


# Women Can Benefit From Sexual and Physical Valuation in the Context of a Romantic Relationship

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## Abstract

Women are frequently valued for their sexuality and physical appearance, and there is theoretical reason to believe that the effects of such valuation depend on the context. A robust body of research demonstrates that such valuation from male strangers harms women's self-esteem; the current studies, however, tested whether women experience more positive outcomes when such valuation emerges in the context of their romantic relationships. Study 1 used an event-based diary study to demonstrate that when partners (vs. male strangers) draw attention to women's sexuality and physical appearance, those women report higher appearance esteem and, subsequently, higher self-esteem. Study 2 used data from two independent, longitudinal studies of newlywed couples to demonstrate that partner sexual and physical valuation has positive implications for women's self-esteem over time. These findings highlight that sexual and physical valuation is not inherently beneficial or harmful; rather, the implications of such valuation depend on the relationship context.

## Keywords

intimate relationships, marriage, self-esteem, objectification, women

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At the end of a long, grueling Wednesday, Monica is walking home from work. She stops at the corner of a busy intersection to wait for the light to change when a man who she has never seen before drives by in a large pick-up truck and, half-hanging out of his window, slowly looks Monica up and down, smiles, and says, “hey, sexy.” Instantly, Monica feels a flood of anxiety, a sense of disgust, and overall negativity about herself.

Later that same week, Monica is getting ready to meet her boyfriend at a restaurant where they are planning to celebrate their 1-year anniversary. When she arrives at the restaurant, her boyfriend slowly looks her up and down, smiles, and whispers in her ear, “hey, sexy.” Instantly, Monica feels a flood of happiness, a sense of acceptance, and overall positivity about herself.

Although both reactions may be easy to imagine, it is unclear whether such opposing reactions are typical—especially within the same person. Indeed, existing theory and research have tended to focus predominantly on the harms of drawing positive attention to women's physical appearance (e.g., Calogero, 2004; Fredrickson & Roberts, 1997; Moradi & Huang, 2008). The goal of this article was to address this theoretical and empirical gap by examining whether there are some contexts in which women can benefit from men's sexual and physical valuation. In pursuit of this goal, the following introduction is divided into four sections. The first section

discusses a theoretical perspective and supporting evidence suggesting that women's self-esteem suffers when men value them for their sexuality and physical appearance. The second section, however, reviews theory suggesting that women's self-esteem may actually benefit from sexual and physical valuation in some contexts—specifically, in the context of a romantic relationship. The third section addresses the possibility that increased appearance esteem mediates this positive association. The final section describes two studies—one event-based diary study and one 1-year longitudinal study—that examine the extent to which sexual and physical valuation by a relationship partner positively impacts women's self-esteem, and whether any such association can be explained, at least in part, by increases in women's appearance esteem.

## Consequences of Men's Sexual and Physical Valuation

Extant theory and research suggest that women are adversely affected when they are valued for their sexuality and physical

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appearance. Indeed, objectification theory—the predominant theory regarding the implications of Western society’s tendency to value women for their sexuality and physical appearance (Fredrickson & Roberts, 1997)—suggests that women experience a host of negative consequences such as decreased body satisfaction, self-esteem, and cognitive functioning as well as increased anxiety, depression, and self-consciousness when men attend to their sexuality and physical appearance (Calogero, 2004; Fredrickson & Roberts, 1997; Moradi & Huang, 2008). Providing empirical support for objectification theory, experimental work has demonstrated that women who merely anticipate being the object of a man’s (vs. woman’s) attention report worse intrapersonal outcomes (Calogero, 2004; but also see Gervais, Vescio, & Allen, 2011).

Why do women experience such negative outcomes? According to objectification theory, when men draw attention to women’s sexuality and physical appearance, those women internalize such attention (i.e., they engage in self-objectification), which subsequently has negative implications for their global sense of self-worth (Hebl, King, & Lin, 2004; Strelan, Mehaffey, & Tiggemann, 2003). Notably, empirical evidence is consistent with this idea. One study, for example, demonstrated a negative association between self-objectification and global self-esteem (Strelan et al., 2003). Likewise, a second study used an experimental design to demonstrate that increased self-objectification leads to lower global self-esteem (Hebl et al., 2004). Thus, according to objectification theory, Monica should experience a *drop* in self-esteem when both the truck driver and her romantic partner attend to her physical appearance because she is being reduced to a mere object and internalizing such objectification, which undermines her global sense of self (see Fredrickson & Roberts, 1997).

### Considering the Relationship Context

Despite such work in support of objectification theory, there is theoretical reason to believe that men’s sexual and physical valuation should not *always* negatively impact women. According to sociometer theory (Leary & Baumeister, 2000), self-esteem reflects an evolved mechanism that gauges the quality of people’s interpersonal relationships, and thus, people generally experience high self-esteem when they perceive interpersonal acceptance (such as the acceptance communicated by sexual and physical valuation; for evidence of additional sources of self-esteem, see Crocker, Luhtanen, Cooper, & Bouvrette, 2003). This theory, however, further posits that the *context* in which people perceive interpersonal acceptance plays an important role in determining its implications. Indeed, as Leary and Baumeister (2000) argue, compared with interactions with a stranger or acquaintance, interactions with a relationship partner “such as those involving romantic partners [and] spouses . . . are particularly potent influences on self-esteem” (p. 47). Accordingly, it is possible that when women’s romantic

relationship partners value them for their sexuality and physical appearance, those women’s may feel better about themselves—paralleling Monica’s experience.<sup>1</sup>

Although there does not appear to be any direct evidence supporting the notion that women experience a boost in self-esteem when their romantic partners value them for their sexuality and physical appearance, there is some indirect evidence. Specifically, some close relationship research demonstrates that women are more satisfied with their relationships when their male partners value their sexuality and physical appearance (Meltzer & McNulty, 2014; Meltzer, McNulty, & Maner, 2017). In one study, for example, women reported higher levels of relationship satisfaction when their male partners reported valuing them for their bodies. Nevertheless, the key issue in the present research raises questions regarding women’s self-esteem, which is distinct from relationship satisfaction (though the two constructs are often moderately correlated; see Murray, Holmes, & Griffin, 2000). Accordingly, the current research examined whether sexual and physical valuation would be positively associated with women’s self-esteem (independent of their relationship satisfaction) when such valuation came from a romantic relationship partner.

### Women’s Appearance Esteem as a Possible Mechanism of the Proposed Effect

Of course, to be most informative, research should aim to theorize and test the potential mechanism of the proposed effect. According to sociometer theory (Leary & Baumeister, 2000), people’s global self-esteem is shaped by perceived acceptance in important domains. Given that society places particularly high value on women’s sexuality and physical appearance (Fletcher, Simpson, Thomas, & Giles, 1999; Li, Bailey, Kenrick, & Linsenmeier, 2002)—particularly in the context of romantic relationships (see Ko & Suh, 2018; Meltzer, McNulty, Jackson, & Karney, 2014)—sexual and physical valuation may indeed be a potent source of self-esteem and, if so, it should emerge through women’s attitudes about their sexuality and physical appearance—that is, their appearance esteem, an aspect of self-evaluation that has positive implications for their global sense of self-worth (Lerner, Orlos, & Knapp, 1976). Empirical evidence is consistent with this idea. For instance, a large, diverse study consisting of more than 7,000 women demonstrated that women’s appearance esteem accounts for nearly 25% of the variability in their global self-esteem—an effect that does not vary across race (Caldwell, Brownell, & Wilfley, 1997). This evidence suggests that if sexual and physical valuation from a romantic relationship partner indeed increases women’s global self-esteem, it may do so through their increased appearance esteem. It is worth noting that this purported mechanism (i.e., appearance esteem) differs from the mechanism that accounts, at least in part, for women’s lowered

self-esteem following sexual and physical valuation from a male stranger (i.e., perceived objectification).

