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Comparing Orgasm Descriptions between the Sexes

Christopher Frederick Palmer
Eastern Kentucky University

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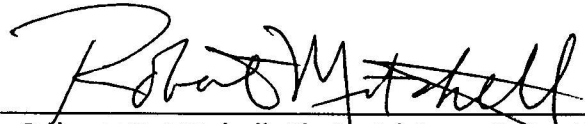
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Comparing Orgasm Descriptions between the Sexes

By

Christopher Palmer

Thesis Approved:



Robert W. Mitchell, Chair, Advisory Committee



Robert Brubaker, Member, Advisory
Committee



Theresa Botts, Member, Advisory Committee



Jerry Pogatschnik, Dean, Graduate School

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Signature Christopher F. Palmer

Date 7/10/2014

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By

Christopher Frederick Palmer

Bachelors of Science
Eastern Kentucky University
Richmond, Kentucky
2008

Submitted to the Faculty of the Graduate School of
Eastern Kentucky University
in partial fulfillment of the requirements
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ABSTRACT

This study examines the effects of sex and sexual context (masturbation or sexual intercourse) on characteristics present in descriptions of orgasms from 291 undergraduate participants aged 18 years or older, using the coding scheme presented in the Human Orgasm Model (Mah & Binik, 2001). Participants were asked to describe their most recent orgasm, and to designate whether the orgasm occurred during masturbation or sexual intercourse. Twenty men and 34 women achieved their orgasm through masturbation, and 47 men and 190 women achieved their orgasm through sexual intercourse. The Human Orgasm Model specifies 26 characteristics of orgasms, of which 25 were present in the orgasm descriptions. Descriptions were coded for the characteristics blind to the sex of the participant and sexual context (unless specified in the orgasm description) by two coders, who achieved percent agreement ratings of 85% and above; disagreements were settled through discussion. No characteristics were present in most of the descriptions, and 68% of the characteristics were present in less than 10% of the descriptions; in fact, the most common characteristic, Satisfaction, was present in only 37.8% of the orgasm descriptions. All effects were analyzed statistically via chi-square. Sex differences were present for only 3 characteristics: proportionally more women than men mentioned Whole Body Involvement, Rhythmic Sensations, and Thermal Sensations. The effects of sexual context were discerned for only 2 characteristics: proportionally, more participants who had masturbated described the orgasm as Intense, and fewer, as producing Satisfaction, compared to participants who had engaged in sexual intercourse. There were no sex differences discernible for any characteristics in the (small) sample of participants who achieved their orgasm through masturbation, and there were only two in the larger sample who achieved their orgasm through sexual intercourse: proportionally, more women than men described Whole Body Involvement and more men than women mentioned Joy—Elation. Effect sizes for all difference were small, suggesting that sex and sexual context have only minor effects on the experience of orgasm. Overall, orgasms appear to be similar between the sexes.

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Chapter I.

INTRODUCTION

This thesis examines sex and sexual context differences in the description of orgasm. Undergraduate participants were asked to describe their most recent orgasm from either masturbation or sexual intercourse (sexual context), and these descriptions were examined for characteristics in the descriptions of the orgasm (e.g., it was pleasurable). The descriptions were then examined to see if some characteristics were more prominent with one sex than the other, or in one sexual context than the other. Prior to a more elaborate description of the study itself and its findings, a review of the literature on orgasms is presented, followed by predictions from this literature about sex and sexual context differences. (Although aware of the controversy over whether to characterize differences between men and women as “sex” or “gender” differences, I elected to call these sex differences given the many anatomical descriptions participants provided in their descriptions of their orgasms.)

Chapter II.

LITERATURE REVIEW

Orgasm

Orgasm, a common experience for most humans and (presumably) many nonhumans, is remarkably still mysterious, and relatively under-researched (Bancroft, 1989; Rosen & Beck, 1988). What is orgasm? According to *The Orgasm Answer Guide* (Komisaruk et al., 2010, p. 2), “an orgasm is a buildup of pleasurable body sensations and excitement to a peak intensity that then releases tensions and creates a feeling of satisfaction and relaxation.” A problem with this definition is that it fails to distinguish the experience of orgasm from the experience of a ride on a roller coaster. A better working definition of orgasm is “the feeling one gets at the moment of sexual climax” (Meyers & Waller, 2009, pp. 146-147), though this definition leaves unarticulated exactly what that feeling is. Most definitions characterize orgasm as a “peak” condition during sexual experience, but these definitions may not distinguish orgasm sufficiently from an elevated state of sexual excitement (Mah & Binik, 2001).

One common physiological description comes from Alfred Kinsey and his famous study of 1948, *Sexual Behavior in the Human Male*; in this definition, the key outcome of orgasm is “the abrupt release of the extreme tension which preceded the event and the rather sudden return to a normal or subnormal physiologic state after the event” (Kinsey, Pomeroy, & Martin, 1948, p. 158). In describing the experience of orgasm in

their work on women, Kinsey et al. (1953, p. 627) similarly states that orgasm is an “explosive discharge of neuromuscular tensions at the peak of sexual response.” A similarly physiologically focused definition is supplied by Alzate (1985, p. 276): orgasm is the result of “cerebral neuronal discharge... elicited ... by the accumulative effect on certain brain structures of appropriate stimuli originated in the peripheral erogenous zones.” Happily for the current thesis, most adults seem to know what an orgasm is without elaborate definition.

It should not be surprising that there is no standardized measure of the psychological characteristics of orgasm (Meyers & Waller, 2009). Internal states can be difficult to describe, and typically people do not seem to spend a great deal of time discussing the nature of their orgasm with other people, given the taboos about discussing sexuality in our culture. Everyone knows, of course, that orgasm is a pleasurable experience, and orgasm clearly differs from other sensory experiences like tickles, aches, and pains in terms of being experienced as more positive (Wiest, 1977). The complexities in orgasmic experiences can differ widely even within the same person, but understanding the characteristics of both male and female orgasms may allow us to determine the extent of similarities and differences in orgasm experience between sexes.

Unfortunately, much of the research on physiological aspects of orgasm is somewhat dated, with little new research, and some of the research on orgasm itself

presumes that female orgasm is a diminished form or derivative of male orgasm. An androcentric bias is clearly present, as is a bias to see sex differences in orgasm.

Male Orgasm

Masters and Johnson (1966) described a widely used model of neurochemical feedback for the male orgasm. According to this model, a complete male orgasm consists of two phases: the emission phase and the ejaculation phase. The emission phase allows for sperm and seminal fluid to be expelled from the vas deferens, seminal vesicles, and prostate gland into the prostatic urethra, causing it to expand. The ejaculation phase is characterized by the ejection of semen from contractions of the prostatic urethra and the bulbocavernosal and ischiocavernosal muscles; the term “ejaculation” is commonly used to describe all characteristics (emission, ejaculation, and orgasm) of the male orgasm experience. Not only is there a distinction between emission and ejaculation, but some investigators believe there is a distinction between ejaculation and orgasm (e.g., Alexander, Sipski, & Findley, 1993; Brackett et al., 1998; Levine, Zachary, & Gottlieb, 1993). This distinction creates the foundation for the belief that men are just as capable of achieving multiple orgasms as women are (see discussion of multiple orgasms below).

When observing the variations in orgasm descriptions of both males and females, scores on a component representing ejaculatory sensations were significantly higher for males than females (Mah & Binik, 2001). However, ejaculatory sensations may not be the essence of male orgasm as it has often been represented to be.

