Dark Triad and Mate Poaching: Is the Relationship Moderated by Self-Perceived Mate Value and Sociosexuality?

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Abstract

An emerging literature indicates a relationship between the Dark Triad traits—Machiavellianism, Narcissism, and Psychopathy—and experiences of mate poaching, yet the underlying mechanisms behind this relationship remain unclear. Therefore, the current study investigates the relationship between Dark Triad (DT) and mate poaching within the context of short-term relationships. It further examines whether self-perceived mate value and sociosexuality or short-term or long-term mating orientation moderates this association and explores sex differences across the variables. Utilizing a sample of 77 predominantly young, educated individuals, the study revealed that psychopathy significantly correlates with and predicts mate poaching attempts, aligning with previous research that underscores the role of psychopathy in mating strategies prioritizing mating over parenting efforts. While narcissism significantly predicted being the target of mate poaching, no such effect was observed for the Dark triad traits (composite) and being successfully poached. Sociosexuality moderated the relationship between psychopathy and poaching attempts, suggesting that high psychopathy is associated with increased poaching attempts when coupled with a short-term mating orientation. Significant sex differences were observed with males scoring higher on sociosexuality and mate poaching attempts, consistent with evolutionary theories on male mating strategies. The findings highlight the complexity of mating behaviors influenced by personality traits and call for further research that considers sociocultural factors and expands demographic representation.

Keywords: *Dark Triad, psychopathy, narcissism, self-perceived mate value, sociosexuality, mate poaching*

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Introduction

In the context of evolution, the drive to find a partner is fundamental across species with gender differences, including our own. This drive plays a pivotal role in ensuring the continuation of a species. Historically, those unable to secure a partner often did not pass on their genes. It is from our ancestors, who overcame the challenges of finding and securing partners that modern humans have emerged (Buss, 1994). The drive for mating, pivotal for species survival, has led humans to evolve strategies such as mate poaching, where individuals attract those already partnered, ensuring reproductive success (Buss, 1994; Schmitt & Buss, 2001).

Mate poaching, the act of pursuing someone romantically who is already in a relationship, is a common behavior in human mating, seen globally (Arnocky et al., 2013; Schmitt & Buss, 2001). This behavior varies, with some individuals seeking brief romantic encounters and others aiming to form lasting bonds by drawing a partner away from an existing relationship. This pattern of behavior is believed to be rooted in our evolutionary past, where those who were adept at attracting mates through poaching often had greater reproductive success. Consequently, present-day humans may inherit a psychological predisposition towards mate poaching, shaped by these historical mating successes (Schmitt & Buss, 2001).

Surveys suggest a significant number of people have either attempted to poach a mate (50%) or have been the target of such attempts (85%) (For eg., Schmitt & Buss.,2001). Personality characteristics linked to those who become targets of mate poaching include openness and extraversion, while individuals who are successfully poached tend to display traits like disagreeableness and neuroticism. These traits connected to mate poaching behaviors are found consistently across various cultures (Schmitt et al., 2004). Building on previous research that connects certain personality traits to mate poaching, this study seeks to explore how darker personality features, known as the Dark Triad—Machiavellianism, Narcissism, and Psychopathy—play a role in such behaviors. This focus on the Dark Triad is an extension of the established understanding that mate poaching is influenced by an individual's characteristic patterns, offering a deeper insight into the more complex and perhaps subversive elements of human mating strategies.

The Dark Triad encompasses three interconnected but individually distinct traits that tend to be socially aversive: Machiavellianism, known for deceit and a lack of empathy; Narcissism, marked by a sense of grandiosity and a need for admiration; and Psychopathy, characterized by impulsivity and a lack of remorse (Paulhus & Williams, 2002; Christie & Geis, 1970; Raskin & Terry, 1988; Hare, 1985). These traits share a common thread of emotional detachment and tend to

intersect, yet each maintains its unique characteristics (Paulhus & Williams, 2002; Jones & Figueredo, 2013). Despite their negative connotations, these traits have endured across time and cultures including North America, Oceania, and Asia, and have been associated with certain positive outcomes like steady emotions, strong self-confidence (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), and greater mating success (Jonason, Li, Webster, & Schmitt, 2009), suggesting possible evolutionary advantages in the realm of romance and attraction (Schmitt, 2008). Research spanning 46 nations indicates that individuals with traits such as high extraversion, low agreeableness, and low conscientiousness are more inclined toward fleeting romantic encounters, including the pursuit of others' partners (Schmitt & Shackelford, 2008). In particular, those with Dark Triad characteristics often engage more in mate poaching, reflecting these traits' link to more exploitative mating strategies (Jonason, Li, et al., 2010).

