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FACTORS THAT INFLUENCE INDIVIDUAL DIFFERENCES IN FEMALE
SEXUAL RESPONSE IN A COLLEGE-AGED POPULATION

by

#### TYNISA L. JONES

(Under the Direction of William D. McIntosh)

ABSTRACT

College females (N=115) completed a questionnaire, which asked an array of questions about demographics, health, sexual partners and orgasm, sexual satisfaction, masturbation and vibrators, personality, and sex guilt. Of the participants, 106 reported that they had experienced sex of some kind, 83 indicated that they had experienced single orgasm during sex with a partner, and 46 indicated that they had experienced multiple orgasms during sex with a partner. Independent variables "general questions", "communication with partner", "overall satisfaction", "fear of becoming pregnant," "stress", "general demographics" and "medications" were significantly related to one or both of the measures of sexual response used. The overall picture that the results suggest is that orgasm likelihood is influenced more by social aspects than physical, personality, or other characteristics.

INDEX WORDS: Orgasm, Sexual experience, Orgasm likelihood, Sexual response, Satisfaction

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by

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B.A., University of Oklahoma, 2000
M.A., Webster University, 2004

A Thesis Submitted to the Graduate Faculty of Georgia

Southern University in Partial Fulfillment of the

Requirements for the Degree

MASTER OF SCIENCE

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# FACTORS THAT INFLUENCE INDIVIDUAL DIFFERENCES IN FEMALE SEXUAL RESPONSE IN A COLLEGE-AGED POPULATION

by

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Electronic Version Approved: May 2008

#### DEDICATION

I dedicate this thesis to my family and friends. They are always there for me providing encouragement, lending an ear listening to all my ideas, and most importantly, having faith in me. I love each and every one of you and I really do appreciate what you do for me.

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### TABLE OF CONTENTS

Page
ACKNOWLEDGMENTS7
LIST OF TABLES9
LIST OF FIGURES10
INTRODUCTION11
PROPOSED RESEARCH36
PROPOSED EXPERIMENT39
HYPOTHESIS40
METHOD45
Participants45
Materials45
Design and Procedure46
RESULTS48
DISCUSSION56
REFERENCES64
APPENDIX: Female Sexual Response Ouestionnaire72

### LIST OF TABLES

									Page
Table	1:	Typical	Orgasm	Experienc	e				107
Table	2:	Typical	Sexual	Experienc	e at	this '	Time		108
Table	3:	Summary	of Stat	tistically	Sign	nifica	nt Ind	epender	nt
	Va	riables :	in Pred	icting Typ	oical	Orgas	m Expe	rience	and
	Τv	oical Sex	xual Exi	perience a	ıt th:	is Tim	e		109

## LIST OF FIGURES

	Page	9
Figure	1: The percentage of each item answered in dependent	
	variable typical orgasm experience110	Э
Figure	2: The percentage of each item answered in dependent	
	variable typical sexual experience at this time113	1

#### INTRODUCTION

Orgasm, also called climax, is a physiological state of heightened sexual excitement and gratification that is followed by relaxation of sexual tensions and the body's muscles (Cardoso, 1997), and is generally considered to be pleasurable and desirable (Masters, Johnson, & Kolodny, 1985).

Researchers have examined why females have orgasms from an evolutionary point of view. One anthropologist, Donald Symons (1979), argued that orgasm is possible in women because it is crucial in men. The theory is that it is evolutionarily crucial for the continuation of the species that men have orgasm. Because embryos of both sexes have a common early development, when male orgasm is "selected for" by evolution, female orgasm is coincidentally selected for as well, and thus that it is a byproduct of male orgasm's role in evolution (Symons, 1979).

In the 1990s, Symons' theory receded from the spotlight as a new mini-genre of adaptive explanations arose assuming a link between female orgasm and reproductive success. These new theories were dubbed sperm competition theories and suggest that female orgasm somehow helps to draw sperm up through the cervix and uterus, thus aiding fertilization and reproduction (Schaffer, 2005).

According to Lloyd (2005), fertility specialists sometimes tell women to lie on their backs and masturbate to orgasm after being artificially inseminated. The contractions that occur in the vagina facilitate this process.

While these theories are useful in attempting to explain why women have orgasms, they do not address the marked individual differences in female orgasm. Darling, Davidson, and Jennings (1991), for example, reported that Kinsey and his research team found only 14 to 16 percent of women report regularly experiencing multiple orgasms. National Health and Social Life Survey estimates that about 29 percent of women always experience orgasm during intercourse with a partner, whereas most of those remaining must have direct clitoral stimulation to achieve orgasm (Hyde & DeLamater, 2006; Laumann, Gagnon, Michael, Michaels, 1994). This percentage is considerably lower than that for men. Seventy-five percent of men report that they always experience orgasm during intercourse with their partner (Laumann, Gagnon, Michael, & Michaels, 1994). to ten percent of adult women in the U.S. have never experienced orgasm by any means of self or partner stimulation (Spector & Carey, 1990). Very little research has been conducted to understand the factors that might contribute to these variations.

What research does exist focuses almost exclusively on why some women do not achieve orgasm, or have a decreased sexual desire, and looks to sexual dysfunctions as an explanation. Female sexual dysfunction is a multicausal and multidimensional problem combining biological, psychological and interpersonal determinants (Basson, et. al, 2000). It is age related, progressive, and highly prevalent (Basson, et. al, 2000). There are numerous causes of sexual dysfunction. Physical causes include hormonal imbalances, pain caused by injury or anatomical problems, and certain conditions such as diabetes (Basson et al., 2001). Psychological causes include stress, marital discord, and previous sexual trauma (Basson et al., 2001). Aging can cause sexual dysfunction through changes in the vagina, such as stiffening and lack of lubrication (Basson et al., 2001). Finally, certain medications, such as blood pressure and diabetes medications, may cause sexual dysfunction (Fourcroy, 2003). Sexual dysfunctions are characterized by disturbances in sexual desire and in the psycho-physiological changes associated with the sexual response cycle in men and women (DSMV-IV, 1994). Sexual dysfunction is also a decrease in or lack of sexual satisfaction (Basson et al., 2000). It is very common, affecting up to 40% of women, most commonly young women,

and tends to decrease with age (Tiefer, 2002). Sexual dysfunction may include a decreased level of desire (such as fewer sexual fantasies or thoughts), the inability to become or remain aroused or sexually excited, the inability to have an orgasm, or even painful intercourse (Basson et al., 2000).

According to the World Health Organization

International Classifications of Diseases-10 (ICD-10) the definition of sexual dysfunction includes "the various ways in which an individual is unable to participate in a sexual relationship as he or she would wish (ICD-10, 1992)."

Specific categories in the nomenclature include a lack or loss of sexual desire (F52.0), sexual aversion disorder (F52.1), failure of genital response (F52.2), orgasmic dysfunction (F52.3), nonorganic vaginismus (F52.5), nonorganic dyspareunia (F52.6), and excessive sexual drive (F52.7).

In contrast, the DSM-IV: Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) of the American Psychiatric Association, which is specifically limited to psychiatric disorders, concerns nomenclature for mental disorders and was not intended to be used for classification of organic causes of female sexual dysfunction (DSM-IV, 1994). In the DSM-IV (1994) sexual

dysfunctions are defined as "disturbances in sexual desire and in the psychophysiological changes that characterize the sexual response cycle and cause marked distress and interpersonal difficulty." Disorders in women include hypoactive sexual desire (302.71), sexual aversion (302.79), female arousal disorder (302.72), female orgasmic disorder (302.73), dyspareunia (302.76) and vaginismus (306.51).

Basson et al. (2000) critically evaluated and revised existing definitions and classification of female sexual dysfunction. They stated that female sexual dysfunction is highly prevalent but not well defined or understood (Basson et al., 2000). In their article, Report of the International Consensus Development Conference on Female Sexual Dysfunction: Definitions and classifications, they recommend use of the new female sexual dysfunction diagnostic and classification system based on physiological as well as psychological pathophysiologies, and a personal distress criterion for most diagnostic categories (Basson et al., 2000). They also broadened existing definitions. The definition of hypoactive sexual desire was broadened to include a lack of receptivity to sexual activity (Basson et al., 2000). The new definition emphasizes the persistent lack or deficiency of well-accepted markers of desire, such

as sexual thoughts or fantasies and desire for or receptivity to initiation by a partner (Basson et al., 2000). Basson et al. (2000) point out that the two important elements in the new definition are the persistent lack of desire and resulting personal distress. They noted that some patients with a sexual desire disorder diagnosis have apparent desire for sexual contact but are unable to initiate or respond to contact due to phobic aversion (Basson et al., 2000). Therefore, they included sexual aversion in the broader category of sexual desire disorders. The definition of sexual arousal disorder was expanded to incorporate nongenital and subjective dimensions of arousal (Basson et al., 2000). Recognizing the wide range of physical and subjective reactions that characterize female sexual arousal, their new definition refers to "lack of subjective excitement or a lack of genital lubrication/swelling) or other somatic responses (Basson et al., 2000)." Basson et al. 2000 stated that this new definition is more inclusive than the ICD-10 definition of "failure of genital response." A new category of noncoital sexual pain disorder was added to the classification system, which is to be applied to recurrent or persistent genital pain induced by noncoital sexual stimulation (Basson et al., 2000). It was noted that a

significant number of women experience pain during noncoital forms of sexual stimulation who would not be included in the current categories of vaginismus or dyspareunia. This new category is also important in recognizing that sexual activity for women need not necessarily involve penile vaginal intercourse and the category of sexual pain disorder may apply to nonheterosexual women engaging in alternative sexual behaviors (Basson et al., 2000). An essential element of the new diagnostic system is the inclusion of a personal distress criterion for most of the diagnostic categories. Thus, for hypoactive sexual desire disorder, sexual arousal disorder, orgasmic disorder and vaginismus an essential element of the diagnosis is the requirement that the condition causes significant personal distress for the individual. Repeatedly, Basson et al. (2000) stated that further research is needed and the current literature at present is lacking. They stated that female sexual dysfunction is an especially underresearched and poorly understood area, and that there is a lack of adequate experimental or clinical trial data. They recognized the broad need for basic and applied research in the area (Basson et al., 2000). The current research project aims to help close this knowledge gap.

Laumann, Paik, and Rosen (1999) conducted a study that analyzed data from the 1992 National Health and Social Life Survey. Their focus was to assess the prevalence and risk of experiencing sexual dysfunction across various social groups and examine the determinants and health consequences. They found that sexual dysfunction is more prevalent for women than for men. The average percentage of women who experience sexual dysfunction was 43 while among men it was 31 percent. They also found that sexual dysfunction is associated with various demographic characteristics. Women's sexual problems tend to decrease with age. They also identified that non-married women are 1½ times more likely to have climax problems and sexual anxiety than women who are married. In addition, women with lower educational attainment reported less pleasurable sexual experiences and raised levels of sexual anxiety. Laumann, Paik, and Rosen (1999) also found that women of different racial groups demonstrate different patterns of sexual dysfunction. Although the findings were modest, African Americans appear more likely to have sexual problems than Caucasians, while Hispanics are less likely (Laumann et al., 1999). Finally, they stated that experience of sexual dysfunction is more likely among women and men with poor physical and emotional health, and that

sexual dysfunction is highly associated with negative experiences in sexual relationships and overall well-being (Laumann et al., 1999).

An interesting alternative to explain adverse affects on women's orgasm was proposed by Kiefer, Sanchez, Kalinka, and Ybarra (2006). They postulate that the dissociation between women's physiological and subjective arousal suggests that psychological factors play a prominent role in women's subjective sexual functioning and satisfaction. Tevlin and Leiblum (1983), for example, have argued that women's adoption of a submissive sexual role reduces sexual agency, thereby undermining their sexual function. support of that contention, women who report less sexual control, autonomy, and agency often show inhibited sexual functioning and satisfaction (Amaro, Raj, & Reed, 2001; Grauerholtz & Serpe, 1985; Haavilo-Mannila & Kontula, 1997; Hurlbert, 1991; Hurlbert, Apt, & Rabehl, 1993; Sanchez, Crocker, & Boike, 2005; Sanchez et al., 2006). Kiefer, and Ybarra (2006) stated that women possess nonconscious associations between sex and submission, which mirror common cultural stereotypes. Kiefer et al. (2006) also found that women associate sex with submission at an unconscious level. In study 1 of their research, they showed that women's nonconscious sex-submission

associations predicted reduced subjective arousability (Kiefer et al., 2006). More directly applicable to the present study, in study 2 they further demonstrated that these associations predicted less self-reported ability to reach orgasm among women (Kiefer et al., 2006). These findings suggest that sex-submission associations may adversely affect women's sexual functioning (Kiefer et al., 2006). Not only did Kiefer et al., (2006) provide suggestions for further research, they also stated that further research in general is needed in this area. They suggested that the influence of women's sexual partners is an important direction for future research (Kiefer et al., 2006).

