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The Object of My Aggression: Sexual Objectification Increases Physical

Aggression Towards Women

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#### **Abstract**

Objectification involves reducing someone to a sexual object, rather than seeing them as a full person. Despite numerous theoretical claims that people are more aggressive towards the objectified, and empirical evidence that objectification is linked to high willingness to aggress, rape proclivity, and aggressive attitudes, no research has examined a *causal* link between objectification and physical aggression, particularly in the context of provocation. In two experiments, we examined this hypothesised link. In Experiment 1, using a 2 (objectification: no/yes) x 2 (provocation: no/yes) factorial between-subjects design, we investigated the effects of objectification, induced via body focus during a face-to-face interaction, and provocation on physical aggression towards a female confederate. Our results revealed a significant main effect of provocation, a marginal main effect of objectification, and a significant interaction between these variables. In the absence of a provocation, focusing on a woman's body increased aggression towards her. Experiment 2 replicated Experiment 1 using a video of a target woman instead of a face-to-face interaction. Again, our results showed a significant two-way interaction between objectification and provocation, wherein objectification increased aggression in the absence of provocation. Overall, this research indicates that objectification can lead to heightened physical aggression towards objectified women.

Keywords: Objectification, Body Focus, Physical Aggression, Aggression Towards Women, Aggression

The Object of My Aggression: Sexual Objectification Increases Physical Aggression

Towards Women

Sexual objectification is the perception of an individual solely as an object useful for fulfilling sexual desires, rather than as a person in their own right, with moral rights and a complex mind. Philosophers (Kant, 1797/1996; Nussbaum, 1995), feminist writers (Dworkin, 1989; MacKinnon, 1982), and psychologists (Fredrickson & Roberts, 1997; Loughnan & Pacilli, 2014) have suggested that sexual objectification leads to increased aggression towards objectified women. However, to date, this has not been empirically tested, despite clear evidence linking sexual objectification with processes and outcomes (e.g., dehumanization, hostile sexism) that are likely to facilitate aggression (Cikara, Eberhardt, & Fiske, 2011; Heflick & Goldenberg, 2009). The aggression-facilitating effects of objectification may be especially impactful when the objectifier additionally perceives that they have been provoked by the target. Thus, the purpose of the current study was to examine whether sexual objectification and provocation interact to increase physical aggression towards real-life female targets. In the next section, we discuss the link between the objectification of women and the negative psychological and behavioural outcomes that would predict that objectification also leads to physical, non-sexual aggression.

Although having sexual desires toward others is commonplace, sexual objectification goes beyond sexual desire, and as far as dehumanization; it leads to viewing another as less than fully human. At an implicit level, sexualized women are viewed as body parts rather than whole bodies (Bernard, Gervais, Allen, Campomizzi, & Klein, 2012), as interchangeable with other sexualized women (Gervais, Vescio, & Allen, 2012), and are more readily associated with animals (Rudman & Mescher, 2012; Vaes, Paladino, & Puvia, 2011) and objects (Rudman & Mescher, 2012). At an explicit level, sexually objectified women are

viewed as lacking human nature (Heflick & Goldenberg, 2009), as cold, incompetent, and immoral (Heflick, Goldenberg, Cooper, & Puvia, 2011), and as possessing relatively impoverished mental lives (Gray, Knobe, Seshkin, Bloom, & Barrett, 2011; Loughnan et al., 2010).

In essence, dehumanization that stems from sexual objectification has a range of detrimental effects on the treatment of others, including increasing and facilitating aggression (cf. Haslam, 2006; Haslam & Loughnan, 2014). Dehumanizing others directly leads to increased levels of aggression (Greitemeyer & McLatchie, 2011). Further, once aggression occurs, people engage in even more self- and other-dehumanizing, suggesting a dehumanization-aggression cycle (cf. Bastian et al., 2012). In addition to facilitating personal aggression, the dehumanization of outgroups appears to justify and facilitate intergroup aggression (Bar-Tal, 1989; Castano & Giner-Sorolla, 2006). Given that dehumanization leads to increased aggression at both interpersonal and intergroup levels, we may expect women who are dehumanized (via objectification) to also be aggressed against.