Self-perceived mate value, which reflects an individual's self-assessment of their own attractiveness and overall desirability as a partner, plays a significant role in mate poaching. This concept consists of qualities that boost one's prospects in attracting and retaining a partner and can range from material wealth to physical appeal (Buss & Barnes, 1986; Buss & Schmitt, 1993; Waynforth, 2001). Research suggests that men who consider themselves highly desirable are more inclined toward casual relationships, whereas women with similar self-assessment tend to prefer more stable, long-term partnerships (Clark, 2006). Previous studies have also found a link between self-confidence and attractiveness and an increased likelihood of engaging in mate poaching (Rhodes, Simmons, & Peters, 2005). Further studies have indicated that the success of mate poaching attempts may depend on the perceived qualities of the poacher compared to the current partner of the desired individual (Davies & Shackelford, 2017). Interestingly, narcissism, a Dark Triad trait, has been positively associated with self-perceived desirability, influencing both men and women's perceptions of their own mate value and attractiveness, which in turn could predict their likelihood of attempting to poach a mate (Leon & Rantala, 2021; Zeigler-Hill & Trombly, 2018; Erik & Bhogal, 2016).

This study also examines sociosexuality, a term that refers to an individual's preference for either short-term or long-term relationships (Jonason et al., 2009). Sociosexuality is indicative of a person's openness to casual, non-committed encounters (Penke & Asendorpf, 2008). People with a preference for short-term mating typically engage in casual sex more frequently and invest less emotionally in relationships, often having multiple sexual partners (Schmitt, 2005). In contrast, those with a leaning towards long-term mating are more committed and emotionally invested in their

relationships (Buss, 1994). Often, those with Dark Triad traits display a tendency towards short-term mating (Jonason et al., 2009; Jones & de Roos, 2017a, 2017b). Burtaverde and colleagues (2021) discovered that a person's sociosexuality can act as a moderator between psychopathy and romantic jealousy, affecting how much jealousy they feel if they have psychopathic traits; those with psychopathic tendencies who seek long-term relationships tend to experience more jealousy than those seeking casual ones. Patch and Figueredo (2016) also investigated how early adversities and life experiences relate to psychopathy and one's openness to casual relationships. They found that stressful experiences in childhood, along with a challenging life history and a confrontational attitude, are linked to higher levels of psychopathy, which in turn is associated with a greater openness to casual sexual relationships. These findings suggest that psychopathy may have evolved as a trait to increase chances for short-term mating. A deeper understanding of how Dark Triad traits are connected to one's relationship orientation could explain the mating behaviors seen in individuals with these traits.

This study aimed to examine whether and to what degree DT traits predict the frequency and success of various mate poaching behaviors, particularly in a short-term relationship context. Furthermore, the researcher also wanted to examine if the relationship between the dark triad traits and mate poaching is moderated by self-perceived mate value and sociosexuality. Due to the possible sex differences in personality characteristics and sexual strategies pursued by men and women, this study also aims to examine the sex differences that might exist amongst the variables.

Rationale

Evolutionary theories suggest that the evolution and development of all biological creatures are guided by the principle of maximizing reproductive fitness. Even our psychological mechanisms are largely guided by the same principle. As such, the process of acquiring reproductive access (or mating) is a very important domain that needs to be understood scientifically. According to David Buss, a pioneer of evolutionary psychology and an expert in human mating, our failure to understand the real and paradoxical nature of human mating is costly, both scientifically and socially. “Scientifically, lack of knowledge leaves unanswered some of life’s most puzzling questions, such as why people sacrifice years of their lives to the quest for love and the struggle for fulfilling relationships.” “Socially, our ignorance leaves us frustrated, helpless, and often hurt when mating goes wrong, whether in the jungle of online dating sites, in hookups on college campuses, in the workplace, or in our home.” (Buss, 2016, p10).

Erik & Bhogal (2016) and Burtaverde et al. (2021) have shown that psychopathy

significantly predicts mate poaching intentions and that individuals with a high self-perceived mate value are more prone to engage in mate poaching. These findings suggest a complex interaction where personality traits, self-assessment, and mating strategies converge. The current study will delve into these nuances, exploring how manipulation, sexual exploitation, and derogation—elements intrinsic to the mating process—vary according to these personality traits.

Therefore, the current study might highlight the personality factors that influence mate poaching, which might include manipulation, sexual exploitation, and derogation which are all aspects of the mating process. According to sexual strategies theory (Buss & Schmitt, 1993), the sexes have different costs of mating, such as differential parental investment, and thus, the mating strategies pursued by the sexes also differ. Therefore, this study also looks at the sex differences in sociosexuality, self-perceived mate value, and mate poaching behavior. By exploring the interplay between dark triad traits, self-perceived mate value, sociosexuality, and mate poaching, this research aims to contribute new insights into the dynamics of human mating strategies and their psychological underpinnings. It also seeks to address the notable scarcity of studies examining the impact of these personality factors on mating experiences within the Indian population. By integrating these diverse elements, the study intends to uncover new psychological insights into mating behaviors and contribute to the broader understanding of these phenomena in diverse cultural contexts.

Objectives

To examine how dark triad traits are associated with self-perceived mate value, sociosexuality, and mate poaching. To examine gender differences in sociosexuality, mate value, and mate poaching. To examine the moderating effect of self-perceived mate value and sociosexuality (mating orientation) on dark triad traits and mate poaching.

