



Men's Psychopathy and Mating Effort in Intimate Relationships: Links with Jealousy and Sexual Coercion

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Received: 4 May 2022 / Revised: 8 March 2023 / Accepted: 10 March 2023 / Published online: 28 March 2023
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Abstract

Psychopathic men sometimes direct sexual aggression toward prospective female partners (e.g., using sexually aggressive behavior on a first date) and such behavior may be indicative of a high mating effort strategy. Less research has investigated the role of psychopathy in men's use of sexually coercive behaviors in their intimate relationships (e.g., sexual aggression directed toward one's long-term romantic partner) or the relationship processes that might facilitate such behavior. The present study surveyed 143 heterosexual dyads to assess men's psychopathic traits and their relation to self-reports and partner-reports of men's jealousy and partner sexual coercion. Results across informant models showed that men's psychopathy was associated with higher suspicious jealousy and partner sexual coercion. Suspicious jealousy also indirectly linked men's psychopathic traits with engaging in partner sexual coercion. The findings provide novel insights using dyadic data and suggest that both psychopathy and jealousy are important for men's engagement in partner sexual coercion.

Keywords Psychopathy · Jealousy · Mating effort · Paternity uncertainty · Relationship dyads

Introduction

Psychopathy is an important individual difference factor for understanding unethical, antisocial, and violent behavior (Blais et al., 2014; DeLisi, 2018; Harris et al., 2015), with constituent traits that include deception and grandiosity, callousness and disaffiliation, impulsivity and sensation seeking, and aggression and rule-breaking behavior (Hare et al., 2018; Paulhus et al., 2016). The consequences of psychopathy for relationship functioning, in general, and intimate relationships, in particular, also are receiving increased research attention (see Forth et al., 2022, and other articles in a recent special issue on the topic). Psychopathic individuals—most often men—engage in diverse acts of control, abuse, and coercion in their intimate relationships, often inflicting psychological and physical costs on their partners (Forth et al., 2022; Humeny et al., 2021; Leedom et al., 2012). In addition, psychopathic men show increased jealousy toward and

possessiveness of their intimate partners (Harris et al., 2011), but also are routinely unfaithful and engage in short-term sexual relationships (Kirkman, 2005).

An evolutionary perspective may help conceptualize the co-occurrence of jealousy, sexual coercion, and disloyalty in the intimate relationships of psychopathic men by drawing on the link between psychopathy and the concept of mating effort (Brazil & Volk, 2022; Harris et al., 2007). Mating effort refers to the time, energy, and resources that organisms devote toward acquiring mating opportunities (Dixson, 2012; Trivers, 1972). Mating effort can function not only to obtain additional mates but also to retain current ones, via mechanisms such as partner attraction (Cuthbert, 1985; Shackelford et al., 2005a), aggression or threats toward same-sex competitors (Puts et al., 2016; Robbins, 2003), and partner sexual coercion (Emery Thompson & Alvarado, 2012; Starratt et al., 2008). Previous research has applied the concept of mating effort to understand how psychopathy might influence obtaining new mates (Jonason et al., 2009), but less research has examined how mating effort also could be applied to understand how psychopathy may influence mating behaviors in existing relationships, including control, jealousy, and sexual coercion (Buss & Shackelford, 1997; Shackelford et al., 2006; Wilson & Daly, 1993). The present study adds to this limited research on psychopathy and mating effort within intimate

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relationships. Our study assesses men's psychopathic traits and their use of partner sexual coercion, and men's jealousy using both self-reports and partner-reports. This approach might provide additional insights into the controlling, abusive, and coercive behaviors of psychopathic men.

Sexual Coercion, Mating Effort, and Intimate Relationships

Sexual coercion is one mechanism of sexual selection that has shaped the traits and behaviors available to members of many species (Andersson & Iwasa, 1996). Sexual coercion can take several forms across species, including but not limited to forced copulation, sequestering females, and punishment of females for associating with other males (for a review of tactics in apes, see Emery Thompson & Alvarado, 2012). In apes, including humans, these tactics of sexual coercion often occur in the context of an existing relationship (Emery Thompson & Alvarado, 2012; Tjaden & Thoennes, 2000). Thus, the various behaviors of sexual coercion can be construed as mating effort to maintain frequent and exclusive sexual access to one's partner (Shackelford et al., 2006; Wilson & Daly, 1993).

In humans, sexual coercion includes behaviors that function to directly influence having sex with one's partner, either via manipulation, pressuring, or force (Shackelford & Goetz, 2004). We refer to these behaviors as relationship or partner sexual coercion. In addition to these direct behaviors, there are also indirect processes and behaviors associated with sexual coercion (Emery Thompson & Alvarado, 2012). For example, guarding one's partner from potential rivals via vigilance, concealing one's partner, and monopolizing their time (Buss & Shackelford, 1997). Jealousy also serves to alert an individual to potential threats of a partner's infidelity and can motivate frequent in-pair sex (Goetz & Shackelford, 2006). Across cultures, sociolegal practices and rules dictate the consequences of infidelity, especially female infidelity, which often include violent retaliation against rivals and/or the offending partner (Wilson & Daly, 1993).

