

**NUMBER OF SEXUAL PARTNERS PREDICTING SELF-ESTEEM,
SEXUAL SATISFACTION, AND SEXUAL SELF-EFFICACY**

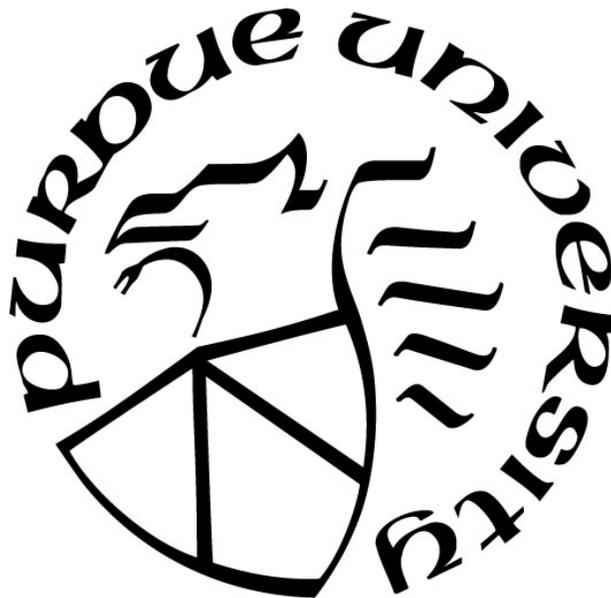
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A Thesis

Submitted to the Faculty of Purdue University

In Partial Fulfillment of the Requirements for the degree of

Master of Science



Department of Child Development and Family Studies

Hammond, Indiana

December 2019

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*This thesis is dedicated to my cohort:
Allie, Gabriella, Tina, Lexie, Briana, Sierra, and Kaitlyn.
Your love, support, and laughter mean so much to me.*

ACKNOWLEDGMENTS

I first think it is important for me to thank my committee members, for I would not be here without all of your help and support. Dave, my committee chair, sat with me for countless hours on numerous occasions and helped me make sense of all my results. He answered all of my crazy questions and calmed me down during all of my moments of panic, and I am forever grateful for all his guidance. As for my other committee members, Chris and Kyle, I am so lucky to have been able to work with two amazing sex therapists. Chris helped me put together my model after blurting out a bunch of different ideas, and Kyle generously took time out of his busy schedule as a clinician to help provide some extra insight into the sex therapy world.

I would also like to thank my best friend, Allie, for being right there along-side me during this crazy thesis process. We pushed each other every day, and we helped each other so much over the past few years. She was my partner in crime in every aspect, and we would not be graduating in December if we did not motivate each other along every step of the way. I am so excited to be graduating by her side and to show the world that you can both work hard and still have fun. Our moments of silent laughter are what got me through graduate school, and I am so blessed that graduate school gave me a lifelong best friend.

I am so lucky to have learned and laughed with such an amazing cohort. They inspired me every day to be the best therapist that I could be, and I am so happy I got to watch each and every one of them grow as a therapist. They are the strongest group of women that I have ever been a part of, and I am constantly amazed at the work they are capable of doing. They are the most phenomenal women, therapists, and friends that a girl could have. They made Purdue Northwest feel like home.

Lastly, I want to thank my parents and my partner, Mike, for being my biggest supporters throughout my time in graduate school. They listened to me vent about all things related to being a student and a clinician, and they encouraged me every day to get my work done. They constantly helped me see the bright side of a situation, and they never let me forget my dream of graduating in December, despite my many downfalls and moments of fear. They always saw what I was capable of, and I am so lucky to have such a strong support system. I love them more than I could ever say.

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ABSTRACT

Previous research has provided little insight into how the number of sexual partners affects people's overall perceptions of themselves and their lifestyles. The sexual double standard has been found to inhibit women from engaging in, or reporting, sexual activities with multiple partners, though previous research also has found that women are likely to have more frequent sexual encounters when involved in a committed romantic relationship. The present study predicted that gender, relationship status, sexual orientation, and sexual debut would have an impact on number of sexual partners, which would then affect self-esteem, sexual satisfaction, and sexual self-efficacy. Through an online survey, participants anonymously responded to statements related to these concepts in order to test relationships among demographics and the number of sexual partners as well as among the number of sexual partners and self-esteem, sexual satisfaction, and sexual self-efficacy. Overall, men were much more influenced by their relationship status and number of sexual partners than women, implying that the men are still affected by the sexual double standard through the praise they receive for having many sexual partners.

Key words: sexual partners, self-esteem, sexual satisfaction, sexual self-efficacy, hookup, sexual debut, sexual orientation, gender, relationship status

CHAPTER 1: INTRODUCTION

Statement of the Problem

There is no such thing as one “right” way to be sexual (McCarthy, 2015), but people continue to make judgments about other people’s sex life and sexuality. The number of sexual partners that a person engages with is something that is often not talked about with other partners or even friends due to fear of judgment (Anderson, Kunkel, & Dennis, 2010); this may contribute to self-judgment. Much of previous research has focused on what could contribute to a person’s number of sexual partners, such as hormone levels and gender stereotypes (Puts et al., 2015; Tate, 2011), but no research has analyzed how the number of sexual partners can be a predictor for how people feel in other areas of their life - such as self-esteem and sexual satisfaction, and more specifically how gender plays a role in these variables. There is a common belief that it is acceptable for men to engage in sexual activities with several different partners, but the same behavior becomes “slutty” when women engage in it (Marks & Fraley, 2005). This is called the ‘sexual double standard,’ and it is something that needs to be addressed in research and therapy, given the significant consequences it has, especially for women.

The sexual double standard may lead some women to have self-defeating thoughts or feel that they should not engage in sexual activity in order to be more “pure” or keep a “good girl” reputation (Young, Cardenas, Donnelly, & Kittleson, 2016). Men who have, or at least report, several sexual partners may think more positively about themselves in response to the celebrations that they receive from other male peers when reporting their number of partners (Reid, Elliot, & Webber, 2011). Having several partners can become a bragging point for a man, giving him a label as a “stud” or a “player,” which are both typically considered to be a compliment (Kreager, Staff, Gauthir, Lefkowitz, & Feinberg, 2016). The same effects may also

be occurring with women, but women are often negatively judged by other people instead of encouraged by others for the same behavior. Internalizing some of the messages that women receive about engaging in sexual activities with many partners, such as being slutty or dirty, or being told they have poor morals or do not respect their bodies, can potentially lead to women feeling insecure or guilty or having low self-esteem (Tolman, 2002). Internalizing these messages can also lead to less safe sexual practices, such that women feel restricted in their sexual communication and refrain from initiating condom use to avoid being perceived negatively (Young, Penhollow, & Bailey, 2010). Surprisingly, there have been mixed results within previous research as to whether or not the sexual double standard actually exists (Zaikman & Marks, 2014). It is possible that people only believe in the double standard due to confirmation bias, making people notice the cases that are consistent with what they know about sexual double standards and ignore or undervalue cases that contradict it (Marks & Fraley, 2005), but many studies have found evidence to support it (England & Bearak, 2014; Farvid, Braun, & Roney, 2016; Reid et al., 2011).