The existing literature on sexual objectification provides indirect evidence that individuals will aggress against sexually objectified women. People tend to possess hostile beliefs and action tendencies towards objectified women. For men, the tendency to sexually objectify women is linked to hostile sexism, likelihood to sexually harass, rape myth acceptance, and rape proclivity (Cikara, Eberhardt, & Fiske, 2011; Rudman & Mescher, 2012). Women also tend to hold strongly negative attitudes towards sexually objectified women and see them as less than fully human (Heflick & Goldenberg, 2009; Loughnan et al., 2015; Puvia & Vaes, 2012; Vaes, Paladino, & Puvia, 2011). The impact of objectification extends beyond judgements of humanity and mind to impact perceived moral standing. When an individual is disliked, dehumanized, and deemed unworthy of moral consideration, we feel

less concern for them and more comfortable to aggress against them (Haslam, 2006; Waytz, Gray, Epley, & Wegner, 2010). Compared to non-sexually objectified targets, objectified women tend to elicit lower levels of moral concern – people report less concern if they are harmed (Loughnan, Pina, Vasquez, & Puvia, 2013; Loughnan et al., 2010), and are less willing to intervene when other women are victims of partner violence (Pacilli et al., in press). Moreover, recent findings show that among adolescents, sexual objectification of girls is correlated with non-sexual aggression towards them (Vasquez, Osinnowo, Pina, Ball, & Bell, 2017).

If people dislike, dehumanize, and care less about sexually objectified women, they may be more likely to be aggressive towards them. This may be particularly true when objectified individuals provide (or are perceived to provide) provocations, which are a common cause of aggressive behavior (see Anderson & Bushman, 2002; Berkowitz, 1993). More specifically, a provocation induces negative affect, including anger, which, in turn, induces the motivation to retaliate against the perceived source of the provocation (see Berkowitz, 1989, 1990). Depending on a person's history, as well as the particular situation, the negative affect can lead directly to aggression or violence. Objectification has the potential for moderating the effect of provocation on aggression for a variety of reasons. For instance, as suggested above, it can increase aggression by reducing concern for the objectified, thus reducing the inhibition to aggress. In addition, objectification may increase a dislike towards the objectified. Disliking a provoking individual tends to increase aggression towards them (Pedersen, Bushman, Vasquez, & Miller, 2008). Hence, objectification may augment retaliation following a provocation by decreasing inhibitory processes and/or facilitating aggressive motivation.

Some modes of objectification of women, particularly those involving highly sexualised media, such as pornography, can also augment aggression via increased arousal and/or the priming of aggressive responding to females. For instance, objectification can increase aggression when the physiological arousal induced by sexually objectifying a person is added or transferred to the experience of anger induced by a subsequent provocation. This process is termed *excitation transfer* (see Cantor, Zillmann, & Einsiedel, 1978; Zillmann, 1971). Excitation transfer theory proposes that the combining of excitation occurs when the arousal from the first incident (e.g., watching porn) has decreased, but not completely dissipated, and the individual is no longer aware of it. If at that point, a person is provoked, the arousal from the first incident can then be attributed and added to the arousal induced by the provocation, thereby intensifying the experience of anger, which in turn, increases retaliation (Zillmann, 1971).

It is important to note, however, that excitation transfer does not augment aggression through decreased concern for the target or other disinhibiting processes, as objectification is theorised to do. Instead, it should do so by increasing the experience of negative affect and arousal. In addition, the typical study on excitation transfer and aggression that employs erotic stimuli to induce arousal involves targeting aggression towards a person who is not directly associated with the objectifying stimuli. That is, the arousal manipulation that employs objectification (e.g., pornography) does not include the person who subsequently becomes that target of aggression. Our paradigm differs from excitation transfer in the two previous respects; we expected objectification to increase aggression, even in the context of more subtle (i.e., low in arousal) manipulations of this variable, such as merely focusing on the target's body.

Highly sexualised media can also increase aggression when it has aggressive characteristics, such as depicting forceful sex, which can prime an individual for aggressing more intensely if provoked (see Berkowitz & Donnerstein, 1981). In our paradigm, however, we examined the effect of sexual objectification on aggression using a manipulation of objectification that was devoid of aggressive cues. More specifically, we induced objectification by asking participants to focus on a confederate's physical appearance and body. Gazing at women is a key aspect of objectification and can have negative effects on the target. For instance, women who are the target of objectifying gaze experience lower performance on cognitive task, such as math problems (Gervais, Vescio & Allen 2011).

