ORIGINAL ARTICLE

Exploring Perceptions of Slut-Shaming on Facebook: Evidence for a Reverse Sexual Double Standard

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Published online: 15 January 2015 © Springer Science+Business Media New York 2015

Abstract Although there is a widespread belief that women are judged more harshly for sexual activity than men, research on the existence of the sexual double standard has been mixed. We investigated the sexual double standard and "slut-shaming" by asking participants to provide perceptions of both a target of "slut-shaming" and a "shamer." Male and female participants viewed a blinded Facebook conversation in which the male or female target, or "slut," was shamed by either a male or female "shamer." We found evidence for a reverse sexual double standard; male "sluts" were judged more harshly. Furthermore, the "shamer" was negatively evaluated, especially when shaming a woman. Our participants also indicated a belief in a societal sexual double standard. They perceived the "shamer" to be more judgmental and less congratulatory when the "slut" was female. Furthermore, qualitative data indicated that female "sluts" were believed to be labeled as such for lower levels of sexual behavior (e.g., sexy clothing or dancing), than was the case for male "sluts" (e.g., sex with multiple partners). Our data indicate that individual beliefs are changing more quickly than social perceptions.

Keywords Sexual double standard · Slut-shaming · Gender differences · Social media

Introduction

The concept that women are judged more harshly than men for comparable sexual behavior is known as the sexual double standard [10]. Specifically, the sexual double standard indicates that men should be allowed more sexual freedom in areas

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such as premarital and extramarital sex [10]. Whereas men are generally rewarded for their number of sexual partners, women are often marginalized for similar behaviors [23]. This discrimination is sustained through "slut-shaming," which is the act of attacking a woman's character based upon her perceived or real sexual activity [2, 3, 29]. However, it remains unclear whether or not most people currently hold this bias [8] although a recent review indicated that it is still generally in effect [32]. Furthermore, whether or not the sexual double standard actually exists, the majority of people seem to assume it does and state that other people hold a sexual double standard more strongly than they do themselves [23, 25]. Conversely, there is some evidence that men are actually judged more harshly than are women for sexual activity, referred to as the reverse sexual double standard [23, 24, 36]. In the current study, we investigated the presence of both the traditional and reverse sexual double standards through perceptions of those involved in an act of "slut-shaming" on Facebook. We sought to determine whether men or women were perceived differently when they posted about seeking a sexual encounter and were subsequently "shamed" by another male or female Facebook user. We also hoped to determine how people perceived the person who shamed the "slut" and what activities were perceived as precipitating the shaming act.

Conflicting Evidence About the Existence of the Sexual Double Standard

It remains unclear whether people continue to hold a traditional sexual double standard in which sexually active women are judged more harshly than similarly sexually active men [8, 32]. A common way to assess the sexual double standard is to give participants a vignette that describes a target's level of sexual activity and ask participants to rate the target [10, 13, 26]. One study using this method found that sexually conservative women were rated lower on a personability factor but higher on interpersonal attractiveness and overall evaluation than were sexually permissive women [13]. Similarly, research has found that women are perceived more negatively when they engage in casual sex than men are [7, 35]. One study [37] examined data from between 1990 and 2012 and found a consistent pattern that did not change substantially over time wherein both male and female participants considered it more acceptable for a hypothetical man than a hypothetical woman to have sex in a casual relationship.

On the other hand, other studies have not found evidence of a sexual double standard, especially when participants were asked to rate specific targets that were described as being more or less sexually active. For example, one study used a vignette method and found no difference in the overall evaluations of sexually active men versus women [26]. Similarly, another study found an absence of the sexual double standard when participants were presented with male and female targets of various levels of sexual permissiveness [20]. It may be that the lack of a sexual double standard in these studies is due to demand characteristics in which participants realize that it is not acceptable to differentially evaluate men and women based on their sexual activity.

Studies attempting to avoid socially desirable responding have generally found evidence of a traditional sexual double standard. One study put participants under cognitive load by asking them to audibly rehearse an eight-digit number while evaluating a target [22]. The study found that participants under cognitive load rated sexually active men more favorably than sexually active women, while participants whose attention was undivided showed no such bias. This suggests that even if people do not explicitly support the sexual double standard, their implicit attitudes may be different. Furthermore, another study found that when participants read vignettes including positive and negative comments about men's and women's sexuality, they were able to recall more information consistent with the traditional sexual double standard than they could inconsistent information [21]. Jonason and Marks [14] sought to avoid socially desirable responding by depicting an extreme sexual act. Women who were described as having engaged in a threesome were rated far more negatively on derogatory dimensions than were men who were described as having engaged in the same behavior.

In real life settings, research has suggested that sexually permissive women do indeed suffer socially. For example, among adolescents, greater numbers of sexual partners were positively correlated with boys' peer acceptance but negatively correlated with girls' peer acceptance [16]. Specifically, boys who were sexually permissive had more friends than did girls who were sexually permissive. In one study, women specifically reported concerns over how they would be perceived if others knew that about their participation in casual sex [7]. In terms of romantic relationships, heterosexual men have reported wanting sexually permissive partners only for low commitment relationships [27]. For marriage or a committed partnership, men rated sexually permissive women as less desirable [27].

