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Research Article

Heightened Male Aggression Toward Sexualized Women Following Romantic Rejection: The Mediating Role of Sex Goal Activation[1]

Author note

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Abstract

Research from a variety of disciplines suggests a positive relationship between Western cultural sexualization and women's likelihood of suffering harm. In the current experiment, 157 young men were romantically rejected by a sexualized or non-sexualized woman then given the opportunity to blast the woman with loud bursts of white noise. We tested whether the activation of sexual goals in men would mediate the relationship between sexualization and aggressive behavior after romantic rejection. We also tested whether behaving aggressively toward a woman after romantic rejection would increase men's feelings of sexual dominance. Results showed that interacting with a sexualized woman increased men's sex goals. Heightened sex goal activation, in turn, predicted increased aggression after romantic rejection. This result remained significant despite controlling for the effects of trait aggressiveness and negative affect. The findings suggest that by heightened sex goal activation may lead men to perpetrate aggression against sexualized women who reject them.

Keywords: sexualization; aggression; sex goals; sexual dominance; rejection

Over the last few decades, numerous studies have begun to articulate the effects of Western cultural sexualization on male-female interactions. Cultural sexualization refers to the saturation of Western culture by sexual identities, practices, and representations (Gill, 2012). Two defining features of this trend are a shift toward more permissive sexual attitudes and the proliferation of female displays of overtly sexualized or revealing clothing (APA Task Force on the Sexualization of Girls [APA], 2007; Attwood, 2006). Research in this field shows that women in sexualized, revealing clothing are perceived as (1) more interested in having sex than women in non-revealing clothing (Farris, Viken, Treat, & McFall, 2006) and (2) as lacking qualities and mental capabilities that may protect them from harm (Loughnan, Pina, Vasquez, & Puvia, 2013; Vaes, Paladino, & Puvia, 2011). The second of these perceptions occur in both sexes, although in men they appear to be motivated by the activation of sexual goals (Vaes et al., 2011).

Men are the primary perpetrators of sexual violence toward women (Krahé, Tomaszewska, Kuyper, & Vanwesenbeeck, 2014; Smith et al., 2017). Men also tend to associate sex with aggression (Allen, d'Alessio, & Brezgel, 1995; Mussweiler & Förster, 2000) and have more sexually aggressive intentions toward women in sexualized than non-sexualized clothing (Blake, Bastian, & Denson, 2016). Taken together, these findings raise the possibility that the arousal of sex goals in men may facilitate aggressive behavior toward sexualized women. In the current experiment, we tested this notion in the context of romantic rejection. We examined whether men behaved more aggressively towards a sexualized than a non-sexualized woman after an episode of romantic rejection, and whether this effect was mediated by the activation of sexual goals.

Female Sexualization and Male Sex Goals

The etiology of female sexualization and its effects on women are complex and diverse. Sexualization encompasses not only wearing sexualized clothing, but also a range of attitudes and behavioral intentions intended to give an impression of sexiness and availability for sexual encounters (Nowatzki & Morry, 2009). Some women report feeling pressured to engage in sexualization (APA, 2007; Nowatzki & Morry, 2009) and a substantial body of work shows that sexualization can detrimentally affect women (APA, 2007). Conversely, other women report engaging in sexualization because it is empowering and enjoyable (Erchull & Liss, 2013), provides a sense of sexual agency (Lerum & Dworkin, 2009), and attracts desirable attention from men (Yost & McCarthy, 2012). Sexualization can communicate enhanced status in female hierarchies (Durante, Griskevicius, Hill, Perilloux, & Li, 2011) and can also incite intrasexual aggression amongst women (Vaillancourt & Sharma, 2011). Thus, the evidence suggests that women self-sexualize for many reasons and that the consequences of sexualization for women can be both positive and negative.

