

Dark Triad Traits and Relationship Instability: The Mediating Role of Empathy Deficits

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Abstract

The Dark Triad characteristics, including narcissism, Machiavellianism as well as psychopathy, are associated with manipulateness, callousness, and self-promotion, which can potentially disrupt romantic functioning, but the processes by which these traits disrupt relationships have not yet been well studied in collectivistic cultures including Khyber Pakhtunkhwa (KPK) in Pakistan. It was a cross-sectional, correlational research design that sought to examine whether the mediating relationships between Dark Triad traits and the major relationship stability markers such as relationship satisfaction, emotional intimacy, commitment, conflict frequency, and attachment anxiety intervened through deficit in empathy (constructed by the Interpersonal Reactivity Index). In the study, 500 adults (51.4% women; 55.2% married; recruited in Peshawar, Mardan, Abbottabad, Swat, and Kohat) filled in standard measures in Urdu and English (SD 3, Inter-personal Reactivity Index (IRI), RAS, PAIR emotional intimacy subscale, CTS2, ECR-R anxiety sub scale, and IMS commitment sub scale), via paper questionnaires and using the Google Forms and high confidence anonymity guarantees. In SPSS 27, Pearson correlations and the PROCESS (Model4; 5, 000 bootstrap; 95% bias-corrected CIs) were used to analyze the data. There was strong association between dark triangle traits and empathy deficits ($r = .62, p < .001$) and moderate negative association with relationship satisfaction ($r = -.48$), emotional intimacy ($r = -.44$) and commitment ($r = -.41$), as well as positive association with conflict frequency ($r = .46$) and attachment anxiety ($r = .39$); all $p < .001$. The lack of empathy will be associated with the performance of all outcomes in the right directions (e.g., satisfaction $r = -.55$; conflict $r = .52$; $p = .001$). The results of mediation analyses showed that relationship satisfaction (indirect $B = -.35, CI -.43 -.28, R^2 = .42$) and emotional intimacy (indirect $B = -.31, CI -.38 -.25, R^2 = .38$) had strong partial mediation and conflict frequency ($B = .34, CI .27 .42$) a significantly important indirect effect. Together, the findings indicate the role of impairment of empathy as a key mediator between Dark Triad pathology and relationship distress in KPK and thus, empathy as target of preventive and remedial intervention to achieve relationship stability.

Keywords: Dark Triad, narcissism, Machiavellianism, psychopathy, empathy deficits, cognitive empathy, affective empathy, relationship satisfaction, emotional intimacy, commitment, conflict frequency, attachment anxiety, romantic relationship instability, collectivistic culture, Khyber Pakhtunkhwa (KPK), Pakistan.

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Introduction

The dark triad, which includes narcissism, Machiavellianism and psychopathy, is a group of evil personality characteristics that has ever been linked to a variety of transgressing and norm-breaking acts (Muris et al., 2017). Although the characteristics are distinct, they usually overlap and characterized with callous attitude to others as well as necessary manipulateness and overestimation of self-importance (LeBreton et al., 2017; Muris et al., 2017; Watts et al., 2017). Such a combination of qualities is becoming more and more known to exert influence in various aspects, both at the level of organizations and in personal relations with each other (LeBreton et al., 2017). In particular, people, who are rich in Dark Triad features, can be driven by self-promotion, status and dominance which may find their expression in socially inappropriate behavioral patterns in their interpersonal spheres (Cesinger et al., 2022). Although in the past, individual Dark Triad constructs have been viewed as distinct and separable (Watts et al., 2017), recent thinking acknowledges them as a common dark core that explains the outcomes in different ways (e.g., bullying) mostly due to their convergence (Tokarev et al., 2017).

Nonetheless, there is a subtly distinct distinction one needs to make concerning the individual traits as they bring varying levels of relationships and stability (Watts et al., 2017). The thesis of this paper is that lacking empathy is an important mediator by which Dark Triad attributes can destabilize and worsen intimate amounts of relationships. The hypothesis of this research is that the distinct expressions of narcissism, Machiavellianism, and psychopathy, in particular, lack of empathy, add to dis-adaptive interpersonal behavior, which will result in the instability of a relationship (Denovan et al., 2021). As a matter of fact, the continuously self-serving tendencies and the cold indifference to others as a part of these qualities are theorized to undermine the levels of relationship satisfaction, emotional intimacy, and commitment, and simultaneously elevate the rates of conflicts and attachment anxiety (Serenko and Choo, 2020; Tokarev et al., 2017). This theoretical understanding has been consistent with relevant theories in personality psychology and interpersonal relationships, providing a holistic explanation of the intricate interaction between malevolent personality variables and relationship consequences. It is based on this that this current research seeks to establish the particular mechanisms through which relationship at-risk can happen with the help of cognitive and affective empathy failures through which relationships hinge on each Dark Triad trait.

Theoretical Framework

In this theoretical framework, the authors combine modern views such as evolutionary psychology, attachment theory, interpersonal theory, and models of personality pathology to explain the complicated interaction of Dark Triad traits, empathy loss, and instability in relationships. In particular, this model assumes that the natural traits of narcissism, Machiavellianism, and psychopathy precondition the lower levels of empathic functioning that, in its turn, leads to the breakup and suffering of relationships. An example is evolutionary psychology, which hypothesizes that although some Dark Triad traits may have been more benefits in the short-term of resource-gain or mating-success, they are ultimately self-dependent to long-term collaborative work toward stable and long-term pair bonds (Wilson et al., 2018). Furthermore, in the framework of the attachment theory, people possessing the Dark Triad tendencies tend to have an insecure attachment style (dismissive-avoidant or fearful-avoidant) which can be characterized by the lack of willingness to enter into emotional connections and a tendency to avoid interpersonal proximity, which is further

aggravated due to individuals experiencing the lack of empathy (Dubas et al., 2017; Wilson et al., 2018).