As a further complication, some research has found a *reverse* sexual double standard. The reverse double standard is the notion that men are viewed more negatively than women for engaging in high levels of sexual activity [23, 24, 36]. One study found that male targets were seen as most desirable as a date when they engaged in moderate levels of sexual activity, whereas female targets were seen as most desirable as a date when they engaged in high levels of sexual activity [36]. In another study, men who were described as having high levels of sexual activity were judged more harshly than women who were identically described [24].

There is some evidence that women, in particular, may hold a reverse sexual double standard, and this may best be revealed when measuring implicit beliefs. Participants in one study were given both an explicit measure of the sexual double standard as well as a sexual double standard Implicit Association Test [33]. Explicitly, men endorsed a stronger sexual double standard than did women. However, implicitly, men were not biased towards either gender, and women actually held a reverse double standard. Other research has suggested that when assessing explicit attitudes, men are more likely to endorse a traditional double standard than women [1, 31].

One's own level of sexual permissiveness may also influence the extent to which one evaluates and perceives the sexuality of others. For example one study found that sexually permissive participants had more favorable attitudes towards a female target described as providing a condom [18]. On the other hand, another study found that sexually permissive men had a greater endorsement of a sexual double standard and were less accepting of women engaging in casual sex [37].

"Slut-Shaming"

One way in which the sexual double standard manifests itself is through "slutshaming" or "slut-bashing," a form of sexual regulation involving attacking women for perceived high levels of sexual activity [2, 3, 29]. Research has shown that people want less social contact with a "slut" and even marginalize a person who is labeled as such [16].

Little research has explored the motivations behind "slut-shaming;" however, the self-esteem hypothesis and the competition hypothesis provide possible explanations. The self-esteem hypothesis suggests that women "slut-shame" other women in order to increase or boost their own self-esteem [6]. Those who "slut-shame" may position others as being sexually promiscuous, something typically perceived as socially undesirable or in violation of social norms and, specifically, norms of femininity [6, 19]. Thus, they may feel better about themselves because they better exemplify characteristics desired and approved of by society. The competition hypothesis, derived from evolutionary theory, is based on the idea that women view other women as competitors for the most desirable potential mates [6, 40, 41]. Women are believed to be less likely than men to engage in physical aggression as a means of competing for mates; thus, they may opt to use relational aggression in order to degrade potential competitors. This allows them to make others look less desirable as potential partners in order to increase their own chances of attracting the most desirable mate. It is less clear why men may engage in "slut-shaming," but they may be motivated by sexual jealousy [4, 5]. For example, evolutionary theory suggests that men may be more concerned with sexual infidelity than are women due to concerns about paternity of offspring, and they may express this jealousy through shaming those perceived as "sluts". Furthermore, "slut-shaming" may act as one way through which men control women's sexuality [4, 30, 31].

"Slut-shaming" may take place in a variety of settings such as through social media, in the workplace, or in a classroom [3]. Whether insults are face-to-face, indirect comments made about one person to another, or comments made online, the common thread is that the shamed individual is being referred to as a "slut" (e.g., "she is such a slut", or "what a slut" [39]. One particularly common way that young men and women may engage in "slut-shaming" is through social media such as Facebook. When this occurs, it can be considered a form of "cyberbullying" [34]. Furthermore, research has suggested that interactions on Facebook reflect social realities in everyday interactions [17]. Why exactly people "slut-shame" is unclear; however, its effects are clearly detrimental. Victims and perpetrators of "cyberbullying," which includes "slut-shaming" through social media, have higher levels of both physical and psychological problems and lower levels of academic achievement than those not involved with cyberbullying [15].

The negative effects of cyberbullying generally apply to both victims and perpetrators and especially to those who are both victims and perpetrators [15]. What is less clear is how being a victim and/or a perpetrator of "slut-shaming" affects how one is perceived by others. While research has suggested that those who have been labeled as "sluts" are generally perceived negatively [16], research has yet to investigate how people view perpetrators of "slut-shaming." Given that the

motivation behind "slut-shaming," at least when women are perpetrators, likely involves lowering another woman's status in order to raise one's own, it is important to understand how people perceive the "slut-shamer."

Hypotheses

Through an exploratory study, we utilized college students' familiarity with Facebook to present an ambiguous online conversation between a "slut" and a "slut-shamer" who varied in gender. Although some work has examined attitudes about "sluts," little has been done to explore perceptions of someone who is "slut-shaming" [3]. Participants were asked to evaluate both the "slut" and the "shamer," interpret the tone of the conversation, and suggest what behavior the "slut" engaged in. The goal was to gain a better understanding of possible contexts in which "slut-shaming" is perceived as acceptable as well as the attitudes toward both male and female "sluts" and "slut-shamers."

Given the conflicting data about the continued existence of a sexual double standard, we did not have a specific hypothesis about whether the male or female "slut" would be viewed more negatively. We also had no specific prediction about how participants would respond to the "shamer." However, due to the pervasive belief that society currently holds a sexual double standard, we predicted that the tone of the "shamer's" remark would be interpreted as more judgmental and less congratulatory when the "slut" was a woman. Given the potential for intrasexual competition as an explanation for "slut-shaming" [6, 40, 41], we also explored the extent to which the "shamer's" tone was perceived as jealous. Finally, we predicted that participants would believe that a female "slut" was being shamed for more conservative behaviors than a male "slut." In other words, participants would assume that people were quicker to label a woman as a "slut" than a man. Given that one's own sexual history might influence one's perception of both a "slut" and a "shamer," we assessed and controlled for participants' level of sexual activity.