Grouping the experiences of emission, ejaculation and orgasm presents the male orgasm as a reduced version of itself, and reflects the viewpoint of male orgasm in previous literature as a much simpler process than it is.

Female Orgasm

Female orgasms have been classified into two types: surface orgasms or deep orgasms. Orgasms can be labeled as either *surface* or *deep* according to distinguishable differences between the sensations and locations of each type (King & Belsky, 2012). The surface orgasms, which focus on the surface of the genitalia, are also referred to as clitoral orgasms; whereas the “deep” orgasms, which are associated with internal sensations, are commonly regarded as the more “mature” vaginal orgasm (Vance & Wagner, 1976). However, the original basis for this so-called “maturity” of the vaginal orgasm derives from Freud’s (1932) inaccurate idea that women, to become feminine (and heterosexual), must transfer the feelings of sexual stimulation from the clitoris to the vagina.

Stimulation of the clitoris has been cited as the leading source of pleasure that generates orgasm (e.g., Darling et al., 1991; Hite, 1976; Masters & Johnson, 1966), though one research group argues that orgasms that derive from deep penile-vaginal penetration without clitoral stimulation are healthier (Brody et al., 2011). A majority of women in Fisher’s (1973) study claimed that clitoral stimulation is important for achieving orgasm, and women rated clitoral stimulation as at least somewhat more important than vaginal stimulation in achieving orgasm. However, there are no

distinguishable biological differences between clitoral and vaginal orgasms (Fisher, 1973; Kinsey et al., 1953).

During arousal, the anterior third of the vagina becomes vasocongested to form the foundation of sexual climax (Masters & Johnson, 1966). This vasocongestion may not return to baseline as quickly in female orgasm as men return to baseline in male orgasm (Geer & Quartararo, 1976; Gillian & Brindley, 1979; Henson, Rubin, & Henson, 1982). This phenomenon may explain why women show a greater skill at achieving multiple orgasms than men do (Mah & Binik, 2001). King and Belsky (2012) posit that “deep” orgasms influence sperm movement to facilitate insemination, yet the physiological changes that occur during female orgasm do not appear to enable sperm retention or insemination (Baker & Bellis, 1993a; 1993b; Singh et al., 1998).

Orgasm Characteristics of Both Sexes

Though there have been many theories describing the patterns of body responses for each sex during orgasm, there are some basic bodily characteristics of orgasm that are prevalent in the experiences of both male and female orgasm. For example, body rigidity, muscle spasms, vocalizations, sweating, hyperventilation, rocking pelvic motions, and shuddering have been reported during orgasm in men and women (Hite, 1976; 1981).

Fundamental orgasm description characteristics by males and females seem to share more similarities than differences, but some researchers maintain the assumption

that some reported orgasm characteristics are more typical in one sex than another. Operating under the assumption that a male's orgasm tends to be more abrupt and explosive and a female's orgasm is typically more delayed and less violent, researchers set out to determine if judges were able to determine the sex of participants when reading his or her orgasm description. The written descriptions had all gender-related cues neutralized before being analyzed by psychologists, medical students, and obstetrician-gynecologists; judges detected no recognizable differences between the descriptions of orgasms given by males and females other than the occurrence of multiple orgasms for women (Vance & Wagner, 1976).

Multiple Orgasms

One purported difference between male orgasm and female orgasm is the ability for women to achieve multiple orgasms more easily than men. However, it is not clear how many women are multiply orgasmic; the percentage ranges across studies from 12% (Masters & Johnson, 1966) to 32% (Kaplan, 1974). By contrast, as many as 55% of preadolescent males (though only 3% of adult males) reported multiple orgasms in Kinsey's landmark studies, whereas only 14% of females did (Kinsey et al., 1948; 1953), though in reading these studies it is unclear how similar the experience of multiple orgasm described is between most men and women. In addition, one male subject sought out for his skill at multiple orgasms described experiences of usually 3-10, but up to 30, orgasms prior to ejaculation (Robbins & Jensen, 1978); some researchers are critical of these data (Mah & Binik, 2001).

Methodologies

While recognizing the many inherent problems with self-report measures, many studies collect information about participant orgasm using by asking subjects to rate how accurately a list of adjectives or descriptions describe his or her experience of orgasm (e.g., van Anders & Dunn, 2009; Mah & Binik, 2005; Wiest, 1977). One research investigation asked participants detailed, somewhat leading questions, derived from theory, about his or her orgasm experience; e.g., female participants were asked if they experience internal sucking sensations when experiencing orgasm during intercourse, to see if such experiences could help sperm insemination (King & Belsky, 2012). Several researchers have used self-report measures that require an open-ended type of response (Vance & Wagner, 1976). Investigators sometimes interview participants in a face-to-face setting to collect information about orgasm experiences (King & Belsky, 2012; Zucker et al., 2004).

Vaginal orgasms have been claimed to be healthier for women, based on a diversity of research from one laboratory (see, e.g., Brody et al., 2011). One piece of research compared the gaits of women with a history of vaginal orgasm experiences to the gaits of women who have a history of vaginal anorgasmia (Nicholas et al., 2008). The women were asked to complete a preliminary questionnaire on sexual behavior and indicate their willingness to be contacted for further study; 7 women with known histories of achieving vaginal orgasm and 9 with known histories of vaginal anorgasmia were later videotaped walking down a street and judges (blind to the women's orgasmic

history) were asked to rate them on their orgasmic status. The evidence used was “a global impression of women’s free, fluid, energetic, sensual manner of walking (with an emphasis on energy flow through the rotation of the pelvis and spine)” (p. 2121).

Trained sexologist judges were able to correctly infer whether or not a woman had experienced vaginal orgasm based on perceptions of her confidence while walking.

However, it may well be that women who enjoy sexual experiences express their interest in their walking, whereas women who do not enjoy sexual experiences do not.

Themes in Descriptions of Orgasm: The Human Orgasm Model

An intricate theoretical three-component model of the psychological experience of orgasm with subcomponents and representative adjectives was constructed by Mah and Binik (2001). The Human Orgasm Model posits 26 different characteristics that can be present in orgasm experiences. The three primary components in the model represent the sensory, evaluative, and affective aspects of orgasm. Each component comprises many items commonly used in orgasm descriptions (as in the original definitions presented at the beginning of this thesis), each of which can be coded for using specific key words and words relating-to or synonymous with these terms (see Appendix).

According to the Human Orgasm Model, sensory aspects include: *Buildup of Tension*, coded with terms like “rising,” “building,” and “swelling”; *Release of Tension*, coded with terms like “relieving,” “releasing,” “erupting,” and “exploding”; *Spreading Sensations*, coded with terms like “flowing,” “spreading,” and “radiating”; *Whole-Body*

Involvement, coded with terms like “trembling” and “shuddering”; *Ejaculatory Sensations*, coded with terms like “oozing,” “spurting,” and “shooting”; *Rhythmic Sensations*, coded with terms like “quivering,” “pulsating,” and “throbbing”; *Miscellaneous (Sensory)*, coded with terms like “tickling,” “tingling,” and “flushing”; and *Thermal Sensations*, coded with terms like “cool,” “warm,” and “hot.”

