**Dark Triad Traits and Relationship Dissolution**

**Abstract**

A substantial body of research exists documenting the relationship between Dark Triad traits and the formation and maintenance of close personal relationships. Relatively few studies have, however, considered Dark Triad traits in the context of relationship dissolution. The present studies investigate the relationship between Dark Triad traits and the strategies used during the dissolution of romantic relationships (Study 1) and friendships (Study 2). For each study participants (Study 1: *N* = 722; Study 2: *N* = 177) completed the Short Dark Triad-3 (SD3) and Break-up Strategies Questionnaire. In Study 1, Machiavellianism predicted greater use of avoidance / withdrawal, cost escalation / manipulation, and de-escalation when terminating a romantic relationship and lower open confrontation. Further, psychopathy predicted greater use cost escalation / manipulation and distant / mediated communication but lower positive tone / self-blame and open confrontation when terminating a romantic relationship. In Study 2, psychopathy predicted greater distant / mediated communication only and Machiavellianism was not a significant individual predictor of strategies used during the dissolution of friendship. Narcissism was less closely associated with break-up strategies than Machiavellianism or psychopathy, predicting greater open confrontation with romantic partners only (Study 1).

Keywords: break-up; Dark Triad; friendships; narcissism; Machiavellianism; psychopathy; relationship dissolution; romantic relationships

**1.0 Introduction**

The Dark Triad traits (narcissism, Machiavellianism, psychopathy) are conceptualized as distinct but related personality traits characterized by a lack of empathy, emotional coldness, and manipulation (Paulhus & Williams, 2002). Previous research has documented the extent to which Dark Triad traits influence interpersonal relationships such as romantic relationships and friendships (e.g., Jonason et al., 2012; Jonason & Schmitt, 2012). For example, those high on Dark Triad traits prefer relationships with low levels of commitment and are more likely to engage in emotional abuse (e.g., Brewer et al., 2018). However, though there has been substantial discussion of Dark Triad traits in the context of relationship formation and maintenance, relatively few studies have considered the extent to which Dark Triad traits impact on relationship dissolution. The present studies address this area, investigating the relationship between Dark Triad traits and the dissolution of romantic relationships (Study 1) and friendships (Study 2).

Relationship dissolution is a common, though distressing, lifetime event. When deciding whether to terminate a relationship a range of factors may be considered including reasons to remain in the relationship (e.g., emotional intimacy) and reasons to leave (e.g., a lack of trust). These factors are related to general relationship satisfaction and commitment (Joel et al., 2018). Previous research indicates that those high on Dark Triad traits report lower levels of relationship satisfaction (Goetz & Meyer, 2018) and commitment (Koladich & Atkinson, 2016), suggesting that those high on Dark Triad traits may be more willing to terminate a close personal relationship than those low on these traits. For example, Jonason et al. (2021) consider the relationship between Dark Triad traits and ghosting, an indirect form of relationship termination focused on silence and disengagement. Those high on Machiavellianism and psychopathy were more likely to report ghosting a partner. In part this may reflect the perceived acceptability of ghosting for short-term but not long-term relationships and the widely reported association between Dark Triad traits and short-term relationships with lower levels of commitment (Jonason, et al., 2012).

The approach taken to relationship dissolution varies, for example, in relation to the directness of the discussion and compassion shown to the partner (Sprecher et al., 2010). According to Collins and Gillath (2012) there are seven primary break-up strategies adopted when terminating a romantic relationship. These are avoidance / withdrawal (e.g., avoiding contact or closeness), positive tone / self-blame (e.g., taking the blame for the break-up and avoiding hurting the partner), open confrontation (e.g., clearly explaining the reasons for the break-up), cost escalation (e.g., making the relationship increasingly unpleasant), manipulation (e.g., promoting new relationships to the partner), distant / mediated communication (e.g., terminating the relationships through text or email), and de-escalation (e.g., delaying the break-up or suggesting that the break-up is temporary). Previous research indicates that women high on Machiavellianism are more likely to engage in avoidance / withdrawal, cost-escalation, manipulation, and distant / mediated communication when terminating a romantic relationship (Brewer & Abell, 2017). Study 1 extends this research to consider all Dark Triad traits.