Similar to the idea that women should not have a large number of sexual partners, there is also a long-held belief that sexual activity is complete once the male achieves orgasm (Braun, Gavey, & McPhillips, 2003). Many women reported that orgasm is their desired end goal, but very few women report having an orgasm every time they have sex (Lavie-Ajayi & Joffe, 2009). Salisbury and Fisher (2014) found that some women reported orgasm as a “bonus” instead of the goal. Wade, Kremer, and Brown (2005) found that over 90% of men usually or always achieve orgasm during heterosexual intercourse, whereas up to 70% of women reported that they do not usually orgasm during intercourse. Men are typically able to achieve orgasm through vaginal penetration, but women are often unable to achieve orgasm from penetration alone (Wade et al.,

2005). It is often necessary for women to have manual or oral stimulation of the clitoris in order for orgasm to occur (Salisbury & Fisher, 2014). Lavie-Ajayi and Joffe (2009) reported that some women felt too shy or embarrassed to ask their partner for oral sex, so they rarely or never achieve orgasm and thus may not be sexually satisfied. It is possible that orgasm is not the main source of satisfaction for women in their sexual experiences, though an older study in Germany had found that 66% of women were disappointed and unsatisfied when they did not reach orgasm during their sexual encounter (Sigusch & Schmidt, 1971). Kleinplatz et al. (2009) explained that media and popular culture make people believe that orgasm, performance, spontaneity are necessary to have great sexual experiences, when orgasm was actually found to be a minor component of what people believed was important to have “optimal” sex. McCarthy (2015) also explains that expectations around orgasm are highly stereotyped and that it should not be the main focus of satisfaction.

Prioritizing the male orgasm in heterosexual intercourse has an evolutionary explanation such that a male orgasm generally must occur in order for reproduction to occur. Male ejaculation is necessary to release sperm, but female orgasm is not needed for sperm to fertilize an egg. Because there was so little focus on the female orgasm due to the perceived lack of necessity for reproduction, there was a long held belief that during sexual activity there was no reason for scholars of reproduction to pay attention to the clitoris (Tuana, 2004). This led to significant advancement in the understanding of male-based sexuality and sexual satisfaction, but consequently resulted in a significant lack of understanding for female sexuality – specifically orgasm. The mindset that female orgasm is not necessary continued over time, even when sex became a recreational activity and a means for pleasure instead of just for reproductive purposes (Tuana, 2004).

Although men and women receive opposing messages about what is acceptable sexual behavior, they may have more similarities than differences when it comes to how they feel about their sexual performance. When it comes to a person's sexual self-efficacy, there are many different things that affect how people view their sexual capabilities. There are also many things that affect a person's self-efficacy, but relationship status and the number of sexual partners have not been considered in depth previously – thus this research aims to fill the gap in the literature.

CHAPTER 2: REVIEW OF THE LITERATURE

Significance of the Problem

When considering how we treat others in regards to their sexual activity, it is important to remember that everyone is a sexual being. International organizations have worked towards improving sexual health knowledge and establishing sexual rights, and the World Association of Sexology (WAS) approved a Declaration of Sexual Rights that identifies 11 specific sexual rights, including the right to sexual pleasure, the right to sexual freedom, and the right to sexually associate freely (Ng, Borrás-Vills, Pérez-Conchillo, & Coleman, 2000). After going through puberty, both men and women of all sexual orientations have thoughts, feelings, and impulses in regards to their sexuality. Aumer (2014) defines a sexual person as someone who is romantic, arousable, and capable of creating sexual relationships. Men and women experience sexual desire, but society treats people differently based on their gender, sexual orientation, relationship status, and sexual debut. Consenting adults are allowed to make decisions on who they interact with and how often they interact with them, yet humans continue to make judgments based on how many sexual partners that a person has. Is there a number of sexual partners that is considered “healthy” or more normal? It is unclear if we will ever know, or can know, but the number of sexual partners that people have, or report, can play a role in how they perceive themselves and their lives. Though we may not know what is considered acceptable, we do know what is typical amongst heterosexual men and women in the United States. Rossi, Poulin, and Boislard (2017) gave participants a definition of sexual relation, including vaginal intercourse, and were asked how many people they had had as a sexual partner. They found that 31.6% of women and 26.1% of men between the ages of 21 and 24 reported between three and six lifetime sexual partners, and 11.7% of women and 18.1% of men with the same ages reported between seven and fourteen partners.

Hookup Culture

Society has changed in that people are getting married at a much later age and are much more likely to go on several dates or participate in the “hookup culture” (James-Kangal, Weitbrecht, Francis, & Whitton, 2018). The age at which people ideally want to get married is 25 (James-Kangal et al., 2018), but 30 is the average age at which people are actually getting married (Vespa, 2017). This hookup culture is based around the idea that young adults are engaging in more casual sex or nonromantic sexual behavior, also known as “hookups” (Furman & Shaffer, 2011). These hookups are typically occurring in uncommitted relationships, with the sexual partners being friends, acquaintances, or even strangers. It is important to note that these sexual activities do not necessarily involve sexual intercourse. About 60% of sexual hookups do not involve sexual intercourse, and most hookups are usually unplanned experiences (Paul, McManus, & Hayes, 2000). These hookups can consist of sexual activities ranging from a kiss with tongue to oral or anal sex.

Participating in the hookup culture is not something that is required, though many young adults would say that they have engaged in a hookup at least once in their life (Bradshaw, Kahn, & Saville, 2010). As humans we learn a lot through social observations, and humans tend to follow along with the messages and actions that they are hearing about and seeing in society. Social learning theory posits that humans learn through observation and experience, but we then participate in and maintain the learned behavior through social validation (Cook, 1976). Within hookup culture, people see others participate and then choose to participate themselves based on desire, which is then reinforced through knowing that they are engaging in an activity that others have participated in as well. There is then a “script” that people follow when participating in sexual activity, such that men and women believe that they are supposed to act or say things a certain way that corresponds with their gender (Murray, 2018). Simon and Gagnon (1986, 2003),

two sexual script theorists, explain that sexual scripts are socially constructed norms that dictate sexual behavior amongst men and women. Murray (2018) explains through Sexual Script Theory that men should always want and desire sex, should initiate the sexual activity, and should be highly skilled in their sexual behaviors. These scripts can then be viewed from a feminist lens, showing the power and privilege that men have in both casual and committed sexual relationships.