Evaluative aspects of the Human Orgasm Model include: *Feeling of Inevitability*, coded with terms like “inevitable”; *Temporal Evaluation*, coded with terms like “quick,” “long,” and “unending”; *Intensity*, coded with terms like “mild,” “moderate,” “intense,” and “powerful”; *Physical Effects*, coded with terms like “relaxing,” “engulfing,” and “exhausting”; *Depth*, coded with terms like “deep,” “full,” and “complete”; *Global Pleasure*, coded with terms like “pleasant,” “enjoyable,” “pleasurable,” and “incredible”; *Sensual Pleasure*, coded with terms like “soothing,” “sweet,” “sensual,” and “exquisite”; *Satisfaction*, coded with terms like “satisfying,” “gratifying,” “fulfilling,” and “cathartic”; and *Excitement*, coded with terms like “exhilarating,” “exciting,” and “wild.”

The third component of the Human Orgasm Model represents affective aspects, which include: *Emotional Intimacy*, coded with terms like “close” and “loving”; *Joy-Peacefulness*, coded with terms like “peaceful,” “blissful,” and “tender”; *Joy-Elation*, coded with terms like “elated,” “ecstatic,” “euphoric,” “rapturous,” and “passionate”; *Emotional Excitation*, coded with terms like “abandoned” and “uncontrolled”; *Emotional Fusion*, coded with terms like “immersing,” “merging,” and “unifying”; *Miscellaneous (Affective)*, coded with terms like “melting” and “vulnerable”; *Suspension*, coded with

terms like “suspended” and “soaring”; *Lack of Awareness of Surround*, coded with terms like “detached,” “oblivious,” and “unreal”; and *Unreality* (sic!), coded with terms like “light-headed,” and “dizzy.” The terminology from this model is used in this study to characterize orgasmic descriptions.

Some Bases for Sex Differences in Orgasm Experience

Generally, most men acknowledge that they experience orgasm. By contrast, not all women say that they experience orgasm. Many studies suggest that males are able to, and therefore do, achieve orgasm more regularly than females (Mah & Binik, 2001). Due to insufficient information from parents and school sex-education courses, a large number of women do not know the anatomical locations of their own clitoris, which limits its use for masturbatory orgasms, but they can be easily taught (Wade, Kremer, & Brown, 2005). Some individuals have great difficulty in reaching orgasm, or are unable to reach orgasm at all either due to physical and/or psychological matters. Being unable to reach sexual climax or experiencing low orgasm-consistency (the likelihood that an individual will be able to achieve orgasm) is much more prevalent in women than in men. However, some women’s difficulties may derive from the widespread practice by doctors of cliteridectomy and clitoral surgeries for female infants born with an enlarged clitoris; this practice diminishes the sexual feelings available when these infants become mature (May, Boyle, & Grant, 1996).

For both men and women, more extensive concurrent exposure to androgens increases orgasm intensity, and usually men have more testosterone in their system

than women do. Sexual activity increased the levels of testosterone in some women (van Anders & Dunn, 2009), and androgens have reinforcing properties in females (Wood, 2004); these women also report more frequent orgasms, perhaps due to the increase in pleasurable reward that higher testosterone levels provide. Women with high levels of testosterone also showed higher interest in sexual stimuli and more sexual interest in general (Rupp & Wallen, 2007; van Anders & Dunn, 2009).

Psychosocial factors may be the principal catalysts of the subjective feelings of orgasm in women, including pleasure and satisfaction (Levin, 1981). Anorgasmic individuals, typically female, tend to report more self-blame attributions (Mah & Binik, 2001), lending support to the theory that orgasm difficulties may be primarily psychological. Men's experience of orgasm has been given less attention than women's, but evidence suggests that men's orgasmic experiences are also subject to psychosocial influences (Dunn & Trost, 1989). Sexual passion can be an important component of sexual functioning, and some theorists posit different types of orgasm a woman may experience based on her passion (King & Belsky, 2012), though the evidence is slight and the methodology problematic. Passion (coded as "Joy—Elation" in the Human Orgasm Model) may create specific feelings of pleasure that can influence how an individual interprets the intensity of his or her orgasm. Conversely, feelings of inhibition about the potential sexual act or the sexual act a woman is engaged in can alter her sexual interest; knowledge of the consequences of sex (pregnancy, sexually-transmitted diseases, etc.) or inhibitions about satisfactory self-performance can affect a woman's

ability to become fully aroused (Graham et al., 2004; May, Boyle, & Grant, 1996). Similar inhibitions can be assumed to have developed in men as well; however, few studies focus on the psychological aspects involved in men's orgasms.

The debate about the biological function of the female orgasm has been fueled by the fact that successful reproduction occurs in many species without the notable presence of female orgasm. Because female orgasm is not a necessity for human sexual reproduction, it is reasonable to suppose that the orgasm experienced by women may not be comparable to that experienced by men in terms of pleasurable reward.

From an evolutionary standpoint, there are many theories trying to explain why men and women both *can* experience orgasm. The male orgasm usually accompanies ejaculation of seminal fluids containing sperm, and is therefore likely to induce repetition of the act that produces both orgasm and ejaculation. The purpose and evolutionary function of the female orgasm, on the other hand, is less clear-cut. Female orgasms have been theorized to have emerged as a by-product of male adaptation: as evolution produced males with more sensitive penises to reward males having intercourse, clitorises (which are homologous with penises) were also compelled to develop with similar sensitive genital structures (Gould, 1987).

Some evolutionary scholars claim that female orgasm has emerged as a result of natural selection focused on an increase in reproductive fitness, i.e., the dispersion of genes in future generations (Baker & Bellis, 1993a, 1993b; Thornhill, Gangestad, & Comer, 1995). One adaptationist theory is that female orgasm is a female choice

mechanism, enabling higher rate of conception based on her aided harvesting of sperm (via her orgasm) from the preferred mate (Baker & Bellis, 1993a, 1993b). Similar theories also breed the idea that female orgasm involves suction or “insuck,” a pressure change in the uterus that allows the female to pull sperm from preferred mates more effectively (Fox, 1976; King & Belsky, 2012).

A widespread assumption in the field of sexual research is that there are significant differences between a male’s experience of orgasm and a female’s experience of orgasm (see discussion in Vance & Wagner, 1976). The key differences lie in the descriptions that men and women use to describe their orgasms: when rating the extent of their experience of given characteristics, men gave higher ratings to Shooting Sensations, whereas women gave higher ratings to Rhythmic Sensations (specifically throbbing and spasms), Spreading Sensations, and Buildup of Tension (Mah & Binik, 2002). When it comes to marked differences between the orgasms experienced by males and females, women’s descriptions suggest that their orgasms as less Intense than men’s (though higher in passion: King & Belsky, 2012, which is coded as Joy—Elation) and as more variable in location (penis for men, clitoris or vagina for women) (Hite, 1976). Differences in orgasm experiences may not occur strictly *between* sexes, however; it is possible that the experience of orgasm in one man (or woman) can differ greatly from, or can be completely different than, another man’s (or woman’s) experience (Meyers & Waller, 2009).

Considering how complex the female orgasm has been proposed to be, there remains much similarity between the subjective self-reports of male and female orgasm descriptions, when analyzed through the lens of written language (Wiest, 1977). In order to compare the descriptions of orgasms between the sexes, obvious references to sex-specific structures must be removed or made ambiguous (or neutral) to ensure that certain terms would not expose a judge or researcher to the sex of the respondent. When Proctor, Wagner and Butler (1974) asked judges to compare neutralized orgasm descriptions of men and women, the judges were unable to reliably identify which descriptions were male and which female experiences (see also a similar finding in Vance & Wagner, 1976). If sex differences are inherent, genital structures function differently for men and women, and only male orgasms are deemed “necessary” for biological purposes, then why do the written descriptions of orgasms between men and women seem relatively interchangeable?