## The Current Research

The goal of the current research was to examine whether heterosexual, partnered women experience more positive appearance esteem and thus more positive self-esteem when their romantic relationship partners sexually and physically value them. Notably, such an effect would emerge in contrast to work in support of objectification theory demonstrating that women experience greater perceived objectification and thus more negative self-esteem when male strangers sexually and physically value them. In pursuit of this goal, two studies were conducted. In Study 1, women in dating relationships completed an event-based diary, in which they reported their state appearance esteem and state self-esteem each time their partner drew attention to their sexuality or physical appearance. In an effort to replicate prior research in support of objectification theory, and to demonstrate that such valuation from a relationship partner indeed differs from such valuation from a male stranger, Study 1 additionally assessed women's perceived objectification and state self-esteem each time a male stranger drew attention to their sexuality or physical appearance. In Study 2, recently married husbands who participated in a broader longitudinal study reported the extent to which they sexually and physically valued their wives, and their wives reported their appearance esteem and self-esteem every few months for up to 1 year.

## Study 1

Study 1 examined the associations between women's state appearance esteem, perceived objectification, and state self-esteem following instances of sexual and physical valuation. Women who were involved in close, intimate relationships that had lasted at least 1 month completed an event-based diary. Specifically, each woman reported her state appearance esteem, perceived objectification, and state self-esteem each time that a man drew attention to her sexuality, attractiveness, or physical appearance. Drawing from work on objectification, it was predicted that a given woman would report relatively greater perceived objectification when male strangers drew attention to her sexuality and physical appearance, which would be associated with decreased state self-esteem. Nevertheless, in line with the study's main goal, it was additionally predicted that that woman would report relatively higher levels of state appearance esteem when their partners drew attention to her sexuality and physical appearance, which would be associated with increased state self-esteem. Finally, and perhaps most notably, it was predicted that a given woman would experience *different* outcomes following sexual and physical valuation from a male stranger versus her relationship partner.

## Method

**Participants.** Participants were 44 heterosexual undergraduate women at a large, Southeastern university who were at least 18 years of age and currently involved in a romantic relationship that had been ongoing at least 1 month ( $M = 17.01$  months,  $SD = 29.18$ , range = 1-180 months). Participants were on average 18.88 ( $SD = 2.73$ ) years of age and most (78.0%) self-identified as Caucasian. All participants received partial fulfillment of a course requirement for their participation.

In total, these women provided 353 observations that were somewhat non-independent (intraclass correlation coefficient [ICC] = .54) and thus yielded an effective sample size of 75 observations (see Snijders & Bosker, 2012). A post hoc power analysis based on this effective sample size indicated the study had power = .90 to detect the demonstrated relationship-context effect.

**Procedure and measures.** After enrolling in the study, participants completed online questionnaires that included baseline measures of potential mediators (perceived objectification, state appearance esteem), the outcome variable (state self-esteem), and covariates (height, weight, trait self-objectification), as well as a consent form approved by the local Human Subjects Review Board. At a corresponding laboratory session, participants received a 17-page, paper-and-pencil, event-based diary and instructions to complete one diary entry *each time* that they were in a "situation in which a man draws attention to [their] sexuality, attractiveness, and/or physical appearance." For each entry, participants indicated their relationship with the valuing man (i.e., stranger, partner), and then completed measures assessing their perceived objectification, state appearance esteem, and state self-esteem. Each diary included a personalized subject number to ensure the anonymity of individual participants' responses. In an effort to reduce attrition, participants received daily emails reminding them of their participation and that they should record each instance that a man "draws attention to [their] sexuality, attractiveness, and/or physical appearance." On average, participants completed eight diary entries, although there was substantial variability in the number of diary entries that participants completed ( $SD = 3.41$ , range = 1-17). After 1 week, participants were fully debriefed. Descriptive statistics for and correlations among all variables (including the covariates) are provided in the Supplementary Online Material (SOM).

**Valuing man.** At each diary entry, participants reported their relationship with the man who drew attention to their physical appearance. Specifically, women categorized the nature of their relationship with each man: stranger, acquaintance, friend, former partner, or current partner, which were used to create a dummy code of relationship status such that 0 = "Stranger" ( $n = 92$ ) and 1 = "Current partner" ( $n = 148$ ), excluding all other relationships ( $n = 113$ ).

**Perceived objectification.** Although longer, multi-item measures typically demonstrate better psychometric properties than shorter measures, empirical evidence has demonstrated that using single-item measures in longitudinal studies to assess within-person variation can provide reliable estimates of face-valid constructs while reducing participant burden (see Aron, Aron, & Danny, 1992; Robins, Hendin, & Trzesniewski, 2001). Thus, at baseline and each diary entry, women reported their perceived objectification using a single, face-valid item. Specifically, they indicated the extent to which the following statement was true for them at that moment: “I feel more like an object than like a human being,” using a 5-point scale (1 = “Not at all”; 5 = “Extremely”). Higher scores reflect greater perceived objectification.

**State appearance esteem.** At baseline and each diary entry, women also reported their state appearance esteem using a single, face-valid item. Specifically, they indicated the extent to which the following statement was true for them at that moment: “I am pleased with my appearance right now,” using a 5-point scale (1 = “Not at all”; 5 = “Extremely”). Higher scores reflect higher state appearance esteem.

**State self-esteem.** At baseline and each diary entry, women also reported their state self-esteem using a single, face-valid item. Specifically, they indicated the extent to which the following statement was true for them at that moment: “I feel good about myself,” using a 5-point scale (1 = “Not at all”; 5 = “Extremely”). Higher scores reflect higher state self-esteem.

**Covariates.** Participants additionally completed measures assessing two covariates likely to be associated with, yet conceptually independent from women’s self-esteem following instances in which men draw attention to their physical appearance: body mass index (BMI) and trait self-objectification. First, given that women’s body size is likely associated with the frequency that they attract men’s attention, participants self-reported their height and weight at baseline, which were used to compute their BMIs ( $\text{kg}/\text{m}^2$ ). Second, to ensure that any effects were not due simply to women’s trait self-objectification, women completed the 12-item Self-Objectification Questionnaire (Noll & Fredrickson, 1998) at baseline, which requires participants to rank, in order of importance, appearance- and competence-based traits. As is standard practice, participants’ appearance-based traits were summed and subtracted from the sum of their competence-based traits; scores thus range from  $-36$  to  $+36$ , with higher scores reflecting greater trait self-objectification.

## Results

*Do the effects of male sexual and physical valuation for women’s state self-esteem differ across the relationship context?* Given that repeated assessments were nested within participants, and given that there was an unbalanced number of diary entries per

participant, the following Level 1 equation of a two-level model (using HLM 7.03; Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2011) was estimated to examine the extent to which the relationship context was associated with women’s state self-esteem:

$$Y_{ij} (\text{Self-Esteem Relative to Baseline}) = \pi_{0j} + \pi_{1j} (\text{Diary Entry}) + \pi_{2j} (\text{Relationship Context}) + e_j, \quad (1)$$

where (a) the Diary Entry estimate was included (grand-mean centered) to control for variance due to natural changes and fluctuations in the phenomena (see Bolger & Laurenceau, 2013), (b) Relationship Context was grand-mean centered, and (c) the Level 2 Intercept and Relationship Context estimate were allowed to vary across individuals (deviance tests that compared the fit of different models with various random effects indicated this was the best model; West, Welch, & Galecki, 2007). Critically, each woman’s state self-esteem diary entry was centered on her baseline state self-esteem score so that scores greater than 0 represent higher self-esteem than baseline and scores less than 0 represent lower self-esteem than baseline; to avoid problems associated with difference scores (Edwards, 1994), women’s baseline state self-esteem reports were additionally controlled on the Level 2 Intercept (grand-mean centered). Thus, results were interpretable relative to women’s state self-esteem when men (either strangers or partners) were *not* drawing attention to women’s sexuality and physical appearance.