Dunn, Cherkas, and Spector (2005) presented a biological and genetic way to explore influences on variation in female orgasmic function. They found a significant genetic influence with an estimated heritability for difficulty reaching orgasm during intercourse of 34%, and 45% for orgasm during masturbation. They also found that between 34% and 45% of the variation in ability to orgasm can be explained by underlying genetic variation, with little or no role for the shared environment (e.g. family environment, religion, social class or early education). These results show that the

wide variation in orgasmic dysfunction in females has a genetic basis and cannot be attributed solely to cultural influences (Dunn et al., 2005). This study challenges researchers such as Symons (1979), who argued that orgasm is possible in women because it is crucial in men. Moreover, the study also challenges Symon's (1979) assertion that when male orgasm is "selected for" by evolution, female orgasm is, coincidentally, selected for as well, and thus that it is a byproduct of male orgasm's role in evolution. Orgasm may be primarily genetic. Therefore, with regard to this study one could conclude that no situational factors affect orgasm. However, Dunn et al. (2005) did not account for all of the variance in female orgasm. By way of comparison, intelligence is estimated to be perhaps 50% determined by genes, yet nutrition, parental influence, and many other factors have also been found to affect intelligence (Wright, 1999).

Along a similar vein, Dawood, Kirk, Bailey, Andrews, and Martin (2005) expressed surprise that little or no attention had been devoted to the possibility of genetic influences on female orgasm. Their study reported genetic and environmental influences on the frequency of orgasm in women during sexual intercourse, during other sexual contact with a partner, and during masturbation. They

concluded that, overall, genetic influences accounted for approximately 31% of the variance of frequency of orgasm during sexual intercourse, 37% of the variance of frequency of orgasm during sexual contact other than during intercourse, and 51% of the variance of frequency of orgasm during masturbation. In order to establish a continuum of the frequency and ease of reaching orgasm they used the response set: never/rarely; fairly often; often; usually; almost always; always; do not do this. Their findings also suggest that orgasm during intercourse, orgasm during sexual contact other than intercourse, and orgasm during masturbation may be distinct phenotypes. This assertion was supported both by the failure of the common pathway model to provide the best fit, and by the significant influence of the context specific genetic and environmental effects. In other words, female orgasm may function differently in different contexts (Dawood et al., 2005).

The relationship between negative mood and sexuality in heterosexual college women and men was examined by Lykins, Janssen, and Graham (2006). The main purpose of their study was to examine inter-individual differences in the relationship between negative mood and sexuality in a non-clinical sample of women. Half of their sample of women reported a decrease in sexual interest when feeling

depressed, while 40% of the women reported no effect and 9.5% reported an increase in sexual interest when feeling depressed. Reports on sexual response when feeling depressed were less frequent, with approximately one third of the women reporting that their sexual response decreased. Smaller percentages of women reported negative effects on either sexual interest (34%) or response (23%) when feeling anxious. Compared to feeling depressed, almost twice as many women indicated that they experienced an increase in sexual interest (23%) and response (21%) when anxious. Finally, as they predicted, women reported more negative effects of anxiety and depressed mood on sexual interest and response than men, and women scored higher than men on both trait anxiety and depression proneness. Relating these findings to the present study, this inter-individual difference could be instrumental in evaluating factors that influence individual differences in female sexual response.

Haning (2005) explored nine potential predictors of sexual satisfaction in heterosexual females and males: general intimacy, sexual partner intimacy, respondent's orgasm frequency, respondent's orgasm type with a partner, conflict, depression, gender, partner's orgasm frequency, and partner's orgasm type. Haning hypothesized that gender

differences will be a factor in one or more of the aforementioned variables and that individual differences will dictate orgasm type and frequency. Moreover, such individual differences will have the same affect on orgasm during masturbation as with a partner. He further hypothesized that sexual satisfaction will correlate positively with both general intimacy and sexual partner intimacy, as well as with one or more measures of the respondent's orgasmic response (respondent's orgasm type and/or orgasm frequency). However, Haning hypothesized that sexual satisfaction will correlate negatively with conflict and depression. Finally, Haning hypothesized that empathic sexuality is a common phenomenon in the human being and will enhance sexual satisfaction in respondents whose partners have high orgasm frequency and/or multiple or sustained orgasms and reduce sexual satisfaction in respondents whose partners have low orgasm frequency and/or only short single orgasms (Haning, 2005). The study provided support for all eight hypotheses and demonstrated that in long-term relationships sexual satisfaction was positively correlated with two different variables: the respondent's orgasm likelihood, and the partner's orgasm likelihood, and negatively correlated with conflict in the relationship (Haning 2005). Of relevance to the present

study, Haning (2005) provided strong support for the concept that not only do differences within the individual dictate influences in females sexual response, but also partners have a strong influence. Moreover, Haning (2005) provided data supporting Dunn et al., (2005) and Dawood et al., (2005) in their assertion that both genetic and environmental factors influence the frequency of orgasm.

In a study of young British men and women, Joffe and Franca-Koh (2001) explored the link between remembered non-verbal sexual communication in the home, current sexual behaviors, and feelings of sexual guilt. They found higher levels of parental non-verbal sexual communication were linked to: earlier onset of sexual activity, fewer sexual partners, and lower feeling of some aspects of sexual guilt. The proposed present study includes questions that pertain to family atmosphere and how open parents were about sex, how parents felt about sex and marriage, and the onset of exposure to sexual information (e.g. sex education in school, R-rated movies). Given the results of the Joffe and Franca-Koh (2001) study, the present study should reveal a positive correlation between such aforementioned items and participants' sexual response.

Communication problems are also believed to play a central role in sexual dysfunction. Kelly, Strassberg, and

Turner (2006) found that sexually dysfunctional couples evidenced significantly poorer communication than controls, primarily but not exclusively when discussing sexual topics. The anorgasmic women or their male partners demonstrated more blame and less receptivity than women who did have orgasms. This study demonstrates that many factors could influence female sexual response. For example, a woman who is unable to effectively communicate with one partner would be at risk for not achieving orgasm, but in the event she has a new partner where communication is better, she would be able to experience orgasm.

Kelly, Strassberg, and Kircher (1990) compared orgasmic women and anorgasmic women to determine attitudinal and experiential correlates. They found that, as compared to orgasmic women, anorgasmic women reported greater discomfort in communicating with a partner regarding only those sexual activities involving direct clitoral stimulation, had more negative attitudes toward masturbation, greater endorsement of sex myths, and greater sex guilt.

Mosher, and O'Grady (1979) examined the subjective sexual arousal and affective reaction of college women to explicit sex. Their study uncovered that women high in sex guilt reported fewer genital sensation and rated themselves

lower on sexual arousal during and after the films than did their counterparts less disposed to guilt over sex.

Moreover, high sex guilt women reported more affective guilt, disgust, and anxiety-fear as a consequence of viewing an explicit film than women below the median on sex guilt. These results suggest that there may be a negative relationship between sex guilt and orgasm in women.

More than 40% of women, both young and middle-aged, report difficulty in achieving orgasm (Wilson, 1989).

Guilt and anxiety surrounding sexual activity remains a problem for both sexes, affecting about 14 percent of men and 18 percent of women, but perhaps most striking are the number of women who suffer painful intercourse (around 40 percent) or are simply bored and uninterested in sex (around 35 percent; Wilson, 1989). It stands to reason that these factors, as well as the various factors previously discussed, influence female sexual response.

Such factors, and others not yet examined, could explain why some women do not achieve orgasm at all while others routinely experience multiple orgasms, while still others fall somewhere in-between.

Research by Baumeister supports the notion that female sexual response may be more susceptible to situational influences. Baumeister (2000) proposed a theory of "erotic"

plasticity" that suggests the female sex drive is more malleable than the male in response to socio-cultural and situational factors. He stated three predictions based on this hypothesis of female erotic plasticity: 1) individual women will exhibit more variation across time than men in sexual behavior, 2) female sexuality will exhibit larger effects than male in response to most specific sociocultural variables, and 3) sexual attitude-behavior consistency will be lower for women than men. Interestingly, Baumeister (2000) stated female sexuality is responsive to culture, learning, and social circumstances. Moreover, the plasticity of the female sex drive offers greater capacity to adapt to changing external circumstances as well as an opportunity for culture to exert a controlling influence. He argued that plasticity could be manifested through changes in what is desired (e.g. type of partner, type of activity), in degree of desire (e.g. preferred frequency of sex, degree of variety), or in expression of desire (e.g. patterns of activity). Changes in attitude may contribute to these behavioral changes.

Baumeister provided three different hypotheses to explain the difference in erotic plasticity between women and men. First, he related it to the difference in power.

On average, men are physically stronger and more aggressive than women, and they also tend to hold greater sociopolitical and economic power. Hence, women become socially malleable as an adaptation to male power. Second, flexibility may be an inherent requirement of the female role in sex. Initially the female rejects the man's advances, then later changes her response from no to yes. The centrality of this change in female sexuality requires each woman to have a certain degree of flexibility, and a broader pattern of erotic plasticity for this foundation. The third possible explanation is that women have a weaker sex drive than men. A relatively weak motivation is presumably easier to redirect, channel, or transform than a more powerful one. Women could thus more easily be persuaded to accept substitutes or alternate forms of satisfaction, as compared with men, if women's overall sexual desires were milder. According to Baumeister the question of "What does it mean?" - in other words, what does a particular sex act signify and communicate - is centrally important to the female sexual experience before, during, and after sex. This alone could explain the variance in female orgasm. This also speaks to the influence the type of relationship the female has with the partner in determining her sexual response. If she is in a long term, loving, and meaningful relationship she should be more likely to have a greater experience of orgasm.

Building on this theory, Baumeister and Twenge (2002) investigated how cultural suppression impacts women's sexual gratification. Socializing influences such as parents, schools, peer groups, and legal forces have cooperated to alienate women from their own sexual desires and transform their (supposedly and relatively) sexually voracious appetites into a subdued remnant. In some cases, surgical procedures have been used to prevent women from enjoying sex. From some perspectives, according to Baumeister and Twenge, these societal forces have deprived most women of their natural capacity to enjoy multiple orgasms and intimate gratification. Baumeister and Twenge outline two control theories to offer explanations for the historical suppression of female sexuality. The Male Control Theory depicted men as conspiring to suppress female sexuality as a way of controlling women, ensuring peace and order in society, and reducing the risk of wifely infidelity. The Female Control Theory depicted women as cooperating to restrict each other's sexuality, mainly as a way of ensuring that the exchange of sex for other resources would proceed in a way favorable to women. Evidence repeatedly favored the latter theory. Mothers and

female peers, rather than fathers and male peers, are the main sources that teach adolescent girls to refrain from sexual activity. Moreover, adult women feel more disapproval from female peers than from men over engaging in sexual activity beyond the current norms. This would lead me to the hypothesis that women who have many close friends might experience less orgasm frequency due to this feeling of disapproval. However, I also predict that women who have close female relationships where both parties are open with each other and effectively communication would have an increased likelihood of orgasm. This is because the communication and openness foster a comfortable environment and increase the sex education of each woman. However, if the friends are judgmental of one another then the likelihood of orgasm could be decreased.

Baumeister (2000) and Baumeister and Twenge (2002) provide some insight into variability in female orgasm, and they identify specific, everyday factors and individual characteristics, particularly cultural and socializing influences such as parents, schools, peer groups, and legal forces, that could covary with the differences in orgasm among women.