As there are important differences between romantic relationships and friendships (Kito, 2005), Study 2 investigates the impact of Dark Triad traits on the strategies employed to terminate a friendship. Similar to romantic relationships, Dark Triad traits influence the formation and development of friendships. For example, those high on Dark Triad traits are more likely to select friends for strategic purposes (Jonason & Schmitt, 2012). Further, women high on Machiavellianism display more manipulative behaviour towards their friends (Abell, et al., 2016) and report greater pleasure in response to a friend’s misfortune (Abell & Brewer, 2018). Despite the relationship between Dark Triad traits and friendship formation and maintenance, the association between Dark Triad traits and friendship dissolution remains unclear. Further, though previous research has documented the importance of adult friendships (e.g., Bagwell et al., 2005), the majority of friendship dissolution research focuses on childhood or adolescence (e.g., Flannery, & Smith, 2021; Nielson, et al., 2020). Additional research is required to establish factors influencing the process of adult friendship dissolution (Vieth et al., 2022) and we address this issue in Study 2.

In both Study 1 and Study 2, we predict greater use of manipulative break-up strategies (e.g., avoidance / withdrawal, cost escalation, manipulation, de-escalation) and lower use of break-up strategies displaying empathy and compassion (e.g., positive tone / self-blame, open confrontation) in those high on the Dark Triad traits. Though the Dark Triad was originally conceptualized as a three-component construct, other researchers have proposed a ‘Dark Dyad’ composed of Machiavellianism and psychopathy, with narcissism as a separate construct (Egan et al., 2014). Similarly, though the Dark Triad measure utilised in the present study is intended as a three-factor measure (Jones & Paulhus, 2014) and this three-factor structure has been replicated (e.g., Burtăverde et al., 2022), a two-factor version (composed of a Dark Dyad and narcissism) has been suggested (Siddiqi et al., 2020). Therefore, whilst we have retained the original three-factor structure in the present studies which we believe to be more informative, we recognise the potential for greater consistency in the strategies employed by those high on Machiavellianism and psychopathy than narcissism.

**2.0 Study 1 Method**

*2.1 Participants*

Participants (*N* = 722) aged 18 to 75 years (*M* = 24.70, *SD* = 11.44) were recruited from online social networks and a University participation pool scheme. No data were excluded from subsequent analyses and apriori power analyses indicated that the sample size is sufficient (at 80%) for the Multiple Regression analyses conducted[[1]](#footnote-1). The majority of participants were female (*n* = 580), followed by male (*n* = 138), and non-binary / prefer not to say (*n* = 4). Participants were typically in a serious relationship (*n* = 391) or single (*n* = 283) at the time of the study with relatively few participants reporting being in a casual relationship (*n* = 46) or failing to report their relationship status (*n* = 2). For those in a relationship at the time of the study, the average length of relationship reported was 54.05 months (*SD* = 98.07).

*2.2 Materials and Procedure*

Participants responding to advertisements posted on online social networks and a University participation pool scheme were directed to an online self-report questionnaire. Participants provided demographic information (e.g., age, gender) and then completed the Short Dark Triad-3 (SD3, Jones & Paulhus, 2014) and Break-up Strategies Questionnaire (Collins & Gillath, 2012). All participants provided informed consent.

The Short Dark Triad-3 (SD3, Jones & Paulhus, 2014) is a 27-item measure of the Dark Triad traits. Participants complete items (9 items per Dark Triad trait) on a 5-point likert scale (1 = strongly disagree to 5 = strongly agree). Example items include “*It’s wise to keep track of information that you can use against people later*” (Machiavellianism), “*People see me as a natural leader*” (narcissism), and “*People often say I’m out of control*” (psychopathy).

The Break-up Strategies Questionnaire (Collins & Gillath, 2012) is a 43-item measure of the strategies employed to break up with a partner. Participants report the likelihood that they would use each break-up strategy on a 7-point likert scale (1 = I would never to 7 = extremely likely). The break-up strategies measured are avoidance / withdrawal (11 items), positive tone / self-blame (10 items), open confrontation (4 items), cost escalation (4 items), manipulation (5 items), distant / mediated communication (4 items), and de-escalation (5 items).