The tendency for men to monitor and punish women for infidelities may be understood with reference to sexual conflict theory, which describes how the sexes diverge in their reproductive interests, leading to sex-differentiated mating tactics (see Camilleri & Quinsey, 2012). One source of sexual conflict is a consequence of sex differences in parental certainty. Females are certain that offspring from a sexual union is genetically their own, whereas males can never be certain, leading to the adaptive problem of paternity uncertainty (Goetz et al., 2008). Selection pressures from sexual conflict may have produced direct and/or indirect partner coercion in humans, particularly among men for which paternity certainty is a concern (Buss, 2017; Camilleri & Quinsey, 2012). Thus, men may deploy coercive tactics, including partner

sexual coercion, to mitigate their risk of investing resources in genetically unrelated offspring. These tactics, however, are expected to be context specific. For instance, specific cues or past risk of female infidelity is one of the strongest predictors of men's use of sexual coercion in their relationships (Camilleri & Quinsey, 2009a; Goetz & Shackelford, 2006, 2009).

Although men may have mechanisms for detecting and responding to paternal uncertainty with increased mating effort, there also are individual differences in men in the propensity for sexual coercion and mating effort (Lalumière et al., 2005). One important individual difference affecting sexual coercion propensity is psychopathy (Knight & Guay, 2018). Men's psychopathic traits also have been theorized and found to be associated with higher levels of mating effort (Brazil & Volk, 2022; Harris et al., 2007; Lalumière & Quinsey, 1996). This work, however, has focused on mating effort as it applies to seeking new mates, and less in the context of mating effort in existing intimate relationships, including its association with partner sexual coercion.

Relationship Sexual Coercion and Men's Psychopathy

Men's psychopathy is associated with sexually aggressive attitudes and behaviors (Kosson et al., 1997; Mouilso & Calhoun, 2012; Watts et al., 2017), which suggests a link with higher levels of mating effort that involves the acquisition of new mates (Lalumière et al., 2005). Studies assessing relationship or partner-directed sexual coercion and psychopathy might also suggest a link with mating effort in intimate relationships specifically. A few studies have examined whether men's psychopathy is associated with partner sexual coercion. Camilleri and Quinsey (2009b) used the Tactics to Obtain Sex Scale (TOSS; Camilleri et al., 2009) and showed that community, college, and incarcerated men higher in psychopathy reported an increased willingness to use subtle coaxing and serious coercive tactics to obtain sex from their partners. They also found that men convicted of partner rape scored higher on the Psychopathy Checklist–Revised (PCL–R; Hare, 2003) than men convicted of non-sexual partner assault. Jones and Olderbak (2014) used the TOSS in different relationship scenarios, including one's partner, a date, and a stranger. Psychopathy was strongly associated with the likelihood of using coercive tactics in all three relationship scenarios, which included one's partner. The findings suggest that men higher in psychopathic traits might be willing to use coercive tactics to obtain sex regardless of the type of relationship. Similar results were obtained by others who have examined psychopathy and sexual coercion across relationship type (e.g., Pegram et al., 2018).

Taken together, these studies provide evidence of a link between psychopathic traits and sexual coercion in committed intimate relationships, which adds to the research

evinced a link between psychopathy and sexual coercion, more broadly (Knight & Guay, 2018). Although informative, this research is limited in that it has focused on men's self-reports of their propensity/likelihood to use sexual coercion in their intimate relationships. Thus, reports from both men and their partners concerning the frequency of men's sexually coercive acts may be particularly informative (Shackelford & Goetz, 2004). Additionally, partner sexual coercion is a direct and extreme tactic that men may deploy in cuckoldry prevention. Other less extreme tactics that aim to monitor and control a partner's sexual behavior may also be important, including jealousy (Buss & Shackelford, 1997; Camilleri & Quinsey, 2012; Wilson & Daly, 1993).

Jealousy and Men's Psychopathy

Jealousy is a relevant emotion for gauging mating effort toward partners. Jealousy also may be particularly important when considering partner sexual coercion because of its associations with feelings of entitlement and control (Wilson & Daly, 1993). Jealousy is a normal relationship experience that occurs in response to a real or imagined threat to the relationship (Pfeiffer & Wong, 1989; Rydell & Bringle, 2007) and is multidimensional (Pfeiffer & Wong, 1989). A transactional perspective on relationships suggests that there are reactive and suspicious forms of jealousy (Rydell & Bringle, 2007). Reactive jealousy involves emotional responses to concrete events that threaten a relationship (e.g., seeing one's partner flirt with someone else), whereas suspicious jealousy involves over-responding to even minor cues to a partner's interest in someone else and often is accompanied by excessive thoughts and controlling behavior (e.g., searching a partner's belongings for evidence of infidelity). Reactive jealousy is often associated with positive relationship outcomes including satisfaction and closeness, whereas suspicious jealousy is often associated with negative relationship outcomes including negative emotions about the relationship (Attridge, 2013; Dandurand & Lafontaine, 2014).

