Are infidelity tolerance and rape myth acceptance related constructs? An association moderated by psychopathy and narcissism

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Abstract
Infidelity and rape are sexual transgressions that embody self-centeredness and disregard for others. The attitudinal frameworks related to each of these sexual malfeasances—infidelity tolerance and rape myth acceptance (RMA), respectively—may both result from sexual scripts that lack empathy. We proposed that infidelity tolerance and RMA are associated constructs and that their relationship is moderated by psychopathy and narcissism, both of which are characterized by a lack of empathy. In our cross-sectional study of 262 undergraduates, the relationship between infidelity tolerance and RMA was significantly moderated by both psychopathy ($\beta = 0.125, p = 0.029$) and narcissism ($\beta = 0.133, p = 0.025$). Specifically, the positive relationship between infidelity tolerance and RMA was strengthened as psychopathic or narcissistic traits increased. Further, in an exploratory set of analyses, we found that the self-centered impulsivity factor of psychopathy and the exhibitionism/entitlement factor of narcissism were driving their respective interactions with RMA. Infidelity tolerance and RMA are associated, especially in people that are more likely to lack empathy. The sexual scripts of people with psychopathic and narcissistic traits should be further examined. Other sexual scripts (e.g., hostile masculinity) may also result in a positive relationship between infidelity tolerance and RMA.

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1. Introduction
Romantic relationships, with all of their ups and downs, are central to the human experience (e.g., Gable & Impett, 2012; Richards, Crowe, Larson, & Swarr, 1998). Indeed, these relationships are what many people schedule their time around and are a contingency upon which they plan their futures (Shulman & Connolly, 2013). Healthy romantic relationships contribute to overall well-being (e.g., Gable & Impett, 2012), but relationships can be destructive when one or both partners endorse attitudes tolerant of infidelity (e.g., Previti & Amato, 2004). Infidelity has consistently been associated with poor romantic relationship outcomes such as decreased relationship quality (Affifi, Falato, & Weine, 2001) and relationship dissolution (Hall & Fincham, 2006). The present study conceptualized infidelity as “being unfaithful in a committed monogamous relationship” (Whatley, Little, & Knox, 2006). While cultural attitudes are becoming more permissive of premarital sex, this has not extended to extramarital sex. Higgins, Zheng, Liu, and Sun's (2002) cross-cultural study found that British and Chinese college students alike were against having extramarital affairs. And although college students in the United States appear to be increasingly engaging in casual, non-committed sexual relationships (Littleton, Tabernik, Canales, & Backstrom, 2009), many college students do engage in committed relationships and so do most people as they get older (Wang & Parker, 2014). This trajectory makes infidelity research quite relevant for developing young adults. Thus, how tolerant people are of infidelity remains an important issue to understand and address. To better comprehend infidelity tolerance, it may be prudent to consider how these attitudes relate to other sexual attitudes.

Research suggests that sexual scripts—conceptualizations of how people are supposed to act sexually—play a key role in how people understand and engage in sexual interactions (Littleton & Assom, 2003). For example, cheating on a partner may result from an instrumental sexual script, which emphasized self-centeredness and disrespects the sexual experience of others (Hunyady, Josephs, & Jost, 2008). Attitudes toward rape—another sexual malfeasance—also embody an instrumental sexual script. Rape myth acceptance (RMA) is defined as the endorsement of false beliefs about rape that typically place blame on the victim rather than the perpetrator (Burt, 1980). These attitudes toward sexual violence disregard the experience of other people. Specifically, blaming rape victims, downplaying rape, or claiming victim is lying all represent a certain lack of empathy (Payne, Lonsway, & Fitzgerald, 1999). Recently, Ryan (2011) argued that RMA can indeed influence sexual scripts that determine sexual attitudes and behavior. Specifically,
she suggested that people who endorse rape myths may hold erroneous sexual scripts for rape, resulting in perpetrators denying their own actions as rape and also in victims not labeling their experiences as rape. Both infidelity tolerance and RMA are characterized by a lack of empathy toward others (e.g., Bushman, Bonacci, Van Dijk, & Baumeister, 2003; Watts, Bowes, Lutzman, & Lilienfeld, 2017). And empathy is vital within the context of romantic relationships; a lack of empathy affects one’s ability to recognize or identify with the feelings and needs of others. Similar sexual scripts inherent to both infidelity tolerance and RMA support the possibility that these two attitudinal constructs are associated.