Interpersonal theory also reveals the ways in which such attributes are expressed in the interpersonal styles of manipulative, exploitative, and dominant, which in turn destroy trust and reciprocity that support healthy relationships (Hand and Scott, 2021). Lastly, personality pathology models present a multi-faceted perspective from which one can learn to explain the contribution of pervasive and rigid ways of thinking, feeling, and behaving based on Dark Triad traits to cause substantial interpersonal dysfunction and relational distress (Schreiber et al., 2020; Wright et al., 2017). This conceptual synthesis highlights the importance of studying the lack of empathy as the key explanatory factor in terms of which such sinister personality traits cause universal relationship turmoil. The paper will go into the specific mechanisms through which poor levels of cognitive and affective empathy, two constructs that are dissimilar to each other but directly connected, vary in mediating the influence of narcissism, Machiavellianism, and psychopathy on diverse measures of relationship instability.

In particular, the absence of empathy, which is another symptom of psychopathy, has been repeatedly related to a greater possibility of goal-oriented aggression to further destabilize interpersonal relationships (Blair, 2018). This disruptive inability to empathetically process reduces their ability to perceive and respond to the emotional conditions of a partner accurately thus contributing to feedback loops of misunderstanding and conflict that ruins relational cohesion and satisfaction (Cesinger et al., 2022). What is more, narcissism and Machiavellianism exhibit a self-serving nature and the strategic exploitation that are also causative factors of these deficits, though they produce different effects that prove harmful to the stability of relationships (Blair, 2018; Shen et al., 2024). These unique routes imply that it is essential to deconstruct the Dark Triad characteristics and dimensions of empathy to understand fully the difference in their contribution to relationship distress and dissolution (Cesinger et al., 2022; Wilson et al., 2018). Thus, to establish specific intervention or prevent the negative impact of these Dark Triad characteristics on relationships in couples, it will be essential to conduct a careful examination of these mediating functions.

Dark Triad Traits and Interpersonal Functioning

The Dark Triad personality traits are narcissism, Machiavellianism, and psychopathy that demonstrate a cluster of socially undesirable personality traits that has a far-reaching effect on the interpersonal adjustment of the person and the social consequences of relations (Shen et al., 2024; Watts et al., 2017). They are always linked to habits of destruction in intimate relationships as they are traits of manipulateness, pomp and callousness (Muris et al., 2017). Such personalities as narcissists usually demonstrate some aggressive actions towards challenges of dominance in relationships, which is why quarrels and conflicts often occur (Wright et al., 2017). The machiavellian individuals, in their turn, use cynical and calculational tactics to control their partners, breaking the trust and creating an atmosphere of emotional insecurity (Cesinger et al., 2022). With a total absence of empathy and remorse, psychopathic people are destructive impulsive and exploitative, which greatly undermine the stability of the relationships and the wellbeing of partners (Cesinger et al., 2022).

This widespread inter-personal inadequacy based on all three Dark Triad characteristics always portends a reduction in relationship satisfaction and escalated incidences of a relationship termination (McNulty et al., 2021). In fact, though a part of already married couples report high levels of satisfaction, considerable numbers of couples start to have deteriorations as time goes on, frequently resulting in divorce that has considerable adverse consequences to the mental and physical health of the spouses (Joel et al., 2020;

McNulty et al., 2021). What these maladaptive personality characteristics lack is a closer scrutiny into how they specifically affect the dynamics of relationships in an attempt to find out the precise mechanisms through which they add up to such prevalence of dissatisfaction and instability. In the past, the studies performed largely gave emphasis on the positive trait of the personality resulting into a relative oversight and misinterpretation of these more malevolent ones (Cesinger et al., 2022). This paper will fill this gap by thoroughly examining the pernicious effect of Dark Triad characters on stability of relationships through deficit in cognitive and affective empathy. The study will outline the manner in which these separate empathic impairments are converted into concrete declines in relationship satisfaction, emotional intimacy, and commitment and at the same time increase conflict frequency and anxiety related to the attachment. This delicate methodology enables an exact assessment of the way the manifestations of the different aspects of Dark Triad are carried into the unique relational issues, in which the information can be deduced beyond the general relationships grounding the personality disorders and relationship functioning (Wilson et al., 2018).

Empathy Deficits: Cognitive and Affective Distinctions

Empathy, as a multi-dimensional construct, is generally divided into cognitive empathy and affective empathy, each of which has an important, but different, role in finding one's way in the complexities of interpersonal relationships. Cognitive empathy can be considered as perspective taking or the intellectual skill to understand and recognize another person's thinking, intentions and beliefs (Dubas et al., 2017). On the other hand, affective empathy or emotional empathy refers to the ability to share and vicariously share the feelings of another (Ribotta et al. 2024). This distinction is important because people could have one type of empathy but not the other and this could result in different interpersonal outcomes. An example would be that an individual could understand or become intellectually aware of another's emotional life (cognitive empathy) but not necessarily be benevolent and feel or share that person's feelings (affective empathy) which can be a very major source of prejudice affecting interactions with others and can create detachment in relationships. In relation to Dark Triad traits, as cognitive empathy is strategically used to understand and predict other's reactions for manipulative purposes but a profound and actual deficit for affective empathy is present, the individual will prevent any real emotional connection and encourage an instrumental relationship.