Gazing has also been used to induce objectification in previous research (e.g., Heflick & Goldenberg, 2009). Our manipulation allowed us to control for the confounding effects of previously employed stimuli, such as violent pornography, that combine sexual objectification and aggression, thereby examining the purer impact of the former.

In short, objectification has important implications for aggression because an aggressor may experience lower levels of inhibition against aggressing towards an objectified target. The current studies tested the hypothesis that sexual objectification leads to more physical aggression towards women.

#### **Experiment 1**

The first experiment examined the interaction between objectification and a provocation on physical aggression. Participants interacted face-to-face with a female confederate. Prior to the interaction, they were instructed either to focus on her physical appearance or her as a person. They subsequently engaged in a bogus task and ostensibly exchanged their responses with the confederate for evaluation. Participants in the provocation condition received fake negative feedback on their performance in the bogus task. Those in

the no provocation condition received generally positive feedback. The participants subsequently had the opportunity to engage in physical aggression against the female confederate. It was hypothesised that participants who focused on the confederate's body would be more aggressive than those who focused on their personality. In addition, it was hypothesised that provoked, relative to unprovoked participants would be more aggressive. Furthermore, it was hypothesised that body focus and provocation would interact, such that provoked participants who also focused on the confederate's body would be the most aggressive.

#### Method

Participants and design. A total of 80 students from a British University (56 females, 24 males;  $M^{\text{age}} = 19.93$  years, SD = 3.81) participated for course credit or payment. They were randomly assigned to one of four conditions in a 2 (body vs. personality focus) x 2 (provocation vs. no provocation) between-subjects factorial design.

Procedure and materials. All participants were treated in accordance with APA ethical guidelines, and the experiment received prior approval from the lead author's departmental research ethics committee to ensure it met ethical standards. Informed consent was obtained from all volunteers prior to their participation. Participants arrived at the lab, were seated, and were told they would take part in a study on Extra Sensory Perception (ESP) and impression formation with another participant (a confederate), who was seated momentarily in another lab with another (bogus) experimenter (see Appendix for the experiment script).

The confederate was brought into the room to be seated in front of the participant to engage in the bogus ESP task with them. They were told the ESP task involved predicting the outcomes in a series of dice rolls with their partner. As part of the cover story relating to impression formation, participants were told they would focus on a specific aspect of the

partner. Participants in the body-focus (i.e., objectification) condition were asked to focus on the confederate's physical appearance during the ESP task. In the personality-focus condition, participants were asked to focus of the confederate's personality. This objectification manipulation has successfully been employed in previous research using images rather than people (cf. Heflick & Goldenberg, 2009; Heflick, Goldenberg, Cooper, & Puvia, 2011).

Following the bogus ESP task (approximately 5mins), the participant and confederate were separated, and the former was subsequently instructed to take five minutes to write an essay on their attitude towards abortion. They were told this would be evaluated by the other participant. This task served as the context for the provocation manipulation. Provocation was manipulated because most aggressive contexts involve instigation (cf. Anderson & Bushman, 2002). Participants received either a bogus negative (provocation condition) or positive (no-provocation condition) evaluation about the writing task. The bogus negative evaluation included rating of the participants' effort in writing the essay, as well as rating of the validity and quality of the writing. These rating were 3, 4 and 3 respectively, on a 7-point scale (1 = Not at all, 7 = Very High) and the following comments: "This essay is not very good. Although they have put some effort in, their arguments aren't very relevant. They haven't put much thought into it. There are important points they have missed." The bogus positive evaluation included effort, validity and quality ratings of 6, 6 and 6 respectively, on a 7 point Likert scale (1 = Not at all, 7 = Very High) and the following comments "This essay is good. They appear to have put a lot of thought and effort in and made some really good points. I can't think of any points that they have missed out".

Following the provocation manipulation, participants were given the opportunity to retaliate against the confederate. Participants were told that a second experiment was being

run by another experimenter to examine the effects of making a decision on cognitive performance. The participant would decide how long the confederate should ostensibly hold her hand in iced water while she engaged in a cognitive task. They were told that due to randomisation of conditions they were in a visual condition and would be distracted by photos on a computer screen and their partner was in a tactile condition, and thus, had to hold their hand in the ice cold water. Aggression was measured by asking participants to decide how long the confederate should submerge her hand in ice water (cf. Ballard & Lineberger, 1999; Vasquez, 2009). In order for participants to understand how painful submerging a hand in the water was, they were asked to test the water with their own hand. Participants were told to indicate the length of the distraction in seconds using a 9-point scale that ranged from 1 (0 seconds) to 9 (80 seconds) by circling their answer on the distraction form. This measure of physical aggression has been successfully employed in previous research (e.g., Vasquez, 2009; Vasquez, Denson, Pedersen, Stenstrom, & Miller, 2005). Participants were then asked to complete a provocation manipulation check, which contained 25 emotion/feeling words (e.g., angry, happy, irritable, cheerful) that assessed participants affective reactions to the provocation using a scale that ranged from 1 (not at all) to 7 (extremely). Participants were subsequently debriefed.