Example items include “*I avoided contact with my partner as much as possible*” (avoidance / withdrawal), “*I avoided blaming my partner at all costs, even if my partner was to blame*” (positive tone / self-blame), “*I openly expressed to my partner my desire to breakup*” (open confrontation), “*I picked an argument with my partner as an excuse to breakup*” (cost escalation), “*I promoted new relationships for my partner to make the breakup easier*” (manipulation), “*I terminated the relationship indirectly (through e-mail, text-messaging, or other unidirectional methods of communication)*” (distant / mediated communication), and “*I procrastinated in saying or doing anything in the hopes that things would improve*” (de-escalation).

In Study 1, Cronbach’s alphas were Machiavellianism α = .68, narcissism α = .67, psychopathy α = .71, avoidance / withdrawal α = .94, positive tone / self-blame α =.81, open confrontation α = .85, cost escalation α = .84, manipulation α = .78, distant / mediated communication α = .77, and de-escalation α = .76. Though analysis of each break-up strategy was intended, cost escalation and manipulation were closely correlated (*r* = .59) in the present sample. Therefore, a combined cost escalation and manipulation variable was created (α = .86).[[2]](#footnote-2)

**3.0 Study 1 Results**

Preliminary correlation analyses were conducted to illustrate relationships between variables. Analyses revealed significant positive correlations between Machiavellianism and avoidance / withdrawal, cost escalation / manipulation, distant / mediated communication, and de-escalation and a significant negative relationship between Machiavellianism and open confrontation. Narcissism was significantly negatively correlated with positive tone / self-blame. Psychopathy was significantly positively correlated with cost escalation / manipulation, distant / mediated communication, and de-escalation and significantly negatively correlated with positive tone / self-blame and open confrontation. These data are shown in Table 1 (correlations significant at *p* <.01).

A series of two-stage multiple hierarchical regressions were conducted to determine whether the Dark Triad traits (narcissism, Machiavellianism, psychopathy) predicted the breakup strategies (avoidance / withdrawal, positive tone / self-blame, open confrontation, cost escalation / manipulation, distant / mediated communication, and de-escalation) adopted when terminating a romantic relationship, when controlling for participant age and gender. Reflecting the number of analyses conducted, we adopted a more stringent level of significance (*p* <.005) for the multiple regression analyses.[[3]](#footnote-3)

The regression revealed that at stage one, age and gender significantly predicted use of avoidance / withdrawal, *F* (2, 590) = 15.27, *p* < .001. Inclusion of the Dark Triad traits at stage two was also significant, *F* (5, 587) = 11.15, *p* < .001, explaining 8.7% of the variance (*R*2 = .09, *Adj R*2 = .08). When all five predictor variables were entered at stage two, Machiavellianism (*B* = .22, *t* = 4.87, *p* < .001) was the only significant predictor such that those high on Machiavellianism were most likely to engage in this strategy.

The model predicting the use of positive tone / self-blame was not significant at stage one, *F* (2, 591) = .41, *p* = .662, but was significant at stage two, *F* (5, 588) = 9.88, *p* < .001. explaining 8.0% of the variance (*R*2 = .08, *Adj R*2 = .07). When all five predictor variables were entered at stage two, psychopathy (*B* = -.27, *t* = -5.76, *p* < .001) was the only significant predictor such that those high on psychopathy were less likely to engage in this strategy.

Regression revealed that at stage one, age and gender did not significantly predict use of open confrontation, *F* (2, 590) = 4.36, *p* = .013. Inclusion of the Dark Triad traits at stage two was significant, *F* (5, 287) = 10.41, *p* < .001, explaining 8.1% of the variance (*R*2 = .08, *Adj R*2 = .07). When all five predictor variables were entered at stage two, age (*B* = -.15, *t* = -3.74, *p* < .001), Machiavellianism (*B* = -.17, *t* = -3.71, *p* < .001), narcissism (*B* = .15, t = 3.37, *p* < .001), and psychopathy (*B* = -.17, *t* = -3.67, *p* < .001), were each significant predictors such that older participants, those high on Machiavellianism or psychopathy and low on narcissism were less likely to engage in open confrontation.