Another area of interest is the role stress may play on female sexual response. Stress can lead to diminished

sexual desire and an inability to achieve orgasm in women. Stress response can also cause temporary impotence in men. Part of the stress response involves the release of brain chemicals that constrict the smooth muscles of the penis and its arteries. This constriction reduces the blood flow into, and increases the blood flow out of, the penis, which can prevent erection (Stress, 2003). LeVay and Valente (2003) state that any kind of stress can lead to sexual problems and some examples of stress include relationship difficulties, financial or career problems, illness, bereavement, and chronic stress.

Morokoff and Gillilland (1993) focused on determining the relationship of sexual functioning and sexual satisfaction variables to marital satisfaction and stressors, particularly unemployment. They stated that stress has been shown to affect a wide range of physiological, health, and psychological functions in men and women. Therefore, their study was a preliminary evaluation of the relationship between stress and sexual functioning. They hypothesized that unemployment, as well as other measures of stress, would be positively correlated with some sexual dysfunctions in men and women, but that marital satisfaction would interact with the stressors such that in happier marriages the effects of the stressor would

be moderated. As it pertained to women and their sexual dysfunction, unemployment was not found to predict lower orgasmic frequency. Morokoff and Gillilland argued that this was because the majority of their female sample was unemployed by choice, therefore not experiencing the stress of economic hardship to the family. However, unemployed women did express a faster age-related decline in desire for sexual intercourse than employed women. Ultimately, Morokoff and Gillilland stated that stressors are not associated with sexual dysfunction unless their psychological meaning signifies something important for sexual functioning (as unemployment signifies less fulfillment of the traditional male gender role).

More directly, Davis (2006) stated that for women who are unable to achieve orgasm there may be other factors, some medical, playing a role: inadequate stimulation, personal inhibitions, lack of privacy due to having young children or teenagers, fatigue, stress, depression or medications for depression, relationship issues or other health problems. These items relate directly to the hypothesis presented in the present research; that many factors, most of which that might occur in day to day life, may contribute to individual differences in female sexual response.

Gunderson and McCary (1980) investigated the effects of sex education on college students with respect to their sex information, sex attitudes, sexual quilt, and sexual behaviors. They administered a sex questionnaire at the beginning and at the end of a course in human sexuality (Gunderson & McCary, 1980). Through this study, Gunderson and McCary (1980) found that sex education has many positive effects such as reduction of sexual quilt and inhibitions. They also found that there was a positive effect on maintaining the traditional values of love and fidelity, as well as providing a healthier, more comfortable and responsible attitude toward sex. Based on the previously outlined literature coupled with Gunderson and McCary's findings, sex education should have a positive impact on female sexual response, because sex education has been shown to reduce sex guilt, and sex guilt is negatively correlated with female sexual response.

Wanlass, Kilman, Bella, and Tarnowski (1983) explored the effects of different types of sex education instruction formats. The conditions they used were lecture only, small group discussion only, lecture and small group discussion, lecture and extra lecture/review, and no intervention.

Pre- and posttest measures were administered to assess the dimensions of sexual guilt, sexual attitudes, and sexual

anxiety. They found a significantly greater reduction in sexual guilt for all conditions except the small group discussion only and the control. The small group discussion only and lecture and extra lecture/review conditions reflected significantly greater changes in the direction of more tolerant sexual attitudes.

As seen in the review of the literature, there are many factors, including everyday, mundane factors such as parental influences, schools, peer groups, and legal forces (Baumeister, 2000; Baumeister and Twenge, 2002), which may inhibit and/or influence female sexual response. Kinsey, Pomeroy, Martin, and Gebhard (1953) also stated that variance in sexuality in the human female could be attributed to various socioeconomic variables: age, education, marital status, occupation, and religious identification.

## PROPOSED RESEARCH

Considering the variety of factors that have been found to, or hypothesized to, influence female orgasm, it seems that examining a large number of potential factors at once would be beneficial. In this manner, the relative predictive strength of these factors could be assessed. addition, the inclusion of additional potentially relevant variables that have not yet been examined could provide further insight into what influences variations in female orgasm. This is the aim of the proposed study. Beyond the factors already discussed, some of the factors that will be examined in the present research are current student status, religious preference, types of schools attended, number of siblings and gender of siblings, birth order, current marital status, political affiliation, degree of liberalism, number of children they have, menstrual cycle characteristics, level of exercise, and parents' feelings toward sex.

In addition to the variability in contributing factors of orgasm, there is also great variability concerning the ease with which various women experience orgasm (Kinsey et al., 1953), and very little is known about what accounts for this variability. The frequency and ease by which various women experience orgasm can be conceptualized on a

continuum from never/not at all have orgasm, to typically have orgasm, but only via direct stimulation of the clitoris, to typically have one orgasm, to typically have multiple orgasms.

The present study will use scales ranging from 1 (indicating "never") to 7 (indicating "very frequently" or "a great deal"). By comparing a range of potentially relevant factors and individual differences to women's reports of sexual response, this research seeks to take a first step in identifying the factors that may account for these differences. By examining the entire range of sexual responses that women report experiencing, rather than lumping women into one of two categories: a) experiences orgasms and b) is sexually dysfunctional, this project will explore individual differences in female orgasm in a more favorable light, as opposed to something that has to be fixed. It would be of great benefit to researchers and society to understand better what causes women to experience variations in sexual pleasure, both from a basic research perspective and because of potential clinical application and insight that could be offered to women who are dissatisfied with their sexual response. The current literature provides valuable insight into reasons why female sexual response would be inhibited, but it does not

provide a full understanding of why women vary considerably in their sexual response. Therefore, this study may also further society's education concerning factors that influence individual differences in female sexual response.

## PROPOSED EXPERIMENT

In the present experiment a wide range of possible factors that influence female orgasm will be examined. Rather than simply focusing on the medical and psychological problems that may cause dysfunction, a wider range of variables will be examined. The day to day experiences and/or individual characteristics that might influence female sexual response would seem to be critical information, particularly for women who do not have a specific medical or psychological issue, but who are dissatisfied with their sexual response. To date, there has been little to no research that examines everyday factors, as well as the actual social history of individuals, to understand how these variables might relate to women's typical sexual response.

Previous research has outlined many factors that may influence female sexual response. It is predicted that this study will replicate the results of prior research. It is also predicted that the current study will identify a number of additional variables both positively and negatively correlated.

## HYPOTHESIS

This is an exploratory study and a wide range of information will be collected, that may relate to female orgasm. This study may identify negative correlations between orgasm likelihood and stress, sex guilt, fear of pregnancy, and high number of siblings, birth order (i.e. first born) to name only a few. It is also predicted that this study will find a positive correlation between orgasm likelihood and communication with partner and sex education. It is important to note, however, that many predictions are speculative, because of a dearth of previous research that has directly examined these

One instrument that will be used to gather information is a standard personality questionnaire called the International Personality Item Pool (IPIP), which measures the five basic factors that comprise personality: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Based on prior literature, it is hypothesized that the factors openness, extraversion, and agreeableness will correlate positively with the likelihood that one will achieve orgasm, whereas the factors conscientiousness and neuroticism will correlate negatively with the likelihood that one will achieve orgasm. Openness involves active

imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and intellectual curiosity (Costa & McCrae, 1992). They are also open to new experiences. Therefore, if an individual scores high on openness it would lead one to believe that they would have a positive correlation with orgasm likelihood. Extraverts are gregarious, assertive, and generally seek out excitement, which explains why scoring high on extraversion would positively correlate with orgasm likelihood. Finally, people who score high on the agreeableness dimension are empathetic, considerate, friendly, generous, and helpful. They also have an optimistic view of human nature. They tend to believe that most people are honest, decent, and trustworthy. Because of these characteristics it is hypothesized that people who score high on agreeableness will have a positive correlation with orgasm likelihood. However, people who are conscientious are generally hard working and reliable. When taken to an extreme, they may also be workaholics, perfectionists, and compulsive in their behavior. Conscientiousness is the trait of being painstaking and careful, or the quality of acting according to the dictates of one's conscience. It includes such elements as selfdiscipline, carefulness, thoroughness, organization,

deliberation (the tendency to think carefully before acting), and need for achievement. For these reasons, it is hypothesized that individuals with this personality type would have a more difficult time achieving orgasm and would, therefore, exhibit a negative correlation with orgasm likelihood. Matthews and Deary (1998) defined neuroticism as an enduring tendency to experience negative emotional states. They also stated that individuals who score high on neuroticism are more likely on average to experience such feelings as anxiety, anger, guilt, and clinical depression, and are often self-conscious and shy. They also respond more poorly to environmental stress, and are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. Previous literature explained that individuals who experience high quilt do not experience orgasm as often as those who have low or no quilt. Therefore, it is also hypothesized that individuals high on neuroticism will have a negative correlation with orgasm likelihood.

It is also hypothesized that women's sexual responses are determined by a far more complex combination of factors than sexual trauma/abuse (or lack thereof), and that many of these factors may seem on the surface mundane. For example, stress can play a part in many complications that

women experience, including orgasm. I predict that a woman experiencing a great deal of stress will be more likely to report not experiencing orgasm, or less likely to report experiencing multiple orgasm, than women whose stress level is low.

Communication with partner is also predicted to correlate positively with orgasm. If a woman is able to openly express her desires to her partner, she will achieve orgasm more often than a woman who does not communicate effectively with her partner.

Sex guilt plays an important role in female sexual response as well. It is predicted that women who indicate that their parents expected them to get married before having sex, but have engaged in premarital sex, will experience orgasm less frequently. This is because if the woman's parents instilled in her that premarital sex is wrong and she engages in it anyway, she will have a higher level of sex guilt.

As shown in the literature review, sex education tends to reduce sex guilt. Therefore, it is also predicted that women who indicate that they had earlier sex education will experience orgasm more often than their counterparts who had sex education later, or not at all.

Schaffer (2005) stated that female orgasm somehow helps to draw sperm up through the cervix and uterus, thus aiding fertilization and reproduction. It is predicted that participants who fear becoming pregnant will experience orgasm less or not at all than a participant who does not. This is because the woman may be either consciously or subconsciously inhibiting orgasm based on a fear of becoming pregnant. Similarly, it is predicted that a woman who has many siblings and a high birth order (e.g. first born) will experience orgasm less or not at all. It is presumed that the woman assisted in taking care of her siblings and has a fear of becoming pregnant due to the stress it may have caused and may, thereby, subconsciously inhibit orgasm.

This study will examine many different factors that normally occur in everyday life, as well as personal characteristics, to examine what influences female orgasm. If the hypotheses are supported, we will gain a better understanding of women's sexual response.

## METHOD

# *Participants*

Research participants were 115 undergraduate females who were enrolled in Introductory Psychology at Georgia Southern University. They received course credit for their participation. There was no age limitations, beyond the requirement that participants be 18 years or older.

Materials

An eight-part questionnaire (see Appendix) that required approximately 70 minutes to complete was utilized in the study. Part I focused on demographics and background information, Part II focused on health, medication, and physical activity, Part III focused on sexual partners and orgasm, Part IV focused on sexual satisfaction, desire, and arousal, Part V focused on masturbation and vibrators or other sexual objects, and Part VI focused on general questions. This questionnaire contained a series of questions about participants' current and previous sexual experiences. The questions included what type of sexual response the participants generally have (no orgasm; single orgasm, but only with direct clitoral stimulation; single orgasm; multiple orgasm, but only with direct clitoral stimulation; or multiple orgasm), experiences with a partner, experiences while masturbating,

experiences while using vibrators or other objects, and so The questionnaire also included general demographic questions and general questions about individuals such as: their age when they first received sex education in school; if they fear becoming pregnant; if they believe that it is acceptable to have premarital sex of any kind; communication with parents about pregnancy, intercourse, birth control, etc.; their age when they saw their first Rrated movie or viewed pornography of any kind; the number of close friends they have; and how many times they have been in love. Section VII contained a standard personality questionnaire (the International Personality Item Pool (IPIP): A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences (http:ipip.ori.org/, which measures the five basic factors that comprise personality: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Section VIII consisted of sex-quilt items from Dr. Donald L. Mosher's (1998) Revised Mosher Guilt Inventory.