Results are presented in Table 1. As can be seen, the association between male valuation and women’s state self-esteem, controlling for their baseline self-esteem, indeed depended on the relationship context. Simple effects tests conducted by centering the Relationship Context variable such that 0 represented sexual and physical valuation from a male stranger revealed that, consistent with prior work in support of objectification theory, when a male stranger drew attention to a woman’s sexuality and physical appearance, she trended toward reporting self-esteem that was lower than baseline,  $\pi = -0.30$ , 95% confidence interval (CI) =  $[-0.66, 0.07]$ ,  $t(42) = -1.63$ ,  $p = .111$ , effect-size  $r = .39$ . In contrast, centering the Relationship Context variable such that 0 represented sexual and physical valuation from a romantic partner revealed that, consistent with predictions, when a woman’s romantic partner drew attention to her sexuality and physical appearance, she reported self-esteem that was higher than baseline,  $\pi = 0.42$ , 95% CI =  $[0.11, 0.73]$ ,  $t(41) = 2.74$ ,  $p = .009$ , effect-size  $r = .39$ .

Two supplemental analyses examined the robustness of this effect. First, to ensure the primary effect was independent of participants’ BMI and trait self-objectification, both covariates were grand-mean centered and entered at the Level 2 Intercept; the primary effect continued to emerge as significant,  $\pi = 0.73$ , 95% CI =  $[0.33, 1.13]$ ,  $t(42) = 3.65$ ,  $p = .001$ , effect-size  $r = .49$ . Second, to explore whether the

**Table 1.** Study 1: Association Between Male Valuation and Women's State Self-Esteem Differs Across Relationship Contexts.

Variable	$\beta/\pi$	95% CI	df	Effect-size <i>r</i>
Intercept	0.15	[-0.12, 0.41]	41	.17
Diary entry	-0.05 <sup>†</sup>	[-0.11, 0.01]	153	.14
Baseline self-esteem	-0.74***	[-1.05, -0.44]	41	.61
Relationship context	0.72***	[0.31, 1.12]	42	.48

Note.  $\beta$ s and  $\pi$ s indicate between- and within-person effects, respectively. Relationship context is coded such that 0 = male stranger and 1 = partner; it should be noted, however, that the parameter is grand-mean centered. CI = confidence interval.

<sup>†</sup> $p < .10$ . \*\*\* $p < .001$ .

primary effect was moderated by participants' BMI or trait self-objectification, both moderators were grand-mean centered and entered at the Level 2 Intercept and Relationship Context parameters (each tested in separate models); although the primary effect was not significantly moderated by trait self-objectification ( $p = .828$ ), it was marginally moderated by BMI,  $\beta = 0.11$ , 95% CI = [-0.004, 0.216],  $t(41) = 1.92$ ,  $p = .061$ , effect-size  $r = .29$ ,<sup>2</sup> such that the effect emerged more strongly among women with relatively larger body sizes (1 *SD* above the sample mean),  $\beta = 1.11$ , 95% CI = [0.48, 1.73],  $t(41) = 3.54$ ,  $p = .001$ , effect-size  $r = .48$ , than among women with relatively smaller body sizes (1 *SD* below the sample mean),  $\beta = 0.37$ , 95% CI = [-0.10, 0.83],  $t(41) = 1.59$ ,  $p = .121$ , effect-size  $r = .24$ .

*Is the positive association between partner sexual and physical valuation and women's self-esteem mediated by women's appearance esteem?* Following the procedures described by MacKinnon, Fritz, Williams, and Lockwood (2007),

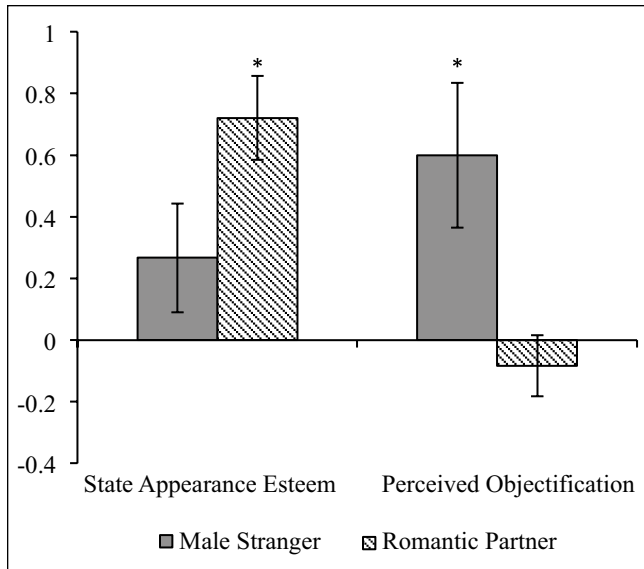
asymptotic CIs were computed to examine whether women's state appearance esteem uniquely mediated the direct positive effect of partner sexual and physical valuation on women's state self-esteem. Those procedures required two analyses. The first analysis estimated the association between the relationship context and the expected mediator—women's state appearance esteem. Specifically, Equation 1 was estimated again but this time state self-esteem was replaced with state appearance esteem at Level 1 (centered on baseline reports) and Level 2 (grand-mean centered). Importantly, given that partner valuation and stranger valuation likely impact women's self-esteem through unique mediators that may have opposing effects (i.e., partner valuation positively impacts women's self-esteem, perhaps through increased appearance esteem; stranger valuation negatively impacts women's self-esteem, perhaps through increased perceived objectification), it was also necessary to ensure that any mediational effects of appearance esteem were independent of women's perceived objectification. Indeed, confounding

**Table 2.** Study 1: Associations Between Male Valuation, Women's State Appearance Esteem, and State Self-Esteem, Controlling Women's Perceived Objectification.

	$\beta/\pi$	95% CI	df	Effect-size <i>r</i>
DV: State appearance esteem				
Intercept	0.546***	[0.301, 0.792]	40	.58
Diary entry	-0.009	[-0.045, 0.028]	152	.04
Baseline appearance esteem	-0.593***	[-0.838, -0.349]	40	.61
Perceived objectification	-0.238*	[-0.438, -0.038]	152	.19
Baseline perceived objectification	-0.245 <sup>†</sup>	[-0.518, 0.027]	40	.27
Relationship context	0.454*	[0.080, 0.827]	42	.35
DV: State self-esteem				
Intercept	-0.086	[-0.245, 0.073]	39	.17
Diary entry	-0.058*	[-0.112, -0.004]	151	.17
Perceived objectification	-0.336***	[-0.501, -0.171]	151	.31
Baseline perceived objectification	-0.303***	[-0.436, -0.171]	39	.59
Appearance esteem	0.457***	[0.288, 0.626]	151	.40
Baseline appearance esteem	0.596***	[0.435, 0.757]	39	.77
Baseline self-esteem	-0.991***	[-1.222, -0.760]	39	.81
Relationship context	0.240 <sup>†</sup>	[-0.023, 0.502]	42	.27

Note.  $\beta$ s and  $\pi$ s indicate between- and within-person effects, respectively. Relationship context is coded such that 0 = male stranger and 1 = partner; it should be noted, however, that the parameter is grand-mean centered. Perceived objectification and appearance esteem are centered around each person's baseline. CI = confidence interval; DV = dependent variable.