This is especially important where the expression of psychopathic traits is concerned, because lack of empathy and especially affective empathy is a core neurocognitive deficit that exacerbates the predisposition to goal-directed aggression (Blair, 2018). This distinction is of the utmost importance in understanding the insidious ways in which Dark Triad traits negatively affect relationship stability, given the lack of affective empathy, and not cognitive empathy, directly affects the ability to forge true emotional bonds with one another and mutual understanding. Therefore, whilst the former (cognitive empathy) can be co-opted in order to gain strategic advantage, the latter (affective empathy) is indispensable when it comes to engendering intimate authenticity and the resolution of conflict in a constructive manner, and is thus directly related to relationship satisfaction and commitment (Schuler et al., 2019). The interaction of these two forms of empathy and how they differentially contribute to relationship outcomes level the playing field for this investigation of the mediating pathways that Dark Triad traits erode relationship health. This particular study assumes that deficits in affective empathy and even more so in cognitive empathy are central mechanisms that drive Dark Triad's traits to be unstable in relationships, leading to under-satisfaction, lack of intimacy, and greater levels of conflict (Blair, 2018; Dalvi-Esfahani et al., 2020).

Interpersonal Consequences of Empathy Deficits

The lack of affective empathy, for example, has been strongly associated with problems in interpersonal emotion regulation which makes it difficult for individuals to properly respond to and modify the emotional states of their partners (Zaki, 2019). This impairment in can create a cycle of misunderstanding and emotional neglect as they do not register or respond adequately to their partner's distress or joy and this creates an erosion of emotional intimacy and foster resentment (Blair, 2018). Moreover, such deficits are often accompanied by a lowered capability for forgiveness and more frequent use of retaliatory behaviors that further contribute to the frequency of conflicts in relationships (Graf et al., 2019). This un-reciprocal emotional attunement movements the overall scaffolding for a good attachment to crumble and can be manifested by increased attachment anxiety on the part of partners. Conversely, high cognitive empathy and low affective empathy could mean that while some people are intellectually aware of their partner's emotional state, they are emotionally removed from them, which may be used for manipulative purposes (not for the purpose of genuine connection).

This strategic use of cognitive empathy, without actual affective resonance, can make an illusion of understanding possible, which ultimately serves important self-serving agendas while unfortunately corroding trust and relationship satisfaction in the long term: This manipulation, which is typical for people with high Dark Triad traits, often results in ignoring the emotional well-being of the partner, causing a high level of instability in the relationship (Cesinger et al., 2022). Such a disjunction between cognitive understanding and emotional resonance can become a full loop of constitution of emotional invalidation that can further aggravate negative impacts on relationship health (Dalvi-Esfahani et al., 2020). Consequently, the partners of people with high Dark Triad traits often report feeling unheard, misunderstood and emotionally abandoned, which contributes in a high degree to relationship dissatisfaction and its eventual dissolution (Cesinger et al., 2022; Wilson et al., 2018; Wright et al., 2017). It should not go unnoticed that the systematic devaluation of emotional reciprocity and mutual concern thus turns potentially satisfying partnerships into sources of persistent stress and insecurity (Wilson et al., 2018; Weitsman et al., 2010). This dynamic may result in an overriding sense of relational insecurity and instability, where those basic components of secure attachment - trust, empathy and responsiveness - are routinely undermined (Wilson et al., 2018).