Many researchers studying the hookup culture have focused on college students for their samples, knowing that the hookup culture is most prominent amongst college-aged students and occurs most often in college environments. Berntson, Hoffman, and Luff (2014) also reports that hooking up is the most common sexual script on college campuses. Paul et al. (2000) found that 78% of college-aged males and females experienced a hookup at some point in their life. In a study done by Fielder and Carey (2010), 33% of the sample reported engaging in an oral sexual hookup during their first semester of college, and 28% of the sample reported engaging in a vaginal sexual hookup during the first semester.

These “hookups” are occurring quite frequently on college campuses, and students are finding hookups to be much easier and much less time-consuming than engaging in a romantic relationship (Bradshaw et al., 2010). Glenn and Marquardt (2001) suggest that college-students are not committing to relationships and prefer to participate in hookups as a way to show their desire to be carefree in college, specifically for young women who strive for independence and self-sufficiency. It has been suggested that the dominant sexual script of engaging in monogamous relationships is something to participate in at an older age, with college-aged students and emerging adults having a stronger desire of having multiple relationships compared to one long-term relationship (Regnerus & Uecker, 2011).

Gender and Number of Sexual Partners

The number of sexual partners that a person has had is something that some people may be afraid to admit or discuss due to sex and one's sex life being deemed as a private experience (LaFrance, Stelzl, & Bullock, 2017). Due to differences in how society views men's and women's sexuality, there is then a difference in how people view the number of sexual partners that a woman has versus the number of sexual partners that a man has (Kreager et al., 2016). This is considered the sexual double standard, because men are socially rewarded for a higher number of partners whereas women are socially degraded for the same number (Marks & Fraley, 2005). There is a "sexual script" that males engaging in sexual activities are acting upon their innate sex drive for the purpose of sex and sex only (rather than romance) with multiple sexual partners, whereas females are expected to engage in long-term relationships and value monogamy and commitment (Kreager et al., 2016). As previously mentioned, there are mixed results as to whether or not people actually support or have beliefs that correspond with the sexual double standard, but people still believe that *other* people have this belief (Marks & Fraley, 2005). Further, there is still a fear by women that they will be disrespected if they have casual sex or have a lot of sexual partners, and women are appearing to under-report their own sexual activity to avoid a negative stigma (England & Bearak, 2014). It has even been found that women are talking negatively about other women despite their criticism that the sexual double standard should not exist (Farvid et al., 2016).

Ostovich and Sabini (2004) found that men typically report a higher sex drive than women, leading to men having more lifetime sexual partners than women. They also report that people who identify as virgins are more likely to have a lower sex drive. It is possible that women are not reporting a high sex drive due to the internalization of the sexual double standard. Though one would believe that there is a correspondence between the number of sexual partners and the frequency of sexual activity, there is actually a difference between the two. It has been found that

men may have more (or at least over-report) sexual partners, whereas women are engaging in fewer (or under-reporting) sexual activities (Amos & McCabe, 2017).

A major tenet in Feminist Theory is that gender is a contextual factor that cannot be ignored or controlled (Allen, 2016). Gender plays a major role in many different aspects of people's lives, and it has an effect on or is affected by many things. Especially during sexual interactions, gender plays a role in how each partner acts. Feminist theorists recognize the importance that power and privilege play in relationships (Allen, 2016), making them important parts of what may be happening during sexual experiences, typically heterosexual intercourse. Women have learned through observation and experience that having many sexual partners could give them a "bad reputation" whereas men have learned that they will be praised for doing so. Following the sexual script, men will be the ones pursuing the sexual encounters or relationships whereas women are supposed to wait until there is an emotional connection before engaging in sexual activity, permitting men to have more partners than women and shaming women for having sex without an emotional connection (Dworkin & O'Sullivan, 2005).

Sexual Orientation and Number of Sexual Partners

Sexual orientation may play a role in the number of sexual partners that people have throughout their lifetime, but a few different variables create mixed results. It is important to first note that sexual minorities may have a different definition of what "sex" is compared to heterosexual individuals, which affects the number of partners that individuals are reporting (Hill, Rahman, Bright, & Sanders, 2010). According to Hill et al. (2010), gay men are more likely to consider oral-genital stimulation, manual-anal stimulation, oral-anal stimulation, and use of sex toys as having "had sex," whereas heterosexual individuals are more likely to only identify penile-vaginal intercourse as sex. Keeping that in mind, gay men are more likely to report a larger number

of sexual partners than heterosexual men, but they also are much more likely to have their first sexual experience at an earlier age than heterosexual men (Blake et al., 2001). This is often stereotyped within society, as gay men are also seen to be more promiscuous and report more sexual activity compared to heterosexual men and women, as well as lesbian women (Baumeister, Catanese, & Vohs, 2001). On the contrary, Dewaele, van Houtte, Symons, and Buysse (2017) found that gay men are older, on average, when they first had sexual intercourse (penile/anal intercourse) compared to heterosexual men. Amos and McCabe (2017) also found that heterosexual and bisexual women reported engaging in the greatest frequency of sexual activity, with heterosexual men reporting the third highest frequency when considering sexual orientation and gender.

The sexual script that people know and follow is typically something that is viewed from a very heteronormative standpoint (Courtice & Shaughnessy, 2018). Straight men are supposed to have a high sex drive and should always be ready for and interested in sexual activity (Murray, 2018), but there is less of a “script” for non-heterosexual men or even non-heterosexual women. Courtice and Shaughnessy (2018) suggest that gay men and women may deviate from the typical gendered script, since gay men are often stereotyped as being more feminine, and lesbian women are often stereotyped as being more masculine. On the other hand, sexual minority people may exaggerate the sexual script since gay men are choosing from a pool of people who supposedly share their sexual script of having a higher sex drive, and gay women are choosing from a pool of people who supposedly have a lower sex drive, leading to gay men engaging in more sexual activity and gay women engaging in less (Courtice & Shaughnessy, 2018).