#### **Results**

## Provocation manipulation checks.

A total of 7 participants were excluded from the study because they were outliers for the aggression measure (three participants whose aggression scores were more than 2 standard deviations from the mean), personally knew one of the confederates (two participants), or had participated previously in a similar study and were suspicious (two participants). The degree to which the provocation manipulation was effective in provoking

participants was measured via the provocation manipulation check questionnaire. We created a composite of six items that assessed levels of negative affect resulting from the provocation manipulation (i.e., frustrated, angry, offended, annoyed, irritable, and upset). The items in the composite had good reliability (Cronbach's  $\alpha = 0.91$ ). An independent t-test revealed that participants in the provocation condition experienced higher levels of negative affect (M = 2.72, SD = 1.14) than participants in no-provocation condition (M = 1.23, SD = .42), t(71) = -7.20, p < .001. This indicates that the provocation manipulation was successful.

## Aggression

We initially conducted a 2 (objectification, no objectification) x 2 (provocation, no provocation) x 2 (male, female participant) between subjects ANOVA. There was no significant three-way interaction, F(1, 65) = .48, p = 0.49, partial  $\eta^2 = .007$ . There was also no main effect of objectification, F(1, 65) = 2.28, p = 0.14, partial  $\eta^2 = .034$ . However, the was a main effect of provocation, whereby provoked participants acted more aggressively than unprovoked participants, F(1, 65) = 8.91, p = 0.004, partial  $\eta^2 = .12$ . In addition, there was a significant objectification x provocation interaction, F(1, 65) = 4.47, p = 0.038, partial  $\eta^2 = .064$ . The means and standard deviations are presented in Table 1.

Given that there were no significant participant gender effects, gender was excluded from subsequent analyses (aggression patterns for males and females were very similar). A 2 (objectification, no objectification) x 2 (provocation, no provocation) between subjects ANOVA was conducted to test for main effects and a two-way interaction. There was a marginal main effect of objectification, with participants who focused on the confederate's body acting marginally more aggressively than those who did not, F(1, 69) = 3.25, p = 0.076, partial  $\eta^2 = .045$ . As expected, there was also a main effect of provocation, whereby provoked participants acted more aggressively than unprovoked participants, F(1, 69) = 10.56, p = 0.056, p = 0.05

0.002, partial  $\eta^2$  = .13. These effects were qualified by an objectification x provocation interaction, F(1, 69) = 4.32, p = 0.041, partial  $\eta^2 = .059$ . The pattern of the interaction, however, was different from the predicted one (see Figure 1).

Deconstruction of the interaction revealed that, contrary to expectations, aggression levels under provocation did not differ across the no objectification (M = 4.16, SD = 1.98) and objectification conditions (M = 4.05, SD = 1.64), t(37) = -.186, p > .85, d = .06. In the absence of a provocation, however, aggression levels were higher in the objectification (M = 3.59, SD = 1.84) than the no-objectification condition (M = 2.06, SD = 1.09), t(32) = -2.95, p = .006, d = 1.01. Thus, objectification increased aggressive behavior toward the female confederate only when she did not provoke the participant.

#### **Discussion**

As predicted, provoked participants were more aggressive than those who were not provoked. Our prediction of a main effect of objectification received only partial support, as this main effect was only marginally significant. More importantly, these effects were qualified by a significant objectification x provocation interaction. The pattern of the interaction, however, was different from what was predicted. More specifically, contrary to our expectations, focusing on the confederate's body had no effect on aggression levels in provoked participants. Interestingly, objectification increased aggression significantly when participants were not provoked. This suggests that for provoked participants, the provocation was the more salient and/or motivating factor in retaliating. In the absence of an instigation, however, body focus alone motivated participants to be more aggressive. Thus, our hypothesis that objectification would increase aggression was supported, but not in the context of a provocation.