At stage one, age and gender were not significant predictors of cost escalation / manipulation, *F* (2, 591) = .41, *p* = .663. Inclusion of the Dark Triad traits at stage two was significant, *F* (5, 588) = 31.23, *p* < .001, explaining 21.0% of the variance (*R*2 = .21, *Adj R*2 = .20). When all five predictor variables were entered at stage two, age (*B* = .13, *t* = 3.53, *p* < .001), Machiavellianism (*B* = .28, *t* = 6.83, *p* < .001), and psychopathy (*B* = .27, *t* = 6.22, *p* < .001) were each significant individual predictors, such that older participants and those high on Machiavellianism and psychopathy were more likely to engage in cost escalation / manipulation.

At stage one, age and gender were not significant predictors of distant / mediated communication, *F* (2, 591) = .56, *p* = .574. Inclusion of the Dark Triad traits at stage two was significant, *F* (5, 588) = 9.18, *p* < .001, explaining 7.2% of the variance (*R*2 = .07, *Adj R*2 = .06). When all five predictor variables were entered at stage two, psychopathy (*B* = .21, *t* = 4.50, *p* < .001) was the only significant individual predictor, such that those high on psychopathy were more likely to engage in distant / mediated communication.

At stage one, age and gender were not significant predictors of de-escalation, *F* (2, 591) = 1.37, *p* = .255. Inclusion of the Dark Triad traits at stage two was significant, *F* (5, 588) = 8.72, *p* < .001, explaining 6.9% of the variance (*R*2 = .07, *Adj R*2 = .06). When all five predictor variables were entered at stage two, Machiavellianism (*B* = .20, *t* = 4.49, *p* < .001), was the only significant individual predictor, such that those high on Machiavellianism were more likely to engage in de-escalation.

**4.0 Study 1 Discussion**

Those high on Machiavellianism were more likely to engage in avoidance / withdrawal, cost escalation / manipulation, and de-escalation and less likely to engage in open confrontation than those low on the personality trait. Avoidance / withdrawal and de-escalation reduce the likelihood of direct conflict with a partner and may encourage the other person to formally terminate the relationship. Findings are consistent with previous research indicating that Machiavellianism is associated with a reluctance to respond to a partner’s potentially destructive behaviour with active constructive (voice), passive constructive (loyalty) or active destructive (exit) behaviour (Brewer et al., 2018). This approach may ensure that opportunities for manipulation and exploitation of the former partner continue, especially if the former partner attributes failure of the relationship to external factors or shared responsibility and experiences a degree of guilt or loyalty.

Those high on narcissism were more likely to engage in open confrontation, an approach involving open and honest communication with relationship partners. Narcissism is characterized by a sense of entitlement and superiority (Emmons, 1987). Narcissism is also associated with low levels of compassion (Salazar, 2016) and perspective taking (Lee & Kang, 2020). As a consequence, those high on narcissism (encouraged by their sense of entitlement) may be willing to directly express their own needs (i.e., to terminate a relationship that is not satisfying) in circumstances where others would be more concerned for the reactions of their partner.

Those high on psychopathy were less likely to engage in positive tone / self-blame or open confrontation but more likely to engage in cost escalation / manipulation, and distant / mediated communication than those low on psychopathy. The lack of concern for a partner’s distress is consistent with the cold, callous behaviour, and lack of remorse that characterize psychopathy (Hare, 1996; Verschuere & te Kaat, 2020). Of course, denying partners appropriate opportunities for relationship closure may increase the partner’s distress and subsequent research should explore the experiences of those who break up with partners high on psychopathy.

**5.0 Study 2 Method**

*5.1 Participants*

Participants (*N* = 177) aged 18 to 64 years (*M* = 22.33, *SD* = 7.84) were recruited from online social networks and a University participation pool scheme. No data were excluded from subsequent analyses and apriori power analyses indicate that the sample size is sufficient (at 80%) for the Multiple Regression analyses conducted. The majority of participants were female (*n* = 135), followed by male (*n* = 34), and non-binary / prefer not to say (*n* = 8). The average length of friendship reported was 9.06 months (*SD* = 7.36).