Method

Participants

We recruited 308 participants between the ages of 18 and 25 to complete our survey. Of these participants, 40 % (n = 123) were men, and 60 % (n = 185) were women. The majority of our participants self-identified as White/Caucasian (78 %), followed by African American/Black (5 %), Latina/Latino (4 %), Multiracial (4 %), Asian/Pacific Islander (3 %), "other" (2 %), and American Indian (1 %), while 2 % did not disclose their ethnicity. The majority also identified as heterosexual/straight (84 %), followed by bisexual (7 %), homosexual/gay/lesbian (5 %), and "other" (4 %). Additionally, most participants self-identified as middle class (49 %) or upper-middle class (30 %), while the rest identified as working class (15 %), poor (4 %), or wealthy (2 %). On average, participants were 20.32 years old (SD = 1.60). Participants were required to be enrolled in college in order to

complete the study, and identified as seniors (30 %), juniors (26 %), sophomores (20 %), and freshmen (20 %). An additional 4 % of participants identified their class year as "other." While all participants needed to identify as college students, they could be students at any university. The majority of the participants (93.5 %) were from the United States. Others were from a variety of European countries, Canada, Australia, Pakistan, and South Korea.

Procedure

Participants over the age of 18 who were enrolled in college were recruited using social networking sites and snowball sampling. The study was described as aiming to learn more about how people make judgments based on what they see on Facebook. The posted survey link took participants to an online informed consent. Upon giving consent, participants were randomly placed by the online survey software randomization function into one of four conditions described below. The survey was the same in all conditions with the exception of the Facebook conversation that was viewed. Participants completed the secure survey hosted through Surveygizmo.com before being taken to an online debriefing statement.

Materials

Screenshots of the Facebook Conversations

Facebook conversations were created by the researchers using fictitious Facebook accounts. Each conversation included a status update and a single comment. Last names, photos, and dates were blocked to create the illusion that we were protecting the privacy of real Facebook users. Participants were randomly assigned to a male or female status creator or "slut" (Michael or Jessica) as well as to a male or female commenter or "shamer" (Ashley or Christopher). The percentage of participants assigned to each of the four cells were as follows: female "slut"/male "shamer" (26.9 %); female "slut"/female "shamer" (25.0 %); male "slut"/male "shamer" (23.7 %); male "slut"/female "shamer" (24.4 %). In all conditions, the status update and the comment read, "Saw you last night, you're such a slut." Participants answered questions about their perceptions of these people based on their interpretation of the conversation.

Person Perception

We assessed participants' evaluation of both the "slut" and the "shamer" through a semantic-differential measure of person perception [10]. We used one subscale from this measure to assess general evaluation (e.g., "bad–good"). These questions were answered using a 7-point scale (-3 to 3) such that higher scores were associated with more positive evaluations. The Cronbach's alpha from the original study was .77. For the current study, "slut" evaluation was .79, and "shamer" evaluation was .84.

Social Distance

We created a measure of social distance drawing from previously used but dated measures (e.g., [38]). Our 15-item measure was used to assess people's willingness to participate in common social interactions for college students with varying degrees of closeness (e.g., "Would you study with this person?" and "Would you be roommates with this person?"). A complete list of items is available upon request. The participants indicated their willingness to engage in these activities using a 6-point scale ranging from 1 (*Definitely No*) to 6 (*Definitely Yes*) such that higher scores indicated a greater willingness to affiliate and a lower desire for social distance. The Cronbach's alpha for the "slut" target was .95, and it was .96 for the "shamer" target.

Sexual Behavior of Participants

In order to measure participants' own sexual behavior, we used the 3-item behavior subscale from the Revised Sociosexual Orientation Inventory [28]; e.g., "With how many different partners have you had sex within the past 12 months". Participants responded using a 9-point scale that indicated specific numbers of sexual partners (0, 1, 2, 3, 4, 5–6, 7–9, 10–19, or 20 or more). The Cronbach's alpha in the original study was .85 for men and .84 for women; the combined Cronbach's alpha for the present study was .87.

"Shamer's" Tone

We asked the participants to report their perceptions of the "shamer's" tone in the conversation. We instructed participants to do so because it can sometimes be hard to decipher tone from text-based conversations [42], and we hoped to further understand how this interaction may have been perceived differently between those in our four conditions. The participants were asked to rate the extent to which they believed the "shamer" was judgmental, congratulatory, and jealous, and they responded on a 7-point scale ranging from 1 (*Not At All*) to 7 (*Very Much So*).

Open-Ended Question

In order to understand what participants perceived to be the context of the interaction, we asked an open-ended question. Participants were asked, "What do you think [Christopher/Ashley] saw [Michael/Jessica] do?"

