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ORIGINAL PAPER

Development and Validation of the Pretending Orgasm Reasons Measure

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Abstract Pretending orgasm is a widespread phenomenon, reported by both men and women. We report here on the development of a new measure to assess reasons for pretending. In three studies, using large diverse samples, we obtained a comprehensive list of reasons for pretending orgasms (Study 1; $N = 46$) and conducted both exploratory (Study 2; $N = 416$) and confirmatory (Study 3; $N = 1010$) factor analyses identifying six reasons for pretending an orgasm: feels good, for partner, not into sex, manipulation/power, insecurity, and emotional communication. Sexual dysfunction was correlated with frequency of pretending orgasms for reasons such as insecure, not into sex, for partner, and emotional communication. Usefulness for future research and clinical implications are discussed.

Introduction

Pretending orgasm is commonly conceptualized as the act of simulating orgasm in order to give the mistaken impression that orgasm actually occurred (Muehlenhard & Shippee, 2010). Although 25–60% of both men and women (higher frequency among women) report pretending an orgasm at least once in their life (Bryan, 2001; Darling & Davidson, 1986; Muehlenhard & Shippee, 2010; Wiederman, 1997), there is relatively little research on pretending orgasms and even less about the reasons people report for pretending orgasms (Darling & Davidson, 1986; Hite, 1976).

Most of the existing research on pretending orgasms has focused on the tendency to pretend or the frequency of pretending rather than the reasons for pretending (e.g., Kaighobadi, Shackelford, & Weekes-Shackelford, 2011; Wiederman, 1997), leaving open the question of why people pretend. This is an important question, and as seen from existing work (e.g., Cooper, Fenigstein, & Fauber, 2014; Muehlenhard & Shippee, 2010), people have very different reasons for pretending orgasms, some with more severe clinical implications than others (e.g., a chronic inability to orgasm or inability to enjoy sex vs. more situational or temporary reasons such as being intoxicated or tired). Furthermore, a large share of past research focusing on reasons for pretending an orgasm has been qualitative in nature (Muehlenhard & Shippee, 2010).

Another limitation of the extant literature is the lack of theory-based work. Many of the existing papers focus on descriptive work—describing the phenomenon and its frequency. Here we took a different approach and tied pretending and reasons for pretending with a well-studied relational theoretical framework—attachment theory (Bowlby, 1969). Attachment theory draws on concepts from ethology, cybernetics, information processing, developmental psychology, and psychoanalysis, to shed light on relational constructs and processes and describe the dynamics of long-term interpersonal relationships (Bretherton, 1992). According to attachment theory, the quality of past interactions with one's caregivers—known as attachment figures (e.g., mom, dad)—shapes relationship-related cognitions as well as interactions with and expectations of close others. This leads to the development of attachment styles—relatively consistent ways of interacting within close relationships.

Attachment styles can be either secure or insecure, with insecure attachment styles being further parsed into avoidance

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or anxiety. Individuals high on avoidance are characterized with emotional aloofness and a tendency to be compulsively self-reliant and avoid trusting or depending on others; whereas individuals high on attachment anxiety are preoccupied with concerns regarding rejection and abandonment, express a strong desire to merge with close others, and are highly emotional. Differences in attachment styles have been found to be associated with various sexual functioning-related variables such as orgasmic difficulty (Birnbaum, 2007), as well as motives for sex (e.g., Schachner & Shaver, 2004). In light of these associations, we used attachment theory and attachment styles in our current investigation in order to better understand reasons why people pretend orgasms.

Existing Research on Reasons for Pretending Orgasms

People pretend orgasms for very different reasons (e.g., Muehlenhard & Shippee, 2010; Steiner, 1981). One way to organize these reported reasons is by classifying them into three main theoretical categories: circumstantial, internal, and relationship-related reasons (Bryan, 2001; Darling & Davidson, 1986; Hite, 1976; Muehlenhard & Shippee, 2010; Schaefer, 1973; Steiner, 1981; Wiederman, 1997), in line with the conceptualization of human interactions by Mischel and Shoda (1995). Circumstantial reasons are related to the "power of the situation," and have the potential to affect every person, regardless of individual differences. Examples of circumstantial reasons involve tiredness, boredom, wanting the sexual encounter to be over, and/or being overly intoxicated. Muehlenhard and Shippee (2010) showed that pretending orgasm when orgasm was unlikely or taking too long was the most popular reason for pretending among men (84%) and the second most popular reason among women (71%). Overall, these reasons involve finding a way to change or escape from a given (unpleasant) situation.

Internal reasons refer to psychological processes or predispositions such as emotions (e.g., excitement or fear) and emotional states. Wanting to enhance arousal levels is a common reason related to these internal processes. For example, Bryan (2001) found among 236 college-aged women who pretended an orgasm, that 33% of them mentioned pretending helped them increase their sexual excitement or arousal in situations in which it was low. Muehlenhard and Shippee (2010) showed that both men (14%) and women (4%) reported pretending an orgasm to avoid negative feelings, such as an "awkward situation" or "appearing inadequate." Additionally, underlying insecurities and the desire to manipulate the partner's perception may also be classified as internal reasons (McCoy, Welling, & Shackelford, 2015).

Relationship-related reasons refer to relational processes (e.g., relationship quality, or stability) and partner-related reasons. Pretending an orgasm is ultimately a relational phenomenon—there is no use pretending without the presence of an audience, more

specifically a relationship partner (Steiner, 1981). Thus, pretending an orgasm is associated with various relational processes, such as relational and sexual satisfaction, love, commitment, and mate retention (Bryan, 2001; Kaighobadi et al., 2011; Steiner, 1981; Wiederman, 1997). Previous research has demonstrated that relationship-related reasons for pretending an orgasm include "not wanting to damage the partner's sexual self-concept," "wanting to please one's partner," and "wanting to keep partner from looking for alternatives" (e.g., Darling & Davidson, 1986; Muehlenhard & Shippee, 2010; Opperman, Braun, Clarke, & Rogers, 2014). This category also aligns with recent research suggesting that pretending an orgasm may be related to mate retaining strategies (Kaghobadi et al., 2011). Also, there is qualitative research showing that when a woman does not orgasm, the greatest concern for both men and women is the negative effect this lack of orgasm may have on the male partner (e.g., lower self-esteem; Salisbury & Fisher, 2014). In Muehlenhard and Shippee's (2010) study, 58% of men and 78% of women reported pretending an orgasm to avoid negative or to obtain positive relationship-related outcomes. This suggests that relationship issues motivate a substantial portion of pretending orgasm behavior (see also Kaighobadi et al., 2011), especially among women. Further support for this claim comes from research on related sexual behaviors. For example, in a study by Brewer and Hendrie (2011) women were more likely to engage in copulatory signals (e.g., moaning) during sex and when a partner was likely to orgasm. Additionally, 92% of the women in the sample reported that these signals boosted a partner's self-esteem.

The three categories we depicted above do not necessarily cover all the possible reasons for pretending orgasms. However, they cover most of the self-reported reasons mentioned in the literature. In generating reasons for pretending orgasms in the current studies, we included representative items from each one of these categories. The current study also provides a unique three-tiered questioning approach (explained in further detail in Study 1) by investigating the various strategies people use for pretending an orgasm in order to better understand reasons for pretending orgasms.

Existing Measures Assessing Reasons for Pretending Orgasms

Recently, three measures assessing reasons for pretending orgasms (The Faking Orgasm Scale for Women [FOS; Cooper et al., 2014]; the Reasons for Pretending Orgasm Inventory [RPOI; McCoy et al., 2015]; and the Motives for Feigning Orgasm Scale [MFOS; Séguin, Milhausen, & Kukkonen, 2015]) were published. These measures have a few limitations. First, both the FOS (Cooper et al., 2014) and RPOI (McCoy et al., 2015) were developed and validated for women only, which makes them only generalizable to 50% of the population. Second, in the MFOS, the sample size used was not in line with psychometric guidelines for the kind of analyses performed (MacCallum, Widaman, Zhang, & Hong, 1999;

Schreiber, Nora, Stage, Barlow, & King, 2006), which might have contributed to the poor fit of the model reported by Séguin et al. Third, the researchers in all three previous papers tested the validity of their scale using variables such as sexual goals and sexual compulsivity, but not with sexual dysfunction or with measures assessing pretending or cheating in general. Thus, the goal of the current paper was to address the problems with existing measures by creating a valid quantitative measure of reasons for pretending orgasms using a large sample size of both men and women.