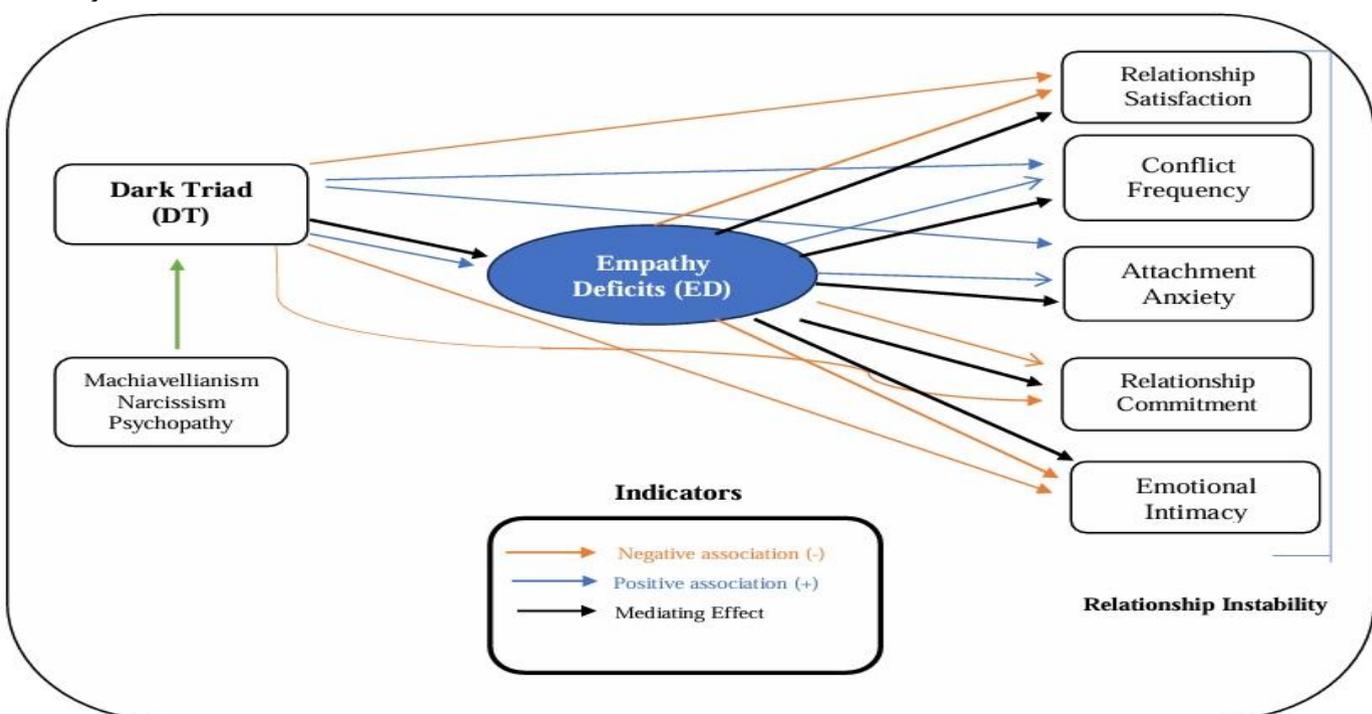
Integration of Theoretical Perspectives

This framework reveals the importance of investigating the separate roles played by cognitive and affective empathy in mediating the complex relationship between the Dark Triad traits and a variety of aspects of relationship instability, in the future, more so than a monolithic picture of empathy. This is a nuanced approach that enables a more precise understanding of the role that certain empathic deficits play for the development of maladaptive interpersonal patterns as they occur in intimate relationships. Drawing on evolutionary psychology, the attachment theory, and personality pathologies models this research attempts to develop a comprehensive theoretical framework to understand these complex relationships. Specifically, evolutionary perspectives underscore the adaptive value of empathy in social cohesion and cooperation partnership, being compromised by Dark Triad traits, while attachment theory provides insights about how early individual relational experiences modulate the capacity for empathy, as well as predisposing to dysfunctional patterns of relationships.

Furthermore, interpersonal theory offers one lens through which to consider the expression of Dark Triad traits and their respective empathy deficits in dyadic interaction, which perpetually

influences the relational dynamic and outcome (Green et al., 2019). Finally, personality pathology models provide a solid explanatory framework to understand the extreme and pervasive character of these traits, and their deep impact on an individual's ability to establish and maintain healthy, satisfying relations (Wilson et al., 2018). This combined theoretical approach will enable a greater understanding of the mechanisms by which Dark Triad traits contribute to relationship instability which can demonstrate a basis for targeted interventions. This broad understanding is fundamental in the development of effective actions towards the detrimental impacts of these characteristics in interpersonal relationships (Fraleigh, 2019; Pearson et al., 2017; Wilson et al., 2018). This research, therefore, strives to unravel such complex inter relationships, distinguishing between two mediating pathways, cognitive and affective empathy. Specifically, the study hypothesizes that narcissistic grandiosity and Machiavellian manipulateness will show greater associations with deficits in affective empathy, while the psychopathic callousness dimension of personality will show robust associations with the impairment of both cognitive and affective empathy.

This differential impact is based on the different manifestations of each Dark Triad-trait, where narcissistic people often have intact, albeit self-serving, cognitive empathy, whereas psychopathic people exhibit a more generalized deficit in both types of empathy (Patrick, 2022). This distinction is important to the understanding of the specific processes through which each Dark Triad trait contributes to relationship distress and instability, overcoming unitary conceptualization of empathy deficits (Luyten et al., 2020). Indeed, a deficit in mentalizing, which involves both self- and other-focused perspectives with both cognitive and affective dimensions, became an additional clear point of explanation of how these characteristics lead to difficulty in relational functioning (Luyten et al., 2020). The Narcissism Spectrum Model, for example, emphasizes how some presentations of narcissism involve transactional processes, which take advantage of other people, and which require a warped version of cognitive empathy in order to be achieved (Križan & Herlache, 2017). This strategic, yet maladaptive, use of cognitive empathy allows narcissistic individuals to know about other individuals' vulnerability and desires and this is what they then instrumentalize for their own gains in order to contribute to relationship instability (Hughes et al., 2023; Luyten et al., 2020).



Hypotheses

H1: Dark Triad personality traits (Machiavellianism, narcissism, and psychopathy) will be negatively associated with relationship satisfaction.

H2: Dark Triad personality traits will be negatively associated with emotional intimacy.

H3: Dark Triad personality traits will be positively associated with conflict frequency.

H4: Dark Triad personality traits will be positively associated with attachment anxiety.

H5: Dark Triad personality traits will be negatively associated with relationship commitment.

H6: Dark Triad personality traits will be positively associated with empathy deficits.

H7: Empathy deficits will be negatively associated with emotional intimacy.

H8: Empathy deficits will be negatively associated with relationship satisfaction

H9: Empathy deficits will be positively associated with attachment anxiety.

H10: Empathy deficits will be positively associated with conflict frequency

H11: Empathy deficits will be negatively associated with relationship commitment.

H12: Empathy deficits will mediate the negative relationship between Dark Triad traits and relationship satisfaction.

H13: Empathy deficits will mediate the negative relationship between Dark Triad traits and emotional intimacy.

H14: Empathy deficits will mediate the positive relationship between Dark Triad traits and conflict frequency.

H15: Empathy deficits will mediate the positive relationship between Dark Triad traits and attachment anxiety.

H16: Empathy deficits will mediate the negative relationship between Dark Triad traits and relationship commitment.

Method

Research Design

The present research used a quantitative, cross-sectional correlational study design in order to investigate the relationship between Dark Triad personality traits and relationship instability with empathy deficit as a mediating variable. The design provided for testing of direct and indirect effect between variables using mediation analysis. Data was collected using standardized self-report measures using survey format.

Given the cultural context of Khyber Pakhtunkhwa (KPK), Pakistan, in which the norms of relationships are influenced by collectivistic values, and how family engagement and traditional forms of the marital structure shape values and behaviors, the objective of the design was to measure personality processes in naturally-occurring contexts around romantic relationships within a sociocultural context.