In Experiment 2, we attempted to replicate our findings using different procedures. It is possible that focusing on the confederate's body during a face-to-face interaction was an uncomfortable task for many participants. Thus, the confederate (and target of objectification) was presented in a video in Experiment 2. In addition, in Experiment 1, the instructions to participants to focus on the confederate's personality in the no-objectification condition may have lowered aggression relative to the objectification condition. In other words, the difference in aggression levels between the body focus and personality focus condition in the absence of a provocation may have been due a personalisation effect in the latter. This is unlikely, given that aggression levels in the no-provocation/no-objectification condition are lower than those in the provocation conditions and seems to have performed as one would expect a proper control condition. Nevertheless, Experiment 2 employed a different control condition in the objectification manipulation to increase our confidence that differences in aggression between the objectification and no-objectification conditions are caused by body focus.

#### Method

Participants and design. A total of 128 students from a British university (80 females, 48 males;  $M^{\text{age}} = 21.38$  years, SD = 6.13) participated in Study 2 for course credit or payment. The participants were randomly assigned to a condition in a 2 (no objectification vs objectification) x 2 (no provocation vs provocation) between-subjects factorial design.

All participants were treated in accordance with APA ethical guidelines, and the experiment received prior approval from the departmental ethics committee to ensure it met ethical standards. Informed consent was obtained from all volunteers prior to their participation. Participants were greeted by the experimenter and seated in a private room in front of a computer screen. They were told that the purpose of the study was to examine

persuasive argument skills and decision-making, and that the study involved another participant who was placed in another room (see the Appendix for the experiment script). After participants gave their informed consent to participate, they were told that they and the other (bogus) participant would be asked to give persuasive arguments for why a more expensive cleaning product should be purchased rather than its cheaper competitors. They were also told that the experimenters want to examine if arguments made in a manner where the person could be seen and heard were more persuasive than those made in written form. Thus, all participants were told they would be given 5 minutes to write their arguments. Ostensibly, the other participant would also take 5 minutes to compose the arguments, then make them verbally to the participant via a Skype link. This information created the context and justification for the objectification manipulation. After the allotted five minutes has ended the experimenter returned to the room and set up the Skype link to the other participant. In reality, the Skype link was bogus, and the confederate's argument was a pre-recorded video.

Participants in the *no objectification condition* were asked to focus on how well the confederate delivered their argument and to what extent the confederate's argument made sense. In addition, the confederate in the video wore black long-sleeve sweater that made it difficult to see details of her body. Those in the *objectification condition* were asked to focus on the appearance, the look and the body of the confederate. The confederate in the video wore a light-colored sleeveless blouse that showed her arms and the area just below the neck. This addition to our objectification manipulation was designed to facilitate focusing on the confederate's body. After the watching the video, all participants completed an evaluation of the confederate's arguments. The feedback was provided using a form consisting of a section

for comment and ratings of creativity, persuasiveness, and clarity, using scales that ranged from 1("not very much") to 7 ("very much").

Participants were led to believe that the confederate would also evaluate the participants' written arguments and provide feedback. This feedback was the context of the provocation manipulation. Participants in the provocation condition were given bogus negative feedback about their arguments, whilst those in the no provocation condition were provided with the positive feedback.

The aggression measure was the same as in Study 1. Participants were asked to indicate how long the confederate should hold their hand in ice-cold water, using a scale that ranged from 1(0 seconds) to 9 (80 seconds). Participants were asked to place their hand inside for a couple of seconds so that they could gage the temperature. Finally, all the participants were asked to complete the provocation manipulation checks. We conducted a funnel debriefing to prove for suspicion, and the participant was subsequently fully debriefed.

#### Results

One participant was an outlier and was excluded from the analyses. In addition, due to experimenter error, the provocation manipulation forms for 49 participants (38% of the sample) were not administered. Thus, we report the manipulation check result for the 78 participants (61% of the sample) who were collected. We created a composite of six items that assessed levels of negative affect resulting from the provocation manipulation (frustrated, angry, offended, annoyed, irritable, and upset). The items in the composite had good reliability (Cronbach's  $\alpha = 0.913$ ). An independent samples t-test revealed that participants in the provocation condition experienced higher levels of negative affect (M = 2.36, SD = 1.00)

1.278) than participants in no-provocation condition (M = 1.21, SD = .43), t(75) = 5.31, p < .001.