Current Studies

The main goal of Study 1 was to lay the grounds for a measure of reasons for pretending orgasms that addresses some of the flaws of previously created measures. Specifically, we used a phenomenological investigation, meant to generate reasons, and constructed an initial version of the Pretending Orgasm Reasons Measure (PORM). In Study 2, we conducted an exploratory factor analysis on the PORM using a large community online sample. In Study 3, we conducted a confirmatory factor analysis on the PORM using a new sample. We also tested the convergent and discriminant validity of our new scale by examining the correlations between reasons for pretending orgasms and (a) the tendency to deceive/lie in general, (b) the tendency to deceive one's partner, and (c) sexual dysfunction.

Study 1

Although previous work has already studied the act of pretending an orgasm (Bryan, 2001; Darling & Davidson, 1986), only a few studies have explicitly investigated reasons for pretending (Kaighbogdagi et al., 2011; Muehlenhard & Shippee, 2010), and only recently have researchers published initial quantitative work using new measures (Cooper et al., 2014; McCoy et al., 2015; Séguin et al., 2015). Therefore, the goal of Study 1 was to generate a comprehensive list of reasons for why people pretend orgasms.

Method

Participants

Participants were 46 undergraduates ($M_{age} = 19.02$, SD $= .88$) who reported ever pretending orgasm. Sixty-seven percent were women and 78% were European American ($n = 36$). The remaining participants identified as multi-racial ($n = 2$), African-American ($n = 2$), Hispanic ($n = 2$), Asian American ($n = 2$), and Native American ($n = 2$). All participants were heterosexual. Seventy percent of the participants ($n = 32$) were in a romantic relationship, and the rest ($n = 14$; 30%) reported no current romantic involvement.

Materials and Procedure

All studies and study materials were approved by the institutional review board and here, as well as in all other studies reported below, participants signed a consent form prior to beginning the study. Informed consent was obtained from all participants in the study. For this study, the online battery consisted of the following measures:

Reasons for pretending orgasm To capture the richness of reasons people may have, we started our measure-constructing process with a phenomenological stage where we created a comprehensive item pool based on people's life experiences (Griffin & Phoenix, 1994). Participants were asked directly to think about why they pretended and to provide five reasons that came to mind. After obtaining a comprehensive list of items, we divided these items into categories and used those categories to guide our next step of constructing the measure.

Sexual history In order to control for frequency of opportunities to pretend orgasm, we measured certain aspects of sexual history. The following definition appeared on each screen that contained sexual history questions: "For the purpose of this survey, sexual behavior that would lead to an orgasm can include genital touching, oral sex, sexual intercourse, anal sex, or anything else that you consider to be a sexual behavior during which it was possible, or during which you expected that you would have an orgasm." Participants were asked: "Approximately how many times have you engaged in sexual behaviors that would lead to an orgasm with another person where your orgasm was possible and/or expected?" The participants responded on a 6-point Likert scale ranging from 1 (*Less than 10*) to 6 (*More than 50*). Respondents also had the option of reporting that they had never engaged in sexual behavior with another person that could lead to an orgasm.

Measures of Pretending Orgasm To accommodate the diversity of experiences people have, we combined several previous definitional strategies and used a three-tiered questioning approach to assess the phenomenon of "pretending." First, participants were asked: "Thinking back over all the times you have engaged in sexual behavior with a partner that could lead to an orgasm, what percentage of those times would you say you pretended to have an orgasm?" (Darling & Davidson, 1986). Second, we also asked about "acting as if you had an orgasm when you did not" (Muehlenhard & Shippee, 2010) and, third, "told your partner that you had one when you did not" (Bryan, 2001). Participants responded using a 7-point Likert scale ranging from 1 (*I never pretend orgasm [0% of the time]*) via 4 (*I pretend orgasm about half the time [40-60% of the time]*) to 7 (*I pretend orgasm every time [100% of the time]*). If respondents endorsed having ever pretended orgasm (i.e., any response more than "never"), they were directed to the open-ended question about reasons for pretending. Otherwise, they were directed to the next pretending orgasm question. The use of a three-tiered approach allowed us to correctly identify people who fit a broad definition of pretending (acting or saying they had an orgasm when they did not) even

when they did not endorse the first or second gateway questions, which in general increased our ability to identify pretenders.

Open-ended question Participants who reported pretending an orgasm before were asked to provide five reasons that have ever motivated them to pretend an orgasm. First, participants were instructed to recall all the times they had pretended an orgasm. Specifically, participants were instructed to: "Please provide in the space below five reasons you have used." After obtaining a comprehensive list of items, we divided these items into categories and used those categories to guide our next step of constructing the measure.

Upon completion of the questionnaires, participants were thanked, reminded of the goal of the study, and provided with contact information if they had further questions.

Results

Each person provided an average of 3.5 reasons for pretending, with no difference between men and women ($M_{women} = 3.8$, SD = 1.45; $M_{men} = 3.2$, SD = 1.91, $t = 1.29$, $p > .05$). This resulted in a total of 143 reasons for pretending an orgasm. We examined these items using content analysis, a strategy often used to study sexuality and gender-related qualitative data (Rudy, Popova, & Linz, 2010). Content analysis is a method that allows researchers to process large amounts of text while analyzing how frequently each text unit is used, and based on that categorizing text units into unique sets (Krippendorff, 2004). As a result of this analysis, the responses were divided into five main categories: External, Insecure with Partner, Partner's Pleasure, Enhance Experience, and It was Expected. Each category was broken down into several subcategories (for a full listing of these results, see Appendix). These categories can be mapped onto the three classifications we identified based on previous research: External and It was Expected are related to circumstantial reasons; Insecure with Partner and Enhance Experience are related to internal reasons; and Partner's Pleasure is related to relationship-related reasons. At the end of this process we were left with a shorter scale consisting of 72 items.

Discussion

Our results were consistent with Muehlenhard and Shippee (2010) as well as with common reasons for engaging in sexual intercourse (Meston & Buss, 2007). Notably different from Muehlenhard and Shippee (2010) were the subcategories: "For Fun," "Don't Know," and the main category: "It was Expected." As intended, asking directly for five reasons led participants to recall more reasons and to elaborate on their initial reasons. Also, this strategy led participants to report that they are not

always aware of the reason or they do not always have a conscious reason to pretend.

Our results also overlapped with the reasons reported by McCoy et al. (2015). Specifically, their category, "Improving Partner's Sexual Experience" was in line with our categories "Partner's Pleasure" and "Enhancing Experience" (particularly the subcomponent, "To Sexually Excite Partner"). McCoy et al.'s category of "Hiding Sexual Disinterest" overlaps with our category of "External" (specifically with the subcategory of "Bored/Uninterested," "Too Tired," and "To End It"). Our scale, however, was different from McCoy et al.'s with the subcategories "For Fun" and "Don't Know."

Our categories also overlapped with Séguin et al. (2015). Specifically, their categories of "Intoxication," "Partner Self-Esteem," and "Insecurity" overlapped with our categories of "External," "Partner's Pleasure," and "Insecure with Partner," respectively. Their categories of "Desireless Sex" and "Poor Sex/Poor Partner" were also in line with our category of "External" specifically in line with the subcategories of "Bored/Uninterested," and "To End It." Our scale, however, also included the subcategories of "For Fun," "Don't Know," and "It was Expected," which did not overlap with their categories.

Lastly, when comparing our categories to Cooper et al. (2014), we found that our categories, "External," "Insecure with Partner," "Partner's Pleasure," and "Enhance Experience" overlapped with their categories of "Sexual Adjournment," "Fear and Insecurity," "Partner's Pleasure," and "Elevated Arousal," respectively. Again, notable differences from Cooper et al.'s scale are our subcategories, "For Fun" and "Don't Know."

Compared to the three other quantitative measures, "For Fun," "Don't Know," and "It was Expected" are three factors that are unique to our work (and similar to Muehlenhard & Shippee, 2010). "For Fun" is a frequently reported reason for sexual activity (Meston & Buss, 2007). "Fun" can have many meanings, especially in a sexual context (Everett, 1891). Hence, "For Fun" can be interpreted in several ways: people could be pretending to be playful, to increase their own arousal, or generally to enhance the overall experience. For example, although Muehlenhard and Shippee's (2010) sample did not report this reason, it could potentially fall under their category "to get the positive consequences of orgasming." Interestingly, both men and women in our study reported that at least one reason that they had pretended was in some way "For Fun."

Only a few people reported pretending an orgasm for the reason "Don't Know," but having this option allowed those who were unsure about the exact reason to express their state of mind. Not knowing why can manifest an implicit process or the working of some defense mechanism protecting the self from getting hurt (Davidson & MacGregor, 1998).