Relationship Status and Number of Sexual Partners

Lehmiller, VanderDrift, and Kelly (2014) found that people who were in a romantic relationship had significantly fewer sexual partners when compared to people who are in a “friends with benefits” relationship. Researchers suggest that the difference between reports of male and female sexual activity frequency may be related to their relationship status, with women in relationships feeling more comfortable with sexual activities when they are with a person with whom they feel comfortable (Amos & McCabe, 2017). Previous research has found that young women typically prefer to be in a relationship compared to engaging in casual hookups due to the potential risks such as STIs that may come along with sexual activity outside of a relationship (Bradshaw et al., 2010), so it comes as no surprise that women would report engaging in sexual activity more frequently when they feel comfortable in a relationship.

The concept of needing comfortability in order to have more frequent sex is something that is socially constructed, considering the idea that many people are able to have sex with multiple partners despite their level of comfort with each person. This goes back to the sexual script that women should have more emotional reasons for having sex compared to physical motives for men (Sakaluk, Todd, Milhausen, & Lachowsky, 2014). Some women may prefer hooking up compared to being in a committed relationship but may suffer repercussions for not following along with what women “should” do (Berntson et al., 2014).

Age of Sexual Debut and Number of Sexual Partners

The beginning of one’s sexual life is a milestone for many people, and it can have an effect on the number of sexual partners that one has. Typically, a person’s sexual debut is defined as being the first time that an individual engages in sexual intercourse (Golden, Furman, & Collibee, 2016), though this definition may be different for other people. Because of this difference, some

people may not believe that their sexual debut was actually sexual intercourse. One's definition of sexual debut may be when a person begins participating in any sort of sexual activity with another person, whether it is petting, kissing, hand stimulation, oral stimulation, vaginal stimulation, or anal stimulation.

It has been found that most Americans reach their sexual maturity by early adolescence (Centers for Disease Control, 2012), allowing people to embark on their sexual lifestyle at a relatively young age. Logically, it would make sense that someone who began sexual activity at a younger age would have more sexual partners than someone whose sexual debut was at a later age due to having more "time" in his or her life to have participated in sexual activities. In fact, Tuoyire, Anku, Alidu, and Amo-Adjei (2018) found that a majority of men who had lost their virginity before they turned 20 years old had a higher number of sexual partners in their lifetime. Dewaele et al. (2017) also found that having an early sexual debut predicts a higher number of sexual partners, though it also predicts feeling less prepared at the time of losing one's virginity.

According to Tuoyire et al. (2018), despite the importance of this event in one's life, few studies have explored the relationship between the number of sexual partners and the age at which one lost one's virginity. Golden et al. (2016) found that having a younger age at sexual debut was associated with higher rates of internalizing symptoms, externalizing symptoms, substance use, and lower self-worth. It is possible that this is due to the age that society has deemed "acceptable" or "typical" to lose one's virginity, and losing it too early would be veering away from what one would think is normal. People learn from the different stories that are told through media and real life experiences that sexual experiences should begin while in high school, and the average age that people begin to have intercourse is 17 (Kan, Cheng, Landale, & McHale, 2010), so starting earlier or later than that may be difficult for one to accept.

Self-Esteem

Self-esteem is a widely studied variable that can be affected in many different ways and by many different things. It is defined as individuals' perception of themselves and how much they like or dislike themselves (Chen, Gully, & Eden, 2004). Self-esteem has many different influences, and a person's sexual life may be one influence that can change how a person sees himself or herself. Following with the sexual script that has been "written" for men and women, men with many sexual partners are rewarded with praise whereas women are socially degraded (Marks & Fraley, 2005). Heterosexual men are viewed to be much "cooler" if they have multiple sexual partners whereas women are seen to be "slutty" for engaging in the same number. Humans are prone to being influenced by what other people think of them, and this may be the same when it comes to how people view others on their sexual behaviors.

Surprisingly, not a lot of research has been done on how a person's number of sexual partners may have an effect on his or her self-esteem. LaFrance et al. (2017) explain that a woman's sexual activity can have a large impact on her sense of self. Ackard, Kearney-Cooke, and Peterson (2000) found that women with a positive body image engaged in more frequent sexual activity, though nothing had been mentioned about the number of sexual partners. The results from a study done by Amos and McCabe (2017) supported previous findings, reporting that women with high self-esteem were more likely to report a higher frequency of sexual activity. They also suggest that people who have lower self-esteem are more likely to fear rejection from sexual partners, resulting in less sexual activity. Higher self-esteem is also seen amongst individuals who believe that they are in a committed relationship (Rill, Baiocchi, Hopper, Denker, & Olson, 2009). Being in a committed relationship can make people feel loved and valued, using partners as a resource for increasing self-esteem (Murray, Bellavia, Feeney, Holmes, & Rose, 2001).

Sexual Satisfaction

Being satisfied with one's sex life can have many different positive correlations with other aspects of one's life. There are many things that indicate that a person is sexually satisfied, though it is ultimately up to individuals as to whether they are happy with the sexual interactions that they are having, the frequency of their sexual activities, and the number of sexual partners with whom they have engaged. Having a satisfying sexual life has been found to be associated with better well-being and happiness (Apt, Hulbert, Pierce, & White, 1996). There are many different studies of, and many different measures that can be used to measure, sexual satisfaction, but little has been reported on sexual satisfaction for people who are not in a relationship. We know that being in a relationship plays a large role in how sexually satisfied that people are since they may be engaging in more frequent sexual activity than their single peers. Lehmiller et al. (2014) found that people in a committed relationship reported more sexual satisfaction than people who were participating in a "friends with benefits" relationship, or in relationships that were noncommittal and potentially unromantic but that involved sexual activities together.

Engaging in sexual activities with multiple partners can increase sexual satisfaction by simply fulfilling one's needs, but it is not always a reciprocal process. Achieving orgasm is typically a positive experience and is ideally an "end goal" for both partners, and orgasm may indicate feeling more sexually satisfied after a sexual activity than if orgasm was not achieved. Though some people prioritize orgasm in their sexual activities, it is possible to still be sexually satisfied without achieving orgasm. McCarthy (2015) defines satisfaction as being much more than just orgasm – it is about feeling securely attached to one's partner, both emotionally and sexually. With this definition, it is likely that people who are not in a relationship will feel less sexually satisfied, or they may rely on an orgasm as their way to feel satisfied. Braun et al. (2003) explain that men are much more likely than women to achieve orgasm, though men often feel guilty or

upset with themselves if the woman is unable to do so. Following the sexual script as well as evolutionary concepts, a male orgasm signals an end to sexual activity, whereas the female orgasm is not “required” in the same way (Braun et al., 2003). As a result, the chance of men feeling sexually satisfied would be much higher since they are more likely to achieve orgasm than women during vaginal intercourse.