<sup>†</sup> $p < .10$ . \* $p < .05$ . \*\*\* $p < .001$ .



**Figure 1.** Simple effects of state appearance esteem and perceived objectification when male strangers versus romantic partners draw attention to women's sexuality and physical appearance.

Note. Positive numbers on the y-axis indicate increases from baseline, whereas negative numbers on the y-axis indicate decreases from baseline. \* $p < .05$ .

and suppression effects can lead to spurious and undetected mediational associations when competing variables are not properly controlled (MacKinnon, Krull, & Lockwood, 2000). Accordingly, women's perceived objectification was additionally entered at Level 1 (centered on baseline reports) and the between-person differences in women's baseline perceived objectification were entered at Level 2 (grand-mean centered) as covariates.

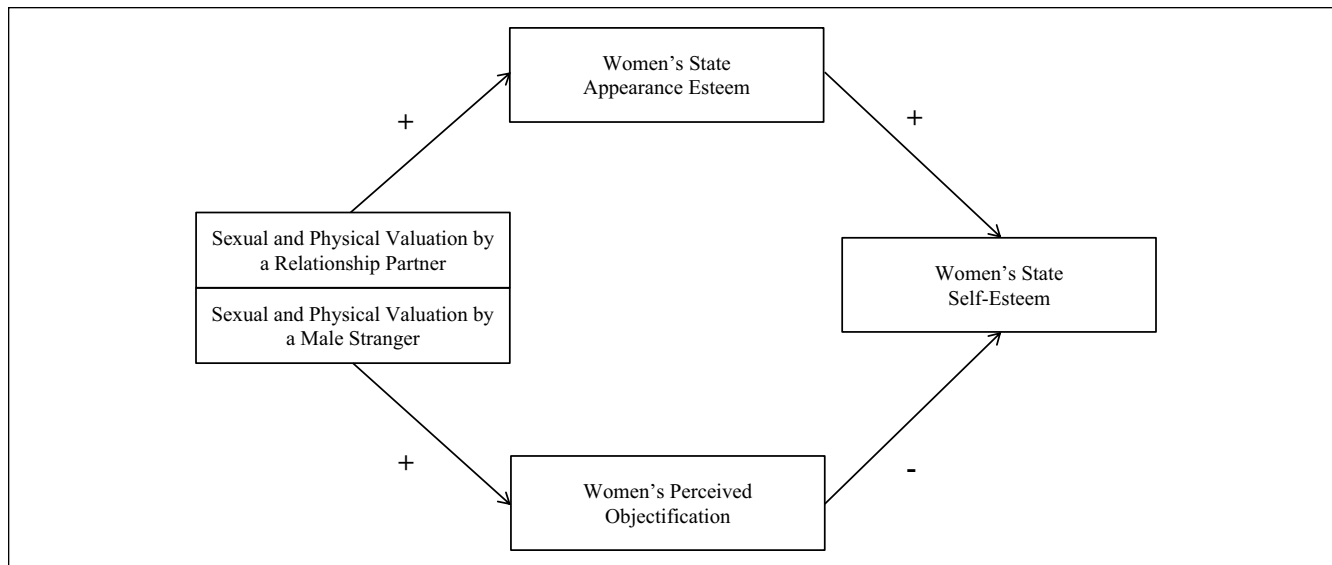
The results are reported in the top half of Table 2. As can be seen, the association between male valuation and women's state appearance esteem, controlling for their baseline state appearance esteem and perceived objectification, depended on the relationship context. Centering the relationship context variable such that 0 represented sexual and physical valuation from a male stranger revealed that, consistent with predictions, when a woman's romantic partner drew attention to her sexuality and physical appearance, she reported higher appearance esteem than usual,  $\pi = 0.72$ , 95% CI = [0.45, 0.99],  $t(40) = 5.30$ ,  $p < .001$ , effect-size  $r = .64$  (see the left half of Figure 1).<sup>3</sup> Notably, this effect emerged independent of women's perceived objectification. A supplemental analysis demonstrated that the primary effect continued to emerge as significant when women's perceived objectification was no longer controlled,  $\pi = 0.64$ , 95% CI = [0.27, 1.01],  $t(42) = 3.46$ ,  $p = .001$ , effect-size  $r = .47$ , and the simple effect for partner valuation also continued to emerge as significant when women's perceived objectification was no longer controlled,  $\pi = 0.77$ , 95% CI = [0.49, 1.05],  $t(41) = 5.53$ ,  $p < .001$ , effect-size  $r = .65$ .

The second analysis necessary for testing mediation estimated the association between women's state appearance esteem and women's state self-esteem, controlling women's baseline appearance esteem and self-esteem as well as perceived objectification and relationship context. Results are reported in the bottom half of Table 2. As can be seen, women's state appearance esteem was positively associated with their state self-esteem. Finally, the two effects were multiplied together to obtain an estimate of the indirect effect,  $\pi = 0.21$ , and an asymptotic 95% CI was computed [0.04, 0.41]. The CI did not contain 0, indicating that women's state appearance esteem mediated the positive association between a romantic partner's sexual and physical valuation and women's state self-esteem (see top half of Figure 2).

*Is the negative association between male stranger sexual and physical valuation and women's state self-esteem mediated by women's perceived objectification?* In an effort to replicate work in support of objectification theory, asymptotic CIs were also computed to examine whether women's perceived objectification uniquely mediated the direct negative effect of male stranger sexual and physical valuation on women's state self-esteem. Again this required two analyses. The first analysis estimated the association between the relationship context and the expected mediator—women's perceived objectification—by repeating the above analysis but swapping women's state appearance esteem with women's perceived objectification.

Results are reported in Table 3. As can be seen, the association between valuation and women's perceived objectification, controlling their baseline perceived objectification and appearance esteem, depended on the relationship context. Centering the relationship context variable such that 0 represented sexual and physical valuation from a male stranger revealed that, consistent with prior research in support of objectification theory, when a male stranger drew attention to a woman's sexuality and physical appearance, she reported feeling more like an object than usual,  $\pi = 0.53$ , 95% CI = [0.07, 0.99],  $t(40) = 2.31$ ,  $p = .026$ , effect-size  $r = .34$  (see the right half of Figure 1).<sup>4</sup> Notably, this effect emerged independent of women's state appearance esteem. A supplemental analysis demonstrated that the primary effect continued to emerge as significant when women's state appearance esteem was no longer controlled,  $\pi = -0.80$ , 95% CI = [-1.29, -0.30],  $t(42) = -3.19$ ,  $p = .003$ , effect-size  $r = .44$ , and the simple effect for stranger valuation also continued to emerge as significant when women's state appearance esteem was no longer controlled,<sup>5</sup>  $\pi = 0.59$ , 95% CI = [0.11, 1.07],  $t(41) = 2.44$ ,  $p = .019$ , effect-size  $r = .36$ .

The second analysis necessary for testing mediation was the same as that described in the previous section. Again, results are reported in the bottom half of Table 2. As can be seen, women's perceived objectification was negatively associated with their state self-esteem. Finally, the two effects were multiplied together to estimate the indirect effect,  $\pi = 0.23$ , and an asymptotic 95% CI was computed



**Figure 2.** The top half of this theoretical model depicts the positive association between a relationship partner’s sexual and physical valuation and women’s state self-esteem through women’s state appearance esteem; the bottom half of this theoretical model depicts the negative association between a male stranger’s sexual and physical valuation and women’ state self-esteem through women’s perceived objectification

**Table 3.** Study 1: Association Between Male Valuation and Women’s Perceived Objectification, Controlling Women’s State Appearance Esteem.