Sexual Context

The sexual context in which orgasm occurs, i.e., through masturbation (solitary) or sexual intercourse (social), may also influence the orgasmic experiences. Few studies have focused on this dimension. Mah and Binik (2002) used ordinal ratings by participants of the extent their experience, during orgasm from both masturbation and sexual intercourse, of characteristics provided from the Human Orgasm Model. Participants rated Satisfaction, General Pleasure, Emotional Intimacy, Shooting

Sensations, and Rhythmic Sensations (specifically general spasms) as more extensive in sexual intercourse than in masturbation.

Hypotheses

The purpose of the present study is to test hypotheses concerning the terms used in descriptions of self-created descriptions of orgasms experienced by men and women, as a result of engaging in either sex with a partner or masturbation. Whether there are differences in men's and women's descriptions of their orgasms was assessed using terms from the Human Orgasm Model of Mah and Binik (2001). The literature about orgasm to some degree supports the following hypotheses:

When describing orgasm experiences,

1. Men and women will generally describe similar characteristics;
2. Proportionally, more men will mention Intensity and Ejaculatory Sensations, and proportionally more women will mention Buildup of Tension, Spreading Sensations, Joy—Elation, and Rhythmic Sensations; and
3. Proportionally, more participants who engaged in sexual intercourse will mention Satisfaction, General Pleasure, Shooting Sensations, Rhythmic Sensations, Emotional Intimacy, and Emotional Fusion, compared to participants who masturbated (the last two characteristics are difficult to envision for masturbation).

Chapter III.

METHODS

Participants

Participants were 300 Eastern Kentucky University undergraduate psychology students, 68 males and 232 females aged 18 years or older, who received course credit for their participation in the study. The students signed up for and participated in the study online using the SONA system, having been informed on SONA that the study concerned their experience of orgasm. Oddly, given the study's description, 1 man and 8 women signed up for the study, yet indicated that they had not experienced orgasm. They were, thus, excluded from any analyses (other than reliability). Of the 291 participants who provided orgasm descriptions, 20 males and 34 females achieved orgasm through masturbation, and 47 males and 190 females achieved orgasm through some form of sexual intercourse. Compared to chance levels, more males had their most recent orgasm via masturbation, and more females, via sexual intercourse (chi-square ($df = 1$) = 7.35, $p = .007$), though most males (70.1%) and most females (84.8%) had achieved their last orgasm through sexual intercourse.

Materials

The data were collected in 2011 by a female graduate student at ECU, who created the online questionnaire, wrote the proposal for IRB, and received IRB approval to enact the study. On the online questionnaire, participants were asked for their sex, and were then

asked, "In considering your most recent orgasm, please describe the experience in as much detail as possible." Following this description, they were asked, "Was this orgasm achieved through masturbation or sexual intercourse?"

Procedure

All data were collected using the SONA system. Participants signed up to participate in the study, and submitted their answers to the questionnaire, online. Upon submission of all 300 surveys, the study ended, and participants were given a debriefing form.

Two coders (blind to sex and method of achievement of the orgasm, except when specified in the orgasm description) independently coded all of the descriptions of orgasm according to the 26 characteristics of orgasm in the three-dimensional model constructed by Mah and Binik (2001). These are described in the Results, along with the initial reliability scores. Both coders, one the author of this thesis and the other his graduate thesis chair, were familiar with the literature on orgasm. Given that the characteristics provided by Mah and Binik (2001) are never elaborated more fully than providing cognates of the general term for any characteristic, both coders used their knowledge of English to assess the relevance of any given characteristic to an orgasm description. Reliability scores (provided in the Results) are the total number of the 300 orgasm descriptions that the coders agreed on (presence or absence) for each characteristic of orgasm, divided by 300. The two coders conferred on disagreements, and agreed on all the final codes.

Data Analysis

Frequency of presence or absence of each of the characteristics of orgasm described in the Human Orgasm Model (see Appendix) were examined using chi-square in relation to the sex of the participants, and in relation to the form of sexual experience (intercourse or masturbation). In addition, sex differences were examined for each characteristic for those who engaged in sexual intercourse separately from those who engaged in masturbation to achieve their orgasm. Perhaps because there were so few who engaged in masturbation, there were no significant sex differences in the frequency with which each of the different characteristics was mentioned by masturbators. Because no one had any orgasm description that satisfied the “Miscellaneous” characteristic (i.e., melting, vulnerable) of the affective component, only 25 of the 26 characteristics could be analyzed.

Chapter IV.

RESULTS

The results and tables appear in the following order: frequencies and proportions of characteristics of orgasm overall, in relation to a sex difference, in relation to sexual context, i.e., intercourse or masturbation, and in relation to sex differences for those who achieved their orgasm during sexual intercourse. (Note that “sexual intercourse” is intended to include any form of social sexual experience.) As noted in the Methods, there were no statistically significant sex differences in the frequencies with which masturbators offered any given characteristic of orgasm in their descriptions.

Overall

One point to acknowledge about the orgasm descriptions is that coding of the characteristics was not a seamless activity. The characteristics from the Human Orgasm Model are relatively unspecified, and sometimes confusing. For example, Mah and Binik (2001) include the subcategory of “unreal” in the characteristic “Lack of Awareness of Surround,” not in the characteristic “Unreality” (which I renamed “Unreality/Disorientation” given their subtypes “dizzy” and “light-headed”). In addition, it is unclear whether to include ecstasy and euphoric under General Pleasure or Joy—Elation, or both (in this thesis it is included under both). Is a “rush of endorphins” a psychological description? (Can one really experience directly?) The choices made as to which terms

to include under which characteristic are available in the Appendix. Although both coders were generally consistent in their detection of the presence or absence of a characteristic, both found it helpful to discuss some descriptions in relation to particular characteristics.

Another point to acknowledge is that some participants did not satisfy the task of describing their orgasm *per se*. Some described solely the behavioral aspects of their sexual encounter in limited (“Missionary”), more extensive (“My partner and I have awesome mind-blowing sex. It only takes a minute for me to have an orgasm”), or great detail (“I met up with this girl, we'll call her Sally. As soon as we met up, she was all over me, like rubbing my shaft. So, we went back to my place and went buck wild. We banged and she blew me and I straight came all in her face. It was glorious”). Some offered critiques of their partner’s sexual prowess (“Boring, kind of like a robot, not much foreplay”) or their own orgasm (“less than average,” “just a normal orgasm”), and some provided quite limited descriptions of orgasm (“it happened,” “good,” “it was great,” “tingly,” “relaxed release”).

Thus, it may not be surprising that none of the characteristics of orgasm was described by most participants (see Table 1). The most frequent characteristic of orgasm described was satisfaction, but this was supplied in the descriptions of less than 40% of participants. Global pleasure was the next most frequent characteristic, accounting for only just over a quarter of the participants’ responses. Intensity, Physical Effects (mostly expressing relaxation, relief, and tiredness), Whole Body Involvement, and

Miscellaneous Sensations (mostly tingling or feeling numb), were each present in about 20% of the descriptions. Release of Tension was mentioned by only 15% of the participants, and Buildup of Tension by only 11%. All the rest of the characteristics were mentioned by fewer than 10% of the participants. Participants may have failed to mention some characteristics of their orgasm, such as the pleasurable aspects, because they were taking their presence for granted. In addition, the participants were asked to describe only their most recent orgasm, not provide an overall summary of all the orgasms they have experienced.