Traditionally, psychopathic individuals have been perceived as being devoid of emotions (see Hoppenbrouwers et al., 2016, for a review). Combined with a tendency to move quickly from one relationship to another (Jonason et al., 2009), one possibility is that psychopathic men simply do not care about their partners and will not invest time and energy in mating effort directed toward them, and hence may have fewer experiences of jealousy. Recent work, however, has found that psychopathy is accompanied by several strongly experienced emotions such as anger and contempt (Garofalo et al., 2019; Kosson et al., 2020). It is possible that jealousy may be another emotion that accompanies psychopathy.

Psychopathy has indeed been consistently positively associated with jealousy, in particular with the suspicious form of jealousy but not the reactive form of jealousy (Barelds

et al., 2017; Chin et al., 2017; Massar et al., 2017). Why this is the case is unclear, but one possibility is that reactive jealousy may capture a positive concern for losing a partner one cares about (partner-centric concern; e.g., "I can't lose *them*"), whereas suspicious jealousy may capture a more negative and possessive approach with self-serving concerns about losing one's partner (self-centric concern; e.g., "They won't leave *me*"). From this perspective, it could be expected that psychopathic men are suspiciously but not reactively jealous. Psychopathy also has been found to be associated with attempting to evoke jealousy in one's partner as a form of manipulation and control (Massar et al., 2017) and with greater mate retention efforts (Jonason et al., 2010), particularly those that are cost-inflicting (e.g., punishment). With greater incidence of both being poached and having their mates poached by others (Jonason et al., 2010), psychopathic men might perceive their exclusive sexual access to their romantic partners as threatened and respond with these various cuckoldry prevention tactics. These findings together suggest that psychopathic men might perceive their relationships as tenuous and respond with jealousy and control that motivates additional mating effort, albeit coercive mating effort. Further, suspicious jealousy may motivate increased use of partner sexual coercion as a form of mating effort. Critical to unpacking these associations is the possible divergence of men's and women's reports of men's jealousy and sexual coercion.

Self-Report versus Partner-Report and the Present Study

There are reasons to question the veracity of men's reports of their own controlling behaviors, jealousy, and sexual coercion in relationships, including a reluctance to acknowledge these issues or a tendency to underreport their frequency or severity (Dobash et al., 1998; Shackelford et al., 2005b). When assessing psychopathy, the issues might be even more complicated. For instance, there is the possibility that the deceptive, callous, and impulsive tendencies of psychopathic men preclude them from viewing their own behavior as sexually coercive. Additionally, psychopathic men might have an inflated self-view and, therefore, may not perceive themselves as jealous (Hare, 2003). As a result, it is important to examine and compare men's self-reports directly with women's reports of their male partner's jealousy and sexual coercion. Women's reports of their partner's jealousy and sexual coercion may reflect more accurately the incidence of such behaviors, particularly in the case of women partnered to men higher in psychopathic traits. There is also a need for research examining the joint reports of psychopathic men and their romantic partners to better understand these abusive and controlling relationships (Forth et al., 2022; Kirkman, 2005).

The present study examines the associations between men's psychopathy and their jealousy and sexual coercion in a sample of heterosexual adults—securing and comparing both self-reports and partner-reports of men's jealousy and sexual coercion. Specifically, we were interested in assessing whether men's psychopathy would be associated with sexual coercion from both men's and women's reports. In addition to this direct link, we examined whether the forms of jealousy—reactive jealousy and/or suspicious jealousy—mediated the association between men's psychopathy and sexually coercive behavior, which could provide evidence that psychopathy and jealousy might lead to sexual coercion and thus mating effort in the intimate relationship. Based on prior research, our hypotheses were that men's psychopathy would be associated with both suspicious jealousy and sexually coercive behavior. Further, we expected that suspicious jealousy would mediate the association between men's psychopathy and sexually coercive behavior for both men's and women's reports. These findings were expected to persist even after controlling statistically for the age of either partner or the relationship length.

Method

Participants and Procedure

A total of 296 men and women comprising 148 heterosexual couple dyads were surveyed using the Prolific online platform, who participated in exchange for financial compensation (\$10.00 USD). All participants reported that they were in a committed heterosexual relationship for a minimum of 6 months. Participants completed measures of psychopathy, jealousy, and sexual coercion via a secure website. Participants were instructed to provide this information separately (i.e., each participant was not supposed to be aware of the specific responses provided by his or her partner). Missing data for five men resulted in 143 heterosexual dyads with complete data across both male and female informants. Men's age ranged 18–60 years ($M = 27.20$, $SD = 7.46$) and women's age ranged 18–58 years ($M = 25.84$, $SD = 6.95$). Both men and women provided an estimate of the length of their relationship in months, which for women's reports ranged 2–228 months ($M = 48.71$, $SD = 43.18$) and for men's reports ranged 6–228 months ($M = 47.69$, $SD = 42.33$). Thus, the average relationship length was approximately four years.

Measures

Demographic information was collected including sex of each dyad member (male or female), age (self-reported by each dyad member), and relationship length (self-reported by each dyad member). Men and women then completed

a series of questionnaires that were focused on the man in the relationship dyad. Men completed self-report versions of psychopathic traits, jealousy, and sexual coercion in their relationship. Women completed partner-report versions of men's jealousy and men's use of sexual coercion in their relationship.