	$\beta/\pi$	95% CI	df	Effect-size <i>r</i>
DV: Perceived objectification				
Intercept	0.11	[-0.10, 0.32]	40	.16
Diary entry	-0.01	[-0.04, 0.01]	152	.08
Baseline perceived objectification	-0.91***	[-1.03, -0.79]	40	.93
Appearance esteem	-0.15*	[-0.27, -0.03]	152	.19
Baseline appearance esteem	-0.02	[-0.19, 0.15]	40	.04
Relationship context	-0.68**	[-1.16, -0.20]	42	.40

Note.  $\beta$ s and  $\pi$ s indicate between- and within-person effects, respectively. Relationship context is coded such that 0 = male stranger and 1 = partner; it should be noted, however, that the parameter is grand-mean centered. Perceived objectification and appearance esteem are centered around each person’s baseline. CI = confidence interval; df = degrees of freedom; DV = dependent variable.  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

[0.06, 0.45]. The CI did not contain 0, indicating that women’s perceived objectification mediated the negative association between a male stranger’s sexual and physical valuation and women’s state self-esteem (see the bottom half of Figure 2).

**Discussion**

Study 1 provided evidence that heterosexual women are differentially affected by whether relationship partners versus male strangers draw attention to their sexuality and physical appearance. Consistent with prior research examining the effects of female sexual objectification, women who experienced sexual and physical valuation from male strangers reported relatively higher perceived objectification than usual, which was associated with relatively lower

state self-esteem than usual. Nevertheless, consistent with predictions, such sexual and physical valuation was not always negatively associated with women’s self-esteem. Indeed, when women experienced sexual and physical valuation from a relationship partner, they reported relatively higher state appearance esteem than usual, which was associated with relatively higher state self-esteem than usual. Notably, these effects emerged within person demonstrating that, like Monica, each woman experiences different outcomes depending on the relationship context. In fact, the relationship context accounted for approximately 23% of the variance in women’s state self-esteem. Moreover, considering that the primary effect remained significant controlling for empirically related but conceptually different constructs (BMI and trait self-objectification), this association appears quite robust.

## Study 2

The findings of Study 1 demonstrate that college-aged women in dating relationships feel better about themselves (at least momentarily) when their partners value them for their sexuality and physical appearance. Nevertheless, the implications of such valuation in the context of romantic relationships have been relatively unexplored, and thus it remains unclear whether these findings can be replicated and extended to more established long-term relationships such as marriage. That is, it remains unclear whether women feel better about themselves to the extent that their long-term, committed partners engage in relatively high (vs. low) sexual and physical valuation. Moreover, given the likely repetitive nature of such valuation by long-term partners, it is possible that it has relatively long-lasting implications for women's self-esteem. Nevertheless, such long-term implications of sexual and physical valuation by a long-term romantic partner are thus far unknown. Study 2 addressed both of these issues. Specifically, Study 2 used data from two independent, longitudinal studies of recently married couples to examine whether (a) women report higher appearance esteem to the extent that their partners engage in relatively high (vs. low) sexual and physical valuation, and (b) such higher appearance esteem has lasting implications for women's global self-esteem. Given their nearly identical designs, the samples of the two independent studies were combined to maximize power.

## Method

**Participants.** Participants in Sample A were 112 heterosexual newlywed couples who participated in a broader longitudinal study of 113 newlywed couples in north Texas, USA (specifically, Dallas County; one husband did not complete the sexual and physical valuation measure and thus that couple could not be included)" (in two instances).]. Recruitment was initially planned for 12 months but extended for one additional month to increase sample size. Couples were married fewer than 4 months, and wives and husbands were 26.79 ( $SD = 4.77$ ) and 28.05 ( $SD = 5.57$ ) years of age, respectively. Participants in Sample B were 62 heterosexual newlywed couples who participated in a broader ongoing longitudinal study of 68 newlywed couples in north Florida, USA (two husbands did not complete the sexual and physical valuation measure and thus those couples could not be included; four lesbian couples were additionally excluded a priori). Recruitment had been ongoing for 15 months. Couples were married fewer than 3 months, and wives and husbands were 27.90 ( $SD = 6.64$ ) and 29.34 ( $SD = 6.86$ ) years of age, respectively. Recruitment strategies and additional sample characteristics appear in the SOM.

The wives of these 174 heterosexual couples provided 447 observations that were somewhat non-independent ( $ICC = .59$ ), and thus yielded an effective sample size of 231

observations (see Snijders & Bosker, 2012). A post hoc power analysis based on this effective sample size indicated the study had power = .85 to detect the effect of husbands' valuation.

**Procedure and measures.** After enrolling in each study, participants completed a packet of surveys at home either by mail or at Qualtrics.com. These surveys included a consent form approved by the local Human Subjects Review Board; a measure of husbands' sexual and physical valuation; measures of wives' appearance esteem, global self-esteem, and marital satisfaction (used as a covariate in a supplemental analysis); additional measures beyond the scope of these analyses; and a letter instructing spouses to complete their questionnaires independently. Couples received US\$100 for completing the questionnaires and corresponding session, where wives had their photographs taken (the remainder of the session is beyond the scope of the current analyses).

At approximately 4-month (Sample B) or 6-month (Sample A) intervals subsequent to the initial session, couples were re-contacted and again sent a packet of survey questionnaires (via mail or online) that contained the same measures of wives' global self-esteem and marital satisfaction. Couples received a check (Sample A = US\$30, Sample B = US\$25) for completing each follow-up assessment. The current analyses are based on three assessments (baseline and two follow-ups) in Sample A and up to four assessments (baseline and up to three follow-ups) in Sample B, which spanned the first year of marriage in both samples. The minor differences in procedures across the samples were due to broader aims of each individual study and constraints on the investigator but were statistically controlled with a dummy code (Sample A = 0, Sample B = 1). Descriptive statistics for and correlations among the key independent variable—husbands' sexual and physical valuation—and all covariates at baseline are provided in the SOM.

**Husbands' sexual and physical valuation.** At baseline, husbands responded to three items presumed a priori to assess the extent to which they valued their wives' sexuality and physical appearance. The first two items used a 101-point scale, where 0 = "Not at all" and 100 = "Completely," and read, "How much do you value your wife for sex?" and "How much do you value your wife for her body?" The third item also used a 101-point scale and read, "Sex is important to many romantic relationships. On a scale of 0 to 100, where 0 = 'Our relationship is completely non-sexual' and 100 = 'Our relationship is nothing but sexual,' what number would you give your relationship?" Husbands' responses were averaged across all three items to form an index of sexual and physical valuation; higher scores reflect greater sexual and physical valuation (it is worth noting, however, that a similar pattern of effects emerged using each item separately; see the SOM for details regarding these analyses). Internal consistency was adequate (in Sample A,  $\alpha = .75$ ; in Sample B,  $\alpha = .81$ ). Across both samples, husbands' average sexual



and physical valuation fell above the midpoint of the scale (49.50),  $t(173) = 12.88, p < .001$ , though there was substantial variability in these reports (range = 15-100).

**Wives' appearance esteem.** At baseline, wives' appearance esteem was assessed using the 35-item Body Esteem Scale (Franzoi & Shields, 1984). Wives indicated their feelings toward different body parts (e.g., chest or breasts, thighs) or conditions (e.g., physical stamina, reflexes) using a 7-point scale (1 = "Have strong negative feelings for"; 7 = "Have strong positive feelings for"). All items were averaged to form an index of global appearance esteem; higher scores indicate higher appearance esteem. Internal consistency was high (in both samples,  $\alpha = .93$ ). One wife in Sample A failed to complete this measure.