## Design and Procedure

Participants were informed that this study was designed to determine what factors influence individual differences in female sexual response and was administered

in the form of a paper questionnaire. Participants were informed at the time of signing up, and again at the experiment that throughout the questionnaire they would be asked very explicit, detailed, and intimate questions regarding their sexuality and sexual activities. They were informed that, while the questions are intimate, they are not traumatic. In addition, participants were informed that the questionnaire was intentionally worded in a manner that recognizes that women's sexual responses vary, and does not imply that women who do not experience orgasm are in any way dysfunctional. Participants were also informed that their participation was voluntary and they have the right to skip a question, stop, or withdraw completely from the study without penalty. Participants were then provided with the informed consent. There was a three digit number in the top right hand corner of each questionnaire, which was only for the purposes of tracking data and was in no way associated with the identity of the participant. Participants then completed the questionnaire. experimenter had the phone number and location of the Campus Counseling Center available in case any participants experienced distress. Upon completion of data collection, relationships were explored using multiple regression analysis.

### RESULTS

There were two dependent variables used throughout.

The first was that of typical orgasm experience (see Table I and Figure I), which could have been one of the following: 1) I do not have orgasms during sex (21.7%), 2) I only experience single orgasm during sex (28.7%), 3) I have experienced both single and multiple orgasm during sex (38.3%), or 4) I only experience multiple orgasm during sex. Only 1 person out of 115 was in the 4th category, so it is clearly not as representative a measure of sexual response. The second was that of typical sexual experience at this time (see Table II and Figure II), which could have been one of the following: 1) I never experience orgasm during sex (21.7%), 2) I experience orgasm during sex, but not consistently (41.7%), or 3) I almost always experience orgasm during sex (26.1%).

The first analysis conducted was count to actually understand how many women had ever engaged in sexual activity of any kind, the age at which they first experienced single orgasm during sex with a partner, and the age at which they first experienced multiple orgasm during sex with a partner. Of the total 115 participants 106 had experienced sex of some kind, 6 had not, and 3 did not provide data. There were 105 participants who provided

an age as to when they experienced their first single orgasm during sex with a partner. Of those participants 22 (21%) indicated that they never experienced single orgasm during sex with a partner and 83 (79%) indicated that they had. The most frequent ages of first experiencing orgasm with a partner were age 17 (21%) and age 18 (21.9%). There were 93 participants who provided an age as to when they experienced their first multiple orgasms during sex with a partner. Of those, 47 (50.5%) indicated that they never experienced multiple orgasms during sex with a partner and 46 (49.5%) indicated that they had. The most frequent age of this experience was 18 (18.3%).

The next variable examined was the role of general health on typical orgasm experience and on typical sexual experience at this time. The independent variable "general health" was created by computing height in inches, weight, general health, level of stress, visits to the doctor, number of times individual had cold or flu in the past year, number of physical health problems, number of allergies, psychological difficulties, chronic physical pain, prominent scars, mental health problems, number of most common ways they exercise, and number of alcoholic drinks they had per week. Contrary to prior literature, general health did not significantly predict typical orgasm

experience (F (1, 24) = 2.078, p > .05). The y-intercept was 1.035. The Beta weight for total health was .005 (p > .05) and only 8% of the variability in typical orgasm experience was accounted for by total health. General health also did not result statistically significant in predicting typical sexual experience at this time (F (1, 24) = 1.370, p > .05). The y-intercept was 1.163. The Beta weight for total health was .004 (p > .05) and only 5% of the variability in typical orgasm experience was accounted for by general health.

In prior research, stress played an integral role in orgasm likelihood. In this study, stress also played a vital role. An individual's level of stress predicted typical orgasm experience (F (1, 98) = 7.074, p < .001). The y-intercept was 1.528. The Beta weight for stress was .163 (p < .05) and 6% of the variability in typical orgasm experience was accounted for by stress.

The IPIP, which measures the "Big 5" personality factors, did not result in any significant results in predicting typical orgasm experience or typical sexual experience at this time. In each model of the backward regression all five factors (extraversion, neuroticism, agreeableness, conscientiousness, and openness) were removed.

Sex education was a variable that was predicted to have a positive correlation with orgasm likelihood. While it did show a positive correlation, it was not statistically significant in predicting either of the two dependent variables (typical orgasm experience R = .119, R Squared = .014; typical sexual experience at this time R = .101, R Squared = .010).

Sex guilt was a significant predictor in prior research on orgasm, but not in the current study. The Sex Guilt Inventory (Mosher, 1998) did not significantly predict orgasm for either variable, although a trend toward a negative correlation between sex guilt and both dependent variables did exist, in the direction of more sex guilt being related to less likely participants are to achieve orgasm.

An analysis of general sexual questions revealed that how often an individual engaged in vaginal sex, and their average rating of their sexual experiences, significantly predicted typical orgasm experience (F (2, 97) = 11.477, p < .001). The y-intercept was .473. The Beta weights for how often an individual engaged in vaginal sex was .112 (p < .05), and the individual's average rating of their sexual experiences was .196 (p < .05). Nineteen percent of the

variability in typical orgasm experience was accounted for by these predictors.

From the same group of general sexual questions, how fearful the individual currently is of becoming pregnant, how often they engage in vaginal sex, how acceptable they find premarital sex of any kind, and their average rating of their sexual experiences significantly predicted typical sexual experience at this time (F(4, 97) = 9.504, p < .001). The y-intercept was 1.445. The Beta weights for how often they engaged in vaginal sex was .146 (p < .05), their average rating of their sexual experiences was .115 (p < ...05), how acceptable they are of engaging in premarital sex of any kind was -.086 (p < .05), and how fearful they are currently of becoming pregnant was -.101 (p < .05). Twenty-eight percent of the variability in typical sexual experience at this time was accounted for by the predictors how fearful the individual currently is of becoming pregnant, how often they engage in vaginal sex, how acceptable they find premarital sex of any kind, and their average rating of their sexual experiences, which were from a group of general sexual questions.

From a group of general demographic questions, participants' birth order, twins among their siblings, and number of children they have had significantly predicted

typical sexual experience at this time (F (3, 78) = 4.193, p < .01). The y-intercept was 1.801. The Beta weights for birth order was .110 (p < .05), twins among siblings was -. 752 (p < .05), and number of children they had was .299 (p < .05). Fourteen percent of the variability in typical sexual experience at this time was accounted for by these predictors. This data shows that an individual who had a greater number of siblings would have greater orgasm likelihood, and a child born fifth of five children (for example) would have greater orgasm likelihood than the children born earlier. The number child the individual was (birth order), twins among their siblings, and number of children they had did not significantly predict typical orgasm experience.

Communication with partners facilitated orgasm likelihood in prior research. This study found similar results. Communication with partners significantly predicted typical orgasm likelihood (F (1, 84) = 11.839, p = .001). The y-intercept was 1.300. The Beta weight for communication with partner was .108 (p < .005). Twelve percent of the variability in typical orgasm experience was accounted for by this predictor. Communication with partner also significantly predicted typical sexual experience at this time (F (1, 85) = 8.193, p < .01). The

y-intercept was 1.331. The Beta weight for communication with partner was .082 (p < .05). Nine percent of the variability in typical sexual experience at this time was accounted for by this predictor.

Communication with close friends about sex did not significantly predict orgasm for either variable, although a trend toward a negative correlation between communication with close friends about sex and both dependent variables did exist, in the direction of more communication with close friends about sex being related to less likely participants are to achieve orgasm. If significant, this would indicate that orgasm likelihood is less likely among women who communicate with their close friends about sex.

As prior research demonstrated, medications may have an effect on orgasm. In this study, medications significantly predicted typical sexual experience at this time  $(F\ (1,\ 16)=5.564,\ p<.05)$ . The y-intercept was 1.884. The Beta weight for medications was .264 (p<.05). 26% of the variability in typical sexual experience at this time was accounted for by this predictor. Medication did not significantly predict typical orgasm experience.

The independent variable "overall satisfaction" combined how satisfied participants were with the following: all aspects of their sexuality, knowledge of

their body, knowledge of their sexuality, their body weight, attractiveness of their body, the sexual pleasure their body provides during sex, their ability to become sexually aroused, their ability to achieve orgasm, and how well informed they feel about sex in general. individual's overall satisfaction significantly predicted typical orgasm experience (F(1, 32) = 18.089, p < .001). The y-intercept was -.411. The Beta weight for overall satisfaction was .035 (P < .05). Thirty-six percent of the variability in typical orgasm likelihood was accounted for by this predictor. Overall satisfaction also significantly predicted typical sexual experience at this time (F(1, 33))= 10.080, p < .005). The y-intercept was .164. The Beta weight for satisfaction was .025 (p < .05). Twenty-three percent of the variability in typical sexual experience at this time was accounted for by this predictor.

### DISCUSSION

This study replicated some of the findings from prior research. However, some results in this study are new, some did not replicate previous findings, and some were the opposite of what previous research has found.

General health was not statistically significant.

This was contrary to prior studies; however, this may be attributed to the age of the participants in this study.

Prior research examined sexual dysfunction and its many different causes, including physical symptoms such as hormonal imbalances, pain caused by injury or anatomical problems, and certain conditions such as diabetes (Basson et al., 2001); psychological symptoms such as stress, marital discord, and previous sexual trauma; aging symptoms through changes in the vagina, such as stiffening and lack of lubrication; and certain medications, such as blood pressure and diabetes medications (Fourcroy, 2003). These are symptoms less likely to be found in a college-aged sample, and therefore did not yield the same results.

Another main area of concern was stress and its role in orgasm likelihood. This study found stress to be a significant predictor of typical orgasm experience, which replicates previous findings. Nonetheless, many of the studies that examined stress used participants of varying

age groups and demographics. For example, Morokoff and Gillilland (1993) used participants who were married, whereas this study primarily included single participants. Davis (2006) had participants of middle age to older. These participants also had young children or teenagers. The participants in the present study mostly did not have children. These differences alone may help to explain the discrepancies between the results of this study and prior studies.

The IPIP Scale, sex education items, and sex guilt items were not statistically significant predictors of orgasm in this study. While this study did not find sex guilt to be a significant predictor of typical orgasm experience or typical sexual experience at this time, the results trended toward a negative correlation, indicating that the more sex guilt one possessed the, less likely they were to achieve orgasm. Many of the studies that were reviewed that examined sex guilt used participants of various ages, as opposed to primarily college age. For example, Joffe and Franca-Koh (2001) used middle aged British men and women, and Wilson (1989) also used both men and women of young to middle age. This could explain the lack of significance in this study pertaining to sex.

From a group of general questions, how often an individual engaged in vaginal sex and their average rating of their sexual experiences significantly predicted typical orgasm experience, thus the more often you engage in vaginal sex and the more pleasurable the sexual experience, the more likely you are to experience orgasm. From the same group of general questions, how fearful the individual currently is of becoming pregnant and how acceptable they are of premarital sex of any kind also significantly predicted typical sexual experience at this time. individual's current fear of becoming pregnant can be related to Sperm Competition Theories, which suggest that female orgasm somehow helps to draw sperm up through the cervix and uterus, thus aiding fertilization and reproduction (Schaffer, 2005). If an individual is fearful of becoming pregnant they may subconsciously inhibit their own orgasm.

From a group of general demographic questions, participants' birth order, having twins among their siblings, and number of children they have had all significantly predicted typical sexual experience at this time. These data indicate that an individual who had a greater number of siblings would have greater orgasm likelihood, and the later-born they are among their

siblings would have greater orgasm likelihood than children born earlier. Birth order, twins among their siblings, and number of children they had did not significantly predict typical orgasm experience.

As in prior research, communication facilitated orgasm likelihood. Communication with partners significantly predicted typical orgasm likelihood and typical sexual experience at this time. There was a positive correlation between each of these variables and orgasm likelihood, as predicted. However, communication with close friends about sex was not significant in predicting either dependent variable and actually resulted in a nonsignificant negative correlation.

In this study, medications significantly predicted typical sexual experience at this time. However, it was a positive correlation. This may be explained by the demographics of the participants in this study. The mean age of the participants in this study was 20, and the majority did not indicate taking medication. Perhaps this non-intuitive finding is an artifact of age, with older women taking more medications, and older women having more orgasms. To test this, a Multiple Analysis of Variance (MANOVA) was conducted between medication and both dependent variables with age entered as a covariate. The

relationship between medication and orgasm became nonsignificant confirming that age played a significant role in this relationship.

An individual's overall satisfaction significantly predicted typical orgasm experience and typical sexual experience at this time. There was also a positive correlation between satisfaction and the two dependent variables. This can be explained because the more satisfaction an individual has with their sexual experiences, their partner, and themselves, the greater the likelihood for orgasm.