The Self-Report Psychopathy Scale: Short Form 4 (SRP:SF; Paulhus et al., 2016) was used to measure men's psychopathic traits. The SRP:SF contains 29 items and was designed to assess psychopathic traits in non-institutionalized samples and produces the same factor structure and converges with the Psychopathy Checklist–Revised (PCL–R; Hare, 2003). Participants rated items on a scale ranging from 1 (*disagree strongly*) to 5 (*agree strongly*). The items can be partitioned into four distinct facets, including Interpersonal (e.g., “A lot of people are ‘suckers’ and can easily be fooled”), Affective (e.g., “I don't bother to keep in touch with my family any more”), Lifestyle (e.g., “I've often done something dangerous just for the thrill of it”), and Antisocial (e.g., “I have tricked someone into giving me money”). The PCL family of measures also provides a superordinate factor of overall psychopathic traits (Neumann et al., 2007).

The Multidimensional Jealousy Scale (MJS; Pfeiffer & Wong, 1989) is a 24-item measure that was used to assess men's jealousy by self-report and partner-report. The MJS has three subscales that assess emotional, cognitive, and behavioral forms of jealousy. The cognitive and behavioral subscales can be combined to form suspicious jealousy (16 items), whereas the emotional subscale comprises reactive jealousy (8 items). Reactive jealousy items are rated on a scale ranging from 1 (*very pleased*) to 7 (*very upset*). Participants are asked to consider “How would you emotionally react to the following situations?” and are presented with items such as “X [current partner] smiles in a friendly manner to someone of the opposite sex.” For cognitive and behavioral items, participants rate items on a scale ranging from 1 (*never*) to 7 (*always*). For cognitive items, participants are asked to consider “How often do you have the following thoughts about X [current partner]” and are presented with items such as “I suspect that X may be attracted to someone else.” For behavioral items, participants are asked to consider “How often do you engage in the following behaviors?” and then rate items such as “I question X about her whereabouts.” For women's partner-report of men's jealousy, the wording was changed to reflect that we were asking women about their male partners' emotions, thoughts, and behaviors regarding jealousy. This study focuses on the Reactive (emotional) and Suspicious (cognitive and behavioral) Jealousy subscales (Attridge, 2013; Rydell & Bringle, 2007).

The Sexual Coercion in Intimate Relationships Scale (SCIRS; Shackelford & Goetz, 2004) is a 34-item scale that was used to assess the frequency of men's engagement in acts of sexual coercion in their current intimate relationship

within the past month. Items are rated on a six-point scale ranging from 0 (*Act did not occur in the past month*) to 5 (*Act occurred 11 or more times in the past month*). Different facets of coercion are assessed by the questionnaire, including verbal pressure (e.g., “I told my partner that if she loved me, she would have sex with me”), manipulation (e.g., “I threatened to have sex with another woman if my partner did not have sex with me”), and force (e.g., “I physically forced my partner to have sex with me”). Women completed the 34-item partner-report version of the SCIRS (e.g., “My partner forced me to have sex with him”), with the same six-point response scale as the self-report version. The total SCIRS score was used in the present study for both men’s self-report and women’s partner-report.

Data Analysis

We adopted a structural equation modeling (SEM) approach to the measurement of men’s overall psychopathic traits and its relationships to the outcome variables (Neumann et al., 2007, 2013). An a priori power analysis suggested we needed a minimum of 100 participants to detect a small effect with our model complexity. For the measurement model of psychopathic traits, the four SRP:SF subscales were set to load onto a latent men’s psychopathic traits factor and the variance of the latent factor was set to one. Two separate SEMs were then modeled: one for men’s self-report and one for women’s partner-report. In both cases, men’s latent psychopathy was the independent variable as we did not assess women’s partner-report of men’s psychopathic traits. For both models, men’s partner sexual coercion (either self-report or partner-report) was treated as the outcome variable and men’s jealousy (either self-report or partner-report) was treated as a mediating variable. Given previous interest in how the different facets of psychopathy relate to relationship abuse and sexual coercion (Debowska et al., 2015; Swogger et al., 2012), we also provide models of the manifest facet variables in the supplemental material.¹

A two-index strategy was adopted to assess model fit (Hu & Bentler, 1999). We chose the comparative fit index (CFI) and standardized root-mean-square residual (SRMR) as indices of relative and absolute fit, respectively. To avoid falsely rejecting viable latent variable models, we chose the traditional cutoffs of $CFI \geq 0.90$ and $SRMR \leq 0.08$ as indicating acceptable fit (Marsh et al., 2004). Descriptive statistics and bivariate correlations among manifest variables were conducted in SPSS version 27, and the SEMs were conducted

using Mplus version 8.5 (Muthén & Muthén, 2017). Given the non-normal distribution of responses to relationship sexual coercion (Shackelford & Goetz, 2004), we used maximum likelihood estimation with robust standard errors (MLR). Standardized direct and indirect coefficients with 95% confidence intervals are reported for analyses.

Results

Bivariate correlations, descriptive statistics, and internal consistencies among all manifest variables are provided in Table 1. As shown on the diagonal, concordance of men’s and women’s reports of the same construct—such as men’s sexual coercion or relationship length—was generally strong, ranging from a low of 0.30 for reactive jealousy to a high of 0.93 for relationship length.² This suggests that partners were similar but not identical in their assessments of these variables. Of the covariates, relationship length was not associated with any other model variable, but both men’s age and women’s age were negatively associated with men’s psychopathic traits.