Although women have varied reasons for self-sexualizing, men tend to perceive sexualized women in a homogenous fashion. Findings reliably show that men think that women in sexualized clothing are seeking and more interested in sexual encounters than women in non-sexualized clothing (Farris et al., 2006). Men additionally believe that women wear sexualized clothing to seduce them (Moor, 2010), which is only sometimes accurate (Yost & McCarthy, 2012). Likewise, men tend to treat sexually open women and women in sexualized clothing similarly, even if the former is wearing non-sexualized clothing (Blake et al., 2016). These results suggest that although women's intentions behind sexualization may be multiply determined and even non-sexual in nature, sexualization reliably activates sex goals in men.

Sexualization, Sex Goal Arousal, and Aggression Following Romantic Rejection

Rejection is a common precursor to aggression and romantic rejection can elicit anger and aggression in men and women (Leary, Twenge, & Quinlivan, 2006). Fifteen percent of violent episodes between dating couples can be attributed to rejection (Makepeace, 1989) and rejection is a common precipitant for men killing their wives (Wilson & Daly, 1993). These findings predict that rejection by both a sexualized or non-sexualized woman may incite aggression. However, as explained below, we predict that by activating sex goals in men, rejection by a sexualized woman may elicit greater aggression than rejection by a non-sexualized woman.

Baumeister, Smart, and Boden (1996) suggest that aggression emerges from threatened self-esteem: That is, from a discrepancy between a favorable self-appraisal and an unfavorable external appraisal. Such discrepancies can elicit aggression toward the source of the unfavorable appraisal due to elevated negative affect or a desire to fulfill a social aim (e.g., enacting punishment; Baumeister et al., 1996). Because sexualized women are perceived to be sexually permissive (Attwood, 2006; Farris et al., 2006), interacting with them may elevate men's anticipated sexual success and thus self-esteem prior to rejection. This outcome would lead to a greater discrepancy between the favorable self-appraisal and the unfavorable external appraisal, thus generating greater ego threat (and thus risk for aggression) upon rejection.

According to this reasoning, the likelihood of aggression following romantic rejection partly depends on the extent to which interacting with a woman primes the fulfillment of male sexual goals. Once aroused, sex goals may worsen the degree to which romantic rejection is provoking by increasing the expectancy that romantic interest is reciprocated. Being rejected by someone who was expected to be sexually accepting is likely to be highly provoking (Buckley,

Winkel, & Leary, 2004), and situations which are highly provoking are more likely to trigger aggressive responses in others (Lawrence, 2006). Thus, sex goal arousal and subsequent romantic rejection by a sexualized compared to a non-sexualized woman may elevate aggression because it constitutes a greater ego threat and is especially provoking. Experimental evidence for these proposed relationships, however, is lacking. The current experiment aimed to fill this gap.

Male-to-Female Aggression and Men's Sexual Dominance

A small body of research suggests that men may aggress against women to enhance their feelings of dominance. Men who adhere to anti-feminine norms or feel stressed when they are subordinate to women report engaging in more sexually aggressive behavior in their intimate relationships (Smith, Parrott, Swartout, & Tharp, 2015). These effects are mediated by some men's need to sexually dominate women (Smith et al., 2015), suggesting that male-to-female aggression might facilitate the need some men feel to experience male superiority. Men's preference for inequitable and hierarchical social relations also predicts their self-reported likelihood of responding to romantic rejection with aggression (Kelly, Dubbs, & Barlow, 2015). These correlational findings suggest that dominance-striving and male-to-female aggression may be positively related, and a secondary focus of the current experiment was to test this suggested relationship.

The Current Experiment

The primary aim of this experiment was to examine whether male-to-female aggression was greater after romantic rejection by a sexualized woman than a non-sexualized woman. We also tested whether sex goal activation in men mediated the effect of sexualization on aggression. In a between-participants design, male participants interacted with an ostensibly live video of a woman in sexualized or non-sexualized clothing, under the guise of a dating game. Participants

completed a measure of sex goal activation, were subsequently rejected by the woman as a substandard romantic date, then completed a laboratory behavioral aggression paradigm ostensibly against the woman they interacted with. Participants then rated their feelings of sexual dominance over women, and we also measured affect and trait aggressiveness to examine whether the observed effects were robust when controlling for these variables. We predicted that men would behave more aggressively after an ego-threatening rejection from a sexualized than a non-sexualized women because sexualization would activate sex goals (i.e., a mediation effect). We further predicted that aggression would positively correlate with subsequent feelings of sexual dominance over women.