The "It was Expected" category represents a belief in a sexual script (McCormick, 2010). Approximately a third (35%) of female participants listed this reason compared to 0% of male participants. Perhaps women are more guided by others' expectations when pretending orgasm, or perhaps there are different sexual expectations for women (sexual scripts for men and women; Tolman, Striepe, & Harmon, 2003). Using focus groups, Salisbury and Fisher (2014) found that women need to be psychologically prepared to orgasm (or to pretend to orgasm) in order to not negatively affect their partner (Bryan, 2001). We devote more space to gender differences and similarities in the next studies. One explanation for why this category emerged in our study and not others is that we asked participants directly for reasons, whereas other studies asked participants to give narratives. In previous studies asking participants to give narratives, participants may have thought they pretended an orgasm because it was expected. However, they may not have added this to their narratives thinking that sexual scripts are common and do not need to be articulated. When we asked participants directly for reasons rather than narratives, they may have been prompted to report this reason. We used items from all of these categories in our next step of measure construction.

Study 2

The goal of Study 2 was to use all the reasons for pretending orgasms identified in Study 1 and perform an exploratory factor analysis that would discriminate between items, identify major categories or types of reasons, and generate a statistically robust measure. To further the construction of the PORM, we not only included items from Study 1, but also items from other measures associated with motivations for various sexual behaviors. This allowed us to further expand our item pool beyond the reasons our student sample provided, or by students in other studies (e.g., Muehlenhard & Shippee, 2010), and tie our reasons with more general reasons for engaging in sexual behavior.

Another goal of Study 2 was to recruit a large and diverse sample different from the samples used in Study 1 and in similar studies by others (e.g., Cooper et al., 2014; Muehlenhard & Shippee, 2010). In order to obtain such a diverse and representative sample, we recruited participants online. This allowed us to gather a more heterogeneous sample. Compared to a student sample, using a more diverse sample in regards to age, location, and ethnicity, as well as sexual experience, sexual orientation, and education, increases the generalizability of our findings (Gosling, Sandy, John, & Potter, 2010).

Finally, taking a quantitative approach, an exploratory factor analysis (EFA) with oblique rotation—instead of the qualitative methods used in Study 1 and similar past studies—allowed us to compare participants and reasons for pretending orgasms to each other, investigate the weight of each reason, and validate the structure of reasons for pretending orgasms (Park, Dailey, & Lemus, 2002).

Method

Participants

Of the 511 participants who completed the online survey, 95 participants were excluded, resulting in a final sample of 416 participants with a mean age of 27 years (SD = 9.55).[1] Eighty-three percent were women, 82% percent were European American, and 77% were heterosexual. The majority of the sample (65%) was recruited from Craigslist. The rest of the sample was recruited from other sources (36%), mainly from a variety of alternative websites listing psychology research opportunities.

Materials and Procedure

The battery consisted of demographic, sexual history, and pretending orgasm questions including those used in Study 1 and items from additional measures as detailed below.

Pretending Orgasm Reasons Measure (PORM) Overall, participants rated the degree of agreement they felt with each of 204 reasons to pretend using a Likert scale ranging from 1 (Disagree Strongly) to 7 (Strongly Agree). Participants were asked: "Please respond to each statement by indicating how much you agree/disagree with it." We asked participants to indicate their agreement/disagreement with each statement rather than reporting the frequency of use to increase consistency between items that were taken from a variety of measures. Agree/Disagree response scales are highly popular because they allow for measuring various constructs in an efficient way. Alternative response scales often require that a different unique scale will be tailored for each item or construct (Saris, Revilla, Krosnick, & Shaeffer, 2010), therefore we adopted the common solution of Agree/Disagree scale.

A total of 72 of these items were derived from the qualitative data gathered in Study 1. The items included the following categories and subcategories: External (Bored/Disinterested in Sex, Ready for Sex to be Over, Orgasm Unlikely), Insecure with Partner (Feeling Insecure with Partner, Engage Partner), Partner's Pleasure (Please Partner, Increase Partner's Confidence, Make Partner Feel Better, Communicate Pleasure), Enhance Experience (Increase Pleasure, Make Self Feel Better, Fun), and It was Expected (Expectations, Don't Know). Twenty-eight additional items were adapted from Muehlenhard and Shippee (2010) covering the factors: To Avoid Negative Consequence, Partner's Orgasm Seemed Imminent, and To Avoid Ejaculation/Possible Pregnancy.

We included 57 items from the Affective and Motivational Orientation Related to Erotic Arousal Questionnaire (AMORE; Hill & Preston, 1996), a widely used sexual motivation measure.

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[1] Participants were excluded from the study for the following reasons: three due to being under 18, 14 for English not being their native language, two for denying pretending orgasm, two for zero sexual experience, and 74 for failing four or more of 11 attention checks.

The items were from the following AMORE factors: Feeling Valued by One's Partner, Showing Value for One's Partner, Obtaining Relief from Stress, Providing Nurturance, Enhancing Feelings of Personal Power, Experiencing the Partner's Power, and Experiencing Pleasure. We omitted the items relating to Procreation because none of the qualitative studies suggested any reasons related to procreation. For the current study, items were changed to reflect the focus on motivations for pretending an orgasm rather than general sexual motivations. For example, the original item, "I frequently want to have sex with my partner when I need him or her to notice me and appreciate me" was changed to "I pretend orgasm with my partner when I need him or her to notice and appreciate me."

Previous research suggests that some reasons for pretending orgasms (and for sexual behavior more generally) are related to relational motives (e.g., Davis, Shaver, & Vernon, 2004). Therefore, we also included reasons regarding one's relationship or attachment style. Similar to Davis et al., we added a few new items to the AMORE focusing specifically on attachment. The additional items improved the internal consistency of the original AMORE factors. Therefore, we used the 25 items from Davis et al., covering the factors: Emotional Closeness, Nurturance, Physical Pleasure, Self-Esteem, Reassurance, Relationship Threat, Manipulative use of Sexuality-General, and Manipulative use of Sexuality-Protection. We also created 13 additional items related to attachment that were not covered by Davis et al., such as "I pretend orgasm because it distances me from my partner," and "I pretend orgasm because it doesn't matter to me if I have an orgasm or not, but it matters to my partner."

Finally, we added nine items related to sexual function—particularly orgasm function—as orgasm function may be related to the motivation to pretend. Example items include: "I pretend orgasm because I have pretended in the past and now I feel like I have to keep doing it," and "I pretend orgasm because I am on a medication that makes it difficult for me to have an orgasm."

Sexual history and frequency of pretending an orgasm were assessed the same way as in Study 1. The PORM also included 11 attention checks, such as "To show that I am paying attention I will check Agree." After completing the online questionnaires, participants answered several demographic questions, were debriefed about the study, were asked about their feelings and thoughts, and thanked for their participation.

Results

Factoring the PORM

EFA 1 The 204 items were factor analyzed using Maximum Likelihood extraction with oblique rotation and Kaiser normalization. Maximum Likelihood factor analysis is the preferred procedure to minimize error, as it accounts for error in measurement, differentiates between shared and individual variance, and allows for significance testing and confidence intervals (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Theoretically, psychological motivations are often interwoven (Tabachnick & Fidell, 2001), therefore we chose an oblique rotation to reflect this possibility. We conducted all exploratory factor analyses using SPSS. The scree-plot leveled off after the 12th factor. Based on the interpretation of the scree-plot and eigenvalues, factor solutions including seven to 12 factors seemed plausible. The 12-factor solution was the most theoretically interpretable, accounting for 62.53% of the variance (see Table 1 for eigenvalues and % of variance explained).

EFA 2 In order to identify the most viable items from the 12-factor solution, items that loaded about .50 and did not cross load above .40 on any other factor were retained for a second EFA (Fabrigar et al., 1999). Sixteen items were eliminated due to violating normality (kurtosis/skewness violations $> \pm 2.0$). Two additional items: "… it is what my partner expects from me" and "… my partner expects me to," which loaded < .40 on a single factor were eliminated. The remaining 155 items were again factor analyzed using Maximum Likelihood extraction with oblique rotation and Kaiser normalization. The scree-plot leveled off after the 6th factor, and all eigenvalues were above 1. Based on the interpretation of the scree-plot and eigenvalues, this suggested a six-factor solution, which accounted for 49.63% of the variance. The six factors were labeled as: Feels Good, For Partner, Not into Sex, Manipulation/Power, Insecurity, and Emotional Communication (see Table 2 for variances and eigenvalues). This six-factor solution is different compared to the categories in Study 1 (External, Insecure with Partner, Partner's Pleasure, Enhance Experience, and It was Expected). However, these categories show some overlap. For example, Feels Good overlaps with External—specifically with the subfactor For Fun. For Partner overlaps with Partner's Pleasure and Enhance Experience; Not into Sex overlaps with External and It was Expected; Insecurity overlaps with Insecure with Partner, and lastly Emotional Communication overlaps with Partner Pleasure. One new factor emerged in this study that was different from Study 1: Manipulation/Power. This unique factor likely emerged from the new measures that were included in our exploratory factor analysis (e.g., AMORE; Hill & Preston, 1996).