The measurement model of men’s latent overall psychopathic traits provided a good fit ($CFI = 0.97$, $SRMR = 0.03$). Each of the indicators loaded significantly with the standardized loadings ranging 0.63–0.90 (Supplemental Fig. 1). The latent psychopathic traits factor was used for the primary analyses reported below and analyses using the manifest psychopathic trait facets are provided in the supplemental material (Supplemental Figs. 4, 5, 6, and 7).

Men’s Self-Reports

The first SEM examined men’s self-report of psychopathic traits, jealousy, and relationship sexual coercion. The overall model showed acceptable fit ($CFI = 0.93$, $SRMR = 0.05$). As shown in Fig. 1, the psychopathic traits factor was positively associated with relationship sexual coercion and suspicious jealousy. Psychopathic traits were positively but not significantly associated with reactive jealousy. Regarding the links between jealousy and sexual coercion, relationship sexual coercion was positively associated with suspicious jealousy and negatively associated with reactive jealousy. Results of the indirect effects showed that the association between the psychopathic traits factor and relationship sexual coercion

¹ The path models were similar when assessing the psychopathic trait facets separately, suggesting they might each have similar relationships to the outcomes as overall latent psychopathic traits (see Supplemental Figs. 4, 5, 6, and 7).

² Although .93 is a large correlation, that it was not a perfect correlation suggests some relationship length disagreement across sex. One possibility is that some men and women diverged on when they perceived the start of their relationship/dating. To assess for this possible discrepancy, our analyses control for both partners’ relationship length reports.

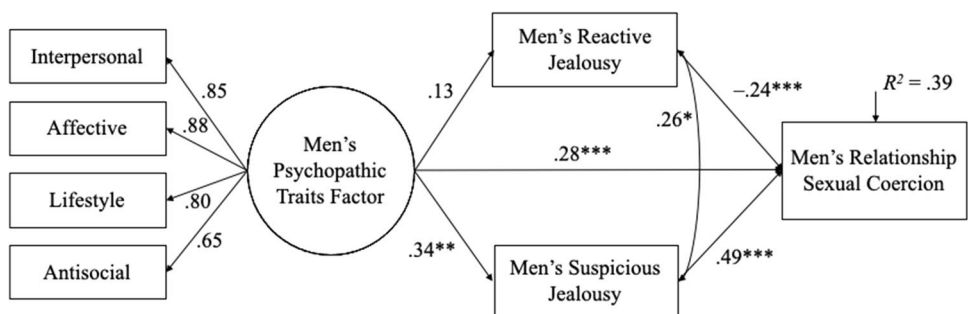
Table 1 Bivariate correlations, descriptive statistics, and internal consistencies of all model variables (men’s report above diagonal, women’s report below diagonal)

	1	2	3	4	5	6	7	8	9
1. Interpersonal	–	.76**	.63**	.58**	.12	.28**	.40**	–.10	–.25**
2. Affective	.76**	–	.73**	.51**	.08	.27**	.28**	–.06	–.22**
3. Lifestyle	.63**	.73**	–	.55**	.17*	.30**	.29**	–.04	–.15
4. Antisocial	.58**	.51**	.55**	–	.02	.27**	.46**	–.12	–.19*
5. Reactive jealousy	–.15	–.17*	–.13	–.20*	.30**	.28**	–.07	–.10	–.07
6. Suspicious jealousy	.22*	.22*	.23**	.31**	.08	.81**	.52**	.06	.01
7. Sexual coercion	.35**	.29**	.28**	.47**	–.18*	.59**	.66**	–.01	–.06
8. Relationship length	–.11	–.05	–.07	–.11	–.02	.01	–.05	.93**	.42**
9. Age	–.23**	–.21*	–.17*	–.20*	–.01	–.09	–.13	.52**	–
range	1–5	1–5	1–5	1–5	1–7	1–7	34–149	2–228	18–60
Mean (SD) men	2.00 (0.87)	2.07 (0.71)	2.11 (0.78)	1.48 (0.56)	5.04 (0.68)	1.88 (0.89)	40.39 (17.47)	47.69 (42.33)	27.20 (7.46)
Mean (SD) women					4.97 (0.90)	1.78 (0.85)	40.48 (18.09)	48.71 (43.18)	25.84 (6.95)
α (men/women)	.85/-	.72/-	.82/-	.75/-	.80/.90	.93/.95	.98/.98		

*N*s = 141–145. Correlations along diagonal are between self- and partner-report of the same variable. Correlations involving psychopathic traits included men’s report only

p* < .05. *p* < .01

Fig. 1 Structural equation modeling of men’s self-report psychopathic traits, jealousy, and relationship sexual coercion. *N* = 143. Standardized coefficients are shown. Fit statistics: CFI = .93, SRMR = .05. **p* < .05. ***p* < .01



was significantly mediated by higher levels of suspicious jealousy ($\beta = 0.17$, 95% CI [0.03, 0.30], *p* = 0.013).