*5.2 Materials and Procedure*

Similar to Study 1, participants provided a range of demographic information (e.g., age, gender) followed by completion of the Short Dark Triad-3 (SD3, Jones & Paulhus, 2014) and Break-up Strategies Questionnaire (Collins & Gillath, 2012). For Study 2, Break-up Strategy items were amended where necessary to refer to a friend or friendship rather than partner. Questionnaires were completed online and all participants provided informed consent. In Study 2, Cronbach’s alphas were Machiavellianism α = .76, narcissism α = .63, psychopathy α = .69, avoidance / withdrawal α = .89, positive tone / self-blame α =.82, open confrontation α = .88, cost escalation α = .83, manipulation α = .78, distant / mediated communication α = .69, and de-escalation α = .70. Though analysis of each break-up strategy was intended, cost escalation and manipulation were closely correlated (*r* = .70) in the present sample. Therefore, a combined cost escalation and manipulation variable was created (α = .87).

**6.0 Study 2 Results**

Preliminary correlation analyses were conducted to illustrate relationships between variables. Analyses revealed positive correlations between Machiavellianism and avoidance / withdrawal, cost-escalation / manipulation, distant / mediated communication, and de-escalation and a negative correlation between Machiavellianism and open confrontation. Psychopathy was positively related to cost-escalation / manipulation and distant / mediated communication and negatively related to positive tone / self-blame and open confrontation. These data are shown in Table 2 (correlations significant at *p* <.01).

A series of two-stage multiple hierarchical regressions were conducted to determine whether the Dark Triad traits (narcissism, Machiavellianism, psychopathy) predicted the breakup strategies (avoidance / withdrawal, positive tone / self-blame, open confrontation, cost escalation / manipulation, distant / mediated communication, and de-escalation) adopted when terminating a friendship, whilst controlling for age and gender. Reflecting the number of analyses conducted, we adopted a more stringent level of significance (*p* <.005) for the multiple regression analyses.

Analyses revealed that stage one (with age and gender), *F* (2, 128) = .55, *p* = .579, and stage two (with Dark Triad traits included), *F* (5, 125) = 1.03, *p* = .406, models were not significant predictors of avoidance / withdrawal. Similarly, the stage one (age and gender), *F* (2, 124) = 1.59, *p* = .209 and stage two (inclusion of the Dark Triad traits), *F* (5, 121) = 3.16, *p* = .010, models were not significant predictors of positive tone / self-blame. Regression revealed that stage one (with age and gender), *F* (2, 126) = 1.62, *p* = .203, and stage two (with Dark Triad traits included), *F* (5, 123) = 2.68, *p* = .025, models were not significant predictors of open confrontation.

At stage one, age and gender were not significant predictors of cost escalation / manipulation, *F* (2, 126) = 1.60, *p* = .206. Inclusion of the Dark Triad traits at stage two was significant, *F* (5, 123) = 5.39, *p* < .001, explaining 18.0% of the variance (*R*2 = .18, *Adj R*2 = .15). However, no individual predictors reached the threshold for significance.

At stage one, age and gender were not significant predictors of distant / mediated communication, *F* (2, 127) = 1.24, *p* = .292. Inclusion of the Dark Triad traits at stage two was significant, *F* (5, 124) = 4.30, *p* = .001, explaining 14.8% of the variance (*R*2 = .15, *Adj R*2 = .11). When all five predictor variables were entered at stage two, psychopathy (*B* = .31, *t* = 3.25, *p* = .002), was the only significant individual predictor, such that those high on psychopathy were most likely to use distant / mediated communication.

Analyses revealed that stage one (with age and gender), *F* (2, 126) = 1.45, *p* = .239, and stage two (with Dark Triad traits included), *F* (5, 123) = 3.32, *p* = .008, models were not significant predictors of de-escalation,

**7.0 Study 2 Discussion**

In Study 2, we investigated the extent to which Dark Triad traits influence the strategies adopted when terminating platonic relationships. Unlike Study 1, which indicated that Machiavellianism was associated with a range of strategies used to break-up with romantic partners, Machiavellianism did not predict the strategies used to terminate a friendship. Extending research focused on Machiavellianism and friendship (e.g., selection of friends Jonason & Schmitt, 2012; perception of friends and friendship Abell, et al., 2016; and behaviour within friendship dyads Brewer et al., 2014) may provide more insight into Machiavellianism and friendship dissolution.