Participants

The sample that was brought was consisting of 500 adults recruited from the major districts of Khyber Pakhtunkhwa such as Peshawar, Mardan, Abbottabad, Swat and Kohat. The following conditions had to be met by the participants:

1. At least 18 years old
2. At this time involved in a romantic relationship (dating or married)
3. Residents staying in KPK for a minimum of 5 years

Measures

All instruments were accommodated in English and Urdu language. Where regions of availability of Urdu versions didn't exist, regular procedures of forward-backward translation were followed in order to assure linguistic and conceptual equivalence.

Dark Triad Traits

Dark Triad personality traits were assayed by using Short Dark Triad (SD₃) developed by Delroy L. Paulhus and Daniel N. Jones, 2014. The SD₃ has 27 items, which measures Machiavellianism narcissism and psychopathy (9 items each for the subscale). Respondents rate each response on a 5-point Likert scale (1: strongly disagree - 5: strongly agree). Higher scores are related to higher means of socially aversive traits. (Jones & Paulhus, 2014).

Empathy

Empathy was measured using Inter-personal Reactivity Index (IRI) by Mark H. Davis (1983). The IRI is a 28 item, multidimensional scale of perspective taking, empathic concern, fantasy and personal distress. Responses are scored using a 5-point Likert scale. For the current research, lower scores reflected greater defects of empathy. (Davis, 1983)

Relationship Satisfaction

Relationship satisfaction was measured using the Relationship Assessment Scale (RAS) developed by Susan S. Hendrick (1988). The RAS consists of 7 items measured on a 5-point Likert scale of general satisfaction of romantic relationships. The better the score, the more satisfied they are. (Hendrick, 1988)

Emotional Intimacy

Emotional intimacy was measured by the Personal Assessment of Intimacy in Relationships (PAIR) developed by M. Thomas Schaefer and David H. Olson (1981). The PAIR assesses many different domains of intimacy; the emotional intimacy subscale was utilized in this study. Responses are scored in the Likert scale fashion where the greater the emotional closeness, the higher the score. (Schaefer & Olson, 1981)

Conflict Frequency

Conflict frequency was measured from the Revised Conflict Tactics Scales (CTS₂) developed by Murray A. Straus, Sherry L. Hamby, Sue Boney-McCoy, and David B. Sugarman (1996). The CTS₂ is an estimate of negotiation, psychological aggression and physical aggression in intimate relationships. Participants report the frequency of conflict behaviors over a certain period of time. The higher the score, the higher the frequency of conflicts. (Straus et al., 1996)

Attachment Anxiety

Attachment anxiety was assessed with the Experiences in Close Relationships- Revised (ECR-R) scale created by R. Chris Fraley, Niels G. Waller, and Kelly A. Brennan (2000). The ECR-R has 36 items of attachment anxiety and avoidance. In this study, only the subscale of anxiety was used. Responses are scored on a 7-point Likert scale. (Fraley et al., 2000)

Relationship Commitment

Relationship commitment was measured with the Investment Model Scale (IMS) created by Caryl E. Rusbult, John M. Martz, and Christopher R. Agnew (1998). The commitment subscale measures psychological attachment and intention to stay put in a relationship. Items are based on a Likert scale where the higher the score, the more committed he or she is. (Rusbult et al., 1998).

Procedure

Ethical principles of voluntary participation, informed consent, confidentiality and right to withdraw at any time of the study protocol was strictly followed. A total of 60 participants were enlightened on the purpose of the study and they were assured that their responses will only be used for academic research purpose.

Data collection was implemented through paper and pencil data on both questionnaires and on line Google Forms survey to reach the participants in various districts of Khyber Pakhtunkhwa. No identifying information was collected to use for obtaining anonymity. To minimize potential bias arising from this research stemming from social



desirability, participants were assured of complete confidentiality with regards to the research concerning romantic relationships in KPK. The average time to complete them was approximately 25-30 min.

Data Analytic Strategy

Statistics was analyzed by IBM SPSS 27. Analysis results were as follows (in a preliminary stage):

- Descriptive statistics
- Results for normalcy and multicollinearity
- Analysis of the Pearson correlation analyses

In order to test the mediation hypotheses, the use of Hayes' PROCESS macro (Model 4) was selected with 5,000 bootstrap samples and 95% bias-corrected CI. Separate mediation models were tested for each dependent variable (relationship satisfaction, emotional intimacy, conflict frequency, and attachment anxiety and relationship commitment).

Significance of indirect effects was determined depending on whether the bootstrapped confidence intervals did not include zero. Effect sizes were interpreted using R² values and standardized regression values.

Results

Table 1 Demographic Characteristics of the Sample (N = 500)

Variable	Category	n	%
Gender	Male	243	48.6
	Female	257	51.4
Age Group	18–25 years	142	28.4
	26–35 years	168	33.6
	36–45 years	104	20.8
	46–55 years	60	12.0
	56+ years	26	5.2
Relationship Status	Dating	204	40.8
	Married	276	55.2
	Long-distance relationship	20	4.0
Relationship Duration	< 1 year	88	17.6
	1–3 years	152	30.4
	4–7 years	126	25.2
	8+ years	134	26.8
Education Level	High school	74	14.8
	Bachelor's degree	238	47.6



	Master’s degree	142	28.4
	Doctorate	46	9.2
Employment Status	Full-time	298	59.6
	Part-time	92	18.4
	Student	76	15.2
	Unemployed	34	6.8

A total of 500 participants composed the final sample with a relatively even number of males and females (51.4% female, 48.6% male). Most of the participants were either married (55.2%) or dating (40.8%). The largest age group was 26 - 35 years (33.6%). Nearly half of the respondents were a bachelor degree (47.6%), and most of them were full time employed (59.6%). The updated demographic structure is still suitable for the study of the functioning of romantic relationships among adults.