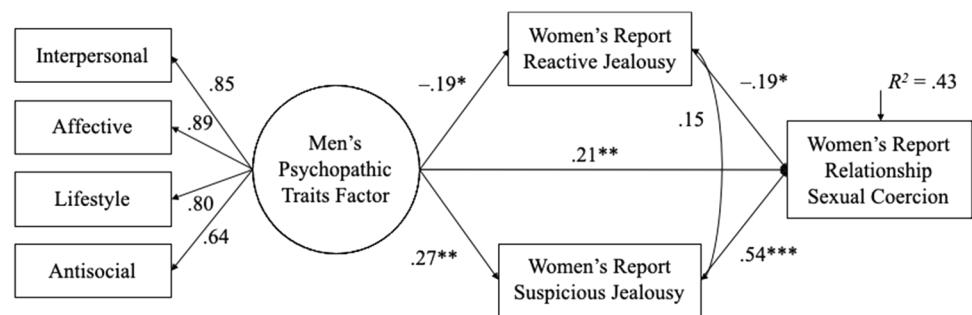
Women’s Partner-Reports

The second SEM examined women’s reports of their partner’s jealousy and relationship sexual coercion with men’s self-reported psychopathic traits. The overall model showed acceptable fit (CFI = 0.95, SRMR = 0.05). The second SEM based on women’s reports shown in Fig. 2 indicated that men’s psychopathic traits factor was positively associated with women’s reports of relationship sexual coercion and suspicious jealousy, consistent with men’s reports. Psychopathic traits also were negatively associated with women’s reports of men’s reactive jealousy, suggesting that the women whose partners were higher in psychopathic traits perceived them as having less reactive jealousy. Women’s reports of relationship sexual coercion also were positively associated with women’s reports of suspicious jealousy and negatively associated with

women’s reports of reactive jealousy. Results of the indirect effects showed that the association between men’s psychopathic traits factor and women’s reports of relationship sexual coercion was significantly mediated by suspicious jealousy ($\beta = 0.15$, 95% CI [0.01, 0.29], *p* = 0.034) but not reactive jealousy ($\beta = 0.04$, 95% CI [–0.01, 0.08], *p* = 0.108), consistent with men’s reports.

Both men’s and women’s reports models also were examined with the covariates of relationship length and both men’s age and women’s age included. Inclusion of the covariates in these models did not change the results among psychopathic traits, jealousy, and relationship sexual coercion for either men’s reports or women’s reports (see Supplemental Figs. 2 and 3). Combining the models into one model also produced a substantially reduced fit (Δ CFI = –0.21 compared to men’s reports model and Δ CFI = –0.24 compared to women’s reports model), suggesting they are better modeled separately.

Fig. 2 Structural equation modeling of men's self-report psychopathic traits and women's partner-report jealousy and relationship sexual coercion. $N = 143$. Standardized coefficients are shown. Fit statistics: CFI = .951, SRMR = .049. * $p < .05$. ** $p < .01$



Discussion

We hypothesized that men's psychopathy would be associated with higher levels of suspicious jealousy and sexually coercive behavior from both men's reports and women's reports of men's behavior, and that suspicious jealousy would mediate the association between psychopathy and sexual coercion. The findings across both men's reports and women's reports support these hypotheses. Because the results were concordant across informants, we can be reasonably confident that in intimate relationships men's psychopathy is associated with more frequent use of sexually coercive behavior including subtle, manipulative, and forceful acts (Shackelford & Goetz, 2004), and that the relationship is characterized by men's increased suspicious jealousy including thoughts and behaviors of distrust and control of one's partner (Horan et al., 2015; Kirkman, 2005).

Men's psychopathic traits were associated with both self-reports and partner-reports of men's suspicious jealousy. These findings are in accord with past studies that found a link between psychopathy and suspicious jealousy (Barelds et al., 2017; Chin et al., 2017; Massar et al., 2017). Our findings add to this research by showing that, in heterosexual dyads, both men's reports and women's reports link men's psychopathy to higher suspicious jealousy. The findings address past limitations of relying on self-reports (mentioned in Chin et al., 2017) by showing consistency across raters, providing further knowledge of the romantic relationship processes and experiences of psychopathic men (Kirkman, 2005).

The one area of disagreement between informants concerned the relationship between men's psychopathy and reactive jealousy. From men's reports, psychopathy was not associated with reactive jealousy.³ In contrast, when considering women's reports, men's psychopathy was negatively associated with partner-reported reactive jealousy. This finding, if replicated, suggests that women who are partnered

with men higher in psychopathy perceive their partners as less emotionally affected by specific jealousy-evoking events in the relationship. Reactive jealousy is associated with some positive relationship qualities such as closeness and satisfaction (Attridge, 2013; Dandurand & Lafontaine, 2014), suggesting that partners of psychopathic men might perceive less closeness and satisfaction in the relationship as well, which is in line with past studies of psychopathy in the context of intimate relationships (Love & Holder, 2016; Savard et al., 2011).