**Wives' global self-esteem.** At baseline and each follow-up, wives' self-esteem was assessed using the Rosenberg (1965) Self-Esteem Scale, which required wives to indicate their agreement with 10 statements assessing their self-attitudes using a 4-point scale (1 = "Strongly disagree"; 4 = "Strongly agree"). After reverse scoring the necessary items, all items were averaged to form an index of global self-esteem; higher scores indicate higher self-esteem. Internal consistency was high (across all assessments in both samples,  $\alpha \geq .87$ ).

**Covariates.** Given that prior research has demonstrated that husbands' sexual and physical valuation is positively associated with wives' marital satisfaction (Meltzer & McNulty, 2014; Meltzer et al., 2017), it is important to demonstrate that any association between husbands' valuation and wives' self-esteem emerges independently of wives' marital satisfaction. Thus, wives' marital satisfaction was assessed using the same two measures that were used by Meltzer and McNulty (2014) and Meltzer et al. (2017): the Quality Marriage Index (Norton, 1983) and a version of the Semantic Differential (Osgood, Suci, & Tannenbaum, 1957). Internal consistency of both measures was high (across all assessments in both samples, all  $\alpha \geq .85$ ). To avoid results that were specific to one measure, an index of wives' marital satisfaction was created by averaging the two measures after standardizing each one across assessments. Supporting this decision, the two measures were highly correlated at each assessment in both samples ( $r_s \geq .72$ ).

In addition, as in Study 1, wives' BMI and trait self-objectification were assessed at baseline and controlled in supplemental analyses. In contrast to the self-reported height and weight used in Study 1, objective measures of wives' height and weight were obtained during their laboratory sessions, which were used to compute wives' BMIs. Due to technical error, one wife's BMI was not assessed. As in Study 1, wives' trait self-objectification was assessed using the Self-Objectification Questionnaire (Noll & Fredrickson, 1998). Twelve wives failed to complete this trait self-objectification measure.

Finally, given that husbands' sexual and physical valuation and the expected mediator—wives' appearance esteem—were both assessed at baseline, any association could be spurious due to other related factors such as wives' physical appearance or the couples' sexual relationship. To rule out any such possibility, wives' physical appearance, couples' frequency of sex, and both couple members' sexual satisfaction were assessed at baseline and controlled for in supplemental analyses. To assess wives' physical attractiveness, trained coders (for Sample A:  $N = 5$ , four women, 20% Hispanic, 80% Caucasian; for Sample B:  $N = 5$ , three women; 40% Hispanic, 60% Caucasian) rated wives' facial attractiveness using head-and-shoulders photographs that were taken at the baseline laboratory session; coders demonstrated adequate reliability (across both samples, ICCs  $\geq .88$ ). To assess couples' frequency of sex, both couple members reported the number of times they engaged in sex with their partner during the past 30 days; both reports were averaged to create a more reliable estimate of couples' frequency of sex. Both members of two couples failed to complete this frequency of sex measure. To assess sexual satisfaction, husbands and wives completed the Index of Sexual Satisfaction (Hudson, 1998; range = 1-7; in both samples, husbands' and wives'  $\alpha \geq .91$ ). One husband and two wives failed to complete this sexual satisfaction measure.

## Results

**Is husbands' sexual and physical valuation associated with wives' global self-esteem at the start of marriage?** Prior to examining potential long-term effects of partner sexual and physical valuation, preliminary analyses were used to examine whether the positive association between a romantic partner's sexual and physical valuation and women's state self-esteem that emerged in Study 1 could be replicated in Study 2 using wives' global self-esteem. Specifically, given that repeated assessments were nested within wives, and given that there was an unbalanced number of assessments per wife, the following Level 1 equation of a two-level model was estimated (using HLM 7.03):

$$Y_{ij} (\text{Wives' Self-Esteem}) = \pi_{0j} + \pi_{1j} (\text{Time}) + \pi_{2j} (\text{Wives' Marital Satisfaction}) + e_j, \quad (2)$$

where (a)  $Y_{ij}$  is the self-esteem of wife  $j$  at assessment  $i$ , (b) Time reflects the number of months since marriage that each assessment was completed and coded such that 0 represents the couples' wedding (and entered uncentered), (c) Marital Satisfaction was standardized (and entered uncentered), (d) the Level 2 Intercept and Wives' Marital Satisfaction estimate were allowed to vary across wives (deviance tests indicated this was the best model; West et al., 2007), and (e) sample was controlled (uncentered) on the Level 2 Intercept parameter. Crucially, Husbands' Sexual and Physical Valuation was standardized and entered (uncentered) on the Level 2 Intercept

parameter to estimate the association between husbands' valuation and wives' global self-esteem at the start of marriage. Results from this analysis demonstrate that, consistent with Study 1, husbands' sexual and physical valuation was positively associated with wives' self-esteem at baseline, controlling for their marital satisfaction,  $\beta = 0.15$ , 95% CI = [0.04, 0.25],  $t(171) = 2.83$ ,  $p = .005$ , effect-size  $r = .21$ ; wives whose husbands reported relatively high (vs. low) sexual and physical valuation at the start of marriage reported higher global self-esteem at the start of marriage.

*Is husbands' sexual and physical valuation at the start of marriage directly associated with wives' self-esteem 1 year later?* To examine whether such sexual and physical valuation had longer term implications for women's self-esteem, Equation 2 was re-estimated but Time was re-coded such that 0 represented wives' 1-year wedding anniversary. Results from this analysis are presented in the top third of Table 4. As can be seen, husbands' sexual and physical valuation at the start of marriage was indeed positively associated with wives' self-esteem 1 year later, controlling for their self-esteem at the start of marriage.

Three supplemental analyses explored the robustness of this effect. The first supplemental analysis explored whether this effect continued to emerge when wives' marital satisfaction was *no longer* included as a Level 1 covariate; it did,  $\beta = 0.07$ , 95% CI = [0.01, 0.13],  $t(171) = 2.18$ ,  $p = .031$ , effect-size  $r = .16$ . The second supplemental analysis explored whether this effect emerged independent of wives' BMI and trait self-objectification (each grand-mean centered and controlled at the Level 2 Intercept); it did,  $\beta = 0.09$ , 95% CI = [0.03, 0.15],  $t(156) = 2.84$ ,  $p = .005$ , effect-size  $r = .22$ . The third supplemental analysis explored whether this effect was moderated by sample, BMI, or trait self-objectification; it was not (all  $ps \geq .129$ ).

*Is the association between husbands' sexual and physical valuation at the start of marriage and wives' global self-esteem 1 year later mediated by wives' baseline appearance esteem?* Following the procedures described by MacKinnon et al. (2007), asymptotic CIs were computed to examine whether women's baseline appearance esteem mediated this direct positive effect. The first analysis (of two) used a simple linear regression model to estimate the association between husbands' sexual and physical valuation and the expected mediator—wives' baseline appearance esteem. Specifically, wives' baseline appearance esteem was regressed onto husbands' valuation, controlling for wives' baseline marital satisfaction and sample. To ease interpretation of results, all predictor variables and covariates were standardized. The results from this analysis are reported in the middle third of Table 4. Husbands' sexual and physical valuation was positively associated with wives' appearance esteem such that wives whose husbands reported relatively high (vs. low) sexual and

physical valuation at the start of marriage reported higher appearance esteem at the start of marriage. To ensure that this association is not spurious due to the influence of wives' physical appearance or the couples' sexual relationship, a supplemental analysis explored whether it continued to emerge as significant controlling for wives' objective facial attractiveness, wives' BMI, couples' frequency of sex, and both couple members' sexual satisfaction (all standardized); it did,  $\beta = 0.17$ , 95% CI = [0.01, 0.32],  $t(157) = 2.16$ ,  $p = .033$ , effect-size  $r = .17$ .