Results

The first MANCOVA measured perceptions of the "slut;" the dependent variables were social distance and general evaluation. The three-way interaction was not significant. Similarly, none of the two-way interactions (participant sex \times "slut" sex, participant sex \times "shamer" sex, and "slut" sex \times "shamer" sex) were

significant. Furthermore, there were no significant main effects for participant sex or "shamer" sex. However, there was a significant main effect for "slut" sex. Additionally, the covariate was significant. See Table 1 for MANCOVA results for perceptions of the "slut."

Examination of the univariate ANCOVAs for "slut" sex indicated significant differences for both dependent variables: social distance and general evaluation. Those who read the Facebook posting from the female "slut" desired less social distance from the "slut" than did those who read the posting from the male "slut." Those in the female "slut" condition also evaluated the "slut" more favorably on the general evaluation measure than did those in the male "slut" condition. This indicates that male "sluts" were, overall, viewed more negatively than were female "sluts." See Table 2 for descriptive statistics and univariate ANCOVA results for perceptions of the "slut."

The second MANCOVA assessed perceptions of the "shamer" in terms of social distance and general evaluation. Once again, the three-way interaction was not significant. Similarly, none of the two-way interactions (participant sex \times "slut" sex, participant sex \times "shamer" sex, and "slut" sex \times "shamer" sex) were significant. Furthermore, there were no significant main effects for "shamer" sex. However, there were significant main effects for both participant sex and "slut" sex. The covariate was not significant. See Table 1 for MANCOVA results for perceptions of the "shamer."

Examination of the univariate ANCOVAs for participant sex indicated that there was only a significant main effect for the dependent variable of social distance. Male participants were comfortable being closer to the "shamer" than were female participants. See Table 3 for descriptive statistics and univariate ANCOVA results for perceptions of the "shamer."

Examination of the univariate ANCOVAs for "slut" sex indicated that there were significant differences for both dependent variables: social distance and general evaluation. Participants were more likely to desire social distance from those who shamed a female "slut" than from those who shamed a male "slut." Similarly, those who shamed a female "slut" were evaluated less favorably on general evaluation than were those who shamed a male "slut." This indicates that "shamers" were, overall, viewed more negatively when shaming a female "slut" than when shaming a male "slut." See Table 3 for descriptive statistics and univariate ANCOVA results for perceptions of the "shamer."

A third MANCOVA was conducted in order to assess perceptions of the tone of the "shamer's" comment. The three independent variables were, again, participant sex, "slut" sex, and "shamer" sex. The three dependent variables were perceptions that the tone was judgmental, congratulatory, and jealous. Sociosexual orientation was again used as a covariate and was significant. There was a significant three-way interaction at the MANCOVA level. Examination of the univariate ANCOVAs indicated that there was a significant 3-way interaction only for jealous tone. See Table 4 for MANCOVA results for perception of the "shamer's" tone.

The significant three-way interaction for jealous tone was probed with one-way ANCOVAs. We separated the data by sex of participant and first investigated differences split by sex of the "slut." First, looking at male participants, when the

	Perception of "slut"	Perception of "shamer"
Participant sex \times "slut" sex \times "shamer" sex	$F(2,294) = .57, p = .57, \eta_{\text{partial}}^2 = .004$	$F(2,292) = 1.30, p = .27, \eta^2 = .01$
Participant sex \times "slut" sex	$F(2,294) = 2.59, p = .08, \eta_{\text{partial}}^2 = .02$	$F(2,292) = .94, p = .39, \eta^2 = .01$
Participant sex \times "shamer" sex	$F(2,294) = 1.21, p = .30, \eta_{\text{partial}}^2 = .01$	$F(3,291) = 2.90, p = .06, \eta^2 = .02$
"Slut" sex \times "shamer" sex	$F(2,294) = .28, p = .75, \eta_{\text{partial}}^2 = .002$	$F(2,292) = 2.20, p = .09, \eta^2 = .02$
Main effect for participant sex	$F(2,294) = .48, p = .62, \eta_{\text{partial}}^2 = .003$	$F(2,292) = 6.25, p = .002, \eta^2 = .04$
Main effect for "shamer" sex	$F(2,294) = .35, p = .70, \eta_{\text{partial}}^2 = .02$	$F(2,292) = .94, p = .26, \eta^2 = .01$
Main effect for "slut" sex	$F(2,294) = 11.00, p < .001, \eta_{\text{partial}}^2 = .07$	$F(2,292) = 7.67, p = .001, \eta^2 = .05$
Covariate: own sexual behavior	$F(2,294) = 3.05, p = .05, \eta_{\text{partial}}^2 = .02$	$F(2,292) = .89, p = .41, \eta^2 = .01$

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	Male M (SD)	Female M (SD)	Univariate equation
Main effect of "slut" sex on social distance	2.33 (.93)	2.90 (1.00)	$F(1,295) = 21.95, p < .001, \eta^2 = .07$
Main effect of "slut" sex on general evaluation	-1.04 (.94)	74 (.98)	$F(1,295) = 5.27, p = .02, \eta^2 = .02$

Table 2 Descriptive statistics and univariate ANCOVA results for perceptions of the "slut"

Social distance scores range from 1 to 6 with a higher score indicating a greater desire to affiliate with the target. General evaluation scores range from -3 to 3 with higher scores indicating a more positive evaluation of the target. Sex of participants, the "slut", and the "shamer" were coded so 0 = male and 1 = female. All η^2 reported are partial η^2