Table 1. Frequency and percentage of the categories offered in the orgasm descriptions from the 291 participants.

<u>Characteristic</u>	<u>Frequency</u>	<u>Percentage</u>
Buildup of Tension	31	10.7
Release of Tension	43	14.8
Spreading Sensations	28	9.6
Whole Body Involvement	55	18.9
Ejaculatory Sensations	5	1.7
Rhythmic Sensations	25	8.6
Miscellaneous Sensations	57	19.6
Thermal Sensations	28	9.6
Feelings of Inevitability	16	5.5
Temporal Evaluation	15	5.2
Intensity	59	20.3
Physical Effects	58	19.9
Depth	8	2.7

Table 1 (continued).

<u>Characteristic</u>	<u>Frequency</u>	<u>Percentage</u>
Global Pleasure	78	26.8
Sensual Pleasure	18	6.2
Satisfaction	110	37.8
Excitement	23	7.9
Emotional Intimacy	9	3.1
Joy—Peacefulness	8	2.7
Joy—Elation	23	7.9
Emotional Excitement	16	5.5
Emotional Fusion	3	1.0
Unreality/Disorientation	13	4.5
Lack of Awareness of Surround	10	3.4
Suspension	3	1.0

Sex Differences

Few sex differences appeared in the descriptions of orgasms, and all but one of the characteristics were mentioned by both male and female participants (see Table 2). There were only 3 sex differences: proportionally more females than males mentioned whole Body Involvement, Rhythmic Sensations, and Thermal Sensations. Note that most participants, male or female, did *not* use these (or any other) characteristics to describe their orgasms. Of the sex differences detected, only Rhythmic Sensations (like throbbing) were expected to show sex differences, based on previous research. However, all three phi coefficients indicate only a small effect of the sex of the participants. Note that some females as well as some males described Ejaculatory Sensations, though very few of either sex did.

Suspension, a characteristic mentioned exclusively by females, was mentioned by only 3 participants. Perhaps with more participants at least some males will describe an experience of floating or soaring during orgasm.

Table 2. Frequency (and percentage) of characteristics of the 67 males and 224 females who provided orgasm descriptions, as well as chi-square and phi coefficient values.§

<u>Characteristic</u>	<u>Male</u>	<u>Female</u>	<u>Chi-square</u>	<u>Phi</u>
Buildup of Tension	7 (10.5)	24 (10.7)	<0.01	
Release of Tension	13 (19.4)	40 (17.9)	0.08	
Spreading Sensations	7 (10.5)	21 (9.4)	0.07	
Whole Body Involvement	7 (10.5)	48 (21.4)	4.06*	.12
Ejaculatory Sensations	2 (3.0)	3 (1.3)	0.14	
Rhythmic Sensations	1 (1.5)	24 (10.7)	5.59*	.14
Miscellaneous Sensations	15 (22.4)	42 (18.8)	0.43	
Thermal Sensations	2 (3.0)	26 (11.6)	4.41*	.12
Feelings of Inevitability	4 (6.0)	12 (5.4)	<0.01	
Temporal Evaluation	4 (6.0)	11 (4.9)	<0.01	
Intensity	12 (17.9)	47 (21.0)	0.30	
Physical Effects	11 (16.4)	47 (21.0)	0.67	
Depth	3 (4.5)	5 (2.2)	0.32	

Table 2 (continued).

<u>Characteristic</u>	<u>Male</u>	<u>Female</u>	<u>Chi-square</u>	<u>Phi</u>
Global Pleasure	20 (29.9)	58 (25.9)	0.41	
Sensual Pleasure	2 (3.0)	16 (7.1)	0.91	
Satisfaction	28 (41.8)	82 (36.6)	0.59	
Excitement	4 (6.0)	19 (8.5)	0.45	
Emotional Intimacy	3 (4.5)	6 (2.7)	0.12	
Joy—Peacefulness	2 (3.0)	6 (2.7)	<0.01	
Joy—Elation	9 (13.4)	14 (6.3)	3.66	
Emotional Excitement	3 (4.5)	13 (5.8)	0.01	
Emotional Fusion	1 (1.5)	2 (0.9)	<0.01	
Unreality/Disorientation	2 (3.0)	11 (4.9)	0.11	
Lack of Awareness of Surround	5 (7.5)	5 (2.2)	2.83	
Suspension	0 (0.0)	3 (1.3)	0.07	

§ Chi-square values (df = 1) are corrected for continuity when expected values are less than 5 for any cell. Phi coefficients are presented only for significant differences.

*p < .05

Sexual context

Whether participants experienced orgasm through masturbation or sexual intercourse had little impact on the characteristics of orgasm they thought to mention (see Table 3). There were only two sexual context differences: proportionally more of the participants who engaged in masturbation than those who engaged in sexual intercourse described the Intensity of their orgasm, and proportionally more of the participants who engaged in sexual intercourse than those who engaged in masturbation described the Satisfaction they experienced from their orgasm. (Once again, the phi coefficients indicate small effects.) These differences seem commonsensically “explained”: whereas sexual intercourse might be more satisfying in many respects than masturbation, an agent masturbating is likely to be more in tune with the prerequisites for making his or her own orgasm as intense as possible than would be others in producing the same effect.

Some characteristics—Feelings of Inevitability, Emotional Intimacy, Emotional Fusion, and Suspension—were never described for solitary sexual experiences. For most of these, their absence is not surprising: it is impossible to have emotional intimacy or emotion fusion when alone, and someone masturbating is likely less aware of the inevitability of orgasm, as that is what they set out to achieve. Suspension, however, could occur during masturbation, but it was rarely mentioned even in the context of sexual intercourse.

Table 3. Frequency (and percentage) of characteristics of the 237 socially orgasmic and 54 solitarily orgasmic participants who provided orgasm descriptions, as well as chi-square and phi coefficient values.§

<u>Characteristic</u>	<u>Social</u>	<u>Solitary</u>	<u>Chi-square</u>	<u>Phi</u>
Buildup of Tension	24 (10.1)	7 (13.0)	0.37	
Release of Tension	42 (17.7)	11 (20.4)	0.21	
Spreading Sensations	23 (9.7)	5 (9.3)	0.01	
Whole Body Involvement	48 (20.3)	7 (13.0)	1.53	
Ejaculatory Sensations	3 (1.3)	2 (3.7)	0.44	
Rhythmic Sensations	19 (8.0)	6 (11.1)	0.22	
Miscellaneous Sensations	46 (19.4)	11 (20.4)	0.03	
Thermal Sensations	21 (8.9)	7 (13.0)	0.85	
Feelings of Inevitability	16 (6.8)	0 (0.0)	2.67	
Temporal Evaluation	10 (4.2)	5 (9.3)	1.37	
Intensity	42 (17.7)	17 (31.5)	5.15*	.13
Physical Effects	46 (19.4)	12 (22.2)	0.22	
Depth	7 (3.0)	1 (1.9)	<0.01	

Table 3 (continued).