Sexual Self-Efficacy

Sexual self-efficacy is based on how well people view themselves and their sexual capabilities. According to Norton, Smith, Magriples, and Kershaw (2016), it is defined as a person’s confidence in his or her sexual abilities, including assertiveness and authority. Viewing oneself positively during sexual activities and feeling confident in one’s abilities could be related to the number of sexual partners that a person has. Similarly, having more sexual partners could be related to having more sexual self-efficacy due to the fact that the person would have more experience. Having more experience would typically lead to a person feeling more prepared or more confident, though this may not always be the case.

People who do not believe that they are “good in bed” may be less likely to want to have several different sexual partners due to the attendant risk of embarrassing themselves. One’s self-efficacy may also be linked to one’s self-perception and self-esteem, such as having certain feelings about body image, weight, or penis or breast size. Women who reported having a positive sexual self-schema have been found to view themselves more positively, to be more liberal in their sexual attitudes, and to evaluate sexual behavior in a more positive way than do women who do not have a positive sexual self-schema (Aumer, 2014). It has also been found that women with a positive sexual self-schema are more likely to engage in casual hookups and to have more sexual partners than their peers (Aumer, 2014). Unexpectedly, previous research has not found a

significant gender difference when examining self-efficacy; thus, there may be more similarities than differences in sexual perceptions (Hewitt-Stubbs, Zimmer-Gembeck, Mastro, & Boislard, 2016). The authors explained that this result may have been due to the high number of female participants who were also in a romantic relationship, which is typically linked to having more sexual self-efficacy.

The Present Study

According to previous research, we know that the number of sexual partners is not usually used as a predictor. For this study, we are trying to find out whether or not the number of sexual partners affects different aspects of a person's sexual well-being and self-perception. It would be limiting not to include gender, sexual orientation, relationship status, and sexual debut as variables within this research context, so the number of sexual partners is used as a mediating variable. The present study aims to find whether the number of sexual partners has an effect on a person, by specifically looking at whether it predicts a person's self-esteem, sexual satisfaction, and sexual self-efficacy. Due to the idea that previous research has typically only studied how factors affect number of partners and not whether the number of partners affects a person, this study is a unique contribution to the field of marriage and family therapy in terms of relational problems relating to sexual satisfaction differences. Instead of gender, sexual orientation, relationship status, and age at sexual debut directly predicting self-esteem, sexual satisfaction, and sexual self-efficacy, this study argues that these effects are driven by the demographic predictors affecting the number of partners, which in turn indirectly predict these three variables; in other words, the number of sexual partners is seen as a predicting variable between demographic factors and relational outcomes.

Hypotheses

Based on the literature review above, nine hypotheses were created and will be tested, as seen in Figure 1. The hypotheses are as follows:

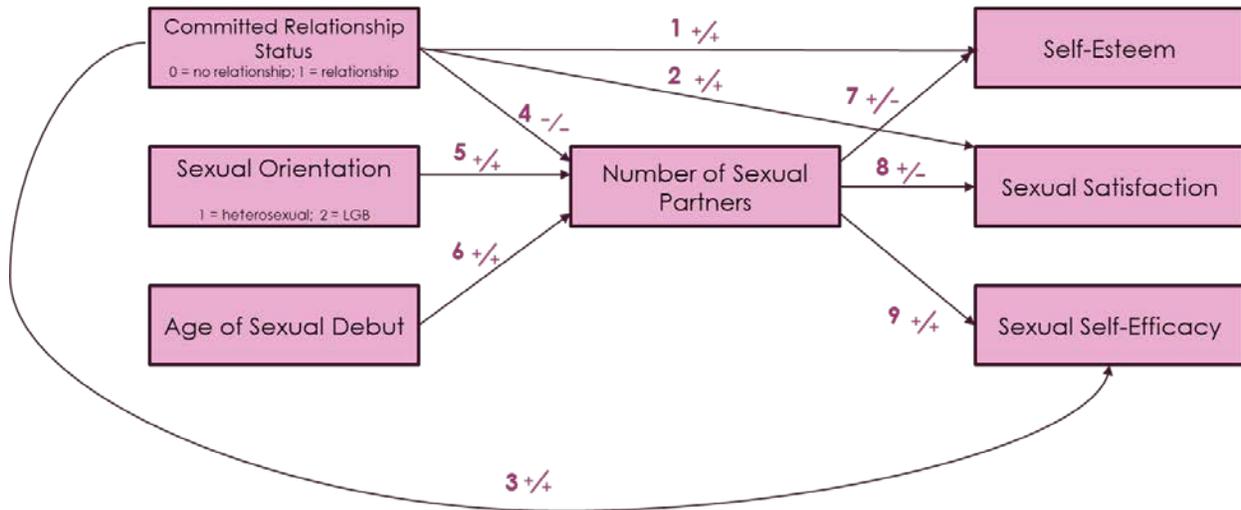


Figure 1. Theoretical Model of Relationships among Variables

**Note:* Numbers indicate number of hypothesis. The signs before and after the / indicate predictions for men and women, respectively.

Hypothesis 1

Both men and women in a committed relationship report higher self-esteem than those who are not in a committed relationship.

Hypothesis 2

Both men and women in a committed relationship report higher sexual satisfaction than those who are not in a committed relationship.

Hypothesis 3

Both men and women in a committed relationship will have more sexual self-efficacy than those who are not in a committed relationship.

Hypothesis 4

Both men and women in a committed relationship will report fewer sexual partners than those who are not in a committed relationship.

Hypothesis 5

Heterosexual individuals will report fewer sexual partners than LGB individuals.

Hypothesis 6

Those who report an earlier age at sexual debut will report more sexual partners.

Hypothesis 7

(a) Men who report more sexual partners will have higher self-esteem than those who report fewer sexual partners, whereas (b) women who report more sexual partners will have lower self-esteem than those who report fewer sexual partners.

Hypothesis 8

(a) Men who report more sexual partners will have more sexual satisfaction than those who report fewer sexual partners, whereas (b) women who report more sexual partners will have less sexual satisfaction than those who report fewer sexual partners.

Hypothesis 9

Men and women who report more sexual partners will have more sexual self-efficacy than those who report fewer sexual partners.