Method

Participants

Two-hundred and four men recruited from the University of New South Wales and surrounding community (M_{age} = 19.79 years, *SD* = 2.24) participated in exchange for course credit or AUD$15 for a study investigated decision-making and social interactions. Twenty-four participants were withdrawn for guessing that the video interaction was pre-recorded, the rejection feedback was fake, or the aggression task was not directed toward the woman they interacted with; 12 participants were withdrawn for having heard about the deception from friends or having done a similar experiment in our laboratory; 8 participants were withdrawn due to technological issues resulting in extensive missing data; and 3 people were withdrawn for refusing to comply with the experiment instructions (leaving *n* = 157 [151 undergraduates and 6 young men from the university community], M_{age} = 19.75 years, *SD* = 2.17). All participants were 18–26 years old, heterosexual, and not in a committed romantic relationship. Participants provided written informed consent and were randomly assigned to one of two conditions in a

between-subjects design (sexualization: non-sexualized, *n* = 73; sexualized, *n* = 84). All participants were debriefed in accordance with the Declaration of Helsinki.

Materials

Trait aggressiveness.

The Aggression Questionnaire (Buss & Perry, 1992) comprises 29 items in which participants rate the extent to which each item characterizes them on a 7-point scale (1 = *extremely uncharacteristic*, 7 = *extremely characteristic*; e.g., 'If someone hits me, I hit back'). The questionnaire is composed of four aggressiveness subscales: verbal aggressiveness, anger, hostility, and physical aggressiveness. Reliability was acceptable and all questions were averaged to form an overall index of trait aggressiveness (*M* = 3.00, *SD* = 2.95, Cronbach's α .89), with higher scores indicating higher aggressiveness.

Dating profile questions.

Participants indicated their own age and ethnicity, how sexually available they were (1 = *sexually unavailable*, 5 = *sexually available*), and how they felt about sex with no strings attached (1 = *no it's not for me*, 3 = *yeah I'm open to it*). Participants created this profile so we could manipulate the woman's responses to the same questions on their screen without causing suspicion and no analyses were conducted on these responses.

Liking ratings.

After the video interaction, participants rated how interested they were in going out on a date with the woman, how attractive they found her, and how good a catch she was (1 = *not at all*, 7 = *very*). They then gave her a global rating out of 1 to 10 and provided open-ended comments to her. We *z*-transformed then averaged the four quantitative responses to form an index of liking (α =.89), with higher scores indicating that the participant liked the woman more.

Sex goal activation.

Participants rated the extent to which they were experiencing sexual or romantic arousal, a desire to have a romantic partner, and a desire to have others be attracted to them (1 = *not at all*, 7 = *very much*; $\alpha = .74$). These three items were interspersed with four filler items to allay suspicion.

Noise blast aggression paradigm.

Participants completed 25 trials of a modified version of the Taylor Aggression Paradigm (Taylor, 1967), a valid and widely used measure of aggression (Anderson & Bushman, 1997). The paradigm allowed the participant to deliver a blast of white noise to the woman under the guise of a cognitive reaction time task. For each trial, participants nominated the intensity (1 = *60db*, 10 = *105db*) and duration (1 = *0.50 seconds*, 10 = *1.85 seconds*) of the noise the woman would ostensibly hear if she lost that trial. The task was rigged so that the participant won or lost the trial automatically. When the participant won, they were told that the woman was blasted with the noise level they selected. When the participant lost, they were blasted with white noise ostensibly selected by the woman.

All participants won the first trial, so the first trial provided a measure of "pure" aggressive retaliation to the rejection feedback as participants had not yet received a noise blast from the woman. The remaining 24 trials consisted of 3 blocks of 8 trials in which participants won 50% of trials. Each block elevated in intensity over trials (loudness and duration; i.e., Low $M_{\text{loudness}} = 67.5$db, $M_{\text{duration}} = 0.70$s; Medium $M_{\text{loudness}} = 81.88$db, $M_{\text{duration}} = 1.21$s; and High $M_{\text{loudness}} = 97.5$db, $M_{\text{duration}} = 1.63$s), thus providing a measure of aggressive responses under low, medium, and high provocation conditions respectively.