Because the underlying sexual script that might tie together infidelity tolerance and RMA stems from self-centeredness and disregard for others, this proposed relationship may be especially prominent in subpopulations that are less empathic toward others (e.g., people with psychopathic or narcissistic personality traits). Psychopathy is a multidimensional personality trait (Patrick, Fowles, & Krueger, 2009) with factors reflecting fearlessness, stoic dominance, self-centered impulsivity, and coldheartedness (Lilienfeld & Widows, 2005). On the other hand, narcissism is a self-absorbed personality trait that reflects exhibitionism/entitlement and leadership/authority (Raskin & Terry, 1988). Psychopathy and narcissism may be distinct, but they both exude a lack of empathy. Unsurprisingly, past studies have reported that both infidelity tolerance and RMA are significantly related to each of these personality traits.

First, many of the traits associated with psychopathy (e.g., lack of remorse and callousness) are counterproductive to the success of romantic relationships (Ullrich, Farrington, & Coid, 2008). Indeed, these personality traits are associated with frequency of affairs and infidelity tolerance (Brewer, Hunt, James, & Abell, 2015; Egan & Angus, 2004). Similarly, infidelity correlated with individual factors of psychopathy: callousness, antisocial dispositions, and lack of empathy (Schmitt, 2004). And people who are callous and lack remorse may not show shame or guilt if they do cheat on their partner, in turn allowing them to easily move on to other partners (Baughman, Jonason, Lyons, & Vernon, 2014). Therefore, people higher in psychopathic traits may endorse attitudes tolerant of infidelity, because they have both the ability to get new partners and the ability to do so without being burdened by the feelings of their current partner. Psychopathy is also significantly correlated RMA (Hersh & Gray-Little, 1998; Watts et al., 2017). Watts et al. noted this association is driven by callousness and lacking empathy. Debowska, Boduszek, Dhingra, Kola, and Meller-Prunskas (2014) also found that the callous aspect of psychopathy was correlated with RMA. It is evident from previous research that lack of empathy is an aspect of psychopathy that relates to both infidelity tolerance and RMA.

Second, empirical data also indicate that narcissism, which involves a defensive, egocentric lack of empathy for others (Hunyady et al., 2008), is positively associated with unfaithful behavior in romantic relationships (Brewer et al., 2015; Buss & Shackelford, 1997). For example, Atkins, Yi, Baucom, and Christensen (2005) found that people who were more focused on themselves and their own needs and desires were more likely to have an affair. Further, people higher in narcissistic traits are significantly more likely to notice and focus on alternative romantic options (Campbell & Foster, 2002). Narcissistic traits are also correlated with RMA, especially a lack of empathy toward rape victims (Bushman et al., 2003). Additionally, the self-centeredness and inflated sense of entitlement inherent to narcissism even predict sexual aggression [Mouilso & Calhoun, 2015]. Again, we see that lack of empathy consistently appears as the mechanism for which a personality trait is associated with infidelity tolerance and RMA.

1.1. Present study

Past studies have found that a lack of empathy is important in how infidelity tolerance and rape myth acceptance (RMA) are individually associated with psychopathy and narcissism (e.g., Atkins et al., 2005; Watts et al., 2017). We sought to bring these constructs together and examine the relationship between infidelity tolerance and RMA. Because the theoretical sexual script that may connect infidelity tolerance and RMA stems from self-centeredness and disregard for others, we hypothesized that this association would be moderated by psychopathy and narcissism. Specifically, we predicted that higher endorsement of these personality traits would increase the magnitude of the association between infidelity tolerance and RMA. We did not predict any differences in the interaction effects of these two types of personality traits, since both are characterized by a lack of empathy. Finally, we conducted exploratory analyses to elucidate whether any particular factor of the personality traits drove the proposed interactions.

2. Method

2.1. Participants

Participants included 308 undergraduates from a large, public university in the southeastern United States (74.8% female). Using the Psychopathic Personality Inventory–Revised, we excluded 46 people for Inconsistent Responding >44, Deviant Responding >25, or Virtuous Responding >38 on (Lilienfeld & Widows, 2005). Our final sample (n = 262) was racially diverse: 39.7% Caucasian, 33.8% African American, 17.6% Asian, 3.4% Hispanic, and 6.5% biracial. Age data for this sample were not available, but a recent study using students from the same university found a mean age of 20.71 years (SD = 4.65; Hecht, Berg, Lilienfeld, & Lutzman, 2016).

