Do Women Pretend Orgasm to Retain a Mate?

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ABSTRACT

The current study tested the hypothesis that women pretend orgasm as part of a broader strategy of mate retention. We obtained self-report data from 453 heterosexual women (mean age 21.8 years) in a long-term relationship (mean length 32.8 months) drawn from universities and surrounding communities in the southeastern Unites States. The results indicated that (1) women who perceived higher risk of partner infidelity were more likely to report pretending orgasm, (2) women who reported greater likelihood of pretending orgasm also reported performing more mate retention behaviors, and (3) women's perceptions of partner infidelity risk mediated the relationship between pretending orgasm and the performance of cost-inflicting mate retention behaviors, such as Intersexual Negative Inducements ("Flirted with someone in front of my partner") and Intrasexual Negative Inducements ("Yelled at a woman who looked at my partner"). Thus, pretending orgasm may be part of a broader strategy of mate retention performed by women who perceive higher risk of partner infidelity.

Key words: pretending orgasm, infidelity risk, mate retention

INTRODUCTION

     Selective sperm retention may be one function of human female copulatory orgasm (Baker & Bellis, 1995; Thornhill, Gangestad, & Comer, 1995). According to this hypothesis, female copulatory orgasm functions to retain the sperm of men with "good genes." These sperm, in turn, are more likely to succeed in fertilization, with the result that an offspring produced shares these "good genes."

     If female copulatory orgasm functions as a sire-selection mechanism, then women partnered to men with "good genes" should experience more frequent orgasms. One signal of "good genes" is attractiveness, which correlates negatively with fluctuating asymmetry, a measure of developmental instability (Gangestad, Thornhill, & Yeo, 1994). Thornhill et al. (1995; see also Shackelford et al., 2000) found that women partnered to more attractive men reported more frequent copulatory orgasms than women partnered to less attractive men.

     Thornhill and Gangestad (2008) argued that the sire-selection function of orgasm provides a reasonable account of orgasm near ovulation, when the chance of conception is highest. Thornhill and Gangestad suggested that orgasm *outside* the fertile phase of the cycle, however, may function instead to secure non-genetic material benefits, by displaying mate selection to her partner and encouraging his continued investment and commitment. Female orgasm, therefore, may function to secure "good genes" and/or non-genetic material benefits from men.

Why Do Women Pretend Orgasm?

     Women are more likely to report pretending orgasm during intercourse than are men (e.g., Thornhill et al., 1995). According to previous research, about 50% to 60% of women self-report pretending orgasm (Darling & Davidson, 1986; Hite, 1976; Muehlenhard & Shippee, 2009; Schaefer, 1973; Wiederman, 1997; see Muehlenhard & Shippee, 2009, for review). We are aware of only one study investigating men's self-reports of pretending orgasm (Muehlenhard & Shippee,

2009). In a sample of 180 male college students, 18% reported pretending orgasm (compared to 48% of women in a parallel sample). Women's self-reported reasons for pretending orgasm included meeting a partner's expectations, boosting a partner's ego, increasing sexual excitement,, and preventing a partner from defecting from the relationship. The most common reasons for pretending orgasm, according to women's self-reports are: to keep a partner interested or excited, and to reduce likelihood of a partner's infidelity or relationship defection (see Muehlenhard & Shippee, 2009, for review).

Men may have evolved mechanisms that produce interest in their partner's copulatory orgasm, especially when the risk of female infidelity is higher, because female orgasm may function to retain the sperm of a favored man (McKibbin, Bates, Shackelford, Hafen, & LaMunyon, 2010).

Because female orgasm may function to secure "good genes" and/or non-genetic material benefits, and because men may have co-evolved a motivation to attend to partner orgasm, women may pretend orgasm to manipulate their partner's commitment by signaling mate selection. Commitment manipulation is a mate retention tactic that is especially likely to be deployed when the perceived risk of partner infidelity is higher (Buss & Shackelford, 1997).

Thus, we hypothesized that pretending orgasm may be a form of mate retention performed to decrease the likelihood of a male partner's infidelity or defection from the relationship by signaling mate selection and, therefore, manipulating his commitment to the relationship. Based on this hypothesis, we generated several predictions: (1) women who perceived higher risk of partner infidelity would be more likely to report pretending orgasm, (2) women who were more likely to have pretended orgasm also report performing more frequent mate retention behaviors; (3) the relationship between pretending orgasm and mate retention performance would be mediated by women's perceptions of partner infidelity risk. In other words, after controlling for infidelity risk, the relationship between pretending orgasm and mate retention behaviors would be reduced or

eliminated, because perceptions of partner infidelity predict both women's mate retention and pretending orgasm.