Method & Materials

Sample

The link to the survey was distributed by the researcher to around 120 individuals via WhatsApp and an online survey dissemination platform called Sirway Me, out of which 85 individuals responded and obliged. Hence, the initial sample was N=85. Two attention checks were included to account for random responses. Based on the attention checks, data of 5 individuals were removed which left the researcher with a sample of N = 80. Additional data of 3 individuals were removed because of repetition which was detected from the Code (First two letters of your name and last two digits of your phone number).

Hence, the final sample on which the analysis was carried out was N= 77. The mean age of the sample was ~23. There were 20

males (25.6%) and 57 females (73.1%). The sample consisted of mostly students (N = 53, 67.9%), residing in an urban setup (N = 72, 92.3%) and belonging to the middle class (N = 43, 55%) and upper middle class (N =26, 33.3%) economic strata.

The sample mostly consisted of heterosexual individuals (N =72, 92.3). 35 (44.9 %) individuals reported to be dating one person exclusively, 4 (5.1%) were married, 1(1.3%) were cohabitating while 37(44.4%) individuals reported not being currently involved with anyone.

Table 1

Demographic Details

Variable	Frequency	Percent
Age (M = 23.45)		
18 -25	65	83.4
26 -31	12	15.4
Sex		
Female	57	73.1
Male	20	25.6
Sexual orientation		
Bisexual	4	5.1
Heterosexual	72	92.3
Homosexual	1	1.3
Highest Education Qualification		
School	4	5.1
Diploma/Undergraduate	32	41.1
Post Graduation	41	52.6
Employment Status		
Student	53	67.9
Job	21	26.9
Unemployed	3	3.8
SES		
Lower middle	6	7.7
Middle	43	55.1

Upper	2	2.6
Upper middle	26	33.3
Area of Residence		
Rural area	5	6.4
Urban area	72	92.3
Current relationship status		
Cohabiting	1	1.3
Dating one person exclusively	35	44.9
Married	4	5.1
Not currently involved with anyone	37	47.4

Design

The current study employed a correlational design to explore the relationships between various psychological constructs. To adequately assess these relationships, the study utilized suitable regression models, including a moderation model, to analyze the data. Additionally, parametric and non-parametric tests were conducted to evaluate sex differences across the variables of interest.

Measures and Tools Used

1. The Short Dark Triad (SD3): Developed by Jones and Paulhus (2014), the SD3 is a 27-item questionnaire comprising 9 items each for narcissism (e.g., "Many group activities tend to be dull without me"), psychopathy (e.g., "Payback needs to be quick and nasty."), and Machiavellianism (e.g., "It's wise to keep track of information that you can use against people later."). Participants rated their agreement on a scale from 1 (strongly disagree) to 5 (strongly agree). The responses were then totaled to generate scores for each Dark Triad trait, with respective reliability coefficients: narcissism ($\alpha = 0.68$), Machiavellianism ($\alpha = 0.80$), and psychopathy ($\alpha = 0.75$).

2. Sociosexual Orientation Inventory-Revised (SOI-R; Penke & Asendorpf, 2008): The SOI-R, as devised by Penke & Asendorpf (2008), serves to gauge an individual's mating orientation. This 9-item instrument utilizes a 9-point response scale and is divided into three sub-scales assessing sociosexual behavior ($\alpha = 0.791$), attitudes ($\alpha = 0.808$), and desires ($\alpha = 0.824$). The aggregation of all nine items provides a comprehensive score for global sociosexual orientation ($\alpha = 0.83$).

3. The Mate Value Scale: Created by Edlund and Sagarin (2014), this 4-item self-report measure evaluates the mate value of

oneself, one's partner, or another individual, demonstrating a good internal reliability (α = 0.81). In this research, it was employed to assess self-perceived mate value,

4. Anonymous Romantic Attraction Survey (ARAS; Schmitt & Buss, 2001): Developed by Schmitt & Buss (2001), this questionnaire is employed to evaluate experiences of short-term mate poaching. This survey encompasses a singular question for each of the five distinct aspects of poaching: poaching attempts: "Have you ever tried to draw someone who is already in a committed relationship toward a brief sexual encounter with you?"; successful poaching: "If you've attempted to draw someone in a relationship, how often have you succeeded?"; victim of poaching: "Have you, while in a relationship, ever experienced someone trying to lure your partner for a short-term sexual relationship?"; target of poaching: "While committed to a relationship, have you been approached by others attempting to draw you into a short-term sexual relationship?" and successfully poached: "If there have been attempts to draw you into a short-term relationship, how often have these been successful?"

Procedure

Participants were forwarded the link to the survey via WhatsApp. The online survey contained informed consent, demographics, the four measures (SD3, SOI-R, MVS and ARAS). The survey ended with a debriefing form explaining the real purpose of the study. Overall, completing the survey took participants less than fifteen minutes on average. Because the survey did not require participants to come to the laboratory, they could complete the survey wherever they chose.