EFA 3 Because the factors obtained in EFA 2 were very large (from 45 to 10 items per factor), we decided to run another EFA in order to obtain a more "user friendly" measure that would not burden participants with too many items. We therefore investigated the possibility of selecting representative items by taking a hierarchical structure approach and examining the higher-order set of factors. In other words, we wanted to select only a few items from each of the six factors without eliminating any important facets of these factors. The six factors were each individually analyzed using Maximum Likelihood extraction with oblique rotation and Kaiser normalization. Factors 2 (For Partner), 4 (Manipulation/Power), 5 (Insecurity), and 6 (Emotional Communication)

Table 1 Eigenvalues and variances for the 12-factor solution

Factor	λ	% of variance explained
EFA 1 statistics		
1	65.60	32.32
2	16.13	7.95
3	14.09	6.94
4	5.55	2.74
5	4.91	2.42
6	3.75	1.85
7	3.45	1.70
8	3.18	1.57
9	2.81	1.38
10	2.63	1.30
11	2.54	1.25
12	2.30	1.13

Table 2 Variances and eigenvalues for the six-factor solution

Factor	λ	% of variance explained
EFA 2 statistics		
Feels good	60.73	29.92
For partner	15.05	7.41
Not into sex	12.81	6.31
Manipulation/power	4.87	2.40
Insecurity	4.26	2.10
Emotional communication	3.04	1.50

were all found to have subfactors that made theoretical sense and had sufficient internal reliability. All eigenvalues for the subfactors were above 1.

We suppressed items that loaded below .40 or loaded on two factors. The final PORM scale was constructed by incorporating the most relevant items from each main factor (factors 1 and 3) and from each subfactor (in factors 2, 4, 5, and 6; see Table 3). The final 48 items were selected based on both statistical and theoretical reasons, including factor and subfactor loadings, means and standard deviations (items with extremely low means and standard deviations would not be valuable in discriminating participants), and repetition.

Feels Good: The first factor loadings ranged from .73 to .92. The mean score on this factor was 2.61 (SD = .60) and the seven items had excellent internal consistency, $\alpha = .92$.

For Partner: The second factor loadings ranged from .56 to .99. The mean score on this factor was 4.79 (SD = .40) and the 11 items had excellent internal consistency, $\alpha = .91$. This second factor consisted of three subfactors: Protect Partner, Pleases Partner, and Increases Partner Arousal. (1) Protect

Partner's subfactor loadings ranged from .80 to .99. The mean score on this subfactor was 5.02 (SD = .13) and the three items had good internal consistency, $\alpha = .88$. (2) Pleases Partner's subfactor loadings ranged from .56 to .90. The mean score on this subfactor was 5.01 (SD = .15) and the four items had excellent internal consistency, $\alpha = .90$. (3) Increases Partner's Arousal's subfactor loadings ranged from .71 to .77. The mean score on this subfactor was 4.25 (SD = .42) and the four items had good internal consistency, $\alpha = .84$.

Not into Sex: The third factor loadings ranged from .63 to .91. The mean score on this factor was 3.43 (SD = .68) and the four items had excellent internal consistency, $\alpha = .91$.

Manipulation/Power: The fourth factor loadings ranged from .56 to .95. The mean score on this factor was 1.91 (SD = .15) and the eight items had excellent internal consistency, $\alpha = .93$. This fourth factor consisted of two subfactors: Manipulation and Power. (1) Manipulation's subfactor loadings ranged from .74 to .95. The mean score on this subfactor was 1.93 (SD = .19) and the five items had excellent internal consistency, $\alpha = .94$. (2) Power's subfactor loadings ranged from .56 to .64. The mean score on this subfactor was 1.87 (SD = .07) and the three items had excellent internal consistency, $\alpha = .93$.

Insecurity: The fifth factor loadings ranged from .40 to .94. The mean score on this factor was 2.76 (SD = .81) and the nine items had excellent internal consistency, $\alpha = .92$. This fifth factor consisted of two subfactors: Desire to Fit in and Fear Partner will Reject. (1) Desire to Fit in's subfactor loadings ranged from .58 to .94. The mean score on this subfactor was 3.69 (SD = .26) and the four items had good internal consistency, $\alpha = .85$. (2) Fear Partner will Reject's subfactor loadings ranged from .40 to .87. The mean score on this subfactor was 2.20 (SD = .30) and the five items had good internal consistency, $\alpha = .88$.

Emotional Communication: The sixth factor loadings ranged from .64 to .90. The mean score on this factor was 3.10 (SD = .58) and the nine items had excellent internal consistency, $\alpha = .92$. This sixth factor consisted of three subfactors: Reassurance/Feel loved, Express love, and Closeness. (1) Reassurance/Feel loved's subfactor loadings ranged from .73 to .90. The mean score on this subfactor was 2.53 (SD = .24) and the three items had good internal consistency, $\alpha = .87$. (2) Express love's subfactor loadings ranged from .69 to .78. The mean score on this subfactor was 3.44 (SD = .70) and the three items had good internal consistency, $\alpha = .82$. (3) Closeness's subfactor loadings ranged from .64 to .74. The mean score on this subfactor was 3.34 (SD = .17) and the three items had excellent internal consistency, $\alpha = .91$.

Discussion

Following three steps of exploratory factor analysis we had a 48-item scale (six factors and ten subfactors), reflecting

Table 3 EFA 3 results for the reasons for pretending orgasm scale

Item	Alpha	Factor loading	Mean	SD	Item #	Source
1: Feels good	.92		2.61	.60		
…I get caught up in the moment		.92	3.57	2.13	78	Study 2
… it is exciting and satisfying		.87	2.33	1.73	176	AMORE
…of the physical enjoyment		.80	3.30	2.11	79	Davis, Shaver, & Vernon
… it seems to improve my outlook on life when nothing seems to be going right		.77	1.91	1.41	204	AMORE
… it feels good to do it		.74	2.44	1.72	148	Study 2
… it makes me feel loved		.74	2.35	1.71	192	Davis, Shaver, & Vernon
… I want to make myself feel better		.73	2.36	1.72	210	Study 2
2: For partner	.91		4.79	.40		
2.1: Protect partner	.88		5.02	.13		
… I do not want my partner to feel inadequate		.99	4.97	1.90	124	Study 2
…I do not want to hurt my partner's feelings		.81	5.17	1.79	109	Study 2
… I do not want my partner to feel self-conscious		.80	4.92	1.98	140	Study 2
2.2: Pleases partner	.90		5.01	.15		
… it makes my partner happy		.90	4.99	1.79	31	Davis, Shaver, & Vernon
… it pleases my partner		.82	4.81	1.85	33	Study 2
…it makes my partner feel good about him/herself		.72	5.16	1.79	60	Study 2
… it boosts my partner's confidence		.56	5.09	1.85	52	Study 2
2.3: Increases partner's arousal	.84		4.25	.42		
… I want my partner to have an orgasm		.77	4.86	2.15	132	Study 2
… it increases my partner's arousal		.73	4.08	2.20	198	Study 2
… I want my partner to remain involved in sex		.72	4.16	2.17	98	Study 2
… I want to encourage my partner and improve my sexual experience		.71	3.89	2.10	114	Study 2
3: Not into sex	.91		3.43	.68		
… sex is taking too long and I want to be finished		.91	4.21	2.09	150	Study 2
… I am ready for sex to be over		.88	3.74	2.17	193	Study 2
… sex is not enjoyable		.67	2.39	1.85	183	Study 2
… I have lost interest in the sexual encounter		.63	3.24	2.11	185	Muehlenhard & Shippee
4: Manipulation/power	.93		1.91	.15		
4.1 Manipulation	.94		1.93	.19		
… it gets me other things I want from my partner		.95	1.91	1.51	200	Davis, Shaver, & Vernon
… it is a powerful tool I can use to get other things I want from my partner		.86	1.71	1.32	202	Davis, Shaver, & Vernon
… it is way to get other things I want from my partner		.85	2.12	1.53	91	Davis, Shaver, & Vernon
… my partner would do or give me something I wanted		.78	2.14	1.63	102	Davis, Shaver, & Vernon
… I have wanted my partner to think I had an orgasm, even when I did not, because I wanted to use it as a bargaining tool		.74	1.79	1.40	151	Davis, Shaver, & Vernon
4.2 Power	.93		1.87	.07		
… I enjoy exerting dominance and control over my partner		.64	1.95	1.51	108	AMORE