<u>Characteristic</u>	<u>Social</u>	<u>Solitary</u>	<u>Chi-square</u>	<u>Phi</u>
Global Pleasure	64 (27.0)	14 (25.9)	0.03	
Sensual Pleasure	17 (7.2)	1 (1.9)	1.33	
Satisfaction	96 (40.5)	14 (25.9)	3.98*	.12
Excitement	16 (6.8)	7 (13.0)	1.56	
Emotional Intimacy	9 (3.8)	0 (0.0)	1.04	
Joy—Peacefulness	6 (2.5)	2 (3.7)	<0.01	
Joy—Elation	19 (8.0)	4 (7.4)	<0.01	
Emotional Excitement	14 (5.9)	2 (3.7)	0.10	
Emotional Fusion	3 (1.3)	0 (0.0)	<0.01	
Unreality/Disorientation	9 (3.8)	4 (7.4)	0.63	
Lack of Awareness of Surround	8 (3.4)	2 (3.7)	<0.01	
Suspension	3 (1.3)	0 (0.0)	<0.01	

§ Chi-square values (df = 1) are corrected for continuity when expected values are less than 5 for any cell. Phi coefficients are presented only for significant differences.

*p < .05

Sex Differences in Orgasm during Sexual Intercourse

There were only two sex differences in the descriptions of orgasms that occurred during sexual intercourse (see Table 4). Whole Body Involvement again showed a significant sex difference, as it did when sexual context was ignored, with proportionally more women describing it than men. This finding is not surprising given that few participants described Whole Body Involvement in the orgasm they had experienced while masturbating. This finding might be explained by the fact that sexual intercourse tends to be more focused on one's overall body than does masturbation, which focuses more restrictedly (though not necessarily exclusively) on the genitals. By contrast, proportionally more men than women described Joy—Elation (extreme pleasure or happiness) from sexual intercourse. Once again, the phi coefficients indicate small effects from sex for these characteristics.

Table 4. Frequency (and percentage) of characteristics of the 47 males and 190 females who provided descriptions of orgasms that they had during a social sexual encounter, as well as chi-square and phi coefficient values.§

<u>Characteristic</u>	<u>Male</u>	<u>Female</u>	<u>Chi-square</u>	<u>Phi</u>
Buildup of Tension	6 (12.8)	18 (9.4)	0.45	
Release of Tension	10 (21.3)	32 (16.8)	0.51	
Spreading Sensations	7 (14.9)	16 (8.4)	1.14	
Whole Body Involvement	4 (8.5)	44 (23.2)	5.01*	.15
Ejaculatory Sensations	2 (4.3)	1 (0.5)	1.75	
Rhythmic Sensations	1 (2.1)	18 (9.5)	1.86	
Miscellaneous Sensations	10 (21.3)	36 (18.9)	0.13	
Thermal Sensations	2 (4.3)	19 (10.0)	0.91	
Feelings of Inevitability	4 (8.5)	12 (6.3)	0.05	
Temporal Evaluation	1 (2.1)	9 (4.7)	0.16	
Intensity	8 (17.0)	34 (17.9)	0.02	
Physical Effects	5 (10.6)	41 (21.6)	2.88	
Depth	2 (4.3)	5 (2.6)	0.01	

Table 4 (continued).

<u>Characteristic</u>	<u>Male</u>	<u>Female</u>	<u>Chi-square</u>	<u>Phi</u>
Global Pleasure	16 (34.0)	48 (25.3)	1.47	
Sensual Pleasure	1 (2.1)	16 (8.4)	1.40	
Satisfaction	21 (44.7)	75 (39.5)	0.42	
Excitement	2 (4.3)	14 (7.4)	0.19	
Emotional Intimacy	3 (6.4)	6 (3.2)	0.37	
Joy—Peacefulness	1 (2.1)	5 (2.6)	<0.01	
Joy—Elation	8 (17.0)	11 (5.8)	5.02*	.17
Emotional Excitement	2 (4.3)	12 (6.3)	0.04	
Emotional Fusion	1 (2.1)	2 (1.1)	<0.01	
Unreality/Disorientation	1 (2.1)	8 (4.2)	0.06	
Lack of Awareness of Surround	3 (6.4)	5 (2.6)	0.68	
Suspension	0 (0.0)	3 (1.6)	0.02	

§ Chi-square values (df = 1) are corrected for continuity when expected values are less than 5 for any cell. Phi coefficients are presented only for significant differences.

*p < .05

Chapter V.

DISCUSSION

The pattern of results supports the hypothesis that, overall, males and females do not differ remarkably from one another when it comes to the terms used in descriptions of orgasm experiences. However, females were more likely to use terms relating to Whole-Body Involvement, Rhythmic Sensations, and Thermal Sensations in describing orgasm experiences compared to males. But most participants of either sex never mentioned these characteristics (or, indeed, any others). In addition, although only females described Suspension during orgasm (and all during sexual intercourse), this characteristic was rarely mentioned.

Contrary to prediction, men did not differ significantly from women in the likelihood of using terms relating to Intensity or Ejaculatory Sensations (although their mention was rare by persons of either sex). Of the four characteristics which women were expected to be more likely than men to use (Buildup of Tension, Spreading Sensations, Joy—Elation, and Rhythmic Sensations), only Rhythmic Sensations was mentioned more commonly by women than men. Whole Body Involvement and Thermal Sensations were also more frequently mentioned by women than by man in the current study, though not in earlier studies. The fact that different studies, using convenience samples, come up with diverse findings suggests that the experience of orgasm within sexes is variably described by participants, such that determination of any consistent differences between the sexes is unlikely.

The sexual context had a limited influence on the characteristics present in descriptions of orgasm. Except for the greater prevalence of Satisfaction for those engaging in sexual intercourse compared to those engaging in masturbation, none of the other predicted characteristics (General Pleasure, Shooting Sensations, Rhythmic Sensations, Emotional Intimacy, and Emotional Fusion) showed statistically significantly greater frequencies for sexual intercourse than for masturbation. However, four of the characteristics that were mentioned as occurring by some participants for orgasm during sexual intercourse were never described as occurring for orgasm during masturbation: Feelings of Inevitability, Emotional Intimacy, Emotional Fusion, and Suspension. For all but the last characteristic, these findings are not surprising; and, as noted earlier, Suspension was mentioned rarely.

The facts that more participants described orgasms during masturbation than during sexual intercourse as Intense, and that more participants described orgasms during sexual intercourse than during masturbation as resulting in Satisfaction, may have more to do with semantics than experience. Participants' uses of terminology like "awesome," "amazing," "beyond pleasurable," "wonderful," and "fantastic," all of which were categorized as Satisfaction, could have been intended to describe how Intense the orgasm felt, such that the resulting differences based on sexual context might disappear.

Men and women showed no differences in their characterizations of orgasm during masturbation (though the sample size was small), and few differences in their

characterizations of orgasm during sexual intercourse. In their orgasms during sexual intercourse, more women noted Whole Body Involvement, and more men noted Joy—Elation. One could elaborate ideas as to why these differences occurred, but, given that the proportions of both characteristics were low (less than 24%), the effect sizes were small, and some representatives of each sex experienced these characteristics, it seems best to wait for corroboration of these differences in other studies.