Despite the relationship between narcissism and open confrontation identified in Study 1 and research indicating that narcissism is associated with lower levels of compassion and greater verbal aggression within friendships (Salazar, 2016), narcissism did not predict strategies used to terminate a friendship (Study 2). Previous research suggests that narcissism is associated with friendship selection (Jonason & Schmitt, 2012), commitment to friends (Sauls & Zeigler-Hill, 2020), and friendship conflict (Wehner & Ziegler, 2022). Future research may wish to consider motivations for friendship dissolution and whether this influences the break-up strategy adopted by those high on narcissism.

Consistent with Study 1, those high on psychopathy were more likely to use distant / mediated communication when terminating a friendship than those low on the trait. This approach denies the friend opportunities to obtain further information and displays a lack of respect and compassion for the former friend. Such behaviour is consistent with previous research documenting the association between psychopathy and psychological distancing in online communication (Hancock et al., 2018) and the lack of empathy (perspective taking and compassion) which characterize psychopathy (Mullins-Nelson et al., 2006).

**8.0 General Discussion**

The present studies investigated the relationship between Dark Triad traits and the dissolution of romantic (Study 1) and platonic (Study 2) relationships. In Study 1, Machiavellianism and psychopathy predicted greater use of the cost escalation / manipulation break-up strategy and lower engagement in open confrontation. Further, Machiavellianism predicted greater avoidance / withdrawal and de-escalation when terminating a romantic relationship whilst psychopathy predicted greater distant / mediated communication and lower use of a positive tone / self-blame. Narcissism predicted only one break-up strategy - greater open confrontation with romantic partners. With the exception of the relationship between narcissism and open confrontation (discussed in section 4.0) findings are consistent with initial predictions. When terminating romantic relationships, those high on Dark Triad traits are more likely to engage in manipulative break-up strategies and are less likely to use break-up strategies characterized by empathy or compassion.

Study 1 suggests important similarities between Machiavellianism and psychopathy, especially in relation to the use of open confrontation and cost-escalation / manipulation. These findings, together with evidence that the strategies used to terminate a romantic relationship are more closely associated with Machiavellianism and psychopathy than narcissism, provide some support for the concept of a ‘Dark Dyad’ with narcissism as a separate construct (Egan et al. 2014). However, there were important differences between Machiavellianism and psychopathy (e.g., in relation to avoidance / withdrawal) suggesting that there is merit in examining the relative influence of each of the original Dark Triad traits. It is important to recognise reports that existing measures of Machiavellianism are not appropriately aligned to expert ratings of the trait and instead represent a form of psychopathy (Miller et al., 2017, 2019). Future research should consider measures of Machiavellianism based on expert descriptions such as the Five Factor Machiavellianism Inventory (Collison et al., 2018) in order to clarify the relationship between Machiavellianism and psychopathy.

In Study 2, the influence of Dark Triad traits on break-up strategy selection was less apparent, and could suggest that Dark Triad traits are more closely related to mating behaviour than other forms of social relationship (Jonason et al., 2017). Though romantic relationships and friendships share common features (e.g., intimacy, reciprocity, trust) there are important differences between these relationship types (e.g., the exclusive nature of most romantic relationships). It is possible, therefore, that those in unsatisfactory friendships may have a broader range of options available to them in relation to relationship dissolution. For example, in addition to termination of the friendship, it may also be possible to engage in distancing (which lowers friendship closeness or reduces frequency of interaction) or compartmentalizing (which limits the scope of the friendship) (Kirmayer, et al., 2021). Indeed, individuals appear more likely to distance or compartmentalize than dissolve a friendship completely, with termination of a friendship most likely when there has been a specific transgression (Khullar et al., 2021). Future research should further investigate the manner in which Dark Triad traits shape the same behavioural strategies across different relationship types (e.g., when negotiating with romantic partners or colleagues).

*Limitations and Future Research*

The present studies enhance our understanding of the Dark Triad traits and the extent to which these influence our close personal relationships. There are, however, a number of limitations to acknowledge. Romantic relationship dissolution may occur for a range of reasons including a desire for freedom, a lack of intimacy, and infidelity (Bravo et al., 2017). Factors contributing to the dissolution of a friendship include transgression, perceived aggression, and a change in circumstance (Jalma, 2008; Khullar et al., 2021; Oswald & Clark, 2003; Rose, 1984). Motivations for the dissolution of a relationship may influence the selection of a specific break up strategy. The current study did not require participants to provide a detailed history of their relationship or the reason for the breakup. Future research should consider whether these factors influence the relationship between Dark Triad traits and break up strategy selection.