Table 3 continued

Item	Alpha	Factor loading	Mean	SD	Item #	Source
…I feel a sense of superiority and power when I am expressing myself by pretending orgasm		.56	1.84	1.40	112	AMORE
…of the sense of power that I feel I have over my partner		.56	1.82	1.36	107	AMORE
5: Insecurity	.92		2.76	.81		
5.1: Desire to fit in	.85		3.69	.26		
…I don't want to seem abnormal or inadequate		.94	3.52	2.20	87	Muehlenhard & Shippee
… I don't want my partner to think I am a bad sex partner		.76	3.56	2.14	184	Muehlenhard & Shippee
… an orgasm during sex is a societal expectation		.71	3.99	2.17	168	Study 2
… I worry if I don't, it will "turn off" my partner		.58	3.50	2.05	181	Study 2
5.2: Fear partner will reject	.88		2.20	.30		
… I don't want to have an argument with my partner		.87	2.60	1.93	194	Muehlenhard & Shippee
…I am afraid my partner will get angry with me if I don't		.83	2.20	1.93	139	Study 2
… I am afraid my partner will leave me if I don't		.74	1.93	1.42	171	Study 2
… I am worried my partner would leave me if s/he thought I hadn't had an orgasm		.67	1.90	1.44	205	Study 2
… I feel insecure about my partner's feelings for me		.40	2.38	1.75	189	Davis, Shaver, & Vernon
6: Emotional communication/closeness	.92		3.10	.58		
6.1: Reassurance/feel loved	.87		2.53	.24		
… it helps to reassure me about where the relationship stands		.90	2.36	1.67	163	Davis, Shaver, & Vernon
… I need to feel understood and when I want to relate to my partner on a one-to-one level		.79	2.42	1.76	187	AMORE
… I need him or her to notice me and appreciate me		.73	2.81	1.86	119	AMORE
6.2: Express love	.82		3.44	.70		
… it makes my partner feel loved		.78	4.19	2.01	30	Davis, Shaver, & Vernon
… it is a way to express love to my partner		.72	3.32	2.07	17	Davis, Shaver, & Vernon
… it makes my partner love me more		.69	2.81	1.71	4	Davis, Shaver, & Vernon
6.3: Closeness	.91		3.34	.17		
… the sense of emotional closeness I experience with my partner is a satisfying way of feeling valued		.74	3.23	2.07	135	AMORE
… it makes me feel emotionally close to my partner		.69	3.26	2.07	131	Davis, Shaver, & Vernon
… the sense of emotional bonding with my partner is an important way of feeling close to him or her		.64	3.54	2.15	145	AMORE

common themes from Study 1 and from previous studies such as Muehlenhard & Shippee (2010). Moreover, our identified factors showed a significant structure overlap with reasons for engaging in other sexual behaviors (Davis et al., 2004), potentially due to the fact that we modified items from such scales.

Study 3

The primary goal of Study 3 was to confirm the structure of the PORM using a new and diverse sample. An additional goal was to improve the understanding of the tendency to pretend

an orgasm, and its ties with reasons to pretend. Although there are some initial data on the percentage of people who have engaged in pretending orgasms (e.g., Darling & Davidson, 1986; Muehlenhard & Shippee, 2010; Séguin et al., 2015), very little is known about the predictors of the frequency of pretending an orgasm and its outcomes. Study 3 addresses these gaps in the literature by treating pretending orgasms as a continuous variable (from never pretended an orgasm to frequently pretend orgasms) rather than a dichotomous one (yes or no; as was the case in many previous studies; e.g., Darling & Davidson, 1986; Muehlenhard & Shippee, 2010). This approach allowed for a more nuanced description of the behavior.

We also explored the associations between our newly developed scale and conceptually related measures—sexual dysfunction, the tendency to mislead in general, and the tendency to mislead with regard to one's romantic partner. Because sexual dysfunction—and especially the difficulty to experience an orgasm—is likely to increase the pressure to pretend an orgasm, we expected that higher scores on sexual dysfunction would relate to a greater tendency to pretend an orgasm particularly for reasons such as Not into Sex and Insecure factors, as compared with other factors such as Emotional Communication, but only to a moderate extent. We also expected that when predicting pretending behavior (frequency and tendency), the reasons we identified would predict the behavior beyond sexual dysfunction scores.

Pretending to have an orgasm can be conceptualized as lying to one's partner. Thus, reasons to pretend orgasms potentially reflect reasons to lie to one's partner. If this is the case, our new measure should be associated with measures assessing other aspects of lying to one's partner. We therefore expected that the tendency to mislead would be related, but not very strongly, to pretending orgasms for all six reasons. We also predicted that the tendency to mislead one's partner would be more strongly related to pretending for Manipulation/Power, and that thinking that your partner misleads you will be more strongly related to pretending because of Insecurity. Similar to sexual dysfunction, we expected the PORM to predict frequency and tendency to pretend an orgasm above and beyond lying. While expecting the PORM to be related to both measures, we also expected the reasons we identified for pretending orgasms to predict pretending behavior (frequency and tendency) above and beyond these related measures.

Method

Participants

Participants completed the survey via the department of psychology online portal (SONA), Craigslist, and posting on other online research listings. Of the 3180 people who began the survey, 1603 were excluded, largely due to incomplete responses. The sample of 1577 participants who fully completed the survey had a mean age of 32 years (SD = 12.56, range 18–80), 64% were

women, 76% were European American, 77% were heterosexual, and 63% were in a committed relationship.[2] The majority (82%) was recruited from Craigslist. Most of the participants reported sexual experience (96%) and history of orgasm (96%).

Of the 1577 participants, only 1010 reported pretending an orgasm. Only these 1010 participants were used for the CFA. The subsample of participants who pretended an orgasm differed from the subsample that never pretended an orgasm. Specifically, the subsample of those who reported pretending an orgasm had proportionally more women, $\chi^2(1, N = 1557) = 188.95, p = .0001$), compared to those who never pretended an orgasm. Also, participants who reported pretending an orgasm were younger ($M = 31.17$, SD = 11.49) compared to those who never pretended an orgasm ($M = 34.49$, SD = 14.03), $t(991.16) = 4.80, d = .26, p = .0001$.

Materials and Procedure

Frequency of Pretending Orgasm Frequency of pretending an orgasm was assessed by the same three-tiered system used in Study 2.

Pretending Orgasm Reasons Measure The 48-item PORM described in detail in Study 2 (plus five attention checks) was used to assess reasons for pretending. All of the main factors had adequate internal consistency: Feels Good ($\alpha = .87$), For Partner ($\alpha = .91$), Not into Sex ($\alpha = .87$), Manipulation/Power ($\alpha = .91$), Insecurity ($\alpha = .88$), and Emotional Communication ($\alpha = .90$). The subfactors also had adequate internal consistency: Partner's Physical Pleasure ($\alpha = .84$), Partner's Emotional Pleasure ($\alpha = .88$), Turn on Partner ($\alpha = .74$), Tool ($\alpha = .90$), Power ($\alpha = .89$), Fit In ($\alpha = .83$), Fear Rejection ($\alpha = .86$), Feel Love ($\alpha = .81$), Show Love ($\alpha = .71$), and Closeness ($\alpha = .85$).

Sexual Dysfunction We measured sexual dysfunction using the Arizona Sexual Experiences Scale (ASEX; McGahuey et al., 2000). The ASEX consists of five questions assessing sexual function over the past week with versions fitting men and women. Participants are asked to answer questions such as, "How easily can you reach an orgasm?" on a 6-point Likert scale ranging from 1 (*Extremely Easily*) to 6 (*Never*). The five items of the ASEX demonstrated excellent internal consistency ($\alpha = .91$). Higher scores reflect higher dysfunction.

Partner Deception We used Cole's (2001) Lying scale, in which participants indicated how much they agreed with statements such as, "I disclose everything to my partner, good and bad," to assess lying to one's romantic partner. Participants responded

using a 7-point Likert scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). In addition, three items assessing perceived level of partner deception were included (Cole, 2001). In this sample, the scale assessing respondents' frequency of lying to their partners exhibited excellent internal consistency ($\alpha = .90$). The scale measuring respondents' perceptions of how often their partners lied to them also had good internal consistency ($\alpha = .86$).