Limitations

As noted in the preceding discussion of coding words to designate characteristics of Intense vs. Satisfaction, the coding for each orgasm description proved to be somewhat complicated. Some characteristics in the Human Orgasm Model of Mah and Binik (2001) were problematic for coders because an orgasm description sometimes contained terms that could be coded into more than one category based on the examples given by these authors, or because the authors provided odd examples (e.g., the characteristic “Lack of Awareness of Surround” was presented as using terms like “unreal,” while the characteristic “Unreality”—reabeled “Unreality/Disorientation” in this study—did not).

Numerous aspects of the orgasm experience were unexamined in this study, which relied on a largely young sample of undergraduates in Psychology classes. These students likely had limited sexual and relationship histories, at least in relation to sex with a partner. The surprisingly limited use of Emotional Intimacy and Emotional Fusion to describe the orgasm experience during sexual intercourse may have arisen from most

participants' inexperience. Although you can have sexual intercourse with someone you simply know and with someone you also love, you can only "make love" with the latter. The relationship status of the relatively young participants who engaged in sexual intercourse to achieve their orgasm may have curtailed more fulsome romantic descriptions.

Like other studies on orgasm experience, the data rely on retrospective memory, which may carry distortions and be influenced by demand characteristics and other forms of bias. Although participants were asked to recall their most recent orgasm in hopes of avoiding some distortions, this did not necessarily mean that the orgasm was a recent one. For example, one participant described her most recent orgasm—from 17 years earlier. Allowing participants to describe their orgasms as they chose, without constraints, was an attempt to minimize demand characteristics, but clearly participants were not uniform in what they took the task to be. It would be interesting and useful in future research to examine participants from diverse walks of life and different age groups to see if the historical period in which one first learned about sexuality and orgasm influences the characteristics that participants recall, as seems to be true in other areas of sexuality (Gottschalk, 2003). Overall, amidst these limitations, the findings of this study indicate few sex and sexual context differences in participants' descriptions of orgasm.

REFERENCES

- Alexander, C. J., Sipski, M. L., & Findley, T. W. (1993). Sexual activities, desire and satisfaction in males pre- and post-spinal cord injury. *Archives of Sexual Behavior, 22*, 217-228.
- Alzate, H. (1985). Vaginal eroticism and female orgasm: A current appraisal. *Journal of Sex and Marital Therapy, 11*, 271-284.
- Baker, R., & Bellis, M. A. (1993a). Human sperm competition: Ejaculate manipulation by females and a function for the female orgasm. *Animal Behaviour, 46*, 887-909.
- Baker, R., & Bellis, M. A. (1993b). Human sperm competition: Ejaculate manipulation by males and the function of masturbation. *Animal Behaviour, 46*, 861-885.
- Bancroft, J. (1989). *Human sexuality and its problems*. New York: Churchill Livingstone.
- Brackett, N. L., Ferrell, S. M., Aballa, T. C., Amador, M. J., Padron, O. F., Sonksen, J., & Lynne, C. M. (1998). An analysis of 653 trials of penile vibratory stimulation in men with spinal cord injury. *The Journal of Urology, 159*, 1931-1934.
- Brody, S., Costa, R. M., Hess, U., & Weiss, P. (2011). Vaginal orgasm is related to better mental health and is relevant to evolutionary psychology: A response to Zietsch et al. *Journal of Sexual Medicine, 8*, 3523-3525.
- Dunn, M. E., & Trost, J. E. (1989). Male multiple orgasms: A descriptive study. *Archives of Sexual Behavior, 18*, 377-387.

- Fisher, S. (1973). *The female orgasm*. New York: Basic Books.
- Fox, C. A. (1976). Some aspects and implications of coital physiology. *Journal of Sex and Marital Therapy, 2*, 205-213.
- Freud, S. (1932). Female sexuality. *International Journal of Psychoanalysis, 13*, 281-297.
- Geer, J. H., & Quartararo, J. D. (1976). Vaginal blood volume responses during masturbation. *Archives of Sexual Behavior, 5*, 403-413.
- Gillian, P., & Brindley, G. S. (1979). Vaginal and pelvic floor responses to sexual stimulation. *Psychophysiology, 16*, 471-481.
- Gottschalk, L. (2003). Same-sex sexuality and childhood gender non-conformity: A spurious connection. *Journal of Gender Studies, 12*, 35-50.
- Gould, S. J. (1987). Freudian slip. *Natural History, 96*, 14-21.
- Henson, D. E., Rubin, H. B., & Henson, C. (1982). Labial and vaginal blood volume responses to visual and tactile stimuli. *Archives of Sexual Behavior, 11*, 23-31.
- Hite, S. (1976). *The Hite report: A nationwide study of female sexuality*. New York: Dell.
- Hite, S. (1981). *The Hite report on male sexuality*. New York: Ballantine Books.
- Kaplan, H. S. (1974). *The new sex therapy: Active treatment of sexual dysfunctions*. New York: Brunner/Mazel.

- King, R., & Belsky, J. (2012). A typological approach to testing the evolutionary functions of human female orgasm. *Archives of Sexual Behavior, 41*, 1145-1160.
- Kinsey, A., Pomeroy, W., & Martin, C. (1948). *Sexual behavior in the human male*. Philadelphia: W.B. Saunders.
- Kinsey, A., Pomeroy, W., Martin, C., & Gebhard, P. (1953). *Sexual behavior in the human female*. Philadelphia: W.B. Saunders.
- Komisaruk, B. R., Whipple, B., Nasserzadeh, S., & Beyer-Flores, C. (2009). *The orgasm answer guide*. Baltimore: The Johns Hopkins University Press.
- Levine, L. A., Zachary, L. S., & Gottlieb, L. J. (1993). Prosthesis placement after total phallic reconstruction. *The Journal of Urology, 149*, 593-598.
- Mah, K., & Binik, Y. M. (2001). The nature of human orgasm: A critical review of major trends. *Clinical Psychology Review, 21*, 823-856.
- Mah, K., & Binik, Y. M. (2002). Do all orgasms feel alike? Evaluating a two-dimensional model of the orgasm experience across gender and sexual context. *Journal of Sex Research, 39*, 104-113.
- Mah, K., & Binik, Y. M. (2005). Are orgasms in the mind or the body? Psychosocial versus physiological correlates of orgasmic pleasure and satisfaction. *Journal of Sex & Marital Therapy, 31*, 187-200.

- May, B., Boyle, M., & Grant, D. (1996). A comparative study of sexual experiences. *Journal of Health Psychology, 1*, 479-492.
- Masters, W. H., & Johnson, V. E. (1966). *Human sexual response*. Boston: Little Brown.
- Meyers, C. D., & Waller, S. (2009). Psychological investigations: The private language argument and inferences in contemporary cognitive science. *Synthese, 171*, 135-156.
- Nicholas, A., Brody, S., de Sutter, P., & de Carufel, F. (2008). A woman's history of vaginal orgasm is discernible from her walk. *The Journal of Sexual Medicine, 9*, 2119-2124.
- Proctor, E. B., Wagner, N. N., & Butler, J. C. (1974). The differentiation of male and female orgasm: An experimental study. In N. N. Wagner (Ed.), *Perspectives on human sexuality* (pp. 115-134). New York: Behavioral Publications.
- Robbins, M. B., & Jensen, G. D. (1978). Multiple orgasm in males. *The Journal of Sex Research, 14*, 21-26.
- Rosen, R. C., & Beck, J. G. (1988). *Patterns of sexual arousal: Psychophysiological processes and clinical applications*. New York: Guildford.
- Rupp, H. A., & Wallen, K. (2007). Relationship between testosterone and interest in sexual stimuli: The effect of experience. *Hormones & Behavior, 52*, 581-589.