Data Analysis

All statistical analyses were carried out using SPSS 26. Both descriptive and inferential statistics using Mean, SD, Frequency scores, Percentage, Pearson's product-moment correlation, linear regression (including simple moderation analysis) and Student's t-test were calculated.

RESULTS:

Table 2: Correlation and Regression analyses for the overall sample

Descriptive Statistics and Correlations for Dark triad traits, Self-perceived mate value, Sociosexuality, and mate poaching experiences (n = 77)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Machiavellianism	3.00	.64	__										
2. Narcissism	3.01	.59	**.23***	__									
3. Psychopathy	2.22	.60	**.43****	.19	__								
4. DT	4.19	.69	**.90****	**.56****	**.65****	__							
5. Self-perceived Mate-Value	4.89	.91	**.31****	**.48****	.16	**.43****	__						
6. Sociosexuality	2.89	1.45	.15	.02	**.31****	.20	-.04	__					
7. Poaching attempts	1.49	1.02	.09	.11	**.37****	.20	-.12	**.52****	__				
8. Poaching success	1.18	1.90	.22	.17	.11	**.24***	-.14	**.45****	**.47****	__			
9. Victim of poaching	2.16	1.34	-.07	.15	.13	.04	-.01	**.26***	**.35****	**.37****	__		
10. Target of poaching	2.26	1.51	-.06	**.24***	.11	.07	.02	**.33****	**.47****	**.24***	**.60****	__	
11. Successfully poached	1.18	1.90	.03	.15	.20	.13	.08	**.38****	**.36****	**.40****	.21	**.37****	__

Note: **p< .01. *p<.05

From Table 2, it can be seen that of the dark triad traits, only narcissism and psychopathy were significantly correlated with mate poaching. Narcissism had a significant positive relationship with being the target of poaching, r = .24, p<.05 implying that with an increase in narcissism, the likelihood of being the target of poaching also increases. Psychopathy had a significant positive relationship with poaching attempts, r= .37, p<.01 implying that with an increase in psychopathy, poaching attempts also increases. Other than that, DT (composite) had a significant positive relationship with poaching

success, r = .24, p< .05 implying that with an increase in one's score in the Dark triad, their poaching success also increases.

Machiavellianism, Narcissism and DT (composite) were all significantly positively correlated with self-perceived mate value, implying that with an increase in one's score in the dark triad traits (except psychopathy), one's self-perceived mate value also increases. Among the dark triad traits, narcissism had the highest correlation with self-perceived mate value, r = .48, p<.01; followed by DT (composite), r = .43, p<.01; and Machiavellianism, r = .31, p< .01. Additionally, psychopathy had a significant positive correlation with sociosexuality (r = .31, p< .01)

Sociosexuality had a significant positive relationship with poaching attempts, r = .52, p< .01; poaching success, r = .45, p< .01; victim of poaching, r = .26, p< .05; target of poaching, r = .33, p< .01; successfully poached, r = .38, p<.01. Therefore, it can be said that with an increase in sociosexuality, or an orientation towards short-term relationships, mate poaching also increases.

Table 3 represents the data that was obtained using the enter method regression analysis. The model establishes psychopathy and sociosexuality as significant predictors of poaching attempts (R^2= 0.32) and F(2, 74)= 17.40 (p<0.001). The value of R^2 tells us that 32% of the variation in poaching attempts can be accounted for by psychopathy and sociosexuality. The value of F (2,74) = 17.40 is significant at p<0.001, which confirms the statistical significance of the Regression Model and rejects this result to chance factor alone. The unstandardized coefficient of psychopathy *B* = .39, p< .05 indicates that one-unit increase in psychopathy would lead to a .39 unit statistically significant increase in poaching attempts with a standard error of .17. The standardized coefficient β = .23 indicates that as psychopathy increases by one standard deviation, poaching attempts increases by .23 standard deviations. The unstandardized coefficient of sociosexuality *B* = .32, p< .01 indicates that one-unit increase in sociosexuality would lead to a .32 unit statistically significant increase in poaching attempts with a standard error of .07. The standardized coefficient β = .45 indicates that as sociosexuality increases by one standard deviation, poaching attempts increases by .45 standard deviations. Therefore, for this research, the regression equation is as follows: Poaching attempts = -.29 + (.39 * Psychopathy) + (.32 * Sociosexuality). However, the assumption of homoscedasticity was violated to some extent, rendering the p-values and the estimates of model parameters(*b*) susceptible to bias.

Table 3

Regression coefficients of Psychopathy and Sociosexuality on Poaching attempts

Variable	*B*	β	*SE*
Constant	-.29		.39
Psychopathy	.39*	.23	.17
Sociosexuality	.32**	.45	.07
R^2	.32		

Note: N = 77; *p<0.05 **p < 0.01 ; *B*- unstandardized coefficients; β- standardized coefficient value

To investigate if sociosexuality moderated the relationship between psychopathy and poaching attempts, a simple moderation analysis was performed using PROCESS. The outcome variable for the analysis was poaching attempts. The predictor variable for the analysis was psychopathy, and the moderator variable was sociosexuality.