 Table 3 Descriptive statistics and univariate ANCOVA results for perceptions of the "shamer"

	Male M (SD)	Female M (SD)	Univariate Equation
Main effect of participant sex on social distance	2.89 (.94)	2.51 (.94)	$F(1,293) = 12.52, p < .001, \eta^2 = .04$
Main effect of participant sex on general evaluation	83 (1.06)	-1.02 (1.00)	$F(1,293) = 3.02, p = .08, \eta^2 = .01$
Main effect of "slut" sex on social distance	2.78 (.93)	2.55 (.98)	$F(1,293) = 3.86, p = .05, \eta^2 = .01$
Main effect of "slut" sex on general evaluation	70 (.92)	-1.17 (1.07)	$F(1,293) = 15.38, p < .001, \eta^2 = .05$

Social distance scores range from 1 to 6 with a higher score indicating a greater desire to affiliate with the target. General evaluation scores range from -3 to 3 with higher scores indicating a more positive evaluation of the target. Sex of participants, the "slut", and the "shamer" were coded so 0 = male and 1 = female. All η^2 reported are partial η^2

Table 4 Significant MANCOVA and univariate ANCOVA follow-up results for perceptions of "shamer" tone

	Perception of "shamer" tone
Participant sex \times "slut" sex \times "shamer" Sex	$F(3,290) = 3.13, p = .03, \eta^2 = .03$
Jealous	$F(1,292) = 8.64, p = .004, \eta^2 = .03$
"Slut" sex × "shamer" sex	$F(3,290) = 5.66, p = .001, \eta^2 = .06$
Congratulatory	$F(3,292) = 14.41, p < .001, \eta^2 = .05$
Judgmental	$F(1,292) = 8.86, p = .003, \eta^2 = .03$
Covariate: own sexual behavior	$F(3,290) = 5.39, p = .001, \eta^2 = .05$

Sex of participants, the "slut", and the "shamer" were coded so 0= male and 1= female. All η^2 reported are partial η^2

"slut" was male, the pattern of means indicated that the female "shamer" was perceived as more jealous than was the male "shamer," although this result failed to meet traditional standards for statistical significance. For female participants in the

	Men		Women	
	Male slut M (SD)	Female slut M (SD)	Male slut M (SD)	Female Slut M (SD)
Male shamer	2.52 (1.38)	3.94 (1.50)	3.05 (1.45)	2.94 (1.66)
Female shamer	3.22 (1.37)	3.03 (1.45)	2.68 (1.51)	3.43 (1.40)

Table 5 Descriptive statistics for jealous tone

All scores could range from 1 (not at all) to 7 (very much so)

Table 6 Univariate ANCOVA results for jealous tone

	Men	Women
Collapsed across "sl	hamer"	
Male slut	$F(1,54) = 3.68, p = .06, \eta^2 = .06$	$F(1,87) = 1.37, p = .25, \eta^2 = .02$
Female slut	$F(1,62) = 6.05, p = .02, \eta^2 = .09$	$F(1,92) = 2.37, p = .13, \eta^2 = .03$
Collapsed across "s	lut"	
Male shamer	$F(1,60) = 14.97, p < .001, \eta^2 = .20$	$F(1,90) = .11, p = .74, \eta^2 = .001$
Female shamer	$F(1,56) = .26, p = .61, \eta^2 = .005$	$F(1,89) = 6.04, p = .02, \eta^2 = .06$

Sex of participants, the "slut", and the "shamer" were coded so 0= male and 1= female. All η^2 reported are partial η^2

male "slut" condition, there was no significant difference in perceptions of jealous tone. When the "slut" was female, however, male participants perceived male "shamers" as being significantly more jealous than were female "shamers." While the result for female participants was not statistically significant, the pattern of results was opposite from that seen with male participants. Women perceived the female "shamer" to be more jealous of the female "slut" than was true for the male "shamer" (see Tables 5, 6 for descriptive statistics and ANCOVA results).

To continue probing the 3-way interaction, we again separated the data by sex of participant in order to investigate differences split by sex of the "shamer." For male participants, when the "shamer" was male, the "shamer" was perceived as being more jealous when responding to female "sluts" as compared to male "sluts." Female participants' responses, however, showed no significant difference between male and female "sluts" when the "shamer" was male. When the "shamer" was female, male participants showed no significant difference in perceived jealous tone. However, for female participants, female than when the "slut" was male. In sum, the 3-way interaction presented a pattern wherein male participants perceived slutshaming to be an act of other-sex jealousy such that, generally, male "shamers" were perceived as more jealous of female "sluts." In contrast, female participants generally perceived a pattern of same-sex jealousy wherein female "shamers" were perceived as more jealous of female "sluts" and male "shamers" were perceived as more jealous of female "sluts." In contrast, female participants generally perceived as more jealous of female "shamers" were perceived as more jealous of male "shamers" were perceived as more jealous of female "shamers" were perceived as more jealous of male "sluts." In contrast, female participants generally perceived as more jealous of female "shamers" were perceived as more jealous of male "shamers" were perceived as more jealous of female "shamers" were perceived as more jealous of female "shamers" were perceived as more jealous of male "sluts." In contrast, female participants generally perceived as more jealous of female "shamers" were perceived as more jealous of female "s

