Integrating Sexual Objectification With Object Versus Person Recognition: The Sexualized-Body-Inversion Hypothesis

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In the study reported here, we tested the novel sexualized-body-inversion hypothesis. Integrating research and theory on objectification and person versus object recognition, we examined whether sexualized women, but not sexualized men, are recognized in the same way as objects are. According to objectification theory (Fredrickson & Roberts, 1997), female bodies are scrutinized and evaluated to a greater degree than male bodies are, which leads to sexual objectification of women. Defined as viewing or treating an individual as a sexualized body, or as sexualized body parts, available for satisfying the needs and desires of other people (Bartky, 1990), sexual objectification has been recently operationalized by portraying the target wearing underwear or a swimsuit.

Sexual objectification is related to decreased mind attribution (Loughnan et al., 2010), diminished agency perception (Cikara, Eberhardt, & Fiske, 2010), and dehumanization (Vaes, Paladino, & Puvia, 2011). Moreover, Heflick and Goldenberg (2009) have shown that focusing on targets' appearance, rather than on their personality, could diminish the degree of human nature attributed to female targets but not to male targets (attribution of human nature is a critical dimension of social perception that allows people to differentiate humans from objects; Loughnan & Haslam, 2007). Furthermore, sexual objectification generally has more adverse consequences for females than for males (Gervais, Vescio, & Allen, 2011a; Moradi & Huang, 2008; Saguy, Quinn, Dovidio, & Pratto, 2010). However, the cognitive processes involved in the perception of sexualized women remain unclear. Drawing on objectification theory, we suggest that perceivers may view sexualized women as objects and sexualized men as persons at a basic cognitive level.

What is meant by "viewing sexualized women as objects"? The vast cognitive-psychology literature suggests that very different processes are involved in person recognition and object recognition. *Configural processing*, which depends on perceiving relations and configurations among the constitutive parts of a stimulus, is related to person recognition and is involved in both face and body-posture recognition (Maurer, Le Grand, & Mondloch, 2002). By contrast, *analytic processing*, which is involved in object recognition, does not take into account spatial relations among the stimulus parts. One major indicator of configural processing is the inversion effect, which refers to the finding that inverted stimuli are more difficult to recognize than upright ones (Yin, 1969). Because people are perceived configurally, the inversion effect occurs in person recognition and not in object recognition. Indeed, human stimuli (e.g., faces and body postures) are more difficult to recognize when inverted than when upright, whereas object recognition is not affected by inversion (e.g., Reed, Stone, Bozova, & Tanaka, 2003; Reed, Stone, Grubb, & McGoldrick, 2006).

We tested the sexualized-body-inversion hypothesis in the present study: If sexualized women are viewed as objects and sexualized men are viewed as persons, then sexualized female bodies will be recognized equally well when inverted as when upright (object-like recognition), whereas sexualized male bodies will be recognized better when upright than when inverted (person-like recognition).

Method

Seventy-eight university students (41 men, 37 women; mean age = 20.5 years, SD = 2.7 years) provided informed consent to participate in the study. We randomly presented 48 sexualized male and female photos to each participant. The stimulus set consisted of 24 photos of men and 24 of women, with 12 photos from each group inverted and 12 upright. In each photo, the target wore a swimsuit or underwear and had a neutral facial expression.[1] Following the protocol of Reed et al.

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(2006), we presented each picture for 250 ms, followed by a 1-s blank screen. After each presentation, participants were shown two pictures and asked to identify which one they saw immediately preceding the blank screen. The distractor images on each trial were left-right mirror images of the target picture (Reed et al., 2006). The percentage of correct identifications was calculated for female upright bodies, female inverted bodies, male upright bodies, and male inverted bodies.

Results and Discussion

We conducted a 2 (position: upright, inverted) × 2 (target gender: male, female) × 2 (participant gender: men, women) mixed-model analysis of variance. The predicted interaction between position and target gender emerged, $F(1, 75) = 15.07$, $p < .001$, $\eta_p^2 = .167$. Consistent with our hypothesis, our results showed that people recognized upright males ($M = .85$, $SD = .17$) better than inverted males ($M = .73$, $SD = .17$), $t(77) = 6.29$, $p < .001$, but this pattern did not emerge for females, $t(77) = 1.38$, $p = .17$ (see Fig. 1). Additionally, participants recognized inverted females ($M = .83$, $SD = .16$) better than inverted males ($M = .73$, $SD = .17$), $t(77) = 5.42$, $p < .001$. This effect was not found for upright males and females, $t(77) = 0.54$, $p = .59$. Neither the two-way nor the three-way interaction was significant ($ps > .22$).[2]

Consistent with our hypothesis, our findings showed that the inversion effect emerged only when participants saw sexualized males. This suggests that, at a basic cognitive level, sexualized men were perceived as persons, whereas sexualized women were perceived as objects. Future research should examine why people perceive sexualized women as objects. One may expect that object-like recognition of women could be explained by a lack of identification with sexualized women among female participants and by sexual attraction among male participants (Vaes et al., 2011).
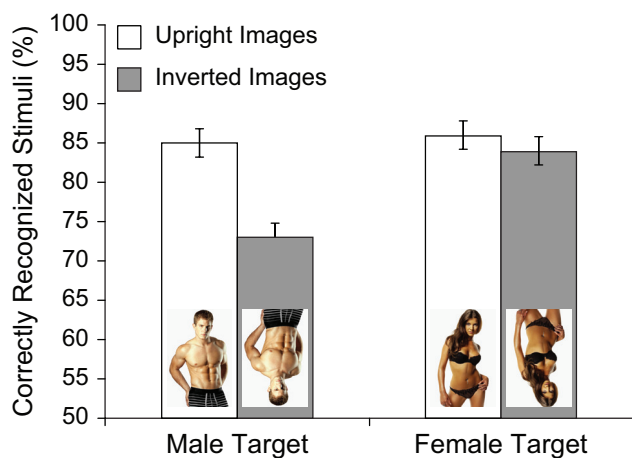

Fig. 1. Percentage of correctly recognized stimuli as a function of target gender and target orientation. Error bars indicate ±1 *SEM*.

Future research should address whether this finding could generalize to nonsexualized bodies. Given that sexualization triggers a focus on the appearance rather than on the personality of the target (e.g., Vaes et al., 2011), one may expect that object-like recognition of women should be stronger for sexualized female bodies than for nonsexualized ones. However, in line with the results of previous research (e.g., Gervais, Vescio, & Allen, 2011b; Gervais, Vescio, Maass, Förster, & Suitner, 2012; see also Heflick, Goldenberg, Cooper, & Puvia, 2011), our findings showed no differences related to participant gender, which suggests that cultural beliefs that women are sex objects are shared by both men and women at a basic cognitive level.

Supplemental Material

Additional supporting information may be found at http://pss.sagepub.com/content/by/supplemental-data

Notes

1. Details about the selection of the photos are available in Pretest Details in the Supplemental Material available online.
2. Additional analyses are available in the Supplemental Material.

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