The model establishes psychopathy, sociosexuality, and psychopathy*sociosexuality as significant predictors of poaching attempts (R^2= 0.42) and F(3, 73)= 17.76 (p<0.001). The value of R^2 tells us that 42% of the variation in poaching attempts can be accounted for by psychopathy, sociosexuality, and the interaction effect between psychopathy and sociosexuality. The value of F (3,73) = 17.76 is significant at p<0.001, which confirms the statistical significance of the regression model and rejects this result to chance factor alone.

Table 4

Moderation analysis with Sociosexuality as the moderator between Psychopathy and Poaching attempts

Variable	*B*	*SE*	*95%CI*	*P*

			LL	UL	
Constant	1.39	.09	1.21	1.58	.000
Psychopathy	.40	.16	.08	.72	.010
Sociosexuality	.28	.07	.15	.42	.000
Psychopathy x Sociosexuality	.38	.10	.17	.58	.000
R^2	.42				

Note: N = 77; *p<0.05 **p < 0.01; *B*- unstandardized coefficients; β- standardized coefficient value

The unstandardized coefficient of psychopathy *B* = .40, t(73) = 2.52, p< .01 indicates that one-unit increase in psychopathy would lead to a .40 unit statistically significant increase in poaching attempts with a standard error of .16. The unstandardized coefficient of sociosexuality *B* = .28, t(73) = 4.28, p< .001 indicates that one-unit increase in sociosexuality would lead to a .32 unit statistically significant increase in poaching attempts with a standard error of .07. The unstandardized coefficient for the interaction effect psychopathy*sociosexuality is *B* = .38, SE = .10, t(73) = 3.59, p < .001 (see Table 4).

From the conditional effects of psychopathy on poaching at different levels of the moderator sociosexuality, the following interpretations can be made -

a) When sociosexuality is low, there is a non-significant negative relationship between psychopathy and poaching attempts, *B* = -1.44, 95% CI [-.58, .29], t(73) = -.66, p = .51.

b) At the mean value of sociosexuality, there is a significant positive relationship between psychopathy and poaching attempts, *B* = .40, 95% CI [.08, .72], t(73) = 2.52, p = .01.

c) When sociosexuality is high, there is a significant positive relationship between psychopathy and poaching attempts, *B* = .95, 95% CI [.50, 1.39], t(73) = 4.25, p = .000.

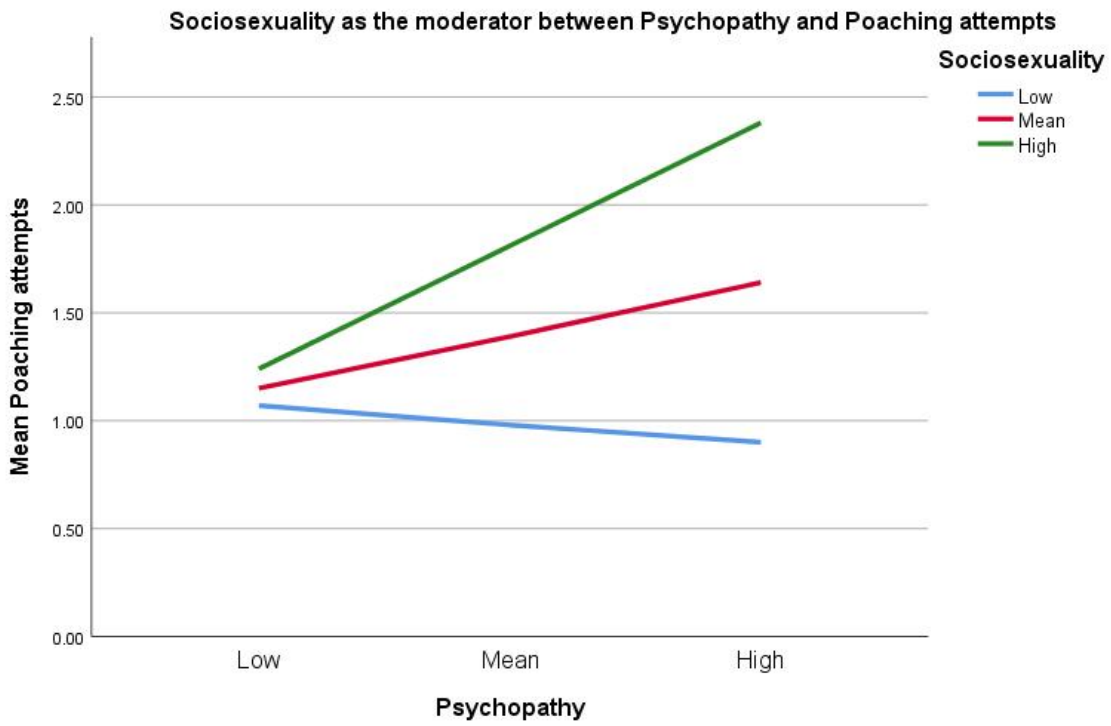

Figure 2: A graph of moderation with Sociosexuality as the moderator between Psych opathy and Poaching attempts

When score on sociosexuality is at least 2.67, psychopathy and poaching attempts are significantly related, B = .32, t(73) = 1.99, p = .05. As sociosexuality increases, the relationship between psychopathy and poaching attempts becomes more positive with the highest score in sociosexuality, B = 1.69, t (73) = 4.27, p < .001.