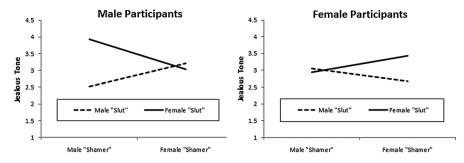


Fig. 1 Mean values on jealousy scores separated by participant sex

	Slut sex		Univariate equation
	Male M (SD)	Female M (SD)	
Congratulatory			
Male shamer	3.44 (1.71)	1.83 (1.28)	$F(1,152) = 44.20, p < .001, \eta^2 = .23$
Female shamer	2.26 (1.35)	1.83 (1.19)	$F(1,148) = 4.25, p = .04, \eta^2 = .03$
Judgmental			
Male shamer	3.30 (1.72)	5.31 (1.13)	$F(1,152) = 76.21, p < .001, \eta^2 = .33$
Female shamer	4.00 (1.59)	4.90 (1.50)	$F(1,149) = 13.08, p < .001, \eta^2 = .08$
	Shamer sex		Univariate equation
	Male M (SD)	Female M (SD)	
Congratulatory			
Male slut	3.44 (1.71)	2.26 (1.35)	$F(1,143) = 21.37, p < .001, \eta^2 = .13$
Female slut	1.83 (1.28)	1.83 (1.19)	$F(1,157) < .001, p = .99, \eta^2 < .001$
Judgmental			
Male slut	3.30 (1.72)	4.00 (1.59)	$F(1,144) = 6.63, p = .01, \eta^2 = .04$
Female slut	5.31 (1.13)	4.90 (1.50)	$F(1,157) = 3.76, p = .05, \eta^2 = .03$

Table 7 Descriptive statistics and univariate ANCOVA results for congratulatory and judgmental tones

Sex of participants, the "slut", and the "shamer" were coded so 0 = male and 1 = female. All scores could range from 1 (*not at all*) to 7 (*very much so*). All η^2 reported are partial η^2

male "sluts" (see Fig. 1; Tables 5, 6 for descriptive statistics and ANCOVA results).

As there were no significant 3-way interactions for either judgmental or congratulatory tones, we examined the two-way interactions. "slut" sex by "shamer" sex was the only significant two-way interaction at the multivariate level. Examination of the univariate analyses indicated that there were significant interactions for both congratulatory and judgmental tones (see Tables 4 for

MANCOVA results and Table 7 for ANCOVA results and descriptive statistics for judgmental and congratulatory tone variables).

The significant interactions were probed using one-way univariate ANCOVAs. Looking first at the sex of the "slut," when the "slut" was male, the male "shamer" was seen as being significantly more congratulatory than was the female "shamer." However, when the "slut" was female, there was no significant difference in how congratulatory the "shamer" appeared to be. Looking next at the sex of the "shamer," when the "shamer" was male, the male "slut" was perceived as being congratulated significantly more so than was the female "slut." The same pattern held when the "shamer" was female. While these are similar outcomes, the effect was stronger when the "shamer" was male.

For perceptions of judgmental tone, results showed that when the "slut" was a man, female "shamers" were perceived as more judgmental then were male "shamers." When the "slut" was a woman, male "shamers" were seen as being more judgmental than were female "shamers." Looking then at the differences when split by "shamer" sex, results showed that both male "shamers" and female "shamers" were perceived as more judgmental when the "slut" was a woman as compared to when the "slut" was a man; however, the effect size was considerably stronger for the male "shamers."

Of the 308 men and women who participated in the study, 275 provided qualitative responses to the open-ended question, "What do you think [Christopher/Ashley] saw [Michael/Jessica] do?" To analyze the frequency with which certain themes came up in the participants' responses, we created a coding scheme using an iterative process. Codes were initially developed based on the researchers collectively reading and discussing a small subset of responses which were not included in reliability calculations. After the initial codes were developed, all responses were coded by one primary rater. Each response was also coded by one of two secondary raters. As new concepts were noted, raters developed new codes as needed. Inter-rater reliability was calculated as percent agreement between the primary rater and each of the two secondary raters and was 81 and 82 %, respectively. All disagreements were resolved through discussion so 100 % agreement was achieved with the final codes.

The most common response to this question was the idea of being involved with multiple people, which 33.1 % of participants mentioned. Other common responses were kissing/making out, mentioned by 26.6 % of participants, and hitting on/flirting, mentioned by 19.8 % of participants. Less common responses included hooking up, which was mentioned by 12.7 % of participants, and having sex, mentioned by 9.7 % of participants. See Table 8 for a list of responses mentioned by at least 5 % of the sample and the specific percentage of participants reporting each idea.