The two dependent variables, typical orgasm experience and typical sexual experience at this time were equally related to the 12 independent variables. However, only the independent variables "general questions", "communication with partner", "overall satisfaction", and "fear of becoming pregnant" were significantly related to both dependent variables. "Stress" was positively related to typical orgasm experience, and did not relate to typical sexual experience at this time. "General demographics" and "medications" were significantly related to typical sexual experience at this time and were not significantly related to typical orgasm experience (see Table III).

In an effort to identify which independent variable(s) accounted for the most variability in typical orgasm experience and typical sexual experience at this time, a backward regression was conducted. This regression included each of the independent variables that resulted statistically significant in the previous regressions.

When combined in a regression, stress, general sexual questions, general demographic questions, communication with partner, medications, overall satisfaction, and how fearful the individual currently is of becoming pregnant did not significantly predict either typical orgasm experience or typical sexual experience at this time. This may indicate that there are other, more significant factors, such as genetics or age, that have a greater impact on orgasm likelihood.

The overall picture that the results suggest is that orgasm likelihood is influenced more by social aspects than anything else. Variables like "overall satisfaction", "communication with partner", and "fear of becoming pregnant" significantly predicted the dependent variables, while general health and personality factors did not. The independent variable "birth order" may even indicate a social influence. This might come down to having older siblings with whom the individual is able to discuss

things. Thus, social influences appear to relate to orgasm more than anything else.

It had been argued in prior studies that the role of stress has a negative impact on orgasm likelihood and, therefore, a negative correlation. However, with a college-aged population stress appears to have a positive impact on orgasm likelihood. College-aged women may handle stress differently compared to older women, or may have different types of stressors. In any case, apparently stress is not as adverse and negative in a college-aged population.

Among this age group, typical orgasm experience and typical sexual experience at this time were not adversely related to factors such as health or stress. This study was able to replicate many of the findings from prior studies, and was able to offer some new information in the area of female sexual response. Many of the studies that were reviewed for this study focused on participants of varying ages, whereas the average age in this study was 20. Because this study only investigated undergraduate college students, future research in this area may want to look at females of all ages to obtain better generalizability in regards to the female population. A wider range of demographics may also be considered. For example, the

majority of participants in this study were single (105 at 91%) with no children (99 at 86%). Finally, this study may prove beneficial if administered over the world wide web, because it would provide greater global variety as opposed to practically all participants being from the south.

### REFERENCES

- Amaro, H., Raj, A., & Reed, E. (2001). Women's sexual health: The need for feminist analyses in public health in the decade of behavior. *Psychology of Women Quarterly*, 25, 324-334.
- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders, 4<sup>th</sup> Ed.

  Washington, DC: American Psychiatric Association.
- Basson, R., Berman, J., Burnett, A., Derogatis, L.,

  Ferguson, D., Fourcroy, J., et al. (2000). Report of
  the International Consensus Development Conference on
  Female Sexual Dysfunction: Definitions and
  classifications. *Journal of Urology*, 163, 888-893.
- Basson, R., Berman, J., Burnett, A., Derogatis, L.,

  Ferguson, D., Fourcroy, J., et al. (2001). Report of
  the International Consensus Development Conference on
  Female Sexual Dysfunction: Definitions and
  classifications. Journal of Sex and Marital Therapy,
  27, 83-94.
- Baumeister, R. F. (2000). Gender differences in erotic plasticity: The female sex drive as socially flexible and responsive. *Psychological Bulletin*, 126, 347-374.

- Baumeister, R. F., & Twenge, J. M. (2002). Cultural suppression of female sexuality. Review of General Psychology, 6(2), 166-203.
- Cordoso, S. H. (1997). Female Orgasm. Campinas, Brazil:

  State University of Campinas.
- Costa, P. T., & McCrae, R. R. (1992). NEO personality

  Inventory professional manual. Odessa, FL:

  Psychological Assessment Resources.
- Darling, C. A., Davidson, J. K., Sr., & Jennings, D. A.

  (1991). The female sexual response revisited:

  Understanding the multiorgasmic experience in women.

  Archives of Sexual Behavior, 20, 527-540.
- Davis, C. M., Yarber, W. L., Bauserman, R., Schreer, G., & Davis, S. L., (1998). *Handbook of Sexuality-Related Measures*. Thousand Oaks, CA: Sage Publications, Inc.
- Davis, N. (2006). Sex fact or fiction. Flare, 28, 58-60.
- Dawood, K., Kirk, K. M., Bailey, M., Andrews, P. W., &

  Martin, N. G. (2005). Genetic and environmental

  influences on the frequency of orgasm in women. Twin

  Research and Human Genetics, 8, 27-33.
- Dunn, K. M., Cherkas, L. F., & Spector, T. D. (2005).

  Genetic influences on variation in female orgasmic function: A twin study. *Biology Letters*, 1, 260-264.

- Fourcroy, J. L. (2003). Female sexual dysfunction:

  Potential for pharmacotherapy. *Drugs*, 63, 1445-1457.
- Grauerholz, E., & Serpe, R. T. (1985). Initiation and response: The dynamics of sexual interaction. Sex Roles, 12, 1041-1059.
- Gunderson, M. P., & McCary, J. L. (1980). Effects of sex education on sex information and sexual guilt, attitudes, and behaviors. Family Relations, 29, 375-379.
- Haavio-Mannila, E., & Kontula, O. (1997). Correlates of increased sexual satisfaction. *Archives of Sexual Behavior*, 26, 399-419.
- Haning, R. V. (2005). Intimacy, orgasm likelihood of both partners, conflict, and partner response predict sexual satisfaction in heterosexual male and female respondents. Thesis submitted to the Graduate College of Marshall University.
- Hurlbert, D. F. (1991). The role of assertiveness in women's sexuality: A comparative study between sexually assertive and sexually nonassertive women.

  Journal of Sex and Marital Therapy, 17, 183-190.
- Hurlbert, D. F., Apt, C., & Rabehl, S. M. (1993). Key

  variables to understanding women's sexual

  satisfaction: An examination of women in nondistressed

- marriages. Journal of Sex and Marital Therapy, 19, 154-165.
- Hyde, J. S., & DeLamater, J. D. (2006). *Understanding human* sexuality (9<sup>th</sup> Ed.). Columbus, OH: McGraw-Hill.
- Joffe, H., & Franca-Koh, A. C. (2001). Parental non-verbal sexual communication: Its relationship to sexual behavior and sexual guilt. *Journal of Health Psychology*, 6, 17-30.
- Kelly, M. P., Strassberg, D. S., & Kircher, J. R. (1990).

  Attitudinal and experiential correlates of anorgasmia.

  Archives of Sexual Behavior, 19, 165-177.
- Kelly, M. P., Strassberg, D. S., & Turner, C. M. (2001).
  Behavioral assessment of couples' communication in
  female orgasmic disorder. Journal of Sex and Marital
  Therapy, 32, 81-95.
- Kiefer, A. K., Sanchez, D. T., Kalinka, C. J., & Ybarra, O. (2006). How women's nonconscious association of sex with submission relates to their subjective sexual arousability and ability to reach orgasm. Sex Roles, 55, 83-94.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948).

  Sexual behavior in the human male. Philadelphia, PA:

  W. B. Saunders.

- Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). Sexual Behavior in the human female.
  Philadelphia, PA: W. B. Saunders.
- Laumann, E., Gagnon, J. H., Michael, R. T., and Michaels, S. (1994). The social organization of sexuality:

  Sexual practices in the United States. Chicago:

  University of Chicago Press.
- Laumann, E. O., Paik, A. and Rosen, R. C. (1999): Sexual dysfunction in the United States: Prevalence and predictors. Journal of the American Medical Association, 281, 537-544.
- LeVay, S., & Valente, S. M. (2003). Human sexuality, pp. 485. Sunderland, MA: Sinauer Associates, Inc.
- Lloyd, E. A. (2005). The case of the female orgasm: Bias in the Science of Evolution. Cambridge, MA: Harvard University Press.
- Lykins, A. D., Janssen, E., & Graham, C. A. (2006). The relationship between negative mood and sexuality in heterosexual college women and men. *Journal of Sex Research*, 43, 136-143.
- Masters, W. H., Johnson, V. E., & Kolodny, R. C. (1985).

  Masters and Johnson on sex and human loving (Rev. ed.). Boston, MA: Little Brown & Company.

- Matthews, G., & Deary, I. J. (1998). Personality traits.

  Cambridge, UK: Cambridge University Press.
- Morokoff, P. J., & Gillilland, R. (1993). Stress, sexual functioning, and marital satisfaction. *Journal of Sex Research*, 30, 43-53.
- Mosher, D. L. (1998). Revised Mosher guilt inventory. In C.

  M. Davis, W. L. Yarber, R. Bauserman, G. Schreer, & S.

  L. Davis (Eds.), Handbook of sexuality-related

  Measures. Thousand Oaks, CA: Sage Publications, Inc.
- Mosher, D. L., & O'Grady, K. E. (1979). Sex guilt, trait anxiety, and female's subjective sexual arousal to erotica. *Journal of Motivation and Emotion*, 3, 235-249.
- Sanchez, D. T., Crocker, J., & Boike, K. R. (2005). Doing gender in the bedroom: Investing in gender norms and the sexual experience. *Personality and Social Psychology Bulletin*, 31, 1445-1455.
- Sanchez, D. T., Kiefer, A. K., & Ybarra, O. (2006). Sexual submissiveness in women: Costs for sexual autonomy and arousal. *Personality and Social Psychology Bulletin*, 32, 512-524.
- Schaffer, A. (2005, May 26). The study of O: The female orgasm as evolution's happy accident. Slate Magazine.

  Retrieved May 05, 2007, from http://www.slate.com

- Spector, I. P, & Carey, M. P. (1990). Incidence and prevalence of sexual dysfunctions: A critical review.

  Archives of Sexual Behavior, 19, 389-408.
- Stress. (2003). Retrieved November 18, 2007, from adam.about.com/reports/Stress.htm and www.healthandage.com/html/well connected/pdf/doc31.pdf
- Symons, D. (1979). The evolution of human sexuality. New York: Oxford University Press, Inc.
- Telvin, H. F., & Leiblum, S. R. (1983). Sex role

  stereotypes and women's sexual dysfunction. In V.

  Franks & E. D. Rothblum (Eds.), The stereotyping of

  women: Its effects on mental health, pp. 129-150.

  Berlin Heidelberg New York: Springer.
- Tiefer, L. (2002). Beyond dysfunction: A new view of women's sexual problems. *Journal of Sex and Marital Therapy*, 28, 225-232.
- Wanlass, R. L., Kilmann, P. R., Bella, B. S., & Tarnowski, K. J. (1983). Effects of sex education on sexual guilt, anxiety, and attitudes: A comparison of instruction formats. Archives of Sexual Behavior, 12, 487-502.
- Wilson, G. (1989) The Great Sex Divide: A study of Male-Female Differences. London: Peter Owen.

World Health Organization (1992). International

statistical classification of diseases and related

health problems. Geneva: World Health Organization.

Wright, K. (1999). Why are you so smart? Discover, 20, 40.

#### APPENDIX

#### FEMALE SEXUAL RESPONSE OUESTIONNAIRE

Thank you for your participation in this study conducted by the Experimental Psychology Department at Georgia Southern University. This study is designed to examine everyday factors that influence a woman's sexual response. Throughout this questionnaire you will be asked very explicit, detailed, and intimate questions regarding your sexuality and sexual activities.

## <u>Confidentiality</u>

Your participation will remain confidential. The only reason that the experimenters need to know your name is to ensure you receive extra credit in your class for your participation.

## General Information

You are asked to complete the questionnaire that follows. Please answer all questions honestly and as completely as possible. There are eight parts to the questionnaire. Part I focuses on demographics and background information, Part II focuses on health, medication, and physical activity, Part III focuses on sexual partners and orgasm, Part IV focuses on sexual satisfaction, desire, and arousal, Part V focuses on masturbation and vibrators or other sexual objects, and Part VI focuses on general questions. Section VII contains a standard personality questionnaire (the International Personality Item Pool (IPIP): A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences (http:ipip.ori.org/, which measures the five basic factors that comprise personality) and Section VIII consists of sex-quilt items from Dr. Donald L. Mosher's (1998) Revised Mosher Guilt Inventory.