A regression analysis (using the enter-method) was carried out using Machiavellianism, narcissism, and dark triad as predictors of self-perceived mate value (Table 5). The model establishes only narcissism as a significant predictor of self-perceived mate value (R^2= 0.28) and F(3, 73)= 9.36, p<0.001. The value of R^2 tells us that 28% of the variation in mate value can be accounted for by the predictors. The value of F (3,73) = 9.36 is significant at p<0.001, which confirms the statistical significance of the Regression Model and rejects this result to chance factor alone.

Table 5

Regression coefficients of Machiavellianism, Narcissism, and DT on Self-perceived Mate Value

Variable	*B*	β	*SE*

Constant	1.99**		.59
Machiavellianism	.39	.28	.47
Narcissism	.72**	.47	.28
DT	-.11	.52	.52
R^2	.28		

Note: N = 77**p < 0.01; *B*- unstandardized coefficients; β- standardized coefficient value; DT – Dark Triad

The unstandardized coefficient of narcissism *B* = .72, p< .01 indicates that one-unit increase in narcissism would lead to a .72 unit statistically significant increase in self-perceived mate value with a standard error of .28. The standardized coefficient β = .47 indicates that as narcissism increases by one standard deviation, self-perceived mate value increases by .47 standard deviations. Therefore, the regression equation is as follows: Self-perceived mate value = 1.99 + (.72 * Narcissism). However, the assumption of homoscedasticity was violated to some extent, rendering the p-values and the estimates of model parameters(*b*) susceptible to bias.

1) Independent sample's t-test and Mann-Whitney U-Test

Finally, an independent samples t-test was carried out to see if there is a significant gender difference in sociosexuality and mate poaching experiences. A significant gender difference was found in Sociosexuality, t(75) = 3.70 p = 0.00, and Psychopathy, t(75) = .11, p = 0.00, with males scoring higher than females in both the variables. No significant sex differences in self-perceived mate value, mate poaching, and DT traits except psychopathy were found.

Table 8

Comparison of Male and Female scores on Sociosexuality

	Male		Female				
Variables	M	SD	M	SD	t(75)	p	Cohen's *d*
Sociosexuality	3.85	1.52	2.57	1.28	3.70	.000	0.94
Mate Value	4.84	1.12	4.89	.81	-.30	.23	.05
Poaching_attempt	1.85	1.13	1.35	.94	1.96	.07	.04
Successful_poaching	1.60	1.93	.98	1.86	1.14	.21	.33
Poaching victim	2.25	1.52	2.07	1.27	.36	.72	.12
Poaching target	1.85	1.57	2.40	1.46	-1.4	.16	.36
Successfully poached	1.35	1.98	1.07	1.51	.57	.57	.16
Machiavellianism	3.07	.75	2.98	.60	.54	.59	0.13
Narcissism	3.11	.61	2.98	.52	.82	.41	0.22
Pyschopathy	2.57	.52	2.10	.58	.11	.00	0.85
DT(overall)	4.40	.72	4.12	.67	.15	.12	0.40

Note: Cohen's d represents effect size

Since the assumption of normality was violated for some variables and the sample size for Males was small, a non-parametric equivalent, the Mann-Whitney U test, was also conducted to assess sex differences across the variables for the sake of thoroughness. The test revealed statistically significant differences in 'Sociosexuality' (U = 844.5, p = 0.0014), 'Poaching_attempt' (U = 723.5, p = 0.0186), and Psychopathy (U = .81, p = .006) between males and females. However, no significant sex differences were observed in 'Mate Value'

(U = 614.5, p = 0.6077), 'Successful Poaching' (U = 657.0, p = 0.2324), 'Poaching Victim' (U = 574.5, p = 0.9605), 'Poaching Target' (U = 434.0, p = 0.0900), and 'Successfully Poached' (U = 550.0, p = 0.807956), and the Dark Triad traits except psychopathy.

Discussion

Using an evolutionary framework, this study aimed to examine the association between the Dark triad and mate poaching experiences in short-term relationships and whether this association is moderated by self-perceived mate value and sociosexuality. Additionally, it also assessed sex differences among sociosexuality, self-perceived mate value, and mate poaching.

Firstly, psychopathy was identified as having a significant positive correlation with, and as a significant predictor of, mate poaching attempts. This aligns with findings from previous research like that of Kardum et al. (2015), which also highlighted psychopathy as a key predictor of mate poaching behaviors. This suggests that certain traits inherent in psychopathy, such as manipulative skills, may be crucial in initiating and maintaining several superficial relationships, a characteristic beneficial for mate poaching. From an evolutionary standpoint, as proposed by Wiebe (2004), psychopathy is seen as a trait that evolved favoring mating efforts over parenting, marked by traits like manipulativeness for initiating numerous relationships, promiscuity to potentially increase offspring, and low conscientiousness, which facilitates exiting relationships and neglecting parental duties. Other research, including studies by Jonason et al. (2010) and Adams, Luevano et al. (2014), supports the idea that Dark Triad traits, particularly psychopathy, are linked to short-term, exploitative mating strategies, such as engaging in sexual relationships outside one's primary relationship, especially in men. Consistent with this, our study also found significant sex differences in psychopathy, with men scoring higher than women. Additionally, Erik & Bhogal (2016) found that high levels of psychopathy are strongly predictive of the intent to engage in mate poaching.