To see if provocation level predicted aggression, we computed four aggression terms by

averaging the intensity and duration scores for each block (first trial, low provocation, medium provocation, high provocation; higher scores indicated more aggression). We then conducted a repeated-measures ANOVA with sexualization as a between-subjects factor. The effect of block and all higher order interactions were non-significant (Greenhouse-Geisser corrected *p*s $\geq$ .101), demonstrating that aggressive responses towards the woman did not differ according to the provocation blocks. We thus used an average of all intensity and duration scores across all 25 trials as an overall index of aggressive behavior (M = 5.69, SD = 2.42).

Expanded positive and negative affect schedule.

In the Expanded Positive and Negative Affect Schedule (Watson & Clark, 1994), participants rated their affect by indicating the extent to which they felt 60 words and phrases that describe different emotions (e.g., bold; 1 = *very slightly or not at all*, 5 = *extremely*). We used the 10-item general negative affect subscale to explore whether effects on aggressive behavior were confounded by negative mood (e.g., upset; M = 1.65, SD = 0.56, α = .82).

Sexual dominance orientation.

Participants indicated their current orientation towards sexual dominance via six items on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*; e.g., 'I tend to take the more dominant role during sexual activity'; from Kiefer & Sanchez, 2007; M = 3.33, SD = 1.29, α = .85).

Procedure

Participants completed the trait aggressiveness questionnaire. They were then told that the study examined how interacting with potential dates online influenced social judgements. They were instructed that they would answer some dating profile questions then prepare and deliver a two-minute speech to a student from another university via a video dating portal that was created for the experiment. Participants were provided a worksheet and 10 minutes to help brainstorm

their speech. After 10 minutes elapsed, participants were told that they were going to listen to and watch the other person deliver their speech without providing any verbal feedback to the other person until after the speeches were finished (and vice versa). We also told participants that their aim was to have the other student rate them positively. This fake video speech methodology has been used extensively in our laboratory to successfully deceive participants (Denson, Hippel, Kemp, & Teo, 2010; Denson, Mehta, & Ho, 2013) and suspicion rates in the current experiment were low (5.4%).

Upon connecting to the video portal, students saw an ostensibly live video feed of a woman as well as her written responses to the three dating profile questions on the computer monitor. To create this video feed, we recorded two videos of a professional female actor delivering the same speech in sexualized clothes then again in non-sexualized clothes. Because sexualization encompasses not just sexualized clothing but also sexually open attitudes and behavioral intentions (Attwood, 2006), the sexualization manipulation comprised the woman's clothing in the video feed as well as her responses to the three dating profile questions. In the non-sexualized condition, the actor was wearing a white t-shirt and jeans (see Figure 1). Her dating profile questions said she was not sexually available ('1') and that sex with no strings attached was not for her ('1'). In the sexualized condition, the actor wore a white strapless top and denim shorts (see Figure 1) and her profile responses said she was sexually available ('5') and open to sex with no strings attached ('3'). Her speech comprised her own authentic responses to the speech preparation worksheet and was the same in both conditions.

After listening to the woman's speech, participants delivered their own speech to the woman and completed the sex goal activation measure and the liking ratings. They were then rejected via negative feedback ostensibly from the woman, which stated that the woman was not

interested in dating them (rating: '2' out of '7'), did not find them attractive (rating: '3' out of '7'), did not think they were a good catch (rating: '2' out of '7'), and rated them a '5' on the 10-point scale. Her personalized feedback read: "your [sic] a nice guy and all, but they said to be honest…if we did get together, Id [sic] maybe feel like I could have done better". Participants then completed the laboratory noise blast aggression paradigm ostensibly against the woman, the affect scale, and the sexual dominance measure.[1] At the end of the experiment, participants were thoroughly debriefed using a funnel debrief procedure.