In addition to Cole's (2001) items assessing frequency of deception of a partner, we included items assessing how often participants tended to mislead others (including their partners, boss/coworker, relatives, and friends). Participants were also asked how often they tended to mislead others about work, relationship, school, and personal issues. Answer choices for all of these items were: never, monthly, several times a month, weekly, several times a week, daily, several times a day, and not applicable (e.g., if someone was not in relationship, working). The internal consistency for this tendency to mislead scale was good ($\alpha = .89$). See Table 4 for more information on all measures in this study.

After completing the online battery including the PORM, demographics, sexual dysfunction, partner deception, the tendency to mislead, and pretending orgasm questions, participants were debriefed, given space to provide comments, and thanked for their time.

Results

Confirmatory Factor Analysis (CFA) of Pretending Orgasm Reasons Measure

To verify the factor structure of the PORM, a CFA with Maximum Likelihood estimation was conducted using MPLUS version 6 (Muthén & Muthén, 2007). The standardized root mean squared residual (SRMR), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI, or NNFI), and the root mean squared error of approximation (RMSEA) of model fit were selected to evaluate both the six-factor model and the nested model with the additional subfactors (Hoyle & Panter, 1995; Hu & Bentler, 1999). The chi-square statistic was not selected because it is overly sensitive to large sample sizes (Hu & Bentler, 1995).

We identified all CFA models by fixing the latent variables' variances to 1 while freely estimating all factor loadings. We first fit the data to a single factor model, which resulted in an unacceptable level of fit, SRMR = .13, RMSEA = .12 (90% CI .12–.13), CFI = .43, TLI = .41. This indicated that our data did not support the existence of a single factor. Next, we fit the data to the six-factor model that was identified in Study 2. The six-factor model resulted in a moderate fit to the data, SRMR = .09, RMSEA = .08 (90% CI .08–.08), CFI = .77, TLI = .76. Standardized factor loadings for this model were all significant and ranged from .43 to .92 ($M = .69$) and the communality values ranged from .06 to .87 ($M = .48$). All of the factors were significantly positively correlated with each other (*rs* ranging from .10 to .90) except for the Not into Sex factor, which was not correlated with For Partner,

and negatively correlated with Emotional Communication ($r = -.11$), and Feels Good ($r = -.18$).

We then examined the possibility that the data would fit better to a higher-order model, with the subfactors identified in Study 2 nested within the factors. Model fit indexes did improve for this higher-order model, SRMR = .09, RMSEA = .07 (90% CI .07–.07), CFI = .83, TLI = .81, with correlated factors, $\chi^2(8) = 1328$, $p < .05$. All the items loaded significantly on all the subfactors, and each subfactor loaded significantly onto its main factor. As the CFA in Study 3 replicated the factors and subfactors structure identified in Study 2, we felt confident to use the measure and its subscales for the rest of our analysis.

Frequency of Pretending Orgasm

Sixty-four percent of the total sample ($n = 1577$) reported pretending an orgasm at least once in their life, with women (76%) being more likely than men (41%) to report pretending an orgasm, $\chi^2(1, N = 1577) = 188.95, p = .0001$. Using our continuous measure of pretending orgasm, results revealed that the majority of people who pretended orgasm reported pretending rarely (54%). However, men and women differed significantly in frequency of pretending orgasm. Whereas approximately equal percentages of women (35.2%) and men (33.5%) reported rarely as the frequency of pretending, women were much more likely to report pretending an orgasm more often than rarely (54% as compared with 17%). This suggests that although pretending orgasms infrequently may be equally common among men and women, pretending as a habit at least in the current sample was more common among women.

Correlates of the Tendency to Pretend Orgasm

The tendency to pretend an orgasm was related to several demographic variables, including gender, ethnicity, and age. Women tended to pretend orgasms more often than men, $t(1555) = 16.46$, $d = .89, p = .0001$. Age was also significantly related to the tendency to pretend an orgasm, such that as participants got older, they tended to pretend orgasms less often, B = $-.03$, SE = .004, $\beta = -.16, t(1574) = -6.30, p = .0001$. There was also a significant difference on the tendency to pretend an orgasm as a function of ethnicity, $F(2, 1348) = 3.33, p = .036$. Specifically, African-Americans ($M = 3.24$, SD = 2.34) reported greater tendency to pretend an orgasm than European Americans ($M = 2.51$, SD = 2.11), $d = .33, p = .03$.

PORM Factors

There were gender differences on the factors of the PORM. Women reported significantly more pretended orgasms due to the reason *For Partner*, $t(1034) = 4.28, d = .32, p = .0001$. Men reported significantly more pretended orgasms due to the reasons *Insecure*, $t(1034) = -5.08, d = .40, p = .0001$, *Emotional*

Table 4 Descriptive statistics and Cronbach's alpha for measures in Study 3

Measure	M	SD	Cronbach's alpha
Pretending orgasm reasons measure (PORM)			
Feels good	2.95	1.32	.87
For partner	4.92	1.35	.91
Not into sex	3.95	1.63	.87
Manipulation/power	2.32	1.25	.91
Insecurity	2.88	1.30	.88
Emotional communication	3.13	1.38	.90
Arizona sexual experience scale (McGahuey et al., 2000)			
Sexual dysfunction	2.48	.83	.91
Tendency to mislead scale (Cole, 2001)			
Tendency to mislead partner	3.53	1.57	.90
Perception of partner misleading you	3.27	1.84	.86
Tendency to mislead in general	2.26	1.55	.89

Communication, $t(1034) = -2.32$, $d = -.18$, $p = .02$, and *Manipulation/Power*, $t(1034) = -4.12$, $d = -.29$, $p = .0001$. There were no significant gender differences on *Feels Good* and *Not into Sex*.

Likewise, there were differences on endorsement of reasons as a function of ethnicity for *Manipulation/Power*, $F(2, 895) = 14.88$, $p = .0001$; European Americans reported using it less ($M = 2.21$, SD $= 1.17$) than African-Americans ($M = 3.06$, SD $= 1.60$), $d = -.61$, $p = .0001$, and Hispanic American/Latinos ($M = 2.71$, SD $= 1.35$), $d = -.40$, $p = .004$. For *Not into Sex*, European Americans reported using the reason more ($M = 4.01$, SD $= 1.59$) than Hispanic American/Latinos ($M = 3.50$, SD $= 1.61$), $p = .039$, $F(2, 891) = 3.32$, $d = .32$, $p = .037$. No other differences for ethnicity were significant.

There were also differences in reasons for pretending orgasms as a function of age. Specifically, the older participants were, the less likely they were to endorse the reason For Partner, $B = -.007$, SE $= .004$, $\beta = -.063$, $t(1049) = -2.04$, $p = .042$, and the more likely they were to endorse the reason *Emotional Communication*, $B = .014$, SE $= .004$, $\beta = .116$, $t(1049) = 3.80$, $p = .0001$. No other differences were significant.

Convergent/Discriminant Validity

Sexual Dysfunction Tests of the three a priori hypotheses regarding sexual dysfunction were conducted using Bonferroni adjusted alpha levels of .017 per test (.05/3). Consistent with our hypothesis, sexual dysfunction was positively correlated with pretending an orgasm for heterosexuals, $r(1572) = .12$, $p = .0001$. This suggested that higher sexual dysfunction was related to greater tendency to pretend an orgasm.

Using the Bonferroni adjusted alpha levels ($p < .017$), sexual dysfunction was also found to positively correlate with a few of

the PORM factors, including *Insecure*, $r(1047) = .18$, $p = .0001$, and *Not into Sex*, $r(1043) = .19$, $p = .0001$. Additionally, sexual dysfunction was positively correlated with pretending *For Partner*, $r(1047) = .08$, $p = .006$, and *Emotional Communication*, $r(1047) = .10$, $p = .001$, but these were not a priori hypotheses. Difficulty achieving an orgasm could contribute to not being interested in sex, feelings of insecurity in sexual relationships, and the need to pretend an orgasm for the partner. That said, the correlations were relatively small, especially for such a large sample size, and should be treated with caution. The small correlations suggested that though related as expected, these specific reasons and sexual dysfunction are different constructs. Additionally, the data suggest that the factor *Not into Sex* is not simply an index of sexual dysfunction, but stands as its own unique construct.