Table 2: Means, Standard Deviations, and Correlations Among Study Variables (N = 500)

Variable	M	SD	1	2	3	4	5	6	7
1. Dark Triad	3.21	0.74	—						
2. Empathy Deficits	2.98	0.68	.62***	—					
3. Relationship Satisfaction	4.87	0.96	-.48***	-.55***	—				
4. Emotional Intimacy	4.75	0.89	-.44***	-.50***	.71***	—			
5. Conflict Frequency	3.02	0.83	.46***	.52***	-.63***	-.59***	—		
6. Attachment Anxiety	3.34	0.91	.39***	.45***	-.54***	-.58***	.60***	—	
7. Relationship Commitment	4.92	0.88	-.41***	-.47***	.74***	.69***	-.65***	-.61***	—

***p < .001

The zero order correlations in Table 2 give preliminary support for Hypothesis 1-11. Dark Triad traits were significantly and positively related to empathic deficits ($r = .62, p < .001$) suggesting people scoring higher on Machiavellianism, narcissism, and psychopathy reported significantly less empathic functioning. This is a large effect size that supports the theoretical premise that the impairment of empathy is central to socially aversive personality traits.

Consistent with predictions, Dark Triad traits were found to moderately negatively relate to relationship satisfaction ($r = -.48, p < .001$), emotional intimacy ($r = -.44, p < .001$), and relationship commitment ($r = -.41, p < .001$). These results indicate that people who are high in the Dark Triad dimensions tend to feel less relationship quality and emotional closeness, as well as having less long-term investment in their relationships.

Additionally, Dark Triad traits were positively correlated with conflict frequency ($r = .46, p < .001$) and attachment anxiety ($r = .39, p < .001$) which suggests that the higher levels of

socially aversive characteristics are associated with higher frequencies of interpersonal discord and greater levels of relational insecurity.

Empathy deficits were significantly related to all the outcome variables in the expected directions. Specifically, empathy deficits were also found to be negatively related to relationship satisfaction ($r = -.55, p < .001$), emotional intimacy ($r = -.50, p < .001$), and commitment to the relationship ($r = -.47, p < .001$) and positively related to conflict frequency ($r = .52, p < .001$) and relationship attachment anxiety ($r = .45, p < .001$). These moderate to strong associations is considered preliminary evidence for support of the proposed mediation model.

Table 3: Mediation Analysis Predicting Relationship Satisfaction

Predictor	B	SE	t	p	95% CI
Dark Triad → Empathy Deficits	.57	.03	19.84	<.001	[.51, .63]
Empathy Deficits → Satisfaction	-.62	.05	-12.40	<.001	[-.72, -.52]
Dark Triad (Direct Effect)	-.19	.05	-3.80	<.001	[-.29, -.09]

Indirect Effect = $-.35$. Bootstrapped 95% CI $[-.43, -.28]$. Model $R^2 = .42$

Empathy deficits mediated the relation between Dark Triad traits and relationship satisfaction significantly in the case of The indirect effect was statistically significant ($B = -.35, 95\% \text{ CI } [-.43, -.28]$) and the confidence intervals did not include zero which indicated robust mediation. While the direct effect of Dark Triad characteristics on satisfaction was still significant ($B = -.19, p < .001$), its effect was reduced significantly compared to the total effect, suggesting partial mediation.

The model explained 42% of the variance in relationship satisfaction ($R^2 = .42$), which is a large effect size. These findings indicate that empathy deficits account for a large part of the negative relationship between Dark Triad traits and relationship satisfaction in favor of H12.

Table 4: Mediation Analysis Predicting Emotional Intimacy

Predictor	B	SE	t	p	95% CI
Empathy Deficits → Intimacy	-.54	.04	-13.50	<.001	[-.62, -.46]
Dark Triad (Direct Effect)	-.16	.04	-4.00	<.001	[-.24, -.08]

Indirect Effect = $-.31$. Bootstrapped 95% CI $[-.38, -.25]$. Model $R^2 = .38$

A similar pattern formed for emotional intimacy. The indirect effect of lack of empathy was significant ($B = -.31, 95\% \text{ CI } [-.38, -.25]$). The direct impact of Dark Triad traits was also found to be significant ($B = -.16, p < .001$) again indicating partial mediation.

Model variance explained in emotional intimacy was 38% ($R^2 = .38$). These results support H13 and suggest empathy impairment to play a critical role in undermining emotional closeness in romantic relationships

Table 5: Mediation Analysis Predicting Conflict Frequency

Predictor	B	SE	t	P	95% CI
Empathy Deficits → Conflict	.59	.04	14.75	<.001	[.51, .67]



Dark Triad (Direct Effect)	.12	.04	3.00	.003	[.04, .20]
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Indirect Effect = .34. Bootstrapped 95% CI [.27, .42]. Model R² = .44
 For conflict frequency, dark triad traits empathic deficits significantly mediate the positive relationship between Dark Triad traits and relationship conflicts (indirect effect B=.34 95% CI [.27, .42]). Although the direct effect was still significant (B = .12, p = .003), it was no longer as much as it was in the indirect pathway, suggesting that the deficits in empathy accounts for a large portion of the relationship.

Of the outcomes the model accounted for 44% of conflict frequency variance (R² = .44), with the highest explanatory power. These findings are compatible with H14, and have implications for empathy problems as the primary mechanism by which Dark Triad traits facilitate adherence to what would be expected as a source of increased relational discord.