The second analysis estimated the association between wives' appearance esteem at baseline and self-esteem 1 year later, controlling for husbands' sexual and physical valuation at baseline (as well as changes in wives' self-esteem over time, wives' marital satisfaction, and sample) by re-estimating the previous multi-level model (a variation of Equation 2) but additionally including wives' baseline appearance esteem (standardized and entered uncentered) at the Level 2 Intercept. As can be seen in the bottom third of Table 4, wives' baseline appearance esteem was positively associated with wives' self-esteem 1 year later, controlling for husbands' baseline valuation. That is, wives who reported relatively high (vs. low) appearance esteem at the start of marriage reported higher self-esteem 1 year later. It is worth noting that husbands' sexual and physical valuation remained significantly positively associated with wives' self-esteem 1 year later in this model, suggesting that other factors may additionally explain the direct association. Finally, the two primary effects were multiplied together to estimate the indirect effect ( $\beta = 0.02$ ) and corresponding 95% CI = [0.002, 0.042]. Consistent with predictions, wives' appearance esteem at the start of marriage mediated the association between husbands' sexual and physical valuation at the start of marriage and wives' self-esteem 1 year later.

## Discussion

Results of Study 2 extend those of Study 1, providing further support for the notion that sexual and physical valuation in the context of a romantic relationship is associated with higher levels of self-esteem in women. Wives whose husbands reported relatively high (vs. low) sexual and physical valuation at the start of marriage reported higher levels of global self-esteem 1 year later. Moreover, wives' appearance esteem at the start of marriage partially explains this effect, and this effect cannot be explained by women's physical attractiveness or the couple's sexual relationship.

## General Discussion

### Study Rationale and Summary of Results

Women are frequently valued for their sexuality and physical appearance. According to objectification theory (Fredrickson & Roberts, 1997), such valuation leads women to internalize

**Table 4.** Study 2: Associations Between Husbands' Sexual and Physical Valuation at Baseline and Wives' Self-Esteem 1 Year Later.

	$\beta/\pi$	95% CI	df	Effect-size <i>r</i>
Direct effect				
Intercept (1 year later)	3.153	[3.076, 3.230]	171	—
Sample	-0.259***	[-0.394, -0.125]	171	.28
Time	0.013***	[0.006, 0.019]	85	.37
Wives' marital satisfaction	0.165***	[0.099, 0.231]	173	.35
Husbands' valuation	0.086**	[0.025, 0.146]	171	.21
Components of indirect effect				
Wives' baseline appearance esteem				
Intercept (baseline)	3.212	[3.110, 3.314]	169	—
Sample	-0.050	[-0.154, 0.054]	169	.07
Wives' marital satisfaction	0.092 <sup>†</sup>	[-0.010, 0.194]	169	.14
Husbands' valuation	0.114*	[0.010, 0.218]	169	.17
Wives' global self-esteem				
Intercept (1 year later)	3.309	[3.237, 3.381]	169	—
Sample	-0.234***	[-0.353, -0.116]	169	.29
Time	0.013***	[0.006, 0.020]	86	.37
Wives' marital satisfaction	0.147***	[0.083, 0.210]	172	.33
Husbands' valuation	0.060*	[0.002, 0.118]	169	.16
Wives' baseline appearance esteem	0.177***	[0.111, 0.243]	169	.38

Note.  $\beta$ s indicate between-person effects;  $\pi$ s indicate within-person effects. CI = confidence interval; df = degrees of freedom.

<sup>†</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

their physical body as an object (Calogero, 2004; Gervais et al., 2011; Moradi & Huang, 2008; Noll & Fredrickson, 1998), which in turn harms their self-esteem. Indeed, empirical evidence examining the effects of sexual and physical valuation from male strangers supports this perspective. Nevertheless, sociometer theory (Leary & Baumeister, 2000) could be used to argue that such effects may depend on the context—because sexual and physical valuation indicates acceptance on a domain that is particularly highly valued by others (Fletcher et al., 1999; Li et al., 2002), particularly by romantic relationship partners (see Ko & Suh, 2019; Meltzer et al., 2014), such valuation from romantic partners may actually benefit women's self-esteem. Two longitudinal studies tested this possibility.

Conceptually replicating prior work in support of objectification theory, Study 1 demonstrated that heterosexual women report greater perceived objectification than usual, which is associated with lower state self-esteem than usual, when male strangers draw attention to their sexuality and physical appearance. Nevertheless, consistent with predictions, Study 1 additionally demonstrated that when *romantic partners* draw attention to heterosexual women's sexuality and physical appearance, those women report greater state appearance esteem than usual, which is associated with greater state self-esteem than usual. Perhaps most notably, women experience different outcomes across these two contexts, and the relationship context accounted for approximately 23% of the variance in women's state self-esteem.

Moreover, Study 2 demonstrated that women whose long-term partners report relatively high (vs. low) sexual and physical valuation reported higher appearance esteem (an association that cannot be explained by women's physical attractiveness or the couple's sexual relationship), which was associated with higher global self-esteem 1 year later. Notably, the effects in both studies appear robust given that they replicated across two independent studies and continued to emerge both controlling and not controlling potential confounds, [specifically, body size, self-objectification, marital satisfaction (Study 2), facial attractiveness (Study 2), frequency of sex (Study 2), and sexual satisfaction (Study 2)].

### Strengths and Limitations

Several strengths of the current research should enhance confidence in the results reported here. First, both studies provided a strong test of the association between sexual and physical valuation from a romantic partner and women's self-esteem. Whereas Study 1 estimated the within-person covariance between multiple assessments of sexual and physical valuation and state self-esteem, Study 2 utilized partner reports of sexual and physical valuation and assessed women's self-esteem up to 1 year later. Second, both studies provided evidence of the purported theoretical mechanisms—appearance esteem, and Study 1 provided evidence of the theoretical mechanism explaining women's negative reaction to valuation from a stranger. Third, given that conceptually similar effects replicated across the two studies and

held controlling for potential confounds (i.e., body size, self-objectification, marital satisfaction, facial attractiveness, frequency of sex, sexual satisfaction), they do not seem to reflect Type I errors or associations due to those covariates. Finally, both studies used women who responded based on current romantic relationships, rather than hypothetical, laboratory-based, or prior relationships. Thus, the outcome measured in these studies—women's self-esteem—was both real and consequential.

Nevertheless, several factors limit interpretation of the current findings until they can be replicated and extended. First, although the single-item measures used in Study 1 were high in face validity, it remains unclear which aspects of partner sexual and physical valuation were associated with women's increased self-esteem. Likewise, it remains unclear which aspects of appearance esteem and perceived objectification were responsible for the mediated effects that emerged in Study 1. For example, the single-item measure of appearance esteem may have assessed women's satisfaction with their sexual appearance, satisfaction with their weight, or positive affect regarding the way that others perceive their appearance, and it remains unclear whether a specific factor (vs. a combination of factors) drives the effects that emerged. Future research may benefit from addressing this issue. Second, although potential confounds were controlled, the current studies utilized correlational data making it difficult to draw causal conclusions. Indeed, it remains possible that appearance esteem or perceived objectification leads to sexual and physical valuation from relationship partners or male strangers, respectively. Likewise, it remains possible that some other uncontrolled variable leads to both valuation and changes in appearance esteem and perceived objectification. Accordingly, future research may benefit by examining the intrapersonal effects of partner valuation using experimental data.