2.2. Procedure and measures

Consent was obtained electronically prior to the administration of the survey. Participants then completed a battery of online questionnaires that included measures assessing infidelity tolerance, RMA, psychopathic traits, and narcissistic traits.

2.2.1. Attitudes toward Infidelity Scale

This 12-item scale assesses how tolerant people are of unfaithful behaviors in a committed monogamous relationship (Whatley, 2012). Participants rate on a seven-point Likert scale how much they agree with each item (e.g., Being unfaithful never hurt anyone). In Whatley et al.’s (2006) sample (α = 0.91), male participants reported more tolerant attitudes toward infidelity (M = 31.53, SD = 11.86) than did female participants (M = 23.78, SD = 10.86; p < 0.05). Higher scores indicate more tolerance of infidelity (sample α = 0.84).

2.2.2. Attitudes toward Rape Victims Scale

This 25-item scale measures rape myth acceptance (Ward, 1988). Participants rate on a five-point Likert scale how much they agree with each item (e.g., Women who have had prior sexual relationships should not complain about rape). Mean score for Ward’s undergraduate

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Women (n = 196)</th>
<th>Men (n = 86)</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>ATIS</td>
<td>24.37</td>
<td>11.55</td>
<td>33.52</td>
</tr>
<tr>
<td>RMA</td>
<td>51.87</td>
<td>13.70</td>
<td>59.74</td>
</tr>
<tr>
<td>PPI-R</td>
<td>284.27</td>
<td>33.55</td>
<td>304.45</td>
</tr>
<tr>
<td>NPI</td>
<td>16.48</td>
<td>7.08</td>
<td>19.03</td>
</tr>
</tbody>
</table>

Note. ATIS = Attitudes toward Infidelity Scale; RMA = Attitudes to Rape Victims Scale; PPI-R = Psychopathic Personality Inventory–Revised; NPI = Narcissistic Personality Inventory.

Levene’s tests: ps > 0.218.

b < 0.05.

* p < 0.001.
In order to determine whether the association between infidelity tolerance and RMA was moderated by personality traits, two hierarchical multiple linear regression analyses were conducted: one for psychopathy and one for narcissism. Each hierarchical multiple linear regression model included RMA and personality scores in Step 1, their interaction in Step 2, and infidelity tolerance as the outcome variable. Hierarchical models were used to discern the predictor and moderator main effects prior to the inclusion of the interaction term. Semi-partial correlation coefficients were calculated to show the unique contributions toward each model’s overall $R^2$ values. Simple slopes analyses of any significant interactions were performed (Dawson, n.d.; Schubert & Jacoby, 2004). In an exploratory nature, we then examined the factors of the PPI-R and the NPI to assess whether any particular aspect of psychopathy or narcissism was driving the interactions.

SPSS 23 was used for all correlation and regression analyses. The values for symmetry and kurtosis for all measures suggested normal univariate distributions (i.e., between $-2$ and $+2$; George & Mallery, 2010). The Variance Inflation Factor of the predictor variables confirmed that this sample’s data did not have multicollinearity issues (Mean VIF $= 1.115$; Cohen, Cohen, West, & Aiken, 2003).

### 3. Results

Descriptive statistics for all study variables are presented in Table 1; $t$-tests indicated that women had lower scores on each of the measures. The regression results presented do not include gender as a covariate; however, none of the predictors gained or lost significance when we controlled for gender.

#### 3.1. Correlations

As shown in Table 2, infidelity tolerance and RMA significantly correlated ($r = 0.290$). Psychopathic personality traits significantly correlated with infidelity tolerance ($r = 0.357$) and RMA ($r = 0.309$). Narcissistic traits no longer significantly correlated with infidelity tolerance after the Bonferroni correction ($r = 0.140$, $p = 0.023$), nor did they correlate with RMA.