It takes approximately 70 minutes to complete the questionnaire.

#### Benefits

Many Introductory Psychology Professors require their students to participate in experiments as either part of the class requirement or as an avenue for the student to gain extra credit in their class. Your participation in this experiment can assist you in meeting such requirements and/or assist you in gaining extra credit points for your class. Furthermore, you will assist in new developments in the research of female orgasm and enable researchers to better understand contributing factors that predict variation in female sexual response.

#### Contact

If you have any questions at any time about this study or the procedures, you may contact Dr. William D. McIntosh or Tynisa L. Jones in the Carroll Building on the campus of Georgia Southern University.

If you feel you have not been treated in accordance with the outlined information, you may contact Dr. John Murray, Chair of the Psychology Department, in the Carroll Building on the campus of Georgia Southern University.

## PARTICIPATION

Your participation in this study is voluntary; you may refuse to answer any particular questions or refuse to participate altogether without penalty. If you decide to participate, you may withdraw from the study at any time without penalty.

Thank you once again for your participation in this study.

## PART I: DEMOGRAPHICS AND BACKGROUND INFORMATION

1. What is your current age?

2.	Where did you grow up? West East North South Midwest
3.	Where do you live when you are not in school? West East North South Midwest

4. What is your current student status? Full-timePart-timeOther:	
5. What is your Religious preference?	
6. What types of schools did you attend (check all that apply)? PublicPrivateHome-schooled	
7. How many siblings do you have? (If you answer zero, skip questions 8-13).	
8. What number child are you?	
9. How many older brothers do you have?	
10. How many younger brothers do you have?	
11. How many older sisters do you have?	
12. How many younger sisters do you have?	
13. Are there twins among your siblings? No	
14. What parents were in your household while growing up Mother onlyBoth Other guardian	,?

15. What is your current marital status? (If you answer anything other than Married skip to question #18). SingleDivorcedMarriedSeparatedWidowed
16. If currently married, how long have you been legally married?
Years Months
17. If married, what is your spouse's job?
18. What is your racial background?CaucasianAfrican AmericanHispanicAsianNative AmericanOther:
19. What is your political affiliation? Democrat Republican Other
20. How conservative/liberal are you?
1 2 3 4 5 6 7  Very Very  Conservative Liberal
21. How many children do you have?
22. What is your height?
Feet Inches

	What	15.	your	weight?	
		Pou	nds		
24.	What	is <u>'</u>	your	hair color?	
25.	What	is	your	eye color?	
26.	What _Hetero _Bi-se: _Homose _Not si	osexi xual exua!	ual	sexual orientation?	
PAR'	r II:	HEA	LTH,	MEDICATION, AND PHYSICAL ACTIVITY	
1.	In gen _Excel: _Very ( _Good _Fair	lent	l, wh	at would you say your health is?	
	Poor				
	_			1 to 7, my level of stress is (1 being gh):	
	- On a :				
low 1 Low 3.	On a sand 7	bein 3	ng hi 4 visit	gh): 5 6 7	

	Age:
	Age:
	Age:
	Age:
	Age:
None None  List anything you ar	ons did you take for these problems ce allergic to:
	_
	_
7. Please list any psyd been treated for by a do	chological difficulties you have octor or psychologist.
	Age:
	Age:
	Age:

			chror ysical	_	_	-		_	experi	Lence	in
1 Very	2 Li		4	5	6	7 A	Great	Deal			
9.	Are Yes No	you	HIV po	ositiv	e?						
10.	Do Ye: No	_	have o	genita	l her	pes?					
	hid	_	have a						_		s that
12. prob	lem: _No	s?	expla	_	suffe.	ring	from	any m	ental	healt	ih
	126	a. W Nor	That me	edicat	ions	do y	ou tak	e for	these	∍ prok	olems?
13. prob	lem: No	s?	curre	_	suffe	ring	from	any p	hysica	al hea	alth
	138	a. Wh	iat med	dicati	ons d	o yo	u take	for	these	probl	Lems?

14. Are you currently taking any oral contraceptives or other hormonal medications?  No
If yes, what
15. At what age did you have your first menstrual period?
16. How would you describe your menstrual cycle?Light flowModerate flowHeavy flow
17. How many days does your menstrual cycle generally last?
Days
18. On a scale of 1 to 7, to what extent do you experience changes in your mood around the time of your period, such as feeling irritable, depressed, or having mood swings?
1 2 3 4 5 6 7 Not at all A great deal
19. How many days per week do you typically exercise?  Days
20. If you do exercise on a regular basis, list the most common ways that you exercise.
21. About how many drinks (mixed drinks, glasses of beer or wine, etc.) do you have per week?
22. Have you ever engaged in sexual activity of any kind? (If no, go to Part VI but skip questions #3, #11, #12, and #13 and resume with section IV).  Yes No

PART III / SECTION I: SEXUAL PARTNERS AND ORGASM  1. Which of the following most accurately describes your typical sexual experience at this time?
I never experience orgasm during sex I almost always experience orgasm during sex I experience orgasm during sex, but not consistently
<pre>2. Which of the following most accurately describes your typical orgasm experience? I only experience single orgasm during sex I only experience multiple orgasm during sex I have experienced both single and multiple orgasm during sex I do not have orgasms during sex</pre>
3. How soon after first meeting your last five sexual partners (or all partners if you had less than five) did you engage in sexual activity?
Partner 1:
Days Weeks Months Years
Partner 2:  Days Weeks Months Years
Partner 3:  Days  Weeks  Months  Years
Partner 4:  Days Weeks Months Years
Partner 5:  Days Weeks Months Years

4. On average, how much do you talk with your current (or most recent) partner about what pleases you and gives you sexual enjoyment?
1 2 3 4 5 6 7 Not at all A great deal
5. On average, how much did you talk with previous partners about what pleases you and gives you sexual enjoyment?
1 2 3 4 5 6 7 Not at all A great deal
6. At what age did you have your first orgasm during sex with a partner? (If you have never had an orgasm, check "does not apply" in both spaces below and skip to question #21 but skip questions #23, #26, also skip Section II: Multiple Orgasm).
Multiple orgasms: Years Does not apply
Single orgasm: Years Does not apply
7. How much would you say your emotional/psychological health at the time of sex influences your tendency to have orgasms?
1 2 3 4 5 6 7 Not at all A great deal
8. Does alcohol influence the frequency with which you tend to have orgasms with a partner?
Alcohol decreases the likelihood I'll have an orgasm during sex  Alcohol has no effect on the likelihood I'll have an orgasm during sex  Alcohol increases the likelihood I'll have an orgasm during sex
9. On average, do you feel that alcohol is necessary for you to achieve single orgasm?
1 2 3 4 5 6 7 Not at all A great deal

with your cur	rent or mos	st rec	ent sexual partner?							
1 2 3 Not at all	4 5	6	7 A great deal							
11. On average with sexual parts	=	ten do	you experience single orgasm							
1 2 3 Not at all	4 5	6	7 A great deal							
12. How often do you experience single orgasm through vaginal stimulation (with no direct clitoral stimulation) with your current sexual partner?										
1 2 3 Not at all	4 5	6	7 A great deal							
through vagina	al stimula	tion (	d you experience single orgasm with no direct clitoral exual partners?							
1 2 3 Not at all	4 5	6	7 A great deal							
	ulation (w	ith no	ence single orgasm through o direct vaginal stimulation) ener?							
1 2 3 Not at all	4 5	6	7 A great deal							
	ulation (w:	ith no	ence single orgasm through direct vicinal stimulation)							
1 2 3 Not at all	4 5	6	7 A great deal							
16. At what a		_	erience single orgasm the most?							

10. On average, how often do you experience single orgasm

following situation:	s:									
During masturbation		1 at a		3	4	5		ery		
							irequ	ently		
Sex with a male:	1 ot at		3	4	5	6	7 Very frequ	uently		
Oral stim. w/ male:	1 ot at		3	4	5	6	7 Very frequ	uently		
Vaginal stim. w/ ma		1 at al		3	4	5	6 frequ	7 Very uently		
18. On average, how long does it take for you to become aroused to the point that orgasm occurs while engaged in sex with a partner?										
Minutes										
IF YOU ARE NOT BISE CONTINUE WITH QUEST: OF #20.										
19. How frequently following situations	_	ou ex	perie	nce s	ingle	orga	asm ir	the		
Sex with a female:	ot at	1 all	2	3	4	5	6	7 Very		
							irequ	ently		
Oral stim. w/ female	e: ot at		2	3	4	5	6	7 Very		
							frequ	ently		
Vaginal stim. w/fema	ale: ot at		2	3	4	5	6	7 Very		
							frequ	ently		
20. How frequently following sexual pos	_		ve si	ngle	orgası	m in	the			

17. How frequently do you experience single orgasm in the

Man-on-top:	1 Not at	2 all	3	4	5	6	7 Very free	y quently	
Woman-on-top		2 at al		4	5	6	7 Very	/ quently	
Side-by-side		2 at al:		4	5	6	7 Very free	y quently	
Rear entry		al): at al		2	3	4	5	6 7 Very	
Rear entry		1 at al		3	4	5	6	7 Very frequently	Ӱ
21. How mar all forms of and skip to	sexua	l acti	vity)			_			
22. With ho experienced	_			_			_	cse?	
23. With he experienced	_		sexua.	l par	tners	have	you		
24. How man (Include all in the box a	forms	of se	xual	activ	ity)	_			
25. With he vaginal stim	_		e sexi	ual pa	artne	rs ha <sup>.</sup>	ve yo	ou explored	t

26. With how many female sexual partners have you experienced orgasm?
27. How much older or younger than you have your last three sexual partners been? (Write in the number of years, then check "older" or "younger") ayearsolder oryounger byearsolder oryounger cyearsolder oryounger
PART III / SECTION II: MULTIPLE ORGASM  28. At what age did you have your first have multiple orgasms during sex with a partner? (If you have never had multiple orgasms during at least one sexual encounter, check "does not apply" and skip to Section IV).
Multiple orgasms:  Years  Does not apply
29. Does alcohol influence the frequency with which you tend to have multiple orgasms with a partner?
Alcohol decreases the likelihood I'll have multiple orgasms during sex
Alcohol has no effect on the likelihood I'll have multiple orgasms during sex
Alcohol increases the likelihood I'll have multiple orgasms during sex
30. On average, do you feel that alcohol is necessary for you to achieve multiple orgasms?
1 2 3 4 5 6 7 Not at all Very much
31. On average, how often do you experience multiple orgasm with your current or most recent sexual partner?
1 2 3 4 5 6 7 Not at all A great deal

32. On orgasm w	_				_	_	ience	mult	iple	
1 2 Not at a		4	5	6	7 A gre	eat d	eal			
33. How vaginal with you	interc	ourse	(with	n no c	direct					
1 2 Not at a		4	5	6	7 A gre	eat d	eal			
34. How vaginal with pre	interc	ourse	(with	n no c	direct		_	_		_
1 2 Not at a		4	5	6	7 A gre	eat d	eal			
35. How clitoral		_	_			_		_		_
1 2 Not at a 36. How clitoral	often	did y	you ex	kperie	A greence r	nulti	ple o	_		cough
1 2 Not at a		4	5	6	7 A gre	eat d	eal			
37. At often?	what a	ge dio	d you	expe	rience	e mul	tiple	orga	ısms r	nost
Y	ears		Doe	es not	app!	Lу				
38. How the foll	_	_	_	_	perie	nce m	ultip	le or	gasm	in
During m	nasturba	ation:		1 at all		3	4	5	6 frequ	7 Very wently
Sex with	ı a male		1 ot at		3	4	5	6	7 Very frequ	ıently

Oral stim. w/	male: 1 2 Not at a		3	4	5	6	7 Very frequ	ently
Vaginal stim.	w/ male: 1 Not at a		2	3	4	5	6 frequ	7 Very ently
39. How frequence the following (Skip this que with a woman)	situations:							
Sex with a fem	nale: 1 2 Not at a		3	4	5	6	7 Very frequ	ently
Oral stim. w/	female: 1 2 Not at a		3	4	5	6	7 Very frequ	ently
Vaginal stim.	w/female: 1		2	3	4	5	6 frequ	7 Very ently
40. How freque following sexu			re mul	tiple	e orga	asm :	_	_
Man-on-top:	1 2 S		4	5	6	7 Verg	y quentl	У
Woman-on-top:	1 2 Not at all		4	5	6	7 Verg	y quentl	У
Side-by-side:	1 2 Not at all		4	5	6	7 Very free	y quentl	У
Rear entry (no		1 ot at		3	4	5		7 Very ently
Rear entry (an	al): 1 2 Not at a		3	4	5	6	7 Very frequ	ently

## PART IV: SEXUAL SATISFACTION, DESIRE, AND AROUSAL

Answer each item as carefully and as accurately as you can by placing a number beside each one as follows. Index of Sexual Satisfaction (ISS).