- Singh, D., Meyer, W., Zamborano, R. J., & Hurlbert, D. F. (1998). Frequency and timing of coital orgasm in women desirous of becoming pregnant. *Archives of Sexual Behavior, 27*, 15-29.
- Thornhill, R., Gangestad, S. W., & Comer, R. (1995). Human female orgasm and mate fluctuating asymmetry. *Animal Behaviour, 50*, 1601-1615.
- van Anders, S. M., & Dunn, E. J. (2009). Are gonadal steroids linked with orgasm perceptions and sexual assertiveness in women and men? *Hormones and Behavior, 56*, 206-213.
- Vance, E. B., & Wagner, N. N. (1976). Written descriptions of orgasm: A study of sex differences. *Archives of Sexual Behavior, 5*, 87-98.
- Wade, L. D., Kremer, E. C., & Brown, J. (2005). The incidental orgasm: The presence of clitoral knowledge and the absence of orgasm for women. *Women & Health, 42*, 117-138.
- Wiest, W. M. (1977). Semantic differential profiles of orgasm and other experiences among men and women. *Sex Roles, 3*, 399-403.
- Wood, R. I. (2004). Reinforcing aspects of androgens. *Physiology & Behavior, 83*, 279-289.
- Zucker, K. J., Bradley, S. J., Oliver, G., Blake, J., Fleming, S., & Hood, J. (2004). Self-reported sexual arousability in women with congenital adrenal hyperplasia.

APPENDIX:
The Coding Scheme for Orgasm Descriptions.

The coding scheme for orgasm descriptions (with initial reliability scores).§

SENSORY COMPONENTS

Initial Reliability

Buildup of Tension:

97.7%

Building

Rising

Swelling

pressure/feeling grows/gets stronger

tension/tense up

Release of Tension:

94.7%

Relieving

Releasing

Erupting

exploding/explosion/like a volcano

like my head would blow off

fireworks gone off inside me

SENSORY COMPONENTS (continued)

Initial Reliability

Spreading Sensations:

96.7%

Flowing/overflowing

Spreading

Radiating

rush of energy/blood/endorphins/cold chills

progressing the feeling further

sparks of electricity going through me

good feeling went from x to y

waves of heat/relaxation

automatically sends happiness and tingles your entire body

hot water starting from my crotch and going toward my knees

sensation runs through entire body

electric shock surged through my body

almost paralyzing feeling sweeping over my entire body

started at toes and moved its way upward

SENSORY COMPONENTS (continued)

Initial Reliability

Whole-Body Involvement:

90.0%

Trembling

Shuddering

whole/entire/full body experience

[tingling/shaking] all over

shaking/body shakes

every part of my body felt great

feeling moves from head to toes/feet

feeling comes over my body

my body [tingled]

muscles tighten everywhere

throughout my body (but not “through my body”)

Ejaculatory Sensations:

99.0%

Shooting

Oozing

SENSORY COMPONENTS (continued)

Initial Reliability

Ejaculatory Sensations (continued):

Spurting

squirting

bullet of euphoria ejaculating out of my penis

(simply mentioning ejaculation was not counted)

Rhythmic Sensations:

95.0%

Pulsating

Throbbing

Quivering

heart pounding/racing/quickening/rate increasing

waves (plural only)

spasm(s)/spasming

trembling

vibrating

SENSORY COMPONENTS (continued)

Initial Reliability

Miscellaneous Sensations:

94.0%

Tingling

Tickling (always combined with “tingling”)

Flushing

feeling numb

goose bumps

sensitive

like a weight lifted

Thermal Sensations:

98.0%

Cool

chills

shivering

Warm

Hot

nerves on fire

EVALUATIVE COMPONENTS

Initial Reliability

Feeling of Inevitability:

94.3%

Inevitable

out of control/uncontrollable

hit the right spot/G-spot

letting go/letting it happen

Intensity:

92.0%

Mild

Moderate

Intense

Powerful

invigorating

strong

burst/rush/release of energy/energizing

explosion/exploding

EVALUATIVE COMPONENTS (continued)

Initial Reliability

Temporal Evaluation:

92.3%

Quick

Long

Unending

short

[exact number of]/ a few seconds

Physical Effects:

93.7%

Relaxing

Exhausting

Engulfing

relieved

tiring/tired

breathtaking/breathless/hard to/out of breathe

energy drained/felt weak/weak

body asleep

EVALUATIVE COMPONENTS (continued)

Initial Reliability

Depth:

96.7%

Deep

Full

Complete

Global Pleasure:

85.0%

Pleasant

Enjoyable

Pleasurable/sending good sensations

Incredible/euphoric/ecstasy earth shattering/mind blowing/glorious

a high/nirvana/died and gone to heaven

happiness/fun/my body was happy/endorphin rush

Sensual Pleasure:

94.3%

Soothing/comforting

Sensual/ sending good sensations

Sweet

EVALUATIVE COMPONENTS (continued)

Initial Reliability

Sexual pleasure (continued):

Exquisite

burst of/focus on good sensations

sensational

Satisfaction:

87.7%

Satisfying

Fulfilling

Gratifying

Cathartic/weight lifted/worries gone

awesome

amazing

wonderful/fantastic

[felt] good/great

magical

best feeling ever

EVALUATIVE COMPONENTS (continued)

Initial Reliability

Satisfaction (continued):

felt excellent

sensational

perfect

beyond pleasurable

self-indulgent

Excitement:

97.3%

Exhilarating

Exciting

Wild

arousing

over stimulating

flustered

heart rate increased

feeling butterflies

AFFECTIVE COMPONENTS

Initial Reliability

Emotional Intimacy:

98.7%

Close

Loving/made love

connected

Joy-Peacefulness:

99.0%

Peaceful/calm

Blissful

Tender

Joy-Elation:

97.3%

Ecstatic

Euphoric

Passionate

Elated

Rapturous

complete happiness/extremely happy

AFFECTIVE COMPONENTS (continued)

Initial Reliability

Emotional Excitation:

93.0%

Uncontrolled/out of control

Abandoned

could not handle the tension/could not think to breathe

Emotional Fusion:

98.7%

Immersing

Merging

Unifying

collapsed into partner

thoughts only about partner

emotionally connected with partner

Unreality/Disorientation:

96.7%

Light-headed/felt like I'm was going to pass out

Dizzy

disorientation/jumbled sentences/feel halfway stupid in the middle

AFFECTIVE COMPONENTS (continued)

Initial Reliability

Unreality/Disorientation (continued):

intoxicating

speechless/mindless

felt like I was in an aurora

weird

Lack of Awareness of Surround:

95.0%

Detached/separated from myself

out of body experience/outer body experience

Oblivious

Unreal

letting go of the world/grip on what was going on around me faded

felt like I was in an aurora

concentrating on orgasm/orgasm all I can think about/devoted to orgasm only

forget everything around me/could not focus on anything else

not a care/release from worry

AFFECTIVE COMPONENTS (continued)

Initial Reliability

Suspension:

100%

Soaring

Suspended/floating

Miscellaneous:

(100%: no instances)

Melting

Vulnerable

§ Subtypes of each component that begin with a capital letter are taken directly from Mah and Binik, 2001; those not present in the current corpus are italicized. Elaborations from the current corpus are listed in lower case.