METHOD

Participants

A total of 453 women, each in a self-defined committed, heterosexual sexual relationship for at least six months, participated in this study. Participants were drawn from universities and surrounding communities in the southeastern Unites States. The mean age of the participants was 21.8 years ($SD = 5.4$), ranging from 18 to 46. The mean age of the participants' partners was 23.9 years ($SD = 6.6$), ranging from 17 to 52. The mean relationship length was 32.8 months ($SD = 36.7$), ranging from 6 to 312 months. About half the participants drawn from universities received extra credit toward one of several social science courses in exchange for their participation. The remaining half of participants drawn from universities received credit toward a required research participation component of an introductory psychology course.

Researchers solicited participants from these courses at the beginning of a class session, noting only that the research was a ''study on romantic relationships.'' Participants drawn from the surrounding community were recruited by word-of-mouth and via flyers posted in public locations. These flyers stated only that volunteers were needed for a ''study on romantic relationships.'' Contact information was provided on the flyers. We estimated that 20% of participants were nonstudents drawn from the community (e.g., Shackelford et al., 2002). Florida Atlantic University's Institutional Review Board reviewed and approved this study for ethical compliance.

Measures

Participants completed a survey that included several sections. The first section solicited demographic information, including the participant's age, her partner's age, and the duration of her current relationship. Participants also completed the Mate Retention Inventory (MRI; Buss, 1988),

which assesses the frequency of their performance of 104 mate retention acts in the past month, with responses ranging from 0 (*never*) to 3 (*often*). According to Buss's (1988) taxonomy of mate retention behaviors, the 104 acts are categorized into five broad categories: Direct Guarding (18 items; sample item: "Called at unexpected times to see who my partner was with"), Intersexual Negative Inducements (29 items; sample item: "Flirted with someone in front of my partner"), Positive Inducements (26 items; sample item: "Dressed nicely to maintain my partner's interest"), Public Possession Signals (15 items; sample item: "Held my partner's hand when other women were around"), and Intrasexual Negative Inducements (16 items; sample item: "Yelled at a woman who looked at my partner").

To measure perceptions partner infidelity risk, we asked participants to answer two questions regarding suspicions of their partner's past and future likelihood of infidelity: (1) "As far as you know, has your partner had sexual intercourse with someone other than you since you have been involved in a relationship together?" and (2) "How likely do you think it is that your current partner will in the future have sexual intercourse with someone other than you, while in a relationship with you?" The responses were recorded on a 10-point scale, anchored by 0 (*Definitely No*) and 9 (*Definitely Yes*). Perception of partner infidelity risk was computed by calculating the average of the responses to the two questions ($r = .35, p < .001$).

To measure pretending orgasm, we asked two questions: (1) "During sexual intercourse with your current partner, have you ever pretended that you were more sexually excited than you really were?" and (2) "During sexual intercourse with your current partner, have you ever pretended that you were having an orgasm when you really weren't?" The responses were recorded on a 10-point scale, anchored by 0 (*Definitely No*) and 9 (*Definitely Yes*). Pretending orgasm was computed by calculating the average of the responses to two questions ($r = .59, p < .001$).

Procedure

The prospective participant had to be at least 18 years of age, and currently in a committed, heterosexual, sexual relationship. If these criteria were met, the researcher handed the participant a consent form, the survey, and a security envelope. The participant was instructed to read and sign the consent form, complete the survey, place the completed survey and the consent form in separate envelopes, and then place the sealed envelopes in two boxes—one for surveys, one for consent forms. The participants completed the surveys in a classroom setting, with at least one empty seat distance between participants to provide privacy of responses. Non-student participants were instructed to return the sealed envelope, which included the completed survey, in an unmarked box located in the researchers' university department.

RESULTS

We selected for analyses responses provide by women who were 50 years or younger, and have been in a sexual committed relationship for at least 6 months ($n = 453$). Following Buss (1988), we calculated scores for women's performance reports of mate retention on each of the five categories by averaging responses to the constituent acts. Also following Buss (1988), to calculate the overall mate retention score, we averaged responses to all 104 mate retention acts. The α reliabilities for the categories and for overall mate retention were greater than .80. The results indicated that 53.9% of women reported having pretended orgasm (responding > 0 to: "During sexual intercourse with your current partner, have you ever pretended that you were having an orgasm when you really weren't?").