Data Analysis

A preliminary two-sample *t*-test (sexualization manipulation: low, high) indicated that men randomized into the sexualized condition (M = 3.14, SD = 0.73) were higher on trait aggressiveness than those randomized into the non-sexualization condition (M = 2.84, SD = 0.81) $t(155) = 2.44$, $p = .016$, Cohen's $d = 0.39$). We therefore modelled trait aggressiveness as a continuous main effect in a series of general linear models, including the interaction between trait aggressiveness and the experimental manipulation. At the first step, the dummy coded manipulation variable (sexualization: 0 = non-sexualized, 1 = sexualized) and mean-centered trait aggressiveness were entered into the model. At the second step, we entered the two-way interaction into the model.

To model the indirect effect of sexualization on aggression via sex goal activation, we used structural equation modelling (SEM) in AMOS version 24. SEM was selected because it allows the assessment of relations between latent constructs with multiple indicators, provides indices of goodness-of-fit, and controls for measurement error (Kline, 2005). Sex goal activation was represented by a latent construct consisting of the three sex goal activation questions, which were moderately and significantly correlated, rs = .48–.51. Trait aggressiveness was represented

by a latent construct consisting of scores on the verbal, anger, hostility, and physical aggressiveness subscales of the Aggression Questionnaire, which were moderately and significantly correlated, *r*s .39–.64. Aggressive behavior was represented by a latent construct consisting of participants' averaged intensity and duration ratings for each of the four aggression blocks (*r*s .48–.87).

We predicted that sexualized clothing would indirectly influence aggressive behavior by activating sex goals. Model 1 included the direct effect of sexualized clothing on aggressive behavior, the covariate of trait aggressiveness, and sex goal activation as a mediator of the effect of sexualized clothing on aggressive behavior. Because trait aggressiveness was not randomly distributed between groups, we also included a parameter to model the correlation between sexualized clothing and trait aggressiveness. To explore whether the indirect effect was influenced by negative affect, we ran a second model replacing trait aggressiveness with negative affect.

Two participants with missing data were excluded from the SEM analysis (leaving n = 155) and bootstrapped standard errors were used to account for non-normal distributions. Models were estimated using maximum likelihood estimation. Model fit was assessed by using the χ^2 / df < 3.0, Comparative Fit Index (CFI) ≥ .95, and Root Mean Square Error of Approximation (RMSEA) ≤ .08 thresholds and models which satisfied all thresholds were considered to provide acceptable fit (Kline, 2005). Although the raw chi-square statistic and significance is reported, it was not used for model fit due to its extreme sensitivity to sample size (Kline, 2005). Outliers were detected using Mahalanobis distance d^2 and one outlier was excluded due to a large d^2 value (d^2 = 39.95, p_1 < .001; p_2 = .011). Indirect effects were significant if the 95% bias-corrected bootstrapped confidence intervals (CI) for the indirect effect did not include zero.

Results

Descriptive statistics are shown in Table 1 and the results of the linear regression models are shown in Table 2. The sexualization manipulation and trait aggressiveness significantly predicted sex goal activation. The sexualized woman (M = 4.66, SD = 1.19) activated sex goals more than the non-sexualized woman (M = 4.05, SD = 1.29; Cohen's d = .49), and men higher in trait aggression showed greater sex goal activation than less aggressive men. The two-way interaction was marginally significant: Trait aggressiveness predicted sex goal activation when the woman was non-sexualized (β = .42, $t(70) = 3.88$, $p > .001$), but not when she was sexualized (β = .13, $t(80) = 1.19$, $p = .238$). The other regression models showed that trait aggressiveness significantly and positively predicted aggressive behavior and negative affect. However, the sexualization manipulation and the sexualization × trait aggressiveness interaction were not significant. Liking ratings of the woman were equivalent across sexualization groups and were not predicted by trait aggressiveness or the interaction between the two variables.