CHAPTER 3: METHODOLOGY

Participants and Procedure

This study consisted of men and women over the age of 17. The participants did need to have engaged in sexual activity to participate in this study, so this was included as an inclusion criterion. There were four separate surveys in order to get an equal sample of groups based on sexual orientation, with one survey for straight people, one survey for gay men, one survey for lesbian women, and one survey for bisexual people. Prior to the recruitment of participants, the Purdue University Institutional Review Board approved the study and the measures required to complete it. Participants were recruited via Amazon's Mechanical Turk (MTurk.com). After going on the MTurk website, the participants clicked on a link to take them to the anonymous survey. The purpose of the study as well as the researcher's information was provided to the participants, followed by an informed consent for them to accept. Participant confidentiality was ensured, with none of the questions asking personally identifying information. The survey was posted on MTurk.com by David Nalbone. Those who were over the age of 17 and who were interested in taking this study were able to complete the survey with a \$0.50 incentive, which was received by participants who met the inclusion criteria after completion.

According to a power analysis, at least 250 participants were needed for the statistical analysis of structural equation modeling (Wolf, Harrington, Clark, & Miller, 2013), but each of the four surveys sought out 100 participants to ensure adequate representation of each of the four main sexual orientation sub-groups.

A total of 858 individuals accessed the survey on MTurk.com. Among those 858 individuals, 857 provided consent, whereas 1 individual did not consent. Of the participants who consented to take the survey, 818 individuals responded that they had engaged in sexual activity,

28 reported that they have not engaged in sexual activity, and 12 did not provide a response; the latter 40 respondents were dropped from further analysis. If participants did not indicate the sexual orientation that corresponded with the proper survey, then they were directed to the end of the survey and were also dropped from further analysis; there ended up being 100 heterosexual individuals, 86 lesbians, 88 gay men, and 98 bisexual individuals who did so. After removal of respondents who did not complete entire scales related to the hypotheses or were otherwise excluded, a total of $n = 351$ participants were included in the final analyses.

A brief section within the questionnaire focused on general demographic information about the participant. The questionnaire included questions regarding the participant's gender, racial or ethnic group, age, religion, education level, geographical location (by state), and employment status. Participants' ages ranged from 19 years to 64 years, with a mean age of participants of 31.99 and a standard deviation of 8.37. In terms of gender, 35.4% of participants reported being female, 61.9% of participants reported being male, 0.3% of participants also reported being a transgender female, 1.1% of participants reported being transgender males, 0.3% of participants reported being genderqueer, 0.5% of participants reported being agender, 0.3% of participants reported being intersex, and 0.3% of participants reported being trans*. In terms of race, the majority of participants (63.6%) reported as Caucasian, with 25.6% as Black or African American, 4.2% as Hispanic, 0.8% as American Indian or Alaska Native, 4.0% Asian, 1.6% as Multiracial, and 0.3% as other.

The participants were also asked about their sexual activity, including whether or not they were in a committed relationship, their age at sexual debut, and how many sexual partners that they have been with in their lifetime. A majority (74.4%) of participants reported being in a committed relationship, and 23.5% of participants reported that they are not in a committed

relationship. The mean number of sexual partners that participants reported is 7.96, ranging from 1-100 partners. The mean age at sexual debut was 17.04, the median age was 17, and the standard deviation was 7.35, ranging from ages 1-66 years old. Participants were also asked if any of their previous sexual activity had been non-consensual; 48.7% reported yes and 51.3% reported no.

Some other demographic information included religion and the state that participants live in. A majority of the sample (51.4%) identified as being some form of Christian or Catholic. Many participants (34.7%) identified as being agnostic, Atheist, or non-religious. 1.1% identified as Buddhist, 1.1% identified as Hindu, 1.1% identified as Jewish, 1.6% identified as Muslim, and .3% identified as Unitarian-Universalist. The rest did not properly indicate their religion, as this question allowed participants to write in their own answer.

In terms of the state that participants live in, I divided their responses into which region of the country they live in: West (WA, OR, ID, MT, CA, WY, NV, UT, and CO) Southwest (TX, OK, AR, NM), Midwest (ND, SD, MI, WI, IA, MN, NE, KS, MO, IL, IN, MI, & OH), Southeast (AR, LA, MS, KY, TN, AL, WV, VA, NC, SC, GA, and FL), Northeast (MD, PA, MA, DE, NJ, NY, CT, RI, NH, VT, ME, and Washington, DC) and Hawaii. Not all states were represented (Alaska, North Dakota, South Dakota, Idaho, Wyoming, Vermont, Delaware, Connecticut, Rhode Island, and New Hampshire), and some participants did not properly indicate a state. The West consisted of 19.5% of the sample; The Southwest consisted of 10.6% of the sample; The Midwest consisted of 15.3% of the sample; The Southeast consisted of 28.1% of the sample; The Northeast consisted of 17.7% of the sample; and Hawaii consisted of 0.6% of the sample.

Materials

Participants completed a series of scales and items on the questionnaire (see Appendix for a copy of it). See Table 1 for descriptive statistics on major items and scales used in the model.

Sexual and Relationship Characteristics

Committed Relationship Status. The participants were asked to identify if they are or are not currently in an exclusive, committed relationship with another person.

Sexual Orientation. The participants were asked how they would describe their sexual orientation, with answer choices of heterosexual, gay, straight, bisexual, or other.

Age at Sexual Debut. The participants were asked to provide the age at which they began participating in sexual activity (hand stimulation, oral stimulation, vaginal stimulation, or anal stimulation) with another person.

Number of Sexual Partners. The participants were asked to provide the number of sexual partners they have been with throughout their lifetime as well as the frequency of their sexual activity. The participants were provided with a definition of a sexual partner to ensure consistency amongst participants. The definition provided was as follows: Sexual interaction with at least one other person in which at least one partner's genitals (penis, vagina, anus) are stimulated.

Self-Esteem

Self-esteem is the positive or negative feelings that one feels about himself or herself. This will be tested using the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES is a ten-item scale that looks at overall self-worth by giving both negative and positive

statements in regards to one's opinions about his or herself. The participants gave a response using a 4-point Likert scale, ranging from 0 (*Strongly Disagree*) to 3 (*Strongly Agree*). An example of a positive statement is "I take a positive attitude towards myself" and an example of a negative statement is "At times I feel I am no good at all." The negative statements, items 2, 5, 6, 8, and 9, were reverse coded. Self-esteem was calculated as the average of the ten responses. A higher score indicated higher self-esteem.

Sexual Satisfaction

Sexual satisfaction is defined as the tendency to be satisfied with the sexual aspects of one's life. This is tested by using the subscale of Sexual Satisfaction within the Multidimensional Sexual Self-Concept Questionnaire (MSSCQ; Snell, 2001). This Sexual Satisfaction subscale consists of five statements that the participant used to indicate to what extent each statement is a characteristic of the participant. Using a 5-point Likert scale, the responses range from 0 (*Not at all characteristic of me*) to 4 (*Very characteristic of me*). An example statement is, "I am satisfied with the way my sexual needs are currently being met." To find the score for sexual satisfaction, no items need to be reverse coded, so the scores of the five statements were averaged together. Higher scores indicated greater sexual satisfaction.