Partner Deception Tests of the four a priori hypotheses regarding partner deception were conducted using Bonferroni adjusted alpha levels of .013 per test (.05/4). As expected willingness to mislead partner, $r(1482) = .14$, $p = .0001$, as well as the tendency to believe that your partner misleads you, $r(1470) = .08$, $p = .001$, were positively correlated with higher tendency to pretend an orgasm for heterosexuals. Moreover, tendency to pretend an orgasm was not correlated with the general tendency to mislead, $r(1473) = .04$, $p = .103$. This suggested that pretending an orgasm is different from the general tendency to cheat or lie, and has more to do with deceptive relational behavior.

Tendencies to mislead one's partner and believe your partner misleads you were significantly correlated with all of the reasons for pretending an orgasm, except For Partner. The general tendency to mislead was also related to all the reasons, except For Partner (see Table 5 for all correlations). Using the Bonferroni adjusted alpha levels ($p < .013$), we found as predicted, that the strongest correlations were between mislead

partner, $r(990) = .21, p = .0001$, perception of being misled by partner, $r(982) = .25, p = .0001$, and pretending an orgasm for Manipulation/Power.

Discussion

Using a new large and diverse sample in Study 3, we confirmed the hierarchical structure of the PORM. The six factors of the PORM (feels good, for partner, not into sex, manipulation/power, insecurity, and emotional communication) cover the breadth of common reasons for pretending an orgasm in a manageable measure. The model that included the nested subfactors provided a better fit than a one factor or a simple six-factor model. This suggests that the subfactors were not only theoretically but also statistically viable, and could be used if desired for more nuanced assessment. Although the fit indexes were moderate to strong, we feel confident in our measure and its factor structure as we replicated the structure in two different sample across age, gender, etc. Furthermore, we found the predicted correlations with theoretically related constructs, which increases our confidence in the new measure.

General Discussion

In three studies we investigated the phenomenological aspect of pretending an orgasm, created a measure assessing reasons for pretending, tested and retested its structure, and provided preliminary validity data of the measure. This will enable further research on pretending orgasms to be statistically viable and to investigate how the complex reasons underlying pretending orgasms may relate to other behaviors such as attachment and mate retention. In Study 1, we used a phenomenological approach to obtain a pool of reasons to pretend. In Study 2, we used a diverse list of sources, including previously validated measures of motivations for sexual behavior, several self-report qualitative surveys, and our own participants' reports to increase our item pool size and diversity. These items were then systematically culled to produce a reliable and valid measure. Study 2 also provided us with the six-factor structure of the PORM. In Study 3, this structure was retested and confirmed using a new sample. In the same study, we gathered preliminary data on convergent and discriminant validity of the new measure.

The diversity of PORM factors suggests that the behavior of pretending an orgasm is a result of complex and multifaceted processes. Identifying the various factors and reasons suggests that there are multiple domains that affect a person's decision to pretend an orgasm. Like the qualitative studies, circumstances (Not into Sex), internal psychological states (Emotional Communication), and relationship processes (For Partner, Manipulation/

Power) are all implicated as potential motivations for pretending an orgasm. Rather than being part of the "feminine mystique" (Darling & Davidson, 1986), pretending an orgasm seems to be a common and multifaceted behavior in which both men and women engage in. Thus, the new empirically supported measure facilitates further research and better understanding. The new measure was normalized using different community and university samples and tested across age and gender.

The tendency to pretend an orgasm was predicted to associate with the general tendency to mislead, and more specifically the tendency to mislead one's partner. Our findings suggest that although the tendency to pretend an orgasm is related only to deceptive relational behavior, the reasons for pretending an orgasm are associated with both the general tendency to mislead in addition to the tendency to mislead one's partner. Pretending For Partner was not associated with any of the misleading measures, suggesting that this reason may in some way be unique—and perhaps less likely to make people feel as if they are misleading their partners. Overall, our results provided preliminary convergent and discriminant validity to our new measure.

Comparing our Measure to Other Existing Measures

Although there is some overlap between our six higher-order factors and the MFOS factors (Séguin et al., 2015), we additionally identified 10 subfactors within the six factors (see Table 6). One reason for this difference may be differences in sample structure/diversity. Another reason may be due to differences in the original item pool. For example, the MFOS validation began with a total of 60 items that were reduced to 25 across two studies. Our PORM began with 72 and went up to 204 items taken from multiple sources (e.g., participants' nominations, previous work on reasons for pretending an orgasm, other questionnaires related to sexual motives), and then reduced to 48 items.

The difference between our resulting factors and the RPOI (McCoy et al., 2015) may be due to the way the scales were analyzed. McCoy and colleagues used a principal components analysis (PCA) within one study, while we used EFA and CFA across two different studies. EFA accounts for common error in measurement, while PCA tends to have a less accurate result as the method absorbs the error (see Bentler & Kano, 1990; Loehlin, 1990). Also, their measure construction process relied solely on female participants to nominate reasons for pretending orgasms, which may have produced a more limited or even biased picture of the reasons for pretending an orgasm.

Similar to the RPOI, the Faking Orgasm Scale (FOS; Cooper et al., 2014) utilized a purely female sample and had a different structure from our own. Similar to the MFOS, this may be due to the more limited sample of items (80) with which the EFA was

Table 5 Correlation matrix of reasons for pretending orgasm

Variable	1	2	3	4	5	6	7	8	9	10
1. Frequency to pretend	–									
2. General tendency to mislead	.04	–								
3. Mislead by partner	.08**	.25**	–							
4. Lie to partner	.14**	.45**	.44**	–						
5. Feels good	.21**	.09**	.09**	.07*	—					
6. For partner	.31**	−.01	.03	.04	.42**	–				
7. Insecure	.21**	.18**	.19**	.20**	.51**	.43**	–			
8. Emotional communication	.24**	.12**	.12**	.12**	.81**	.55**	.65**	–		
9. Manipulation/power	.11**	.19**	.25**	.21**	.61**	.21**	.52**	.55**	–	
10. Not into sex	.02	.06*	.08**	.13**	−.04	.07**	.19**	.01	.15**	–

$N = 980$–1484

** $p < .01$; * $p < .05$

Table 6 Factor structures across various pretending orgasm measures

Measure	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Pretending orgasm reasons measure (PORM)	Feels good	For partner	Not into sex	Manipulation/ power	Insecurity	Emotional communication
The faking orgasm scale for women (FOS; Cooper et al., 2014)	Altruistic deceit	Fear and insecurity	Elevated arousal	Sexual adjournment		
Motives for feigning orgasms (MFOS; Séguin et al., 2015)	Prosocial	Get it over	Anxiety reduction			
Reasons for pretending orgasm inventory (RPOI; McCoy et al., 2015)	Improve partner's sexual experience	Deception/manipulation	Hide sexual interests			

constructed. Additionally, the FOS was developed using only undergraduate participants. Compared to older individuals, undergraduates likely have less past experience of pretending orgasm to think back upon. Our studies recruited a more diverse sample in terms of age and ethnicity. Further research is needed to clarify the similarities and differences between all of these scales, but overall our work offers a more valid and reliable scale, which could be used more generally and was already shown to associate with related constructs.

Clinical Implications

The hierarchical structure we identified can help clinicians to better tailor therapy for people with pretending-related issues. The new measure can help therapists to better understand the experiences of their client, shedding light on the different underlying needs and motives of each client. People can have very different reasons or motivations to engage in pretending an orgasm,

which may necessitate different interventions. More specifically, pretending associated with boredom may be treated with means such as role-playing or sex toys, pretending associated with tiredness can be treated with change of sleep habits, and pretending associated with inability to orgasm may require therapeutic or medicinal intervention. Also, as reasons for pretending an orgasm may be linked to relational and sexual dysfunction, understanding the reasons may help with therapy and treatment. For example, Bryan (2001) reported significant differences between high- and low-pretending relationships in college-aged females where females in high-pretending relationships characterized their relationships as lower in meeting physical and emotional needs. Understanding the reasons for pretending beyond the frequency can help clinicians treat the underpinnings as well as related sequelae.

Clinicians could potentially use the new measure to determine the underlying psychological processes associated with pretending orgasms. Understanding the specific reasons and their source

can help tailor a specific intervention (e.g., individual vs. couples therapy) and facilitate finding a solution. For example, a client who has a primarily avoidant attachment style and pretends orgasms for the reason Not into Sex would benefit from different counseling than a client who is anxiously attached and pretends orgasms because of Insecurity.