SEM Mediation Analysis

Model 1 was a good fit for the data, χ^2 (49, n = 154) = 91.66, χ^2/ df = 1.87; CFI = .95, RMSEA = .08, and all parameter estimates are provided in Table 3. The indirect effect (sexualization → sex goal activation → aggressive behavior) was significant, Standardized Effect = .05, CI_{95} [.004, .14], indicating that men were more likely to aggress against the sexualized woman because interacting with her activated their sex goals (see Figure 2).[2] Model 2 yielded similar effects: The indirect effect (sexualization → sex goal activation → aggressive behavior) was still significant even when controlling for negative affect in the model, Standardized Effect = .05, CI_{95} [.01, .14]).

Sexual Dominance

In a hierarchical regression analysis, we regressed sexual dominance onto sexualization and trait aggressiveness (Step 1). The model was significant and yielded $R^2 = .11$, $F(3,154) = 6.29$, $p < .001$. The sexualization manipulation did not predict sexual dominance ($\beta = .15$, $p = .146$), but trait aggressiveness was a significant positive predictor ($\beta = .37$, $p = .001$). To explore whether aggressing against a woman increased feelings of sexual dominance, in Step 2, we added aggressive behavior to the model. The model yielded $R^2 = .13$, $F(4,154) = 5.49$, $p < .001$. Both trait aggressiveness ($\beta = .33$, $p = .002$) and aggression towards the woman ($\beta = .17$, $p = .093$) contributed to the model, but the aggression effect did not reach conventional levels of statistical significance.

Discussion

After an episode of romantic rejection, men were more likely to aggress against a sexualized than non-sexualized woman because of increased sex goal activation. This mediation effect was observed despite controlling for the effects of trait aggressiveness and negative affect on sex goal activation and aggression.

That sex goal activation elevated aggression following romantic rejection is consistent with the notion that aggression emerges from threatened self-esteem (Baumeister et al., 1996; Twenge & Campbell, 2003). Because sexualized women are presumed to be more interested in having sex (Farris et al., 2006), rejection by a sexualized woman constitutes a greater ego threat than rejection by a non-sexualized woman. The extent of this aggression depends on the degree to which a man anticipates that his romantic interest is reciprocated and thus sex goals are aroused. When this outcome eventuates and romantic interest is believed to be reciprocated, romantic rejection by a woman is likely to be particularly provoking. Both rejection following

presumed acceptance and other especially provoking situations are more likely to incite aggressive responses (Buckley et al., 2004; Lawrence, 2006).

Our findings are consistent with reports that some men believe they are justified behaving aggressively toward sexualized women when romantically rejected because they felt "led on" (Muehlenhard & Linton, 1987). We extend this past work by showing that sex goal activation mediates the relationship between sexualization and aggression following rejection. Our work also supports findings which indicate that men who think that they are a "good catch" are more likely to aggress against others when romantically rejected (Kirkpatrick, Waugh, Valencia, & Webster, 2002). We further offer novel insight into why some men aggress against women who initially consent to sexual activity but later reject them (Monson, Langhunrichsen-Rohling, & Binderup, 2000). Our work indicates that once male sex goals are aroused, unexpected rejection from an assumedly sexually interested woman constitutes a greater ego threat and thus may incite aggressive responses.

Echoing work by others (Murnen, Wright, & Kalyzny, 2002; Testa & Livingston, 1999), our findings imply that aggression toward sexualized women following romantic rejection is partly driven by the degree to which men feel entitled to sex. Male entitlement is correlated with low self-control, the endorsement of stereotypical gender roles, and hostility toward women (Bouffard, 2010). Continued efforts to understand how male entitlement is developed and maintained may thus support efforts to reduce the prevalence of male-to-female aggression. Preventing sexual aggression by reducing harmful masculine ideology in male peer groups (Swartout, 2013) and bystander intervention programs (Gidycz, Orchowski, & Berkowitz, 2011) may further provide effective means for reducing sexual violence.