When examining these responses based on the sex of the "slut," we found that certain responses were more frequently mentioned for male or female "sluts." When the "slut" was a woman, suggestive dancing was mentioned significantly more often than when the "slut" was a man, χ^2 (1, N = 274) = 11.11, p = .001. Suggestive clothing, χ^2 (1, N = 275) = 23.92, p < .001 was also mentioned significantly more often when the "slut" was a woman. When the "slut" was a man,

	N (%)	N(%)	N(%)	N (%)	$N\left(\% ight)$
Involvement with multiple people 102 (3	02 (33.1)	71 (42.8)	40 (21.9)	55 (32.5)	56 (30.9)
Kissing/making out 82 (26.6)		39 (23.5)	53 (29)	50 (29.6)	42 (23.2)
Flirting/hitting on 61 (19.8)		42 (25.3)	28 (15.3)	31 (18.3)	39 (21.5)
Suggestive dancing 42 (13.6)		12 (7.2)	33 (18)	26 (15.4)	19 (10.5)
Hooking up 39 (12.7)		23 (13.9)	21 (11.5)	20 (11.8)	24 (13.3)
Having sex 30 (9.7)		17 (10.2)	18 (9.8)	18 (10.7)	17 (9.4)
Going out 30 (9.7)	9.7)	15 (9)	16 (8.7)	13 (7.7)	18 (9.9)
Suggestive clothing 24 (7.8)		0 (0)	24 (13.1)	18 (10.7)	6 (3.3)
Generic mention of something sexual 22 (7.1)		14 (8.4)	12 (6.6)	9 (5.3)	17 (9.4)
Involvement with a stranger 19 (6.2)		8 (4.8)	12 (6.6)	14 (8.3)	6 (3.3)
Talking to people 18 (5.8)	5.8)	6 (3.6)	12 (6.6)	11 (6.5)	7 (3.9)
Alcohol involved/drunk behavior 18 (5.8)	5.8)	7 (4.2)	13 (7.1)	10 (5.9)	10 (5.5)

Table 8 Qualitative responses

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participants mentioned hitting on/flirting, χ^2 (1, N = 275) = 5.33, p = .02, and involvement with multiple people, χ^2 (1, N = 275) = 16.83, p < .001, significantly more often than when the "slut" was a woman.

When examining the qualitative data based on the sex of the "shamer," significant differences were found for only one coded response. Participants responded that the "shamer" thought the "slut" had been wearing suggestive clothing significantly more often when the "shamer" was a man than when the "shamer" was a woman, χ^2 (1, N = 275) = 6.1, p = .01.

No significant differences were found in qualitative responses based on the sex of participants.

Discussion

Based on ratings of male and female "sluts" on the social distance and person perception measures, the participants held a reverse sexual double standard. The male "slut" was seen as less appealing overall, and participants desired more social distance from the "male" slut than from the female "slut." These results reflect findings from prior research, including a study in which participants rated sexually active men as less appealing than women who were identically described [24]. Sakaluk and Milhausen [33] also found this reverse sexual double standard in the implicit attitudes of women. Additionally, one previous study found that women with high levels of sexual activity were seen as most desirable for a date, while men with moderate levels of sexual activity were seen as most desirable for a date [36].

One explanation for the presence of a reverse sexual double standard in our study is that men explicitly seeking sexual activity could be perceived as a threat to women [23]. In Milhausen and Herold's [23] study, open ended-questions revealed that women often described men with several sexual partners as potential sexual predators, making them undesirable as a dating partner. This may be especially true in our study, in which the "slut" wrote on Facebook, "going out - gonna get some tonight," implying the intent to actively pursue sex.

It is also possible that this pattern of results may not fully reflect the true feelings of our participants. Social desirability may also have been a factor. Holding a sexual double standard and negatively judging women for sexual activity may not be socially acceptable, especially within a college-aged sample. Therefore, our participants may have deliberately tried to form socially desirable responses, perhaps even unintentionally overcompensating by judging men particularly harshly. Previous research has revealed a sexual double standard when participants were under cognitive load and, therefore, did not have the ability to alter responses to conform to social norms [22]. Our participants, however, were not under cognitive load and, therefore, had the cognitive resources available to form socially desirable responses.

When examining participants' perceptions of the "shamer," we saw a similar trend away from the sexual double standard. Targets who were shaming a female "slut" were rated lower on general evaluation as compared to those who were shaming a male "slut." Participants also wanted more social distance from those

who shamed a woman. It seems that participants were particularly wary of any "shamer" who shamed a woman and may have, therefore, perpetuated a sexual double standard. This distaste for anyone who shamed a female "slut" may also be evidence of benevolent sexism in that people may want to protect a vulnerable woman from being criticized [11]. This theory is further supported by the fact that "shamers" of female "sluts" were rated especially poorly when the "shamer" was male. While benevolent sexism may appear harmless and even beneficial to women, it perpetuates stereotypes that lead to gender inequality [12]. Furthermore, the fact that the "shamer" was generally disliked indicates that using "slut-shaming" as an attempt to raise one's own social status [40, 41] is not an effective method, at least among college students.

It should also be noted that female participants wanted more social distance from "slut-shamers" in general than did male participants. This supports the idea that women may be particularly sensitive to the sexual double standard and feel the need to protect themselves from it by distancing themselves from those who might "shame" them.

The paradox of our results is that while participants claimed to find sexually active men less appealing than their female counterparts, they believed that the "shamer" held the opposite opinion. "Slut-shamers" were seen as being more judgmental towards the female "slut" than the male "slut." When the "slutshamer" was a man, this effect increased. Similarly, both male and female "shamers" were seen as being more congratulatory to male "sluts" than to female "sluts." Furthermore, male "shamers" were seen as significantly more congratulatory toward a male "slut" than were the female "shamers."