Sexual Self-Efficacy

Sexual self-efficacy is the belief that people are confident and can deal effectively with their sexual abilities. This can be found using the subscale of Sexual Self-Efficacy within the Multidimensional Sexual Self-Concept Questionnaire (MSSCQ; Snell, 2001). This subscale consists of five statements that the participant will indicate to what extent each statement is characteristic of the participant. The participants indicated this using a 5-point Likert scale, with

responses ranging from 0 (*Not at all characteristic of me*) to 4 (*Very characteristic of me*). An example statement is, “I am competent enough to make sure that my sexual needs are fulfilled.” To find the score for sexual self-efficacy, the responses to the five statements are averaged together. Higher scores indicated greater sexual self-efficacy.

Demographics

The participants were asked to identify their gender, racial or ethnic group, age, level of education, state, employment status, household income, and relationship status, as well as sexual orientation as previously mentioned.

CHAPTER 4: RESULTS

Data Screening

Prior to running any analyses to test hypotheses, scale and sub-scale scores were computed, via the process for obtaining scores mentioned in the materials section. Number of partners, age, and age of sexual debut were originally coded as string variables in SPSS, so I changed them to be numeric. In order to check for a normal distribution, the key variables (number of partners, self-esteem, sexual satisfaction, and sexual self-efficacy) were tested for skewness and kurtosis. Analysis revealed the number of partners to be positively skewed, and self-esteem, sexual satisfaction, and sexual self-efficacy to be negatively skewed. To correct this, I took the natural log of the number of partners because the initial range was from 0 to 430. I excluded the person who indicated 430 partners due to being an outlier (at $p < .001$). I also took the natural log of 6 minus the scale score for self-esteem, sexual satisfaction, and sexual self-efficacy. Each of these transformations produced a normal (non-skewed) distribution. I then checked for missing data, with a total of 27 participants who did not complete items relating to the hypotheses. These participants were excluded from further analysis. In addition, there were 17 participants who either did not properly indicate their age of sexual debut or did not indicate their age at all, which I then coded as missing data and were excluded from further analysis. Data screening also excluded one participant who indicated that their age was 9 years old.

I tested for linearity and homoscedasticity among the variables by using a scatterplot, which indicated that all pairs of variables were linear and that the homoscedasticity assumption was met. I checked for multivariate normality using Mahalanobis distance, and detected 5 multivariate outliers ($p < .001$) with a value greater than the critical value (22.458). All participants above the critical value were excluded from further analysis, resulting in an analysis

sample of 351 participants. Finally I tested for the absence of multicollinearity by running correlations among all variables. There is some concern for multicollinearity, as there is a strong correlation ($r = .82$) between sexual satisfaction and sexual self-efficacy. However, both variables were retained as they are strongly related in literature.

Some responses for age and age of sexual debut were recoded for consistency. One participant indicated being 235 years old, so I changed it to be 23.5, on the assumption that the entry was in error. Five participants apparently indicated the year that they were born instead of their age, so 1984 was recoded to 35, 1991 was recoded to 28, 1990 was recoded twice to be 29, and 1992 was recoded to be 27. I also recoded two responses for age of sexual debut, with 1992 recoded as 27 and “2 years” recoded as 2.

Table 1. Descriptive Statistics of Variables and Scales Used (N=351)

	Theoretical range	Actual range	<i>M</i>	<i>SD</i>	Cronbach's alpha
Committed Relationship Status	0-1	0-1	1.24	.428	--
Sexual Orientation	1-4	1-4	--	--	--
Age of Sexual Debut	Unlimited	1-78	17.40	8.40	--
Number of Sexual Partners ¹	Unlimited	0-100 ²	7.96	24.54	--
Self-Esteem ¹	1-5	1.0-4.4	3.10	0.49	.65
Sexual Satisfaction ¹	1-5	1.0-5.0	3.61	.94	.88
Sexual Self-Efficacy ¹	1-5	1.0-5.0	3.80	0.85	.87

Note. ¹Scales was skewed; transformed scale to remove skewness, but table contains original units for ease of comprehension; ²1 case in the number of sexual partners was excluded as an outlier (430 partners).

Test of Hypotheses

IBM SPSS and EQS software (Bentler, 2006) were used to test my hypotheses. I ran three structural equation models: one overall, one for males, and one for females, to test the

hypotheses depicted in Figure 1; the results are displayed in Figure 2, and a table of correlations among the variables in the model is in Table 2. Specifically, the demographic variables of committed relationship status, sexual orientation, and age of sexual debut were used to predict self-esteem, sexual satisfaction, and sexual self-efficacy, with the number of sexual partners serving as a mediator.

The independence model variables did not fit well, predicting no relationships among the model, $\chi^2 = 530.095$ (21, $N = 351$), $p > .05$. The Satorra-Bentler Scaled (robust) chi-square for the final model indicated an adequate fit between the model and the data, $\chi^2 = 74.1088$ (11, $N = 351$), $p < .001$, CFI = .876, RMSEA = .128.

Table 2: Pearson Correlations Among Variables

Observed Variable	1	2	3	4	5	6	7
1. Committed Relationship Status	1	--	--	--	--	--	--
2. Sexual Orientation	-.08	1	--	--	--	--	--
3. Age of Sexual Debut	-.04	-.04	1	--	--	--	--
4. Number of Sexual Partners	.24*	-.08	-.01	1	--	--	--
5. Self-Esteem	-.01	-.04	-.02	-.06	1	--	--
6. Sexual Satisfaction	.19*	.04	.01	.03	.35*	1	--
7. Sexual Self-Efficacy	.07	.03	.06	-.03	.36*	.78*	1

Note. *. Correlation is significant at the 0.05 level (2-tailed). These numbers are based off of the transformed variables.

Hypothesis 1

Hypothesis one stated that both men and women in a committed relationship would report higher self-esteem than those who are not in a committed relationship. The hypothesis was not supported when looking at the sample as a whole because there was no significant relationship between relationship status and self-esteem. When analyzed separately by gender,

there was a significant positive relationship for males, in that males have higher self-esteem when they are in a committed relationship, but there was not a significant relationship for females.

Hypothesis 2

Hypothesis two stated that both men and women in a committed relationship would report higher sexual satisfaction than those who are not in a committed relationship, and this hypothesis was supported. In the overall sample as well as just for males, people in committed relationships were more sexually satisfied. However, there was no significant relationship between relationship status and sexual satisfaction when analyzing only women.