As in Experiment 1, we initially conducted a 2 (objectification, no objectification) x 2 (provocation, no provocation) x 2 (male, female participant) between subjects ANOVA. Once again, we found no significant three-way interaction, F(1, 119) = .65, p = 0.42, partial  $\eta^2 = .005$ . There also was no main effect of objectification, F(1, 119) = .44, p = 0.51, partial  $\eta^2 = .004$ . There was a main effect of provocation, F(1, 119) = 7.22, p = 0.008, partial  $\eta^2 = .057$ . Once again, there was a significant objectification x provocation interaction, F(1, 119) = 4.63, p = 0.033, partial  $\eta^2 = .037$ . The means and standard deviations for males and females are presented in Table 2.

Because there were no gender effects on aggression, this factor was excluded from subsequent analyses. Thus, we conducted a 2 (objectification, no objectification) x 2 (provocation, no provocation) between subjects ANOVA to test for main effects and the interaction. There was no main effect of objectification, F(1, 123) = .52, p = 0.47, partial  $\eta^2 = .004$ . However, there was a main effect of provocation, which showed that provoked participants acted more aggressively than unprovoked participants, F(1, 123) = 5.57, p = 0.016, partial  $\eta^2 = .046$ . These effects were qualified by the expected objectification x provocation interaction, F(1, 123) = 4.07, p = 0.046, partial  $\eta^2 = .032$ , which generally replicated the aggression results from Experiment 1 (see Figure 2).

Deconstruction of the interaction revealed that, when participants were provoked, there was no difference in aggression between the no objectification (M = 4.52, SD = 2.06) and objectification conditions (M = 4.03, SD = 2.33), t(63) = -.81, p = .42, d = .22. In the absence of a provocation, however, aggression levels were higher in the objectification (M = 3.87, SD = 2.28) than the no-objectification condition (M = 2.84, SD = 1.73), t(60) = 2.05, p = .045, d = 2.28

= .51. Thus, replicating Study 1, focusing on the body of a woman seen in a video presentation increased aggressive behavior towards her only when she did not provoke the participant.

#### General Discussion

In two experiments, our findings showed that objectification of a woman increased aggression towards her in the absence of a provocation. This effect was independent of participant age, and the pattern of results were very similar across participant gender.

Importantly, and in contrast to all previous research (Bernard, Gervais, Allen, Campomizzi, & Klein, 2012; Gervais, Vescio, & Allen, 2012; Loughnan et al., 2010), this effect was observed using a *real* female target (v. an image of a woman) that participants directly objectified, and using a physical measure of aggression where participants believed that they were inflicting real (v. hypothetical) pain on that woman.

The current studies provide experimental evidence for a long-speculated (Dworkin, 1989; Kant, 1797/1996; MacKinnon, 1987) but previously unsupported link between objectification and aggression. It is well established that men who tend to objectify women are more likely to possess a suite of aggressive attitudes and beliefs, including increased likelihood to sexually harass and increased rape proclivity (Rudman & Mescher, 2012). Further, women tend to possess very negative views of objectified women (Vaes et al., 2011). Moreover, as previously stated, correlational research has linked objectification of girls to non-sexual aggression towards them in youth (Vasquez et al, 2017). The current study extends those findings and suggests that sexual objectification has a direct impact on aggression, triggering aggressive behavior even in the absence of a provocation.

Our research expands the list of detrimental effects of sexual objectification for females. Focusing on a woman's body has important intra-personal consequences for that woman. For instance, anticipating a sexualized gaze triggers increased body anxiety and body shame (Calogero, 2004), recalling it leads women to feel less human (Loughnan et al., in press), and directly experiencing that gaze leads to impaired cognitive performance (Gay & Castano, 2010) and diminished social presence (Saguy, Quinn, Dovidio, & Pratto, 2010). The current findings add an important interpersonal dimension to the sexually objectifying gaze, namely, increased aggression.

It is worth noting that our findings demonstrate that minimal conditions for objectification were enough to elicit heightened aggression. Participants were simply instructed to focus on the woman's physical appearance; the woman wore no provocative clothing that would attract undue attention to her body without prompt. In real world situations in which objectification may be more strongly induced – even encouraged – aggression levels are likely to be more intense and have more serious implications. For instance, situations involving prostitution or sexual exploitation are likely to induce more extreme levels of aggression and violence, including torture and homicide.