However, the discrepancy between men's psychopathy and reactive jealousy across informants could afford multiple interpretations. One possibility is that psychopathic men do not accurately perceive themselves as less reactively jealous like their partners do, but instead see themselves as average in reactive jealousy. Because manifestations of reactive jealousy seem to covary with positive relationship experiences (Attridge, 2013), this interpretation suggests that psychopathic men might be underestimating the aloofness they bring to a relationship or overestimating the positive aspects of their relationships (Ali & Chamorro-Premuzic, 2010). In other words, this interpretation suggests that psychopathic men's partners accurately view them as less invested in the relationship, but those men self-deceptively view themselves as more invested, which could negatively affect relationship communication and experience (Horan et al., 2015; Love & Holder, 2016).

Another possibility is that psychopathic men *are not* less reactively jealous than the average man, but their partners perceive them this way—possibly because having a personality style characterized by being detached, manipulative, impulsive, and antisocial could affect how others perceive them. In other words, men higher in psychopathy might not be less reactively jealous, but the manifestation of their personality in intimate relationships could evoke from others the sense that they do not care. This interpretation also could extend to the professional perception that psychopathic individuals are emotionally imperturbable, but whether this is true from their own subjective experience seems unlikely (Garofalo et al., 2019, 2020; Kosson et al., 2020). In either

³ Of the facets of psychopathy, Table 1 shows that there was an association between men's report of reactive jealousy and the Lifestyle traits specifically ($r = .17$).

case, the relationship between men's psychopathy and reactive jealousy is not concordant across men and women in intimate relationships, which calls for additional research on the interpersonal dynamics and perceptions within these relationships.

In contrast to the jealousy paths, both informant models showed that sexual coercion was positively associated with men's psychopathic traits and suspicious jealousy and negatively with reactive jealousy. Our findings coincide with research showing that reactive jealousy is associated with less negative and more positive relationship experiences as reactively jealous men were less likely to engage in sexual coercion of their partners (Attridge, 2013; Rydell & Bringle, 2007). The finding can add to research that examines the risks of men engaging in sexually coercive behavior in intimate relationships—such as cues of infidelity and controlling behavior (Camilleri & Quinsey, 2009a; Goetz & Shackelford, 2009)—by suggesting potential protective factors of such behavior in men. Other possible protective factors could be explored as well, such as men's honor (Saucier et al., 2016) and personality traits associated with prosociality including Honesty-Humility (Ashton & Lee, 2007).

In contrast, the finding that suspicious jealousy had the strongest link with sexual coercion—even stronger than psychopathic traits did—suggests that it should be considered an important predictor of sexual coercion in intimate relationships. Suspicious jealousy includes cognitive (e.g., “I suspect that my partner is secretly seeing someone of the opposite sex”) and behavioral (e.g., “I question my partner about her whereabouts”) tendencies that are closely aligned with mistrust of one's partner (Rydell & Bringle, 2007). Relationship mistrust could reflect men's perceptions of their partner's likelihood or risk of being unfaithful, which maps onto previous work that finds cues of a partner's infidelity especially predictive of men's use of sexual coercion in intimate relationships (Goetz & Shackelford, 2006, 2009) and other behaviors that aim to punish infidelity (Kaighobadi et al., 2008). From an evolutionary perspective, suspicious jealousy could be an indicator of the level of confidence men have in the exclusivity of sexual access to their partner and thus paternity certainty.

Partner sexual coercion was associated with men's psychopathic traits from both informants' reports. Our findings correspond with research showing a link between sexual coercion in intimate relationships and psychopathy (Camilleri & Quinsey, 2009b; Jones & Olderbak, 2014). We add to this research by using a well-validated and reliable measure of sexual coercion in intimate relationships that captures frequency and diversity of sexually coercive acts that have recently occurred in the relationship (Shackelford & Goetz, 2004). Whereas previous research mostly relied on measures of the likelihood of using sexual coercion in a relationship (Camilleri et al., 2009), both types of measures are useful

and important for understanding the coercive nature of the relationships of psychopathic individuals. However, research examining sexual aggression more broadly—as opposed to coercion of intimate partners—has found that measures of actual sexual aggression and likelihood of sexual aggression are only weakly correlated, around 0.10 (Calhoun et al., 1997; Greendlinger & Byrne, 1987; Malamuth, 1988).

Our findings thus suggest that men's psychopathy is not just related to the likelihood of engaging in sexual coercion in a relationship (Camilleri & Quinsey, 2009b), but also to the frequency of men's sexually coercive behaviors. We argue that such a link with sexual coercion in intimate relationships—especially when partner-reports corroborate this association—suggests an elevated risk that calls for more research into the relationship dynamics of psychopathic men and interventions designed to ameliorate these risks. Having knowledge of both likelihood and actual behavior, however, is likely to improve our understanding and the effectiveness of interventions (Malamuth, 1988). Thus, researchers should assess both risk and behavior in future studies of relationship sexual coercion and psychopathy.

Our results also provided evidence across both informant reports that suspicious jealousy mediated the association between men's psychopathic traits and sexual coercion. The hypothesis for this indirect effect was drawn from the literature on intimate relationship sexual coercion from an evolutionary perspective that is informed by cuckoldry prevention (Goetz et al., 2008). This perspective suggests that cues to partner infidelity are often predictive of men engaging in sexual coercion in their relationship because such cues can indicate challenges to paternity certainty (Camilleri & Quinsey, 2009a). Thus, sexual coercion in such contexts can be viewed as a component of mating effort that is stimulated by specific cues and processes involving cuckoldry risk, including jealousy. Our mediation model suggests suspicious jealousy might be produced by a psychological mechanism operative in men higher in psychopathy when deciding to engage in coercive sexual acts with their partner.