#### 3.2. Regression models

##### 3.2.1. Psychopathy as moderator

Our proposed model explained $16.9\%$ of the variance in scores measuring infidelity tolerance (Table 3). In step 1, RMA predicted infidelity tolerance ($β = 0.199$, $p = 0.001$), as did psychopathic traits ($β = 0.296$, $p < 0.001$). The interaction term was also significant ($β = 0.125$, $p = 0.029$). Higher endorsement of the psychopathic traits evidenced a stronger association between infidelity tolerance and RMA. A simple slopes analysis revealed that infidelity tolerance and RMA were more strongly associated at one SD above the psychopathy mean ($β = 0.312$, $p < 0.001$, $r^2 = 0.057$), but this association was not present at one SD below it ($β = 0.056$, $p = 0.527$, $r^2 = 0.002$). Fig. 1 depicts these simple slopes.
3.2.2. Narcissism as moderator

Our proposed model explained 10.4% of the variance in scores measuring infidelity tolerance (Table 4). RMA remained a significant predictor ($\beta = 0.280, p < 0.001$); narcissistic traits did not predict infidelity tolerance above-and-beyond RMA ($\beta = 0.114, p = 0.056$). However, the interaction between RMA and narcissistic traits was significant ($\beta = 0.133, p = 0.025$). Higher endorsement of the psychopathic traits evidenced a stronger association between infidelity tolerance and RMA. A simple slopes analysis revealed that infidelity tolerance and RMA were more strongly associated at one SD above the narcissism mean ($\beta = 0.410, p < 0.001, \eta^2_p = 0.088$), but this association was not present at one SD below it ($\beta = 0.155, p = 0.055, \eta^2_p = 0.014$). Fig. 2 depicts these simple slopes.

3.3. Post hoc analyses

To determine whether particular aspects of psychopathy and narcissism were driving the interactions detailed above, we examined the recommended factor structures for both the PPI-R and the NPI. Complete tables for each of these regressions are available in the supplemental materials. For psychopathy, Step 1 of the model included RMA and the three factors of the PPI-R—fearless dominance, self-centered impulsivity, and coldheartedness; Step 2 included interaction terms between RMA and each factor (overall $R^2 = 0.313$). All three factors were significant predictors of infidelity tolerance ($ps < 0.004$), but RMA only interacted with self-centered impulsivity interacted ($\beta = 0.127, p = 0.018, \eta^2_p = 0.022$). For narcissism, Step 1 of the model included RMA and the two factors of the NPI—exhibitionism/entitlement and leadership/authority; Step 2 included interaction terms between RMA and each factor (overall $R^2 = 0.169$). Both factors were significant predictors of infidelity tolerance ($ps < 0.017$), but RMA only interacted with exhibitionism/entitlement ($\beta = 0.143, p = 0.032, \eta^2_p = 0.018$). These two exploratory interactions were similar to the hypothesized interactions in magnitude and direction.

4. Discussion

People who are self-centered and who have significant deficits in empathy may be more tolerant of being unfaithful in a commited monogamous relationship as well as more likely to perpetuate fallacies about rape. Each of these attitudinal systems—in fidelity tolerance and RMA—may be manifestations of sexual scripts that view sex as instrumental. Such self-centered approaches to sex that also involve a lack of empathy toward others could be the reason that we found a positive relationship between infidelity tolerance and RMA. Two personality traits that reflect this lack of empathy and a disregard for others are psychopathy and narcissism.

We found evidence that infidelity tolerance and RMA are related constructs; this association was stronger in people who are more likely to lack empathy. In addition to significant interaction terms in the hypothesized regression models, the effect sizes for the association between RMA and infidelity tolerance were noticeably larger within participants higher in psychopathic ($\eta^2_p = 0.057$) or narcissistic traits ($\eta^2_p = 0.088$) compared to people who endorsed less of these traits ($\eta^2_p = 0.002$ and $\eta^2_p = 0.014$, respectively). Further, our exploratory examination of the individual factors of both psychopathy and narcissism revealed two unique profiles that drove their interactions with RMA.

First, people who specifically endorsed the psychopathic traits associated with self-centered impulsivity and who were high in RMA were more tolerant of infidelity. Second, people who endorsed the narcissistic traits of exhibitionism/entitlement showed this same interaction. Both of these profiles emphasize self-importance and putting one’s own needs and desires over others (Corry et al., 2008; Edens & McDermott, 2010). If this self-centeredness is imposed upon the sexual scripts of people with psychopathic and narcissistic traits, it is unsurprising that the association between infidelity tolerance and RMA is magnified in people with these specific personality traits.

