declare that there is no conflict of interest.

References

- Bolt, O. C., Jones, F. W., Rudaz, M., Ledermann, T., & Irons, C. (2019). Self-compassion and compassion towards one's partner mediate the negative association between insecure attachment and relationship quality. *Journal of Relationships Research*, 10, 1-9. <https://doi.org/10.1017/jrr.2019.17>
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664-678. <https://doi.org/10.1111/j.1939-0025.1982.tb01456.x>
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviours for late adolescents. *Journal of Youth and Adolescence*, 31(1), 31-4. <https://doi.org/10.1023/A:101403303244>
- Cassidy, J., & Shaver, P. R. (2016). A lifespan perspective on attachment and care for others: Empathy, altruism and prosocial behaviour. In P. R. Shaver., M. Mikulincer., J. T. Gross., J. A. Stern., & J. Cassidy (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed., pp. 878-916). The Guilford Press.
- Gu, J., Baer, R., Cavanagh, K., Kuyken, W., & Strauss, C. (2020). Development and psychometric properties of the Sussex-Oxford Compassion Scales (SOCS). *Assessment*, 27(1), 3-20. <https://doi.org/10.1177/1073191119860911>
- Feeney, J. A., Noller, P., & Hanrahan, M. (1994). Assessing adult attachment: Developments in the conceptualization of security and insecurity. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Theory, assessment, and treatment* (pp. 128-152). The Guilford Press.
- Karantzas, G. C., Feeney, J. A., & Wilkinson, R. (2010). Is less more? Confirmatory factor analysis of the attachment style questionnaires. *Journal of Social and Personal Relationships*, 27(6), 749-780. <https://doi.org/10.1177/0265407510373756>
- Kunce, L. J., & Shaver, P. R. (1994). An attachment-theoretical approach to caregiving in romantic relationships. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Attachment processes in adulthood* (Vol 5., pp. 205-237). Jessica Kingsley Publishers.
- Leiberg, S., Klimecki, O., & Singer, T. (2011). Short-term compassion training increases prosocial behaviour in a newly developed prosocial game. *PLoS ONE*, 6(3), e17798. <https://doi.org/10.1371/journal.pone.0017798>
- Lindsay, E. K., & Creswell, J. D. (2014). Helping the self helps others: Self-affirmation increases self-compassion and pro-social behaviours. *Frontiers in Psychology*, 5. Article 421. <https://doi.org/10.3389/fpsyg.2014.00421>
- Lopez, A., Sanderman, R., Ranchor, A. V., & Schroevers, M. J. (2018). Compassion for others and self-compassion: Levels, correlates, and relationship with psychological well-being. *Mindfulness*, 9(1), 325-331. <https://doi.org/10.1007/s12671-017-0777-z>
- Mikulincer, M., & Shaver, P. R. (2005). Attachment security, compassion and altruism. *Current Directions in Psychological Science*, 14(1), 34-38. <https://doi.org/10.1111/j.0963-7214.2005.00330.x>

- Lindsay, E. & Wilkinson, R.B. (2024). Does Compassion mediate the relationship between attachment style and prosocial behaviour?. *Global Journal of Psychology Research: New Trends New Trends and Issues* 14(1)13-25. <https://doi.org/10.18844/gjpr.v14i1.9237>
- Mikulincer, M., & Shaver, P. R. (2007). Boosting attachment security to promote mental health, prosocial values, and intergroup tolerance. *Psychological Inquiry*, 18(3), 139-156. <https://doi.org/10.1080/10478400701512646>
- Mikulincer, M., & Shaver, P. R. (2016). Adult attachment and emotion regulation. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed., pp. 507-533). The Guilford Press.
- 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>
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223-250. <https://doi.org/10.1080/15298860390209035>
- Penner, L. A., Dovidio, J. F., Piliavan, J. A., & Schroeder, D. A. (2005). Prosocial behaviour: Multilevel perspectives. *Annual Review of Psychology*, 56(14), 356-392. <https://doi.org/10.1146/annurev.psych.56.091103.070141>
- Richman, S. B., Dewall, C. N., & Wolff, M. N. (2015). Avoiding affection, avoiding altruism: Why is avoidant attachment related to less helping? *Personality and Individual Differences*, 76, 193-197. <https://doi.org/10.1016/j.paid.2014.12.018>
- Shaver, P. R., & Mikulincer, M. (2011). An attachment-theory framework for conceptualising interpersonal behaviour. In L. M Horowitz & S. Strack (Eds.), *Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions* (pp17-35). John Wiley & Sons, Inc.
- Shaver, P. R., Mikulincer, M., & Cassidy, J. (2019). Attachment, caregiving in couple relationships, and prosocial behaviour in the wider world. *Current Opinion in Psychology*, 25, 16-20. <https://doi.org/10.1016/j.copsyc.2018.02.009>
- Strauss, C., Taylor, B. L., Gu, J., Kuyken, W., Baer, R., Jones, F., & Cavanagh, K. (2016). What is compassion and how can we measure it? A review of definitions and measures. *Clinical Psychology Review*, 47, 15-27. <https://doi.org/10.1016/j.cpr.2016.05.004>
- The jamovi project (2021). jamovi (Version 1.6) [Computer Software]. <https://www.jamovi.org>
- Wei, M., Yu-Hsin Liao, K., Ku, T., & Schaffer, P. A. (2011). Attachment, self-compassion, empathy, and subjective well being among college students and community adults. *Journal of Personality*, 79(1), 191-221. <https://doi.org/10.1111/j.1467-6494.2010.00677.x>
- Weng, H. Y., Fox, A. S., Shackman, A. J., Stodola, D. E., Caldwell, J. Z. K., Olson, M. C., Rogers, G. M., & Davidson, R. J. (2013). Compassion training alters altruism and neural responses to suffering. *Psychological Science*, 24(7), 1171-1180. <https://doi.org/10.1177/0956797612469537>
- Westmaas, J. L., & Silver, R. C. (2001). The role of attachment in responses to victims of life crises. *Journal of Personality and Social Psychology*, 80(3), 425-438. <https://doi.org/10.1037/0022-3514.80.3.425>