To test the first prediction, we calculated correlations between women's perceptions of risk of partner infidelity and pretending orgasm. Consistent with the prediction, women who perceived higher risk of partner infidelity were more likely to pretend orgasm (see Table 1). [1]

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[1] Scores on the partner sexual infidelity risk variable were positively skewed ($M = .99$, range from 0 to 9.0). To correct for skew, we log-transformed the partner sexual infidelity and conducted analyses with the log-transformed variable.

To test the second prediction, we calculated correlations between pretending orgasm and women's performance frequency on each of the mate retention categories, as well as on overall mate retention. Consistent with the prediction, women who more frequently pretended orgasm also reported more frequent Direct Guarding, Negative Inducements, Positive Inducements, Public Possession Signals, Intrasexual Negative Inducements, and overall mate retention (see Table 1).

To test the third prediction, we followed Baron and Kenny's (1986) guidelines for mediation. We conducted five mediation analyses to test whether women's perceptions of partner infidelity risk mediated the relationship between pretending orgasm and performance frequency on each of the five mate retention categories. For each mediation analysis, we (1) tested the relationship between the predictor variable (pretending orgasm) and each outcome variable (five mate retention categories) using a simple regression, (2) tested the relationship between the predictor (pretending orgasm) and the mediator variable (perceptions of partner infidelity risk) using a simple regression, (3) tested the unique relationship between the mediator and outcome (controlling for the predictor) using multiple regression, and, finally, (4) tested the mediation, using a hierarchical multiple regression. The mediations tested the relationship between pretending orgasm and performance frequency on each of the mate retention categories, controlling for the variance accounted for by perceived risk of partner infidelity. Because the relationships between risk of partner infidelity and Positive Inducements and Public and Possession Signals could not be established, we were unable to test mediations including these two categories.

The results of the mediation analyses for the remaining three mate retention categories indicated that risk of partner infidelity partially mediated the relationship between pretending orgasm and the performance of Direct Guarding and Intersexual Negative Inducements and fully

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The results did not differ substantively. The analyses that included the transformed variable are available upon request from the first author.

mediated the relationship between pretending orgasm and Intrasexual Negative Inducements (for details of the mediation analyses, see Table 2). In other words, after controlling for the variance accounted for by perceptions of partner infidelity risk, the relationships between pretending orgasm and Direct Guarding and Intersexual Negative Inducements decreased, but were not eliminated. However, after controlling for the variance accounted for by perceptions of partner infidelity risk, the relationship between pretending orgasm and Intrasexual Negative Inducements was no longer significant. Sobel tests verified these results ($z_{\text{Direct Guarding}} = 2.01, p < .05; z_{\text{Negative Inducements}} = 2.66, p < .01; z_{\text{Intrasexual Inducements}} = 3.07, p < .01$).

DISCUSSION

The results of this research support the hypothesis that pretending orgasm may be a form of mate retention performed by women to prevent a partner's infidelity or defection from the relationship. Women who perceived higher risk of partner infidelity were more likely to have pretended orgasm during copulation with their partner. Furthermore, women who were more likely to have pretended orgasm reported engaging more frequently in all five categories of mate retention. Thus, women's perceptions of partner infidelity risk may be an underlying variable that causes both pretending orgasm and increased performance of mate retention. The results of the mediation analyses supported this prediction. After controlling for perceptions of partner infidelity risk, the relationship between pretending orgasm and Direct Guarding and Intersexual Negative Inducements decreased, and the relationship between pretending orgasm and Intrasexual Negative Inducements was eliminated.

Although we found a positive relationship between pretending orgasm and Positive Inducements and Public Possession Signals, we were unable to detect a relationship between perceptions of partner infidelity risk and these two categories of mate retention. Women may pretend orgasm to display commitment and interest to their partners; these behaviors are similar to

benefit-provisioning acts included in the Positive Inducements and Public Possession Signals categories (e.g., "Gave in to my partner's sexual requests"). In other words, higher perceived risk of partner infidelity risk is not the only predictor of pretending orgasm. Women sometimes engage in such behaviors to emphasize love and care. Because men are attentive and interested in a female partner's orgasm, women may pretend orgasm to keep their partner happy. Darling and Davidson (1986) asked participants open-ended questions regarding pretending orgasm; the primary response by 51% of women who pretended orgasm was "feel guilty, but it is important to satisfy my partner" (p. 192).

Moreover, several studies have identified dispositional correlates of pretending orgasm. For example, Darling and Davidson (1986) found that women who reported having pretended orgasm were more likely to have become sexually active at an earlier age, and have been more "sexually explorative." Wiederman (1997) found that women who reported having pretended orgasm (relative to those who have not) are older, perceived themselves as more facially attractive, were younger at their first sexual intercourse, report more sexual partners, and scored higher on sexual esteem. Thus, to build a more comprehensive understanding of human female orgasm, future research might include women's life history strategies, as well as sociosexuality.