DT traits also had a significant positive correlation with poaching success. Previous studies have found DT to be important for poaching success, especially in women, suggesting that these traits may provide different information to men and women about their potential sexual partners (Kardum et al., 2015). For instance, high Dark Triad traits in men could be perceived by women as a sign of potential violence in relationships, whereas in women, these traits might be interpreted by men as indicators of their sexual openness. However, due to the underrepresentation of males in the sample, a direct comparison between the sexes could not be made.

Additionally, we found that narcissism had a significant positive relationship with being the target of poaching. This is in alignment with a previous study (Kardum et al, 2015) that has found a significant relationship between narcissism and being the target of mate-poaching, particularly in women. However, being the target of poaching is difficult to verify as it may be the subject of perceptual bias that is itself under the influence of personality factors.

The current study did not find any significant relationship between DT traits and being successfully poached. This is partially inconsistent with previous literature that suggests that DT traits, especially psychopathy, are significant predictors of being successfully poached in men but not in women (Kardum et al., 2015). The possible reason for this insignificant finding could be the underrepresentation of males in the sample.

Similarly, no significant relationship was found between the DT and being the victim of poaching. This contradicts previous literature (e.g., Kardum et al. 2015) that found the victims of poaching to be significantly predicted by DT composite in both sexes. However, they also mentioned that being the victim of poaching is the least predictable aspect of mate-poaching and that it is also difficult to verify.

The current study also found narcissism to be a significant positive predictor of self-perceived mate-value. This aligns with recent findings by Borráz-León & J. Rantala (2021), which indicate that narcissism leads to higher self-perceived attractiveness and mate value. Similar conclusions have been drawn in other research, such as Zeigler-Hill and Trombly (2018), where a positive link was observed between narcissism and self-reported mate value. The nature of narcissistic individuals, often marked by an exaggerated sense of self-importance, intelligence, social impact, and physical appeal (Brown & Zeigler-Hill, 2004; Campbell et al., 2002), may account for their elevated self-perception in mate value.

Existing research indicates that individuals exhibiting Dark Triad traits often lean towards short-term mating strategies (Jonason, Li et al., 2009; Jones & de Roos, 2017). Consistently, this study identified a significant positive link between psychopathy, a Dark Triad trait, and sociosexuality. Burtaverde et al. (2021) have pointed out that this relationship between psychopathy and short-term mating is influenced by sexual disgust and mate value, suggesting that highly psychopathic individuals with high mate value tend to be more sexually active due to lower levels of sexual disgust. Furthermore, research by Patch & Figueredo (2016) revealed that factors like early life stress and an antagonistic approach to social interactions can heighten psychopathy, subsequently leading to more liberal attitudes towards casual sexual

relationships. Thus, the connection between psychopathy and sociosexuality is complex and influenced by various factors not fully explored in this study.

Drawing from previous research suggesting associations between Dark Triad traits, mate value, and a preference for short-term relationships (e.g., Burtaverde, 2021), as well as between Dark Triad traits, self-perceived mate value, and the likelihood of mate poaching (e.g., Erik and Bhogal, 2016), this study examined the moderating role of self-perceived mate value between Dark Triad traits and mate poaching experiences. However, this anticipated moderating effect was not observed. Furthermore, considering the established links between Dark Triad traits, particularly psychopathy, with short-term mating preferences and unrestricted sociosexuality (e.g., Jonason, Li et al., 2009; Burtaverde, 2021), and the effectiveness of mate poaching as a strategy for securing short-term sexual partners, the study also explored the moderating role of sociosexuality in the relationship between the Dark Triad traits and mate poaching experiences. This approach aimed to create a more coherent understanding of these complex interactions. The results indicated that sociosexuality moderated the relationship between psychopathy and poaching attempts – psychopathy had a significant positive relationship with poaching attempts only at mean values and high values of sociosexuality. This suggests that individuals who score high on psychopathy are likely to make more poaching attempts for a short-term sexual relationship only if they have an orientation towards short-term mating. According to sexual strategies theory (Buss and Schmitt, 1993), people have a variety of mating strategies that depend on many factors. Therefore, individuals possessing high psychopathy will not indiscriminately pursue mate poaching as a mating strategy. They might look for exploitative opportunities in a long-term relationship context. However, future research is required to understand the sexual strategies pursued by people with high psychopathy but low short-term mating orientation.