Limitations and Future Directions

Future work may wish to determine whether aggression elicited by sex goal arousal and romantic rejection is directed only toward the inciter of the sex goals and rejection, or whether aggressive urges can be displaced. A sizeable body of work indicates that unresolved past provocations may compound the urge to lash out later, even at seemingly innocent targets (e.g., Vasquez, Denson, Pedersen, Stenstrom, & Miller, 2005). These findings raise the possibility that situations which elevate sex goals in men may increase the likelihood of displaced aggression following rejection, irrespective of whether the source of rejection differed from the source of sex goal activation. Thus, by encouraging sex goal activation in men, Western cultural sexualization may increase the degree to which that men will aggress against women who reject them—irrespective of whether the woman was sexualized or not. Future work testing this notion would provide valuable insight into the effect of Western cultural sexualization on male-to-female aggression.

Though our findings are consistent with aggression resulting from threatened self-esteem, we did not measure self-esteem or manipulate rejection directly. Future work directly measuring whether interacting with a sexualized woman elevates self-esteem in men and whether rejection by her constitutes a greater ego threat would strengthen our results. We also note that we cannot disentangle the relative contribution of (1) sexualized clothing, (2) permissive sexual attitudes, and (3) interest in casual sex on aggression following rejection. Because sexualization encompasses attitudes and behavioral intentions toward sex as well as revealing clothing (Attwood, 2006), we chose to manipulate sexualization using all of these phenomena.

Conclusion

After an episode of romantic rejection, men were more likely to aggress against a

sexualized compared to a non-sexualized woman because of increased sex goal activation. This result remained significant despite controlling for the effects of trait aggressiveness and negative affect.

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Figure 1. Actor in the sexualized condition (left) and non-sexualized condition (right).

Figure 2. Structural equation model testing the indirect effect of the sexualization manipulation on aggressive behavior.

Note. χ^2 (49, n = 154) = 91.66, χ^2/df = 1.85; CFI = .95, RMSEA = .07. All parameter estimates are standardized, standard errors are bootstrapped, and boldface font shows significant paths. The indirect effect of sexualized clothing on aggressive behavior via sex goal activation is significant, Standardized Effect = .05, CI_{95} [.004, .14]. sga1 = experiencing romantic or sexual arousal; sga2 = experiencing a desire to have a romantic partner; sga3 = experiencing a desire to have others be attracted to you.

Tables

Table 1 *Descriptive statistics*

Variable	Sexualization manipulation		Pearson correlation				
	Sexualized	Non-sexualized	Sex goal activation	Sexual dominance	Liking	Negative affect	Aggression
	M (*SD*)	*M* (*SD*)					
Trait aggressiveness	3.14 (0.73)	2.84 (0.81)	.31**	.29**	.02	.25**	.21**
Sex goal activation	4.66 (1.19)	4.05 (1.29)		.20*	.28**	.36**	.20*
Sexual dominance	3.47 (1.26)	3.05 (1.29)			.10	.21**	.17*
Liking	0.04 (0.86)	-0.05 (0.89)				.11	.03
Negative affect	1.72 (0.07)	1.57 (0.05)					.21**
Aggression	5.68 (0.23)	5.70 (0.32)					

Note. †$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.15

Table 2 *Linear models regressing outcome variables onto sexualization and trait aggressiveness.*

	β	*SE*	*p*
Sex goal activation			
Sexualization manipulation	0.48	0.20	.015*
Trait aggressiveness	0.46	0.13	<.001***
Sexualization × trait aggressiveness	-0.45	0.25	.077†
Aggressive behavior			
Sexualization manipulation	-0.19	0.39	.622
Trait aggressiveness	0.68	0.25	.008**
Sexualization × trait aggressiveness	-0.60	0.50	.233
General negative affect			
Sexualization manipulation	0.10	0.09	.280
Trait aggressiveness	0.17	0.06	.005**
Sexualization × trait aggressiveness	0.16	0.12	.183
Liking			
Sexualization manipulation	0.09	0.15	.548
Trait aggressiveness	0.01	0.10	.882
Sexualization × trait aggressiveness	0.24	0.19	.213

Note. The table depicts a series of general linear regression models where sexualization and trait aggressiveness were entered at Step 1 and the interaction term was entered at Step 2. Coefficients, standard errors, and *p* values are reported from the step at which the term was entered. Sex goal activation model: Step 1 $R^2 = .14$, $F(3,155) = 8.09$, *p*