4.1. Limitations and future directions

The cross-sectional design of this study limits any causal inferences. Longitudinal work on personality traits, infidelity tolerance, and RMA is required to support the proposed direction of these effects. Guided by our results, we would expect that experimentally increasing mean levels of empathy or decreasing mean levels of self-centeredness in people with psychopathic or narcissistic traits would lead to less tolerant attitudes toward infidelity and also less acceptance of rape myths. One daunting task for future studies will be to determine whether changing these attitudes results in any behavior change—which we did not examine in the present study. Further, there are a number of constructs that may be relevant to our findings that we did not consider when collecting data (e.g., sexual assault history, detailed relationship status, etc.) that future studies should measure. And the constructs we did measure may be prone to social desirability bias; rape myths, infidelity, psychopathy, and narcissism are all portrayed as negative. Thus, it is difficult to know whether reported values reflect true endorsement of these constructs. We also used a convenience sample, which limits the

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Table 4
Regression analysis of rape myth acceptance (RMA), narcissism (NPI), and their interaction to predict infidelity tolerance ($N = 262$).

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>$\beta$</th>
<th>$B$ (SE)</th>
<th>95% CI</th>
<th>$p$-Value</th>
<th>$\eta^2_p$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMA</td>
<td>0.280***</td>
<td>0.241 (0.051)</td>
<td>[0.140, 0.341]</td>
<td>&lt;0.001</td>
<td>0.079</td>
<td>0.097***</td>
</tr>
<tr>
<td>NPI</td>
<td>0.114</td>
<td>0.198 (0.103)</td>
<td>[0.056, 0.302]</td>
<td>&lt;0.001</td>
<td>0.014</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMA</td>
<td>-0.023</td>
<td>-0.020 (0.126)</td>
<td>[-0.156, 0.086]</td>
<td>0.876</td>
<td>0.000</td>
<td>0.018**</td>
</tr>
<tr>
<td>NPI</td>
<td>-0.355</td>
<td>-0.618 (0.375)</td>
<td>[-1.65, 0.101]</td>
<td>0.101</td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td>RMA-NPI</td>
<td>0.596*</td>
<td>0.015 (0.007)</td>
<td>[0.002, 0.029]</td>
<td>0.025</td>
<td>0.019</td>
<td></td>
</tr>
</tbody>
</table>

Note. $\beta$ = standardized coefficient; $B$ = unstandardized coefficient; SE = standard error; 95% CI = 95% confidence interval for the unstandardized coefficient; $R^2$ = variance explained by the model.

* $p < 0.05$.

*** $p < 0.001$. 

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Fig. 1. Simple slopes diagram probing the effect psychopathic traits on the association between rape myth acceptance and infidelity tolerance.
ecological validity of our findings; however, we introduced the topic of infidelity as relevant to college student populations. Finally, while our interaction terms were “significant” at a 0.05 α-level, they might run the risk of not being replicated by future research. The small to medium effect sizes reported may allay this concern; subsequent studies could also consider adopting other approaches to strengthen the credibility of effects with “higher” p-values (e.g., p-curve analyses, Simonsohn, Nelson, & Simmons, 2014).

Future work should also determine if another sexual script might better explain the relationship between infidelity tolerance and RMA. Similar to those that are more instrumental, sexual scripts that endorse more traditional gender roles may result in both of these attitudes—causing them to be positively associated (Canan, Jozkowski, & Crawford, 2016). For example, people who believe that men are the initiators of sex and women the gatekeepers could also be more likely to excuse men who cheat on their partners (i.e., infidelity tolerance) and to blame women for not preventing their assailant from having sex with them (i.e., rape myth acceptance). For men especially, this sexual script might include hostile masculinity—a desire to be in control, especially regarding women, and an orientation toward women that is insecure and distrustful (Malamuth & Thornhill, 1994).

5. Conclusion

The correlational findings in this study indicate that an association between attitudes toward infidelity and rape myth acceptance exists and is more completely understood by examining the moderating effect of the personality constructs psychopathy and narcissism. These interactions may imply that underlying personality traits (e.g., lack of empathy) can result in instrumental sexual scripts that influence the way people think about sex. Therefore, it is important to emphasize healthy sexual scripts, which would include actively considering the experiences of all people involved in a sexual experience. Such an approach to sexuality would likely decrease both infidelity tolerance and rape myth acceptance.

Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.paid.2017.06.015.

References