The current study found significant sex differences in sociosexuality, with males scoring higher than females. This is consistent with a cross-national study that found men to be more unrestricted in sociosexuality (i.e. score higher on sociosexuality) than women across all 48 nations included in the study (Schmitt, 2005). Other studies have shown (eg., Hyde 1993; Townsend 1995; Clark & Hatfield 1989) that men tend to have a more positive attitude towards casual, low-investment sex, fantasize about having sex with multiple partners (eg., Malamuth, 199 behaviorally seek short-term mateships (eg., Wiederman 1997) more than women do. This is in accordance with sexual strategies theory

(Buss and Schmitt, 1993) which suggests that because of the low investment of men to produce viable offspring as compared to women (women are minimally required to invest in gestation, placentation, and lactation), the reproductive benefits of mating with multiple partners are also greater for men. Therefore, men are more likely to be unrestricted in sociosexuality. Consistent with this, our study also found a significant sex difference in poaching attempts, with males being more likely to attempt mate poaching than females, possibly owing to the differences in evolutionary advantages conferred by mate poaching on males and females. Finally, a lack of sex difference in other mate poaching variables despite men being more inclined towards short-term mating orientation suggests that it is important to account for local environmental conditions and cultural factors that can influence which sexual strategies are pursued by both men and women, as suggested by Gangestad & Simpson (2000) in their strategic pluralism theory.

Limitations and Future Directions

The current study has several potential limitations. The results were based on self-report measures, which are susceptible to social desirability bias. However, studies have indicated that when participants' identities are kept confidential, the reliability of their reported information tends to increase (Fishbein & Pequegnat, 2000). Participants were reminded multiple times to respond honestly and that their responses will remain confidential and anonymous. Secondly, since the data were correlational in nature, the causal relationship between the dark triad traits and mate poaching experiences cannot be claimed. In this regard, future research might benefit from employing an experimental design.

Additionally, as the sample mostly comprised of young college-educated students, the generalizability of the findings might be limited. Therefore, a larger sample, including a broader set of demographics, might be used in future research. Furthermore, the sample mostly consisted of heterosexual individuals. Future research is required to further the understanding of mating dynamics in the non-heterosexual population.

Due to the unequal representation of males and females in the sample, separate analyses for the sexes could not be carried out, preventing the researcher from studying some of the crucial sex differences in mating patterns. Therefore, comparative studies between males and females are needed to be carried out.

Sociocultural factors like gender roles, socialization, the dominant mating style of the country (eg., monogamy, polygamy), the political and economic climate, taboo about casual sex that might potentially influence the results were not accounted for. Therefore, future research should focus on how these

factors influence mating psychology and if alternative explanations for the results exist.

Future studies should also tap on the biological characteristics that might underlie some of the sex differences in the personality characteristics related to mating.

Conclusion

In conclusion, our study provides substantive insights into the complex interplay between Dark Triad traits, particularly psychopathy, and various aspects of mate poaching within short-term relationship contexts. Consistent with existing literature, psychopathy emerged as a significant factor influencing mate poaching attempts and successes, underscoring its adaptive value in mating strategies that prioritize mating efforts over parenting investment. This evolutionary perspective is supported by the observed sex differences, with men displaying higher levels of psychopathy and sociosexuality, aligning with theoretical and empirical expectations regarding male mating strategies.

While narcissism was linked to being targeted for mate poaching, the anticipated moderating roles of self-perceived mate value in the relationship between Dark Triad traits and mate poaching were not supported. This highlights the need for a nuanced understanding of how individual self-assessment intersects with personality traits to influence mating behaviors.

Our findings also emphasize the role of sociosexuality in moderating the relationship between psychopathy and mate poaching attempts, suggesting that high psychopathy levels are not uniformly predictive of mate poaching across all individuals. Instead, a predisposition toward short-term mating may activate the mate poaching tendencies of individuals with high psychopathy. This is a novel finding which needs to be further explored.

The significant sex differences found in sociosexuality and mate poaching attempts further reinforce the notion that evolutionary benefits and mating strategies differ across sexes, necessitating a deeper examination of sexual orientation and the mating strategies pursued by both sexes.

While our study advances the understanding of Dark Triad traits in mating dynamics, it is not without limitations. The reliance on self-reported data, the predominantly young and educated sample, and the lack of representational parity across sexes underscore the necessity for more diverse and experimentally robust future research. Additionally, considering the potential influence of sociocultural factors on mating psychology, future investigations would benefit from a more integrative approach that encompasses these variables.

This study contributes to the overall body of research regarding mating psychology in humans. Also, as per our knowledge, this is the first study that investigated the relationship between the Dark Triad traits and mate poaching experiences in the Indian context. Considering that the DT traits may function differently in non-Western societies (eg., Jonason et al., 2019), it is important to replicate the relationship between these traits and various behavioral outcomes in non-Western societies to obtain more knowledge on the universality and particularities of the DT traits. Finally, mating being one of the significant domains of a sexually reproducing species, a scientific understanding of it, especially in a complex species like humans, will enable us to better understand some of the social evils, from passion crimes to sexual exploitation and infidelity and contribute to the overall good of the society.

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