Couples in relationships that report pretending orgasms may be evaluated for their tendency to mislead each other on other topics. The therapist may have them discuss the level of trust and commitment toward each other and what trust and commitment means to them. Making the assumptions, expectations, and values, explicit in a relationship could aid in achieving insight, which could lead to negotiation and change. Thus, the new measure can help individuals and their therapists to identify reasons, and monitor changes in their motivations over time, which is likely to facilitate understanding and selection of treatment options.

Pretending an orgasm is not by itself an indication that the couple has issues to resolve. As mentioned earlier, the reasons for the behavior are critical. Pretending for reasons such as For Partner and Emotional Communication does not always have negative implications for close relationships. In such cases, clinicians will be able to normalize the couple's experience and thus provide reassurance, which can be very helpful in couples therapy. Also, it helps clinicians remember that one behavior (pretending orgasm) can have multiple motivations and may not have the same implications for people who are engaging in it, which would result in more nuanced and responsive therapy. For example, since pretending orgasm is related to attachment style, couples who experience this behavior may be better served by Emotionally Focused Therapy (Johnson, 1996) or other therapies that utilize an attachment framework rather than treatment-as-usual.

Limitations

There are several limitations to the current studies. All of our data are derived from self-reports on sexual behavior, which research has shown can be inaccurate compared to other measurements, such as observations (Rundle-Thiele, 2009) or diary studies (Hurlbert, White, Powell, & Apt, 1993). However, pretending an orgasm is a private behavior, and we were interested in the subjective experience of pretending an orgasm, which led us to use a self-report method. Compared to other more intrusive and less private methods, self-reports were the preferable choice given they are a subjective report of private behavior that can easily be given to large samples across different mediums.

Other limitations concern the samples we used. While our participants who were recruited through the undergraduate research system were blind to the nature of the study, participants recruited through the internet were told that it was a "Sex and Relationship Survey." This may have biased our non-undergraduate sample. More participants who were particularly interested in sexuality may have completed the PORM, making it less representative of the general population. Our sample also self-identified as proportionately more bisexual/homosexual (17%) than the national average (10%), suggesting additional differences between the study sample and a random sample. However, using two different samples, one that is unaware of the research topic and the other that is relatively diverse, provides additional reliability and validity to our measure.

Future Directions

Future research should utilize longitudinal and experimental designs to fully understand what reasons people use, individual differences in the use of reasons (e.g., attachment style or other personality traits), and the implications of using the various reasons. For example, the PORM can allow researchers to better understand how one's attachment style relates to the type of reasons they have for pretending orgasms with their partner.

Conclusion

Despite the few limitations we raised, our three studies provide a coherent and consistent picture of the structure of reasons for pretending an orgasm. Using robust methodology, large and diverse samples, and sophisticated statistics, we developed a comprehensive quantitative measure of reasons for pretending orgasms that can help both researchers and clinicians in understanding the complexities of this little-understood interpersonal behavior. Moving beyond qualitative research and the dichotomous conceptualization of pretending orgasms by providing a new quantitative measure has the potential to advance the field, open up new questions, and introduce new research and treatment venues.

Appendix

See Table 7.

Table 7 Content analysis of qualitative responses

Themes	N	%	Female	Male
1. External	31	67.4	22	9
To end it	15	32.6	12	3
To finish the quickie	1			
Get it over with	7			
It was taking too long	3			
To be done with the sex	1			
To finish faster	1			
So we could stop	1			
To be done with the sex	1			
Partner kept going	1			
I wanted him to be done	1			
Too drunk	2	4.3	0	2
Whisky dick	1			
Drunk	2			
Too tired	9	19.6	5	4
Tired	7			
Wanted to go to bed	2			
I would be too tired to have sex again, and would just lie and say I got one so I could cuddle or sleep	1			
Partner was done	3	6.5	2	1
He nutted to fast	1			
I could feel he was getting tired	1			
She was done	1			
Orgasm unlikely	4	8.7	3	1
Started to have an orgasm but didn't, so I would pretend if I didn't think I was going to have one after that	1			
Because I came close	1			
It was close anyways	1			
Could not seem to have one	1			
If I don't think I will have an orgasm	1			
External	1	2.2	1	0
My mom came home	1			
Already had one	1	2.3	0	1
Already had at least one	1			
Bored/uninterested	10	21.7	6	4
Apathetic	1			
I was getting bored	4			
Annoyed	1			
Not feeling it	1			
Not interested	1			
Not turned on	1			
He didn't know how to work it	1			

Table 7 continued

Themes	N	%	Female	Male
I didn't wanna do it	1			
Had other things to do	1			
Was not into it anyways	1			
It wasn't that enjoyable	1			
For fun	5	10.9	4	1
Fun	3			
Practice my acting skills	1			
To fool myself	1			
Painful/bad situation	5	10.9	2	3
Bad situation	1			
It started to hurt a little bit	1			
Hurting	1			
If the sex is painful for some reason	1			
Realized the situation	1			
I was uncomfortable and wanted to leave	1			
2. Feeling insecure with partner	7	15.2	5	2
Fear of rejection	1			
I didn't want to seem weird	1			
Not look stupid to	1			
I was self conscious that they wouldn't like it if I didn't	1			
To avoid embarrassment for not being able to have one	1			
Didn't want to be made fun of	1			
Felt out of place otherwise	1			
I was afraid he would leave me	1			
To make myself feel more confident	1			
3. Partner pleasure	33	71.7	25	8
To please partner	4	8.7		
To please my partner	4			
For partner confidence	10	21.7	9	1
For his confidence	2			
To make my partner more confident	1			
Make the guy feel accomplished	1			
I wanted my partner to feel good about himself	2			
Make partner know he was doing a good job	1			
To make my partner feel secure about himself	1			
Boost his ego	1			
To make them feel they did a good job (to boost their male ego)	1			
I felt bad because he felt inadequate	1			
Make partner feel better	5	10.9	3	2
To make the guy feel better	1			
Make partner feel better	5			
Make partner feel good/happy/satisfied	15	32.6	10	5
To make the other person feel good	1			
To make my partner feel they were good.	1			

Table 7 continued

Themes	N	%	Female	Male
To make my partner feel we are both satisfied.	1			
Make partner feel satisfactory	1			
Partners feelings	1			
Partner satisfaction	1			
To make my partner happy	5			
Communicate arousal	2	4.3	2	0
Let partner know I was having a good time	1			
Make it look like I like it	1			
I wanted him to think I enjoyed it	1			
I felt bad	2	4.3	2	0
I felt bad for him	1			
I felt bad because he felt inadequate	1			
To avoid negative emotional consequences for partner	8	17.4	6	2
So my partner wouldn't feel self conscious	1			
Didn't want to hurt the other persons feelings	1			
Did not want to partner to feel inadequate	1			
Making the other person feel bad	1			
So they wouldn't be upset	1			
Didn't want to disappoint my partner	1			
4. Enhance experience	14	30.4	11	3
To sexually excite partner	3	6.5	3	0
It makes guys go crazy	1			
To turn them on	1			
To help the person I am with to arouse me	1			
Make to make my partner to not stop and go harder	1			
To motivate my partner	1			
I wanted him to finish with his orgasm	1			
To try to have one	3	6.5	3	0
Trying to actually have one	1			
To try to get one	2			
To make the encounter better	6	13	3	3
To make the sex seem more fulfilling	1			
Makes the activity more enjoyable	1			
Like the mood	1			
Did not want to kill mood	1			
To make me feel better	9	19.6	6	3
To make myself feel better	1			
It helped me be satisfied	1			
Easy	1			
To make myself feel more satisfied	1			
Makes me feel good	1			
To not disappoint myself	1			
In turn making me feel better	1			
It felt good	1			
To mess with my own head	1			
Just wanted to	2	4.3	2	0

Table 7 continued

Themes	N	%	Female	Male
I wanted to	1			
Just to do it	1			
Keep partner engaged	2	4.3	2	0
Wanted partner to stay engaged in activity	1			
To make my partner to not stop and go harder	1			
To have the other person continue and not stop	1			
Avoid relationship consequences	2	4.3	2	0
Didn't want the knowledge of failure to effect partner in next or future sexual activity	1			
Did not want to cause tension or conflict	1			
Don't know	2	4.3	1	1
I barely do it so I can't think of many!	1			
Not sure	1			
I really don't know	1			
5. It was expected	11	23.9	11	0
Partner expected it of me	1			
Less awkward	1			
Because I was supposed to	1			
Easier than explaining to partner why I didn't get one	1			
Common	1			
I didn't know how else to react	1			
So I don't feel guilty	1			
To meet standards of societies expectation of orgasm	1			
I sort of felt like it was expected (the orgasm)	1			
I felt like I should	1			
Because I was caught up in the moment.	1			

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