Our participants' assumption that the "shamer" was being more judgmental and less congratulatory to the female "slut" indicated a belief in the existence of a sexual double standard at a societal level, despite self-reported scores suggesting otherwise. Our participants seem to be declaring, "Well, I don't think she's a 'slut,' but everyone else does." This concept that people hold egalitarian beliefs but assume others hold more traditional views has been seen in previous literature [3, 9, 23]. It should also be noted that previous research that has found evidence of a sexual double standard has asked about the acceptability of men and women engaging in casual sex in general instead of asking participants to evaluate a particular man or a woman [37]. It could be that the sexual double standard is more evident when people are asked about general levels of acceptability of certain behaviors which may allow them to reflect on how they see society as viewing the behaviors. Generally studies that have not found sexual double standards have, like ours, asked participants to evaluate particular target men and women (e.g., [20, 26].

It should also be noted that one reason that male and female "sluts" were perceived differently may be because the term "slut" itself is more typically used to denigrate women [2, 3, 29]. When such a term is used to refer to men, it may be seen as a joke or even a compliment. There is no comparable negative term to indicate that a man is overly sexual. Men may be referred to by terms such as "player," but this term is perceived as somewhat complimentary and may be used to highlight a male's sexual status rather than a norm violation.

In terms of the perceived jealousy of the "shamer's" tone, male participants believed that the "shamer" was most jealous when the "slut" was the other sex. Conversely, female participants believed that the female "shamer" was more jealous when the "slut" was of the same sex. Participants' assessment of jealousy could be explained theoretically in numerous ways. From an evolutionary standpoint, men's jealousy may be related to a fear of infidelity and, thus, a fear of false paternity [4, 5]. However, our participants were not informed of any current or previous relationship between the "slut" and "shamer" and would have needed to make that assumption themselves for it to support this particular evolutionary perspective. Women, on the other hand, perceived jealousy in "slut-shaming" when "sluts" and "shamers" were of the same sex. It has been suggested that women compete with other women for partners and may do so, in part, through indirect aggression, such as "slut-shaming" [4, 6, 40, 41].

Our qualitative findings also provided evidence that participants believed that others held a sexual double standard. Analysis of the data collected from the openended question "What did [shamer] see [slut] do last night?" revealed a difference in the stereotypical "slutty" behaviors of men and women. Participants' responses showed that the criteria for being labeled as a "slut" were much lower for women than they were for men. Women were assumed to be called a "slut" for dancing "slutty" or dressing "slutty;" they did not even have to come in physical contact with another person to be labeled as a "slut." Men, on the other hand, were assumed to have been called a "slut" for fulfilling the "oversexed" male stereotype. Participants believed that the male "sluts" had been called such for hitting on women or being involved with multiple people in one night, behaviors which, ironically, much more accurately fit the generally agreed upon definition of a "slut" [2]. According to these responses, the grounds for labeling a woman as a "slut" are much lower than the grounds for labeling a man.

It is important not to generalize the results of this study beyond the sample used. This college-aged, college-educated sample is potentially more aware of and sensitive to the sexual double standard than might be true of other populations [3]. For instance, a high school sample or a middle-aged sample may not have expressed a reverse sexual double standard. Therefore, it would be inaccurate to suggest that today's society as a whole endorses a reverse sexual double standard, especially when previous studies have shown that social desirability may disguise the true sentiments of even supposedly liberal college students [21]. In addition to age and education, our samples were demographically limited in terms of race/ethnicity as most of our participants identified as White/Caucasian. Future research should include more demographically diverse samples of participants. It would be particularly interesting to explore differences in perceptions of a sexual double standard as well as differences in perceptions of slut-shaming among nonheterosexual identified individuals, something not possible to do in the present study given our samples sizes.

There are numerous implications of this research. First and foremost, we have provided evidence that those currently in college may be moving beyond disapproval of women's sexual activity. This is important to society developing a new sexual script in which women are active participants. Further, we found a reverse sexual double standard suggesting that the assumption that men's overt sexual endeavors are celebrated may be false. This finding leads to other interesting areas of work, particularly for researchers who may want to further explore contexts in which men's sexuality is perceived negatively.

Additionally, this study presents the implications of "slut-shaming" specifically as a form of cyber-bullying. While participants rated the "slut-shamer" negatively, they also rated the "slut" negatively. This suggests that people may not have as much sympathy for the victim of "slut-shaming" cyberbullying as they might for victims of other types of cyberbullying. This issue is important to examine, as both perpetrators and victims of cyberbullying show decreased prosocial behavior, increased substance abuse, and conduct problems [34].

Overall, our participants seemed to be actively dismissing a bias they assumed the rest of society held. "Slut-shaming" is a common method of indirect aggression among young adults [39], and negative consequences are associated with being labeled in such a way [16]. Our data indicate that, at least among our college sample, there may be a backlash against those who engage in "slut-shaming" combined with an acknowledgment that women are particularly at risk for being shamed. Future research should further investigate the causes and consequences of "slut-shaming" in order to better understand the extent to which it is happening and how individuals of different ages and with different socio-demographic characteristics experience it.

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