	1 = None of the time 2 = Very rarely 3 = A little of the time 4 = Some of the time 5 = A good part of the time 6 = Most of the time 7 = All of the time
1.	I feel that my partner enjoys our sex life.
2.	Our sex life is very exciting.
3.	Sex is fun for my partner and me.
4.	Sex with my partner has become a chore for me.
5.	I feel that our sex is dirty and disgusting.
6.	Our sex life is monotonous.
7. comp	When we have sex it is too rushed and hurriedly leted.
8.	I feel that my sex life is lacking in quality.
9.	My partner is sexually very exciting.
10. or u	I enjoy the sex techniques that my partner likes ses.
11.	I feel that my partner wants to much sex from me
12.	I think that our sex is wonderful.
13.	My partner dwells on sex too much.
14.	I try to avoid sexual contact with my partner.
15. sex.	My partner is too rough or brutal when we have
16.	My partner is a wonderful sex mate.

17I feel that sex is a normal function of our relationship.
18My partner does not want sex when I do.
19I feel that our sex life really adds a lot to our relationship.
20My partner seems to avoid sexual contact with me.
21It is easy for me to get sexually excited by my partner.
22I feel that my partner is sexually pleased with me.
23My partner is very sensitive to m sexual needs and desires.
24My partner does not satisfy me sexually.
25I feel that my sex life is boring.
26. How satisfied are you in the following areas:
All aspects of your sexuality
1 2 3 4 5 6 7 Not at all A great deal
Your knowledge of your body
1 2 3 4 5 6 7 Not at all A great deal
Your own knowledge of your sexuality
1 2 3 4 5 6 7 Not at all A great deal
Your body weight 1 2 3 4 5 6 7 Not at all A great deal

27. How muc desire?	ch does yc	ur body we	eight affect your level of
1 2 3 Not at all	4 5		great deal
28. How sat body?	isfied ar	e you with	the attractiveness of your
1 2 3 Not at all	4 5		great deal
29. How sat		_	the sexual pleasure your on?
1 2 3 Not at all	4 5		great deal
30. How sat		=	your ability to experience
1 2 3 Not at all	4 5	6 7 P	great deal
			the sexual pleasure your male partner?
1 2 3 Not at all	4 5		great deal
		-	the sexual pleasure your female partner?
1 2 3 Not at all	4 5		great deal
33. How sat		-	the sexual pleasure your
1 2 3 Not at all	4 5		great deal
			the sexual pleasure your lation of your clitoris?

bod	y prov	ides	durin	g pe	nile	e/va	agi	nal	inte	erco	urse	?		
1 Not	2 at al	3	4	5	6		7 A	grea	at de	eal				
	How ually			are	you	wit	th	your	ab:	ilit	y to	) k	ecome	
	2 at al		4	5	6		7 A	grea	at de	eal				
	How asm du				_		h	your	ab:	ilit	y to	) ∈	experie	ence
	2 at al		4	5	6		7 A	grea	at de	eal				
	How eral?	well	infor	med	do 3	you	fe	eel y	you a	are	abou	ıt	sex in	n
1 Not	2 at al	3	4	5	6		7 Ve	ery w	vell	Inf	orme	ed		
39.	How	often	do y	ou e	хрез	rier	nce	e the	e fol	llow	ing:			
Sex	ual dr	eams:		2 at a			4	Ę	5	6	7 A	gr	reat de	eal
Sex	ual fa	ntasi.	es:		2 at			4	1	5	6		7 great	deal
Sex.	ual ar Watch	ousal ing m		: 1	2 t at			4	1	5	6		7 great	deal
	Readi	ng a	book:		2 at			4	l	5			7 great	deal
	Looki	ng at	phot	os:	1		2	3	3	4	5		6	7
					Not	at	al	.1				А	great	deal
	At wo	1	2 at al		4		5	6	5	7 A g	reat	c d	leal	

35. How satisfied are you with the sexual pleasure your

Traveling in car/bus/plane: 1 2 3 4 5 6 7 Not at all A great deal In public: 1 2 3 4 5 6 7 Not at all A great deal 40. How often do you fantasize about the following: Sex in an exotic place: 1 2 3 4 5 6 7 Not at all Very often Sex w/two or more people at once: 2 3 4 5 6 7 Not at all Very often Sex with your partner: 1 2 3 4 Not at all Very often Sex with someone else you know: 1 2 3 4 5 6 Not at all Very often Sex with a stranger: 1 2 3 4 5 6 7 Not at all Very often Forced sex: 1 2 3 4 5 6 Very often Not at all Sex with a woman: 1 2 3 4 5 6 Not at all Very often

PART V: MASTURBATION AND VIBRATORS OR OTHER SEXUAL OBJECTS (If you have never experienced orgasm skip questions #3, #4, #5, #6, #8, and #9)

1. At what age did you begin masturbating? (If you have never masturbated, put a 0 in the box and skip to question #7).

2. How often do you masturbate? About daily
About daily About 2-3 times a week
About once a week About twice a month
About once a month
On rare occasions
Never
3. Does alcohol influence the frequency with which you tend to have single orgasm while masturbating?
Alcohol decreases the likelihood I'll have an orgasm during sex
Alcohol has no effect on the likelihood I'll have an orgasm during sex
Alcohol increases the likelihood I'll have an orgasm during sex
4. Does alcohol influence the frequency with which you tend to have multiple orgasms while masturbating?
Alcohol decreases the likelihood I'll have multiple orgasms during sex
Alcohol has no effect on the likelihood I'll have multiple orgasms during sex
Alcohol increases the likelihood I'll have multiple orgasms during sex
Typically, I don't have multiple orgasms during sex
5. Do you masturbate so much that you no longer achieve orgasm from it? SometimesAlwaysNo
Does not apply
6. On average, how long does it take you to become aroused to the point that orgasm occurs while masturbating?
Minutes

7. Do you us never, skip tSometimesAlwaysNever	o the next s			objec	ts? (:	Ιf
8. In using achieve orgas  Sometimes Always Never	m?	r other	sexual c	bjects	, do yo	ou
9. Do you us that you no lSometimesAlwaysNo	onger achiev	re orgas		_	ts so (	often
PART VI: GEN	ERAL QUESTIC	ONS				
1. Using the believe it is						
1 2 3 Not at all	4 5		ry			
2. Using the currently bec			ate how	fearfu	l you a	are
1 2 3 Not at all	4 5		ry			
3. How often sexual action	<del>-</del>	ngaged i	n the fo	llowin	g spec	ific
Oral sex:	1 2 at all	3 4	5		great	deal
Vaginal sex:	1 2 at all	3 4	5	6 7 A	great	deal
Anal sex:	1 2 at all	3 4	5	6 7 A	great	deal

4. Using the scale below, please indicate how much
discussion you have had with your mother (female primary
caregiver) about the following topics.
0 1 2 3 4
Not at all A great deal
Pregnancy
Fertilization
Intercourse
Menstruation
Sexually transmitted (venereal) disease
Birth control
Abortion
Prostitution
Homosexuality
5. Using the scale below, please indicate how much
discussion you have had with your father (male primary
caregiver) about the following topics.
0 1 2 3 4
Not at all A great deal
Pregnancy
Fertilization
Intercourse
Menstruation
Sexually transmitted (venereal) disease
Birth control
Abortion
Prostitution
Homosexuality
iomosexualicy
6. My mother (female primary caregiver) expected me to get
married before having sex.
••
Yes
No
Neutral
7. My father (male primary caregiver) expected me to get
married before having sex.
Yes
No
Neutral
8. At approximately what age did you see your first R-
rated movie?
14004 MOV10.
Age Never viewed an R-rated movie
Age Never viewed an R-rated movie

_	proximatel hy of any	-	age di	d you first vi	iew	
	Age		] Ne	ver viewed por	rnography	7
	pproximate in school	_	grade	did you first	t have se	X
	Grade	I	Never	had sex educat	tion in s	school
11. How	would you	rate yo	ur sex	ual experience	es on ave	erage?
1 2 Very unpl	3 4 easant	5 6		ry pleasant		
12. I in	itiate sex	with my	y part	ner:		
1 2 Not at al		5 6	7 Al	ways		
unpleasan	_	ing ver	y plea	f 1 to 6 (1 be sant), how end tercourse?		
1 2 Very unpl		5 6		ry pleasant		
14. How	many close	friend	s do y	ou have?		
15. How	many times	have yo	ou bee	n in love?		
	g the scale		, rate	how often you	ı talk to	your
1 2 Not at al	3 4 1	5 6		great deal		
PART VII:	IPIP					

For each of the following items, use the scale shown below to describe how accurately each statement reflects your typical behaviors, feelings, or attitudes. Describe

yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. Respond by circling the appropriate number for each item from the scale.

•		•	<b>♦</b>	<b>•</b>			•		
Very		Moderately	Neither		rately	Very			
Ina	ccurate	Inaccurate	Inaccurate nor	Acc	urate	AC	curate		
			Accurate						
1.	Am not	interested i	n abstract i	deas.					
			1	. 2	3	4	5		
2.	Am inte	erested in pe	ople. 1	. 2	3	4	5		
3.	Am qui	et around str	angers. 1	. 2	3	4	5		
4.	Get st	ressed out ea	sily. 1	. 2	3	4	5		
5.	Don't i	mind being th	e center of	attent	tion.				
			1	. 2	3	4	5		
6.	Get ch	ores done rig	ht away. 1	. 2	3	4	5		
7.	Have 1:	ittle to say.	1	. 2	3	4	5		
8.	Don't	talk a lot.	1	. 2	3	4	5		
9.	Am rela	axed most of	the time. 1	. 2	3	4	5		
10.	Make a	mess of thin	gs. 1	. 2	3	4	5		
11.	Change	my mood a lo	t. 1	. 2	3	4	5		
12.	Pay at	tention to de	tails. 1	. 2	3	4	5		
13.	Am ful:	l of ideas.	1	. 2	3	4	5		
14.	Start	conversations	. 1	. 2	3	4	5		
15.	Like o	rder.	1	. 2	3	4	5		
16.	Take t	ime out for c	thers. 1	. 2	3	4	5		
17.	Often	forget to put	things back	in th	neir pro	oper	place.		
			1	2	3	/1	5		

	1	2	3	4			5
	<b>→</b>	<u>−</u>	<b>*</b>	•			<b>♦</b>
Very Inaccurate		Moderately Inaccurate	Neither Inaccurate nor	Modera Accui	-		Very curate
			Accurate				
10							
18.	Have di	ifficulty und	erstanding a 1		ideas 3	4	5
19.	Tngul+	people.	_	_ 2		4	5
20.		soft heart.	_	_ 2		4	5
21.		the backgro	_	_ 2	_	4	5
22.	-	ny duties.		_ 2	3	4	5
23.		thers' emotic	ens. 1	_ 2	3	4	5
24.		interested i		ole's pr		S .	
			1	_	3	4	5
25.	Often f	feel blue.	1	_ 2	3	4	5
26.	Am easi	ily disturbed	l <b>.</b> 1	_ 2	3	4	5
27.	Use dif	fficult words	. 1	2	3	4	5
28.	Am exac	cting in my w	ork. 1	_ 2	3	4	5
29.	Have fi	requent mood	swings. 1	_ 2	3	4	5
30.	Get ir	ritated easil	y. 1	_ 2	3	4	5
31.	Talk to	o a lot of di	fferent peop	ole at p	arties	S .	
			1	_ 2	3	4	5
32.	Have a	rich vocabul	ary. 1	_ 2	3	4	5
33.	Spend t	time reflecti	ng on things	S .			
			1	2	3	4	5
34.	Am the	life of the	party. 1	_ 2	3	4	5
35.	Get ups	set easily.	1	_ 2	3	4	5
36.	Feel co	omfortable ar	ound people.				
			1	_ 2	3	4	5
37.	Sympath	nize with oth	ers' feeling	gs.			
			1	_ 2	3	4	5