The present study relied on data from one member of the romantic relationship or friendship dyad only. Previous research indicates relationships between the Dark Triad traits of an individual, their preference for Dark Triad traits in others, and the actual Dark Triad traits of their relationship partner (Kay, 2021). Further, responses to break-ups vary and are influenced by a range of factors including attachment style (Davis et al., 2003). Dark Triad traits are likely to influence responses to relationship break-ups and relationship conflict (Brewer et al., 2018; Horan et al., 2015). Therefore, future studies should obtain data from both members of the relationship dyad ([Maaß](https://journals.sagepub.com/action/doSearch?target=default&ContribAuthorStored=Maa%C3%9F%2C+Ulrike) et al., 2016; Smith, et al., 2014). As the current study could not inform our understanding of behaviour following the breakup (e.g., attempts at reconciliation) subsequent research should consider a longitudinal approach to the dissolution of romantic relationships and friendships (Dean et al., 2017).

Findings are limited by a reliance on self-report measures without controls for inattentive responding. We recognise that it may be possible for participants to intentionally ‘fake’ their responses (Walker et al., 2022) to over-report desirable behaviour and under-report undesirable behaviour, though in an anonymous survey there may be little incentive to do so. Previous research has documented a negative relationship between Dark Triad traits and social desirability (Gamache et al., 2018; Himes et al., 2021; Kowalski et al., 2016), suggesting that those high on Dark Triad traits may be less motivated to provide socially desirable responses. In the present study, we did not measure socially desirable responding and recommend that future studies include a social desirability measure such as the Balanced Inventory for Desirable Responding (Paulhus, 1984) or SDS-17 (Stöber, 2001) and control for social desirability bias.

The statistical approach adopted in the present study (correlations and Multiple Regressions) is both recommended (Furnham et al., 2013) and the most common form of analysis in Dark Triad research (Miller, et al., 2019), providing greater comparison with prior literature. We recognise, however, that this approach focuses on residualized variables that differ from the traits in their non-partialed form and that this issue may be especially important for Machiavellianism and narcissism (Miller et al., 2019; Sleep et al., 2017). Findings should be interpreted in this context. Further, in the present study we measure each Dark Triad trait as a unitary construct. Future research may consider break-up strategy use in relation to each facet of the Dark Triad traits. It is, however, important to recognise the lack of consistency in the field. Researchers have identified single (Belaus et al., 2022), two (Monaghan et al., 2018), three (Wakefield, 2008), four (Corral & Calvete, 2000), five (Collison et al., 2018) components of Machiavellianism. Similarly, researchers have identified two (Miller et al., 2011), three (Rogoza et al., 2021), four (Mullins & Kopelman, 1988), and five (Glover et al., 2012) components of narcissism and two (Salekin et al., 2014) four (Williams et al., 2007), and between five and seven (Collison et al., 2021) components of psychopathy have been reported. In addition, where researchers agree on the number of components, they may not agree on the items that constitute each component or the description of each component.

To conclude, the present studies investigated the relationship between Dark Triad traits and the dissolution of romantic and platonic relationships. When terminating romantic relationships, those high on Dark Triad traits were more likely to engage in manipulative strategies and were less likely to adopt strategies displaying empathy and compassion for a relationship partner. The influence of Dark Triad trait on the strategies used to terminate a friendship was less apparent. Future research should extend this research to explore the relationship between Dark Triad traits and conflict across different contexts and relationship types. Further, researchers should consider responses to the use of these break-up strategies and the use of measures that assess individual components of the Dark Triad traits.

The research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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1. For both studies, power analysis was conducted via G\*Power (3.1) with a small effect size (.02), five predictors, and an adjusted alpha of .005, resulting in a sample size of 109. [↑](#footnote-ref-1)
2. Revised questionnaires are available for both studies from the corresponding author on request. Ethical approval does not permit distribution of raw data. [↑](#footnote-ref-2)
3. For each study, analyses conducted (correlations and Multiple Regressions) were as planned, with the exception of the aforementioned combination of the cost escalation and manipulation variables. No data were excluded and all measures are reported. Reflecting the number of analyses and Reviewer comment, a more stringent level of significance was adopted for the analyses. [↑](#footnote-ref-3)