It is also important to consider the generalizability of the current findings (see Simons, Shoda, & Lindsay, 2017). Indeed, the current studies only utilized young, heterosexual women who were involved in relatively new relationships (e.g., new marriages), and thus generalizations to other populations should be made with caution. For example, it is unclear whether similar effects would occur among same-sex couples, couples who have been together for an extended period of time, or older couples. Moreover, it is unclear whether the positive implications of sexual and physical valuation extend outside of the romantic relationship context. Although women in Study 1 completed diaries following instances in which men who were neither strangers nor romantic partners (e.g., family members, friends, ex-partners) drew attention to their physical appearance, that study did not have enough power to examine differences among all five different relationship categories (e.g., across all participants, only eight assessments pertained to instances in which family members drew attention to women's appearance). Future research may benefit from addressing the

effects of sexual and physical valuation in the context of other types of close (albeit non-romantic) relationships. Finally, both studies were conducted prior to the recent #MeToo movement. It thus remains unclear whether recent focus on unwelcome attention paid to women's sexuality and appearance (particularly in the context of strangers and acquaintances) influences the phenomenon demonstrated here. Future research would benefit from exploring this possibility. Other than these factors, there is no reason to believe that the results depend on other characteristics of the participants, materials, or context (see Simons et al., 2017).

### *Theoretical Implications*

These findings have important theoretical implications. Most notably, they highlight critical contextual limits of objectification theory and suggest that it may benefit from considering a broader functional perspective that considers the value of self-esteem in light of the critical role of reproduction. Although robust literature in support of objectification theory highlights the negative consequences associated with female sexual objectification (Calogero, 2004; Fredrickson & Roberts, 1997; Moradi & Huang, 2008), the current work provided preliminary support for the possibility that these effects are specific to contexts involving male strangers. As others have argued (Meltzer et al., 2017), such negative reactions to strangers make sense from a functional perspective because it likely helps women to avoid sexual encounters with uncommitted others. This same functional perspective may help to explain potential benefits associated with women's positive reactions to romantic partners' sexual and physical valuation. According to sociometer theory (Leary & Baumeister, 2000), self-esteem functions to help people achieve important goals related to survival. Given that romantic partners often facilitate many of these goals (see Fitzsimons, Finkel, & vanDellen, 2015), it makes sense that self-esteem would most strongly indicate acceptance from such close others. Indeed, consistent with the current functional perspective, experiencing an increase in self-esteem in response to sexual and physical valuation from a romantic partner likely helps to facilitate one of the most critical and unique features of romantic relationships—sex and attraction. In highlighting this critical role of the relationship context, the current studies join a growing body of research demonstrating that the implications of various interpersonal processes are not inherently positive or negative but instead depend on contextual nuance (see McNulty & Fincham, 2012; Reis, 2008). Future work may benefit from considering the extent to which other processes assumed to be inherently positive or negative have alternative implications in interpersonal contexts (for a related discussion, see Lameiras-Fernández, Fiske, Fernández, & Lopez, 2018).

It is important to acknowledge, however, that although the current studies demonstrated that partner sexual and

physical valuation benefited women's self-esteem both in the moment and over time, such partner valuation may not benefit women on other intrapersonal outcomes. Research examining the effects of female sexual objectification demonstrates that increased attention to women's bodies leads women to experience increased anxiety and depression (see Fredrickson & Roberts, 1997), and thus, it is possible that partner sexual and physical valuation leads women to experience similar negative outcomes. For example, a woman whose romantic partner values her for her sexuality and physical appearance may feel the need to continually meet her partner's appearance standards, which may lead to increased anxiety. Future research may benefit from examining other such outcomes. Indeed, Hammond and colleagues (Cross, Overall, & Hammond, 2016; Hammond & Overall, 2013, 2015) have recently demonstrated the relational benefits yet personal costs associated with men's endorsement of benevolent sexism. Although men's benevolent sexism is associated with their increased positivity and care toward their female relationship partners, those female partners feel less competent and are more vulnerable to relationship dissatisfaction.

It is also essential to acknowledge that "sexual and physical valuation" and "sexual objectification" are distinct constructs. As defined in the current research, sexual and physical valuation involves sexual desire and physical attraction. Objectification, in contrast, involves valuing a woman more for her physical versus functional attributes (see Fredrickson & Roberts, 1997). Although there may be similarities between these two constructs, there are important distinctions that should be considered. Most notably, men in the current studies who attended to women's sexuality and physical appearance were not necessarily valuing those attributes *over* those women's functional attributes (though the male strangers in Study 1 may have been given that they had no additional information about those women). Thus, future research should examine the implications of partner objectification for heterosexual women's self-esteem.

### **Additional Future Directions**

To better understand the potential positive implications of sexual and physical valuation in the context of a romantic relationship, future research should continue this line of research. For example, future research should examine the potential implications for heterosexual *men* of sexual and physical valuation by a female relationship partner. Although previous research has demonstrated that sexual valuation by female strangers is unrelated to men's outcomes (Calogero, 2004), like women, men are held to sexual and interpersonal standards in their intimate relationships (Fletcher et al., 1999). Indeed, although women place less emphasis on partner appearance than do men (Fletcher et al., 1999; Meltzer et al., 2014), they still

value such physical traits. Accordingly, men may also feel better about their bodies and themselves more globally to the extent that their female relationship partners sexually and physically value them.

Future research should also consider the boundary conditions of the key association demonstrated here. For example, drawing from a functional perspective, the implications of sexual and physical valuation for women's self-esteem may be moderated by their partners' genetic fitness and status. That is, women with genetically fit, high-status partners (vs. less genetically fit, low-status partners) may be more likely to benefit when those partners engage in sexual and physical valuation. Likewise, the implications of sexual and physical valuation for women's self-esteem may be moderated by their ovulatory cycle (see Ko & Suh, 2019; Meltzer, McNulty, Miller, & Baker, 2015). That is, women may experience greater benefits from partner sexual and physical valuation near ovulation (vs. less fertile phases of their cycles), when women's sexuality and physical appearance plays a particularly important role. Future research may benefit from exploring these and other potential moderators.

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### **Notes**

1. Although sociometer theory does not specifically posit that women should react *negatively* to acceptance and praise from strangers, objectification theory does. Indeed, research in support of objectification theory often assesses or manipulates sexual and physical valuation from male strangers (Calogero, 2004; Moradi & Huang, 2008; but also see Lameiras-Fernández, Fiske, Fernández, & Lopez, 2018), who often have no other information about their female targets other than those targets' physical appearance and thus can only value them for their bodies.
2. This effect should be interpreted with caution. Although the sample was well powered to detect within-person associations, it is less well powered to detect between-person associations. Moreover, this effect does not emerge in Study 2.

3. Centering the relationship context variable such that 0 represented sexual and physical valuation from a male stranger revealed that when a male stranger drew attention to a woman's sexuality and physical appearance, she reported feeling no worse or better about her appearance than usual,  $\pi = 0.27$ , 95% confidence interval (CI) =  $[-0.09, 0.62]$ ,  $t(40) = 1.51$ ,  $p = .139$  (see Figure 1).
4. Centering the relationship context variable such that 0 represented sexual and physical valuation from a romantic partner revealed that when a woman's romantic partner drew attention to her sexuality and physical appearance, she reported feeling less like an object than usual, though this effect was only trending toward significance,  $\pi = -0.15$ , 95% CI =  $[-0.32, 0.01]$ ,  $t(40) = -1.84$ ,  $p = .073$ , effect-size  $r = .28$  (see the right half of Figure 1).
5. In the uncontrolled analysis, the simple effect for partner valuation became significant and negative,  $\pi = -0.21$ , 95% CI =  $[-0.37, -0.04]$ ,  $t(41) = -2.56$ ,  $p = .014$ , effect-size  $r = .37$ .

### Supplemental Material

Supplemental material is available online with this article.

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