The current research had several limitations. First, dispositional traits may account for some of the variance in pretending orgasm, including personality and sociosexuality traits, both partners' relative mate values, and participant's life history strategies. Second, the α reliability for the two-item scale measuring perceptions of partner infidelity was relatively low (.50), and the current results that involved this variable should be interpreted with special caution. Finally, according to Baron and Kenny (1986), "a given variable may be said to function as a mediator to the extent that it accounts for the *relation* between the predictor and the criterion" (p. 1176; emphasis added). The results indicate that the *relationship* between the predictor (likelihood of pretending orgasm) and the

criterion (mate retention frequency) was partially accounted for by the mediator (perceived risk of partner infidelity). Thus, the current study corresponds statistically to a mediation analysis but might be limited conceptually. We can only infer that the relationship between likelihood of pretending orgasm and mate retention behaviors was accounted for by the mediator—perceived risk of partner infidelity—but we cannot infer causality. Furthermore, we cannot infer causality because the data reflect single assessments.

Despite these limitations, this is the first study to assess and provide evidence for a link between pretending orgasm and women's mate retention. The results indicated that women who perceived higher risk of partner infidelity may pretend orgasm to manipulate their partner's commitment by signaling mate selection. Future research could profitably address the possible function of human female orgasm, in general, and pretending orgasm, in particular. This study nevertheless may provide a starting point for such research.

ACKNOWLEDGMENTS

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Table 1.

Correlations between women's likelihood of pretending sexual excitement and orgasm, women's mate retention performance, and perceptions of partner sexual infidelity risk

Variables	1	2	3	4	5	6	7	8
1. Likelihood of Pretending	-	.15**	.16**	.21***	.16**	.10*	.20***	.17***
2. Direct Guarding		-	.81***	.61***	.56***	.63***	.87***	.15**
3. Intersexual Negative Inducements			-	.56***	.53***	.73***	.85***	.21***
4. Positive Inducements				-	.75***	.37***	.85***	.07
5. Public Possession Signals					-	.35***	.83***	-.06
6. Intrasexual Negative Inducements						-	.68***	.24***
7. Overall Mate Retention							-	.12*
8. Partner Sexual Infidelity Risk								-
Mean (SD)	4.25 (3.15)	.41 (.38)	.43 (.41)	1.25 (.47)	1.11 (.51)	.13 (.24)	.67 (.34)	.99 (1.77)

Note. N = 453; the absolute ranges for each variable are: Likelihood of Pretending (0.00-9.00), Direct Guarding, Intersexual Negative Inducements, Public Possession Signals, Intersexual Negative Inducements, and Overall Mate Retention (0.00-3.00), and Partner Sexual Infidelity Risk (0.00-9.00).
 * $p < .05$, ** $p < .01$, *** $p < .001$

Table 2.

Summary of three mediation analyses testing the mediating role of risk of partner infidelity on the relationship between pretending and orgasm and mate retention categories

Model	F	R^2	β
Outcome: Direct Guarding			
Step 1: Pretending orgasm → Direct Guarding	9.73**	.02	.15**
Step 2: Pretending orgasm → Risk of partner Infidelity	14.26***	.03	.18***
Step 3: Risk of Infidelity (& Pretending) → Direct Guarding	8.05***	.04	.12*
Step 4: Pretending Orgasm (controlling for Risk) → Direct Guarding (Change Statistics)	7.07**	.02	.13**
Outcome: Intersexual Negative Inducements			
Step 1: Pretending orgasm → Negative Inducements	10.85**	.03	.16**
Step 2: Pretending orgasm → Risk of partner Infidelity	14.26***	.03	.18***
Step 3: Risk of Infidelity (& Pretending) → Negative Inducements	12.44***	.06	.18***
Step 4: Pretending Orgasm (controlling for Risk) → Negative Inducements (Change Statistics)	6.88**	.02	.13**
Outcome: Intrasexual Negative Inducements			
Step 1: Pretending orgasm → Intrasexual Inducements	3.92*	.01	.10*
Step 2: Pretending orgasm → Risk of partner Infidelity	14.26***	.03	.18***
Step 3: Risk of Infidelity (& Pretending) → Intrasexual Inducements	13.40***	.06	.23***
Step 4: Pretending Orgasm (controlling for Risk) → Intrasexual Inducements (Change Statistics)	1.37	.00	.06

Note. The components of each model are depicted as predictor → outcome.
* $p < .05$, ** $p < .01$, *** $p < .001$