At least two interpretations could account for this finding. One possibility is a general approach that describes psychopathic men as prone to suspicious jealousy because of a broader hostile and suspicious cognitive view of others (Garofalo et al., 2020), driving them toward coercive mating effort because they hold such views. This interpretation suggests suspicious jealousy could be an indicator of psychopathic men's desire for control and difficulty trusting others, but that these suspicions are miscalculated and an overreaction (Rydell & Bringle, 2007). A second possibility is a *specific* approach whereby psychopathic men might perceive their partners—past and/or current—as actually being at risk of committing infidelity, which stimulates suspicious jealousy and then leads to coercive mating effort as a compensatory response to that risk. This interpretation suggests that

suspicious jealousy is not a miscalculation based on general hostility and mistrust, but instead is a calculated response to cues to infidelity from their partner specifically, which might include having experienced more past infidelities as well (Jonason et al., 2010).

Regardless of interpretation, suspicious jealousy may reflect the operation of a mechanism that can be targeted in interventions to reduce occurrences of partner sexual abuse and coercion among psychopathic men (Forth et al., 2022). That suspicious jealousy involves cognitive and behavioral components could suggest that cognitive–behavioral therapies might be especially useful (Reidy et al., 2013). However, this intervention work should also consider the influence of infidelity cues—both real and imagined—as important determinants of psychopathic men’s decisions. Thus, future research could also examine whether psychopathic men report cues of partner infidelity—in addition to or instead of suspicious jealousy—and whether these cues are accurately appraised (e.g., corroborated by women’s reports and/or past behavior).

A theoretical implication of our study concerns the role that mating effort may play in psychopathy. Past research has focused on how mating effort in psychopathy is revealed by the tendency to seek and acquire new mates (Brazil & Volk, 2022; Jonason et al., 2009; Lalumière et al., 2005), but our findings suggest that mating effort in psychopathy also might be revealed by behaviors within established relationships. Although we did not use a direct measure of mating effort, the constructs we evaluated (e.g., jealousy, sexual coercion) capture behaviors that are indicative of mating effort within relationships (Emery Thompson & Alvarado, 2012). Hence, the broader concept of mating effort—which includes the time, energy, and resources devoted to securing copulations from new or current partners (Dixon, 2012; Trivers, 1972)—might be useful for understanding the sexual (e.g., promiscuity) and relationship (e.g., jealousy) behaviors displayed by men with elevated levels of psychopathic traits (Kirkman, 2005).

Limitations and Future Directions

Our study was limited to a relatively small sample of community adults, although the inclusion of heterosexual dyads is a strength of our study. Future work could examine similar relationship processes of jealousy and sexual coercion in incarcerated men, where rates of psychopathy tend to be higher (Hare, 2003). The current study is limited in that we did not ask women to rate their partner’s psychopathic traits, but relied only on men’s self-reports for our assessment of men’s psychopathy. Despite this limitation, we found cross-informant consistency in the relationships among men’s psychopathy, jealousy, and sexual coercion. Research also

suggests fairly high consistency in the cross-partner ratings of psychopathic traits in romantic couples (Kardum et al., 2022), which might ameliorate concerns about this limitation.

Research on the Dark Triad—which consists of psychopathy, narcissism, and Machiavellianism—also could be leveraged to compare how each of these dark personality traits might differ with respect to intimate partner sexual coercion. Past work suggests psychopathy is more strongly linked to both the likelihood of partner sexual coercion (Jones & Olderbak, 2014) and mating effort (Jonason et al., 2009) compared to narcissism and Machiavellianism, but it is unknown whether this generalizes to frequency of partner sexual coercion. Future research also should expand on the present findings by including other relationship processes and factors, including the role of rape myth acceptance (Jonason et al., 2017) and the use of mate retention tactics (Buss & Shackelford, 1997). Another limitation is that we did not examine individual differences in female partners—beyond age—which could have moderating effects. Past studies have found individual differences in the susceptibility of women to the manipulation and exploitation of psychopathy (Book et al., 2021; Brazil et al., 2021), and individual differences might impact propensity to become partnered with psychopathic men as well (Kirkman, 2005; Leedom et al., 2012), suggesting the need to assess women’s individual differences in future studies.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s10508-023-02587-6>.

Author Contributions All authors contributed to the study conception and design. Material preparation and data collection were performed by GV and TKS. Data analysis was performed by KJB and VZH. The first draft of the manuscript was written by KJB, and all authors contributed to revising subsequent drafts. All authors read and approved the final manuscript.

Funding The authors did not receive support from any organization for the submitted work.

Data Availability The data are not made publicly available.

Code Availability The code for analyses is available upon request from the corresponding author.

Declarations

Conflict of interest The authors have no relevant financial or non-financial interests to disclose.

Consent to Participate Informed consent was obtained from all individual participants included in the study.

Ethical Approval Approval was obtained from the Ethics Committee of Oakland University. The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

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