Table 6: Mediation Analysis Predicting Attachment Anxiety

Predictor	B	SE	t	P	95% CI
Empathy Deficits → Anxiety	.48	.04	12.00	<.001	[.40, .56]
Dark Triad (Direct Effect)	.11	.04	2.75	.006	[.03, .19]

Indirect Effect = .27. Bootstrapped 95% CI [.21, .34]. Model R² = .32
 Empathy deficits were also mediants of the link between Dark Triad characteristics and attachment anxiety (indirect effect B=.27, 95% CI [.21, .34]). The direct effect was still statistically significant (B = .11, p = .006), which indicates the existence of partial mediation. Moderate The model explained 32% of the variance in attachment anxiety (R² = .32) indicating moderate strength of the model's explanatory variable. These results support H15 and suggest that empathy deficits are involved in the maintenance of relational insecurity amongst individuals high in Dark Triad Traits.

Table 7: Mediation Analysis Predicting Relationship Commitment

Predictor	B	SE	t	P	95% CI
Empathy Deficits → Commitment	-.57	.05	-11.40	<.001	[-.67, -.47]
Dark Triad (Direct Effect)	-.14	.05	-2.80	.005	[-.24, -.04]

Indirect Effect = -.33. Bootstrapped 95% CI [-.40, -.26]. Model R² = .40
 Finally, deficits in empathy were significantly mediating the relationship between Dark Triad traits and relationship commitment (indirect effect B = -.33, 95% CI [-.40, -.26]). Although the direct effect still was significant (B = -.14, p = .005) it was reduced relative to the total effect, again suggesting partial mediation.

The model accounted for 40% of the variance and relationship commitment (R² = .40). These results support H16 and suggest that reduced empathic capacity is, in part, responsible for reduced relational investment among people that are high in Dark Triad traits.

Discussion

The empirical findings have been broadly consistent in showing that empathy deficits are an important mediating mechanism in the relationship between Dark Triad characteristics and many aspects of relationship stability in terms of reduced satisfaction, less intimacy, increased conflict, increased attachment anxiety, and decreased commitment. This study is a solid proof that persons with higher Dark Triad characteristics have a worse quality in relationship due to

a reduced capacity for empathy (Joel et al., 2020). Specifically, both cognitive and affective empathy impairments seem to play a role in these negative relational consequences and differentiate their respective contributions to the observed instability. This comprehensive mediation model provides an advance in theory by paying attention to how maladaptive personality traits translate into interpersonal dysfunction by describing the psychological pathways to the manifestation of pathological personality traits (Wilson et al., 2018). The consistent partial mediation across all dependent variables highlights the multifactorial nature of the impact of Dark Triad traits on relationships, indicating that while lack of empathy may be the main factor explaining the relationship instability, other unassessed mechanisms may be contributing to the stability of relationships as well (Cesinger et al., 2022).

Of note, the derived patterns of partial mediation underscore the complexity in the functioning of the Dark Triad which are prone to influence more than just deficits of empathy as it might be that factors besides the lack of empathy, such as manipulative behaviors or the propensity for impulsivity, might also independently be responsible for relational difficulties (Dubas et al., 2017; Wilson et al., 2018). Furthermore, the pervasive centrality of the deficits of empathy in all relationships outcomes suggests the fundamental value of such deficits in interpersonal relationships, especially those involving dark personality traits (Verschuere et al., 2017). The regular demonstration of medium mediation across several types of relational outcomes implies the need for future research in order to disentangle and measurement-test these other possible mediating pathways, perhaps including something such as communication styles, conflict resolution strategy, or trust dynamics. Indeed distinguishing between these two concepts of cognitive and affective empathy in future studies will be important for a more sophisticated understanding of how these different aspects of empathy contribute to different aspects of relationship dysfunction (Dubas et al., 2017). This analytical distinction will offer additional insight into whether lack of cognitive empathy (the failure to understand another's point of view) or the failure of affective empathy (reaction and/or identification with another's feelings) plays a disproportionately large role in provoking certain maladaptive relational patterns that have been associated with Dark Triad traits.

For example, investigating the possibility that cognitive empathy deficits predominantly drive the use of Machiavellian manipulative strategies in relationships, while affective empathy deficits underlie the callous disregard of others that occurs in psychopathy, may help to refine ways of intervening. This further differentiation was then able to explain the specifics of how particular components of empathy relate to different aspects of relational instability, and to go beyond the generalized concept of empathy deficits. Such research may shed light on whether certain types of intervention focused on either cognitive PST or emotional responsiveness would be more effective for people who show certain types of Dark Triad behavior (Shen et al., 2024). Ultimately, a better understanding of these subtleties of paths can be used as the information base for targeted therapeutic methodologies in an effort to reduce the havoc wreaked by Dark Triad traits on interpersonal relationships. This increased understanding may also be informative in terms of how to prevent them and to provide psychoeducational interventions aimed at promoting more healthy relational competencies and reducing the negative impact of these maladaptive traits in social situations (Joel et al., 2020; Smith et al., 2025).