< .001; Step 2 R^2 = .16, $F(4,155) = 6.94$, $p < .001$. Liking model: At both steps the models was non-significant, R^2s ≤ .02, Fs < 1.00, ps ≥ .733. Aggressive behavior model: Step 1 R^2 = .05, $F(3,156) = 2.68$, $p = .049$; Step 2 R^2 = .06 $F(4,156) = 2.38$, $p = .055$. General negative affect model: R^2 = .08, $F(3,154) = 4.32$, $p = .006$; R^2 = .09, $F(4,154) = 3.70$, $p = .007$. $^{\dagger}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table 3 *Parameter estimates of structural equation testing the mediation effect of sex goal activation on aggressive behavior.*

Parameter Estimate	*β*	*SE*	*p*
Measurement Model			
Sex goal activation → sga1	.72	.07	<.001***
Sex goal activation → sga2	.73	.06	<.001***
Sex goal activation → sga3	.68	.07	<.001***
Trait aggressiveness → Verbal aggressiveness	.62	.06	<.001***
Trait aggressiveness → Anger	.89	.05	<.001***
Trait aggressiveness → Hostility	.62	.07	<.001***
Trait aggressiveness → Physical aggressiveness	.70	.06	<.001***
Aggressive behavior → Trial #1	.65	.07	<.001***
Aggressive behavior → Low provocation	.89	.03	<.001***
Aggressive behavior → Medium provocation	.97	.02	<.001***
Aggressive behavior → High provocation	.78	.05	<.001***
Error in sga1	.48	.09	<.001***
Error in sga2	.47	.09	<.001***
Error in sga3	.54	.09	<.001***
Error in Verbal aggressiveness	.61	.09	<.001***
Error in Anger	.21	.08	.019*
Error in Hostility	.61	.08	<.001***
Error in Physical aggressiveness	.50	.10	<.001***
Error in Trial #1	.57	.10	<.001***
Error in Low provocation	.20	.05	<.001***
Error in Medium provocation	.06	.04	.119
Error in High provocation	.39	.07	<.001***
Structural Model			
Sexualization manipulation → Sex goal activation	.22	.09	.016*
Sexualization manipulation → Aggressive behavior	-.07	.09	.391
Trait aggressiveness → Sex goal activation	.32	.11	.005**
Trait aggressiveness → Aggressive behavior	.15	.10	.124
Sex goal activation → Aggressive behavior	.23	.10	.033*
Correlation between Sexualization and Trait aggressiveness	.17	.09	.068†
Residual for Sex goal activation	.43	.10	<.001***
Residual for Aggressive behavior	.38	.10	<.001***

Note. χ^2 (49, n = 154) = 91.66, χ^2/df = 1.85; CFI = .95, RMSEA = .07. Parameter estimates are standardized and standard errors are bootstrapped. †p < .10. *p < .05. **p < .01. ***p < .001.

Footnotes

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[1] We also measured hostility towards women (HTW, adapted from Buss & Perry, 1992) after the aggression paradigm. HTW showed a large correlation with trait aggressiveness, $r(155) = .55$, $p < .001$, so we analysed trait aggressiveness only. Participants also rated the woman on a list of mental states from Haslam, Kashima, Loughnan, Shi, and Suitner (2010). Mental state attributions did not predict aggression ($p = .888$) and was not analysed further. We counterbalanced the mental state attribution measure to occur before or after rejection so we included this between-subject effect as a covariate in all linear regression analyses (excluding it yielded comparable effect sizes and *p* values with those reported here).

[2] We also examined whether trait aggressiveness moderated the effect of sexualization on sex goal activation in the mediation model using the PROCESS macro (Hayes, 2012; model 7) and included trait aggressiveness as a moderator of the $a \rightarrow b$ path and as a covariate of the mediator and outcome variable. The effect was not significant, Effect = -.05, CI_{95} [-.18, .002], suggesting that the indirect effect of sexualization on aggression via sex goal activation was not moderated by trait aggressiveness.