1		2	3		4	4		5	
<b>.</b>		•	•		<b>•</b>		<b>•</b>		
Very		Moderately	•		Moderately		Very		
Inac	ccurate	Inaccurate		te	Accur	ate	Acc	curate	
			nor Accurate	_					
			ACCUIACE	=					
38.	Am not	really inter	ested in d	othe	ers.				
				1	2	3	4	5	
39.	Have a	vivid imagin	ation.	1	2	3	4	5	
40.	Have ex	xcellent idea	.S.	1	2	3	4	5	
41.	Am qui	ck to underst	and things	3.					
				1	2	3	4	5	
42.	Do not	have a good	imaginatio	on.					
				1	2	3	4	5	
43.	Feel la	ittle concern	for other	ſs.					
				1	2	3	4	5	
44.	Seldom	feel blue.		1	2	3	4	5	
45.	Worry a	about things.		1	2	3	4	5	
46.	Leave r	my belongings	around.	1	2	3	4	5	
47.	Follow	a schedule.		1	2	3	4	5	
48.	Don't	like to draw	attention	to	myself				
				1	2	3	4	5	
49.	Am alwa	ays prepared.		1	2	3	4	5	
50.	Make pe	eople feel at	ease.	1	2	3	4	5	

#### PART VIII: SGI

This inventory consists of 50 items arranged in pairs of responses written by college students in response to sentence completion stems such as "When I have sexual dreams..." You are to respond to each item as honestly as you can by rating your response on a 7-point scale from 0, which means not at all true of (for) me to 6, which means extremely true of (for) me. Ratings of 1 to 5 represent ratings of agreement-disagreement that are intermediate between the extreme anchors of not at all true and extremely true for you. The items are arranged in pairs of

two to permit you to compare the intensity of a trueness for you. This limited comparison is often useful since people frequently agree with only one item in a pair. In some instances, it may be the case that both items or neither item is true for you, but you will usually be able to distinguish between items in a pair by using different ratings from the 7-point range for each item.

Rate each of the 50 items from 0 to 6 as you keep in mind the value of comparing items within pairs. Circle your rating under each item. Please do not omit any items.

"Dirty" jokes in mixed company...

1. do not bother me.

0 1 2 3 4 5 6

Not at all true Extremely true of (for) me of (for) me

2. are something that make me very uncomfortable.

0 1 2 3 4 5 6

Not at all true Extremely true of (for) me of (for) me

Masturbation...

3. is wrong and will ruin you.

0 1 2 3 4 5 6

Not at all true Extremely true of (for) me of (for) me

4. helps one feel eased and relaxed.

0 1 2 3 4 5 6

Not at all true Extremely true of (for) me of (for) me

Sex relations before marriage...

5. should be permitted.

0 1 2 3 4 5 6

Not at all true Extremely true of (for) me of (for) me

6. are wrong and immoral.

0 1 2 3 4 5 6

Not at all true  $\mbox{Extremely true}$  of (for) me  $\mbox{of (for) me}$ 

```
Sex relations before marriage...
    7. ruin many a happy couple.
            1
                 2 3 4
    Not at all true
                                   Extremely true
    of (for) me
                                   of (for) me
    8. are good in my opinion.
               2 3 4
        0 1
                               5
                                   6
    Not at all true
                                   Extremely true
    of (for) me
                                   of (for) me
Unusual sex practices...
    9. might be interesting.
        0 1 2 3 4
                               5
                                   6
    Not at all true
                                   Extremely true
    of (for) me
                                   of (for) me
    10. don't interest me.
        0 1 2 3 4 5
                                   6
    Not at all true
                                   Extremely true
                                   of (for) me
    of (for) me
When I have sexual dreams...
    11. I sometimes wake up feeling excited.
        0 1 2 3 4 5 6
    Not at all true
                                   Extremely true
    of (for) me
                                   of (for) me
    12. I try to forget them.
        0 1 2 3 4
                               5
    Not at all true
                                   Extremely true
    of (for) me
                                   of (for) me
"Dirty" jokes in mixed company...
    13. are in bad taste.
        0 1 2 3 4
                            5
                                   6
    Not at all true
                                   Extremely true
    of (for) me
                                   of (for) me
    14. can be funny depending on the company.
        0 1 2 3 4 5
    Not at all true
                                   Extremely true
    of (for) me
                                   of (for) me
```

Petting... 15. I am sorry to say is becoming an accepted practice. 2 3 4 5 0 1 Not at all true Extremely true of (for) me of (for) me 16. is an expression of affection which is satisfying. 2 3 4 5 6 0 1 Not at all true Extremely true of (for) me of (for) me Unusual sex practices... 17. are not so unusual. 0 1 2 3 4 5 6 Not at all true Extremely true of (for) me of (for) me 18. don't interest me. 0 1 2 3 4 5 6 Not at all true Extremely true of (for) me of (for) me Sex... 19. is good and enjoyable. 0 1 2 3 4 5 6 Not at all true Extremely true of (for) me of (for) me 20. should be saved for wedlock and childbearing. 0 1 2 3 4 5 6 Not at all true Extremely true of (for) me of (for) me "Dirty jokes" in mixed company... 21. are coarse to say the least. 0 1 2 3 4 Not at all true Extremely true of (for) me of (for) me 22. are lots of fun. 0 1 2 3 4 5 6 Not at all true Extremely true of (for) me of (for) me

```
When I have sexual desires...
    23. I enjoy it like all healthy human beings.
                2 3 4 5
            1
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
         I fight them for I must have complete control of
    my body.
                  2
                     3 4
                               5
            1
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
Unusual sex practices...
    25. are unwise and lead only to trouble.
         0 1 2 3 4 5
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
    26. are all in how you look at it.
         0 1 2 3 4 5 6
    Not at all true
                                   Extremely true
    of (for) me
                                    of (for) me
Unusual sex practices...
    27. are OK as long as they're heterosexual.
         0 1 2 3 4 5
                                    6
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
    28. usually aren't pleasurable because you have
    preconceived feelings about their being wrong.
         0 1
                 2 3 4
                               5
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
Sex relations before marriage...
    29. in my opinion, should not be practiced.
            1 2 3 4
                               5
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
    30. are practiced too much to be wrong.
                 2 3 4 5
         0 1
    Not at all true
                                   Extremely true
                                    of (for) me
    of (for) me
```

```
As a child, sex play...
    31. is immature and ridiculous.
            1
                2 3 4 5
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
    32. was indulged in.
         0 1 2 3 4 5
                                    6
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
Unusual sex practices...
    33. are dangerous to one's health and mental
    condition.
         0 1
                  2 3 4
                               5
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
    34. are the business of those who carry them out and
    no one else's.
        0 1 2
                     3 4
                               5
                                    6
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
When I have sexual desires...
    35. I attempt to repress them.
        0 1 2 3 4 5
                                    6
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
    36. they are quite strong.
                 2 3 4
         0 1
                               5
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
Petting...
         is not a good practice until after marriage.
         0 1 2 3 4
                               5
                                    6
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
    38. is justified with love.
         0 1 2 3 4 5
                                    6
    Not at all true
                                    Extremely true
    of (for) me
                                    of (for) me
```

```
Sex relations before marriage...
    39. help people adjust.
            1 2 3 4 5
    Not at all true
                                  Extremely true
    of (for) me
                                  of (for) me
    40. should not be recommended.
        0 1 2 3 4 5
                                  6
    Not at all true
                                  Extremely true
                                  of (for) me
    of (for) me
Masturbation...
    41. is wrong and a sin.
                             5
        0 1 2 3 4
                                  6
    Not at all true
                                  Extremely true
    of (for) me
                                  of (for) me
    42. is a normal outlet for sexual desire.
        0 1 2 3 4 5
                                 6
    Not at all true
                                  Extremely true
    of (for) me
                                  of (for) me
Masturbation...
    43. is all right.
        0 1 2 3 4 5
                                 6
    Not at all true
                                  Extremely true
    of (for) me
                                  of (for) me
    44. is a form of self-destruction.
        0 1 2 3 4 5 6
    Not at all true
                                  Extremely true
    of (for) me
                                  of (for) me
Unusual sex practices...
    45. are awful and unthinkable.
        0 1 2 3 4 5
                                  6
    Not at all true
                                  Extremely true
    of (for) me
                                  of (for) me
    46. are all right if both partners agree.
        0 1 2 3 4 5
    Not at all true
                                  Extremely true
    of (for) me
                                  of (for) me
```

of (for) me

If I had sex relations, I would feel... 47. all right, I think. 0 1 2 3 4 5 Not at all true Extremely true of (for) me of (for) me 48. I was being used not loved. 0 1 2 3 4 5 6 Not at all true Extremely true of (for) me of (for) me Masturbation... 49. is all right. 0 1 2 3 4 5 6 Not at all true Extremely true of (for) me of (for) me 50. should not be practiced. 0 1 2 3 4 5 6 Not at all true Extremely true

of (for) me

Table 1

Typical Orgasm Experience

				Valid	Cumulative
	-	Frequency	Percent	Percent	Percent
Valid	1 = Do				
	not	25	21.7	24.5	24.5
	Orgasm				
	2 = Only				
	Single	33	28.7	32.4	56.9
	Orgasm				
	3 = Both				
	Single				
	and	44	38.3	43.1	100.0
	Multiple				
	Orgasms				
	Total	102	88.7	100.0	
Missing	System	13	11.3		
Total		115	100.0		

Table 2

Typical Sexual Experience at this Time

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1 =				
	Never	25	21.7	24.3	24.3
	Orgasm				
	2 =				
	Orgasm,				
	but not	48	41.7	46.6	70.9
	consist				
	ently				
	3 =				
	Always	30	26.1	29.1	100.0
	Orgasm				
	Total	103	89.6	100.0	
Missing	System	12	10.4		
Total		115	100.0		

Table 3

Summary of Statistically Significant Independent Variables

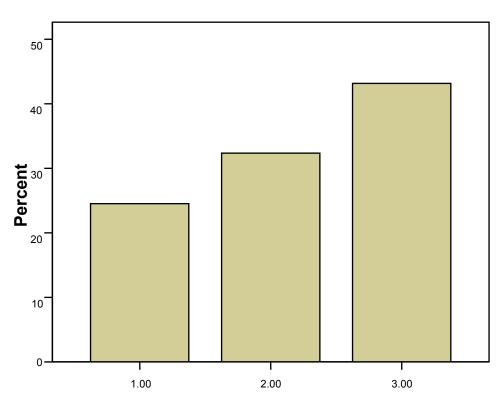
in Predicting Typical Orgasm Experience and Typical Sexual

Experience at this Time

	Significantly Predict DV				
Independent Variables	TOE	TSE			
General Sexual Questions	•	•			
Communication with Partner	•	•			
Overall Satisfaction	•	•			
Fear of Becoming Pregnant	•	•			
Stress	•				
Medications		•			
General Demographic Questions		•			

Figure 1. The percentage of each item answered in dependent variable typical orgasm experience

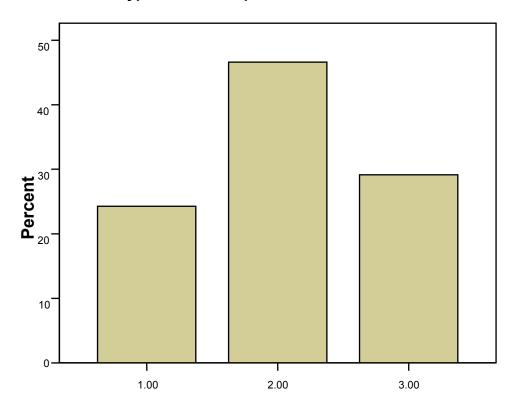
# TypicalOrgasmExperience



TypicalOrgasmExperience

Figure 2: The percentage of each item answered in dependent variable typical sexual experience at this time

## **TypicalSexualExperienceAtThisTime**



**TypicalSexualExperienceAtThisTime**