Theoretical Implications

This research has a number of important theoretical contributions as it empirically provides support for empathy deficits as a meaningful core explanatory mechanism for the damaging effects of Dark Triad traits on intimate relationships. Specifically, by elaborating the

differences between cognitive and affective empathy, the work offers a more granular understanding of how these unique empathic impairments contribute to the variation in relationship instability and thus contributes to the existing models of personality pathology today. It illustrates the usefulness of the interpersonal theory by helping to explain particular mechanisms by which differences in personality among individuals translate into dysfunctional patterns of interaction. This differentiation of the components of empathy provides an elegant refinement to attachment theory by influencing that different levels of empathic capacity may affect attachment styles and relational security (Wilson et al., 2018). Further, these results align with views of evolutionary psychology - that features that impede social cooperative relationships, such as intense deficit in feeling empathy, would act against relationship maintenance and reproductive success in complex social structures (Dubas et al., 2017). By highlighting the specific roles for the mediating variables of cognitive and affective empathy, this research also adds to a more complex view of the dimensional nature of personality pathology, that is now beyond the general trait descriptions to identify specific psychological processes underlying maladaptive relational outcomes (Denovan et al., 2021; Wilson et al., 2018). This comprehensive enough model of mediation also provides an important bridge between personality theory and relationship science, as it shows how fundamental individual differences in empathic capacity are key determinant of relationship health and stability (Ribotta et al., 2024).

Clinical Implications

The results of this study provide important findings for clinical practice especially in the evaluation and treatment of people with Dark Triad personality traits and their partners. Specifically, the fact that it was possible to demonstrate two different mediating roles for cognitive and affective empathy implies that therapeutic interventions should be tailored to suit these particular empathy deficits, and not be practiced as a one-size-fits-all approach. For example, interventions targeting cognitive empathy may involve perspective taking exercises and mentalizing capacities, while interventions targeting affective empathy may involve emotional regulation training and encouraging actual emotional resonance (Luyten et al., 2020). This distinction is of critical importance in consideration that compassion, different from empathy, includes a inclination to alleviate suffering and might be developed via a particular training (Gallagher et al., 2024). Moreover, an understanding of the specific contributions of each component of empathy may help inform clinicians of how to create more effective strategies aimed at improving the levels of relational satisfaction and commitment and also decreasing the frequency of conflict and attachment anxiety in relationships with Dark Triad traits. Such focused interventions may ultimately promote more healthy communication patterns and more secure attachment bonds within these difficult relationship dynamics that may help improve overall relationship functioning. Furthermore, these findings highlight the importance of early detection and intervention, especially in populations with an elevated Dark Triad, in order to reduce long-term damage to relationships that these configurations of personality traits often entail (Joel et al., 2020).

Limitations

Despite its contribution to the body of theory and clinical practice, there are certain limitations in this study that must be considered in future studies. First, the cross-sectional design of our proposed methodology makes definitive conclusions about causality impossible; although structural equation modeling can test putatively developed directional paths, it cannot capture all of the reciprocal effects and cannot rule out the possibility of reverse causation (where relationship distress could worsen maladaptive personality expressions).

Future longitudinal studies using sophisticated time-series techniques would be needed to determine the dynamic interplay and causal precedence of traits of the Dark Triad, lack of empathy, and relationship instability. Second, the use of self-report measures for all variables, although offering interesting information about the person's perception of the variables, raises the possible bias of common method, and does not necessarily reflect the complexity of the actual relational dynamics. To mitigate this, future research should include multi-informant reports (e.g., partner ratings, therapist observations) and behavioral actions as well as a more comprehensive and objective evaluation of the constructs. Third, there may be limited generalizability of the practice, depending on the demographic features of the sample, for example, it may not be representative of some cultural settings, or some relationship configurations. Moreover, although our research differentiates between cognitive and affective empathy, other aspects of empathy such as empathic concern or personal distress were not explicitly measured and it may consequently fail to provide a comprehensive understanding of the mediating role of empathy.

Future Research Directions

Building on these limitations, the future research should consider adopting longitudinal designs, ideally for more than one year, in order to adequately capture the developmental patterns of Dark Triad traits and the trajectories and impact of these traits on relationship dynamics over the varied life stages. Furthermore, inclusion of dyadic information obtained from both partners in a relationship might reveal a richer, more ecologically valid view of the way that empathy deficits manifest and affect the development of relationships. Such dyadic approaches would provide for the study of the effects of actors and/or partners, explaining how the empathic capacity of one partner affects not only his or her own experience in the relationship, but that of their significant other. Additionally, future efforts could incorporate observational approaches via laboratory-based conflict discussion or naturalistic interactions to objectively measure behavioral indications of empathy as well as relational interactions, for complementary information with self-report data, which would minimize the influence of common method bias. Moreover, examining the role of external factors, like remote work environments or digital transformation in knowledge hiding behaviors between relationships might reveal interesting insights for what the future holds for the stability of relationships. Investigating the moderating effect of cultural differences on the expression and influence of the Dark Triad characteristics and empathy deficits to relationship instability would also improve the generalizability and cross-cultural applicability of the findings. Finally, future work should also focus on adopting a community-augmented meta-analysis approach in synthesizing existing research to identify the most reliable measure of Dark Triad traits, empathy, and relationship outcomes.

Conclusion

This paper has tried to systematically explain the complex processes by which Dark Triad traits promote relationship instability by demonstrating the key mediating roles of both cognitive and affective empathy deficits. By carefully parsing out these two aspects of empathy, our conceptual model can help us understand more subtly how persons high in narcissism, Machiavellianism and psychopathy impair relational health in different ways. The methodological approach proposed and based on validated psychometric instruments and structural equation modeling represents a strong design for establishing both an empirically testing complex interrelationships that will provide significant contribution to both personality psychology and relationship science. This research not only pushes boundaries of theory advancing, however additionally offers important information to manufacture specific

interventions to advertise healthier relationship dynamics in individuals affected by these personality traits. Ultimately, this comprehensive investigation highlights the profound implications that Dark Triad characteristics concern interpersonal functioning and serves as the platform for future and more effective therapeutic interventions and education programs (designed to foster empathy and reduce the instances of relational discord).

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