Regarding the lack of effect under provocation, it is important to note that the manipulations of objectification, which primarily used body focus, were likely subtle. As a result, when combined with a provocation, the latter factor was more salient, and thus, became the source of motivation to aggress. It may be that more impactful or extreme inductions of objectification, which can induce more powerful de-humanization effects, do interact with provocations to further augment aggression. For instance, the more intense objectification of sex workers may lead to higher levels of aggression and violence towards them, and this may be particularly true if they are perceived to provoke an aggressor.

In addition, it maybe that objectification can interact with ambiguous provocations to augment aggression. More specifically, the aggressive priming induced by moderate levels of objectification seem to have little impact on aggression in the context of a clear or salient provocation. When a provocation is ambiguous and provoked individuals are normally willing to give the benefit of the doubt and inhibit aggressive responding, however, objectification may be more likely to induce hostile attributions and perceptions that can interact with the instigation and affect aggression. This is because the accessibility of aggression-related cognitions in memory induced by aggressive priming (in this case, objectification) is more likely to affect the interpretation of ambiguous rather than clear or obvious social events (see Todorov & Bargh, 2002). As a result, individuals may be less willing to inhibit aggression. This is analogous to findings by Pedersen, Vasquez, Bartholow, Grosvenor, and Truong (2014), which showed that alcohol priming increased aggression following a provocation only when the provocation was ambiguous. Future research should examine these hypothesized interactions between different types of provocation and the strength or intensity of objectification.

With regards to the potential link or overlap between our research and previous research examining the effect of erotic stimuli on aggression (e.g., excitation transfer), it is important to point out that ours differs on some important dimensions. First, our research examined the effect of objectifying a person who subsequently becomes the target of aggression from the objectifier. In the case of excitation transfer, the objectified individual (s) is not targeted for aggression. Indeed, in order to induce the misattribution of arousal, the initial induction of arousal is unrelated to the provocation induction in that paradigm (see Zillmann, 1971). Second, although looking at a woman's body can be arousing, our manipulations were unlikely to be highly arousing. Some research suggests that for provoked

individuals, mildly erotic stimuli (less arousing) can reduce aggression (see Baron 1974b). Third, incidental arousal increases aggression primarily when an individual has been provoked. In our experiments, objectification did not increase in aggression in the provocation condition. Thus, it is unlikely that excitation transfer explains our findings, though there is some overlap between that paradigm and ours.

As previously discussed, erotic stimuli that contains aggressive cues (e.g., depictions of forceful sex) increases aggression towards a target not involved in the stimuli (Berkowitz & Donnerstein, 1981). Such objectification inductions impact aggressive behavior via aggressive priming and/or the transfer of incidental arousal to the experience of anger. Our research paradigm, however, controlled for aggressive cues and aggressive priming, thereby showing that the inclusion of aggressive cues in the induction of objectification is not necessary to augment aggression.

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Table 1.

Aggression levels as a function of objectification and provocation for male and female participants in Experiment 1.

Males	No Provocation <i>M</i> ( <i>SD</i> )	n	Provocation <i>M</i> ( <i>SD</i> )	n
Objectification	, ,		, ,	
No	1.83 (1.17)	6	4.40 (2.70)	5
Yes	3.60 (1.52)	5	3.71 (1.25)	7
Females Objectification	No Provocation M (SD)	n	Provocation M (SD)	n
No	2.18 (1.08)	11	4.07 (1.77)	14
Yes	3.58 (2.02)	12	4.23 (1.83)	13

Table 2

Aggression levels as a function of objectification and provocation for male and female participants in Experiment 2.

Males	No Provocation <i>M</i> ( <i>SD</i> )	n	Provocation <i>M</i> ( <i>SD</i> )	n
Objectification				
No	2.50 (1.27)	10	5.36 (2.25)	11
Yes	3.78 (2.34)	18	4.25 (1.83)	8
Females	No Provocation M (SD)	n	Provocation M (SD)	n
Objectification	2.00 (1.00)	22	4.05 (1.05)	20
No	3.00 (1.90)	22	4.05 (1.85)	20
Yes	4.00 (2.27)	13	3.96 (2.49)	25

## Figure Captions

- Figure 1. Aggression levels as a function of objectification and provocation.
- Figure 2. Aggression levels as a function of objectification and provocation.