Hypothesis 3

Hypothesis three stated that both men and women in a committed relationship would have more sexual self-efficacy than those who are not in a committed relationship. Overall, this hypothesis was not supported because there was not a significant relationship between relationship status and sexual self-efficacy. There also was not a significant relationship for females; however, there was for males. Men reported more sexual self-efficacy when they are in a committed relationship.

Hypothesis 4

Hypothesis four stated that both men and women in a committed relationship would report fewer sexual partners than those who are not in a committed relationship. This hypothesis was supported overall because there was a significant relationship between relationship status and number of partners, such that people who are not in a relationship reported more sexual

partners. However, the hypothesis is not fully supported when divided by gender. There was still a significant relationship between relationship status and number of partners for both males and females, but the relationship is reversed. Males in committed relationships reported fewer partners, but females in relationships reported more partners.

Hypothesis 5

Hypothesis five stated that heterosexual individuals would report fewer sexual partners than LGB individuals. There was no significant relationship between sexual orientation and number of sexual partners in the overall model and when analyzed separately by gender, so this hypothesis was not supported.

Hypothesis 6

Hypothesis six stated that those who reported an earlier age at sexual debut would report more sexual partners. This hypothesis was supported in that there was a significant negative relationship between age at sexual debut and number of sexual partners. It was significant in the overall model as well as when analyzed by gender, such that people who are younger at sexual debut have more sexual partners, but there was a much stronger effect for women than men. Females with a younger age at sexual debut had more partners than males who started at a younger age, though both were significant.

Hypothesis 7

Hypothesis seven stated that (a) men who reported more sexual partners would have higher self-esteem than those who reported fewer sexual partners, whereas (b) women who reported more sexual partners would have lower self-esteem than those who report fewer sexual

partners. This hypothesis overall was partially supported; for females, there was not a significant relationship between number of sexual partners and self-esteem, whereas for males, there was a positive relationship between number of sexual partners and self-esteem, such that men who report more sexual partners had higher self-esteem.

Hypothesis 8

Hypothesis eight stated that (a) men who reported more sexual partners would have more sexual satisfaction than those who reported fewer sexual partners, whereas (b) women who reported more sexual partners would have less sexual satisfaction than those who reported fewer sexual partners. This hypothesis was partially supported, as there was a significant positive relationship for only males between number of sexual partners and sexual satisfaction, such that males who reported more sexual partners had more sexual satisfaction, whereas the relationship was not significant for females or when analyzed overall.

Hypothesis 9

Hypothesis nine stated that men and women who reported more sexual partners would have more sexual self-efficacy than those who reported fewer sexual partners. This hypothesis was not supported, as the relationship was not significant in the overall analysis or the only female analysis, but there was a significant, positive relationship for males between number of sexual partners and sexual self-efficacy, such that men who reported more sexual partners had higher sexual self-efficacy.

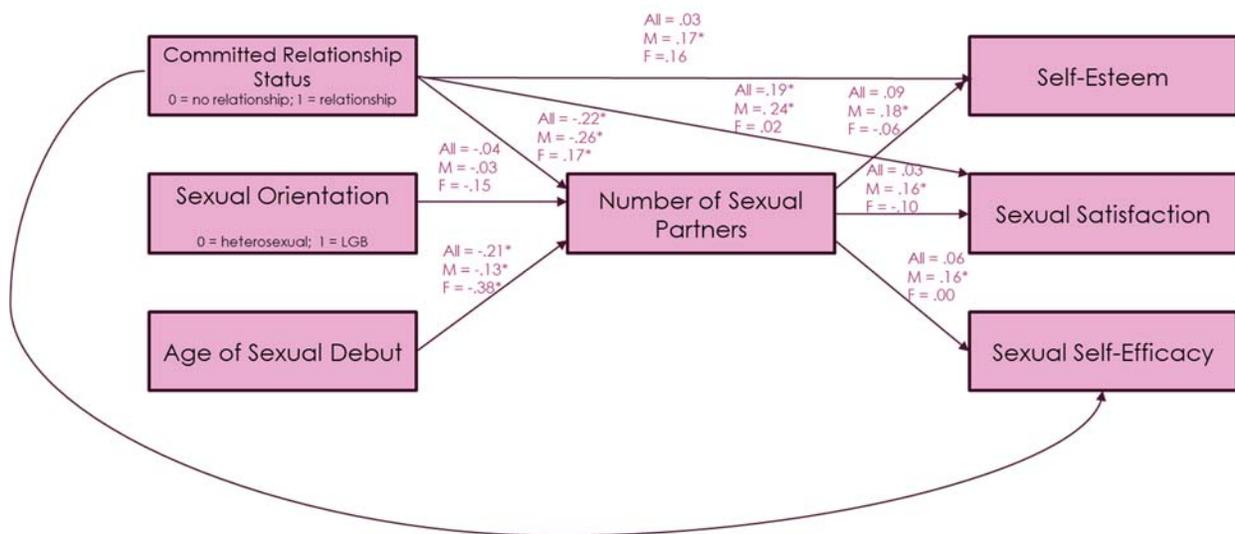


Figure 2. Results of Path Analysis of Relationships Among Variables

*Note: All indicates the relationship between variables within the overall analysis; M indicates the relationship between variables for males; F indicates the relationship between variables for females. A number with * indicates a significant relationship at $p < .05$.

CHAPTER 5: DISCUSSION

The purpose of this study was to explore the possible relationships between relationship status, sexual orientation, age of sexual debut, self-esteem, sexual satisfaction, and sexual self-efficacy, as mediated by the number of sexual partners. Previous research did not focus on whether the number of sexual partners can have an effect on a person's personal and sexual relationships; this study shed some light on the possible gender differences that occur amongst these variables. This follows along with the sexual double standard, in that men are still believing that their sexual activity can make them look better amongst their peers (Marks & Fraley, 2005). The sexual double standard is something that has been commonly studied, though previous research has had mixed results as to whether this standard actually exists (Zaikman & Marks, 2014). The present study is consistent with this, since there is some evidence of the double standard among men but less evidence among women.

Many of the hypotheses were either supported or partially supported in that there was often a significant relationship between variables for males but not for females. There were also a few relationships between variables that were significant overall as well as significant in the analyses of only males, but were not significant when only analyzing women. This seems to show that women's number of sexual partners as well as their individual and relational characteristics are less likely to be influenced by other variables.

Committed Relationship Status and Individual and Relational Outcomes

Hypotheses one through three were related to whether being in a committed relationship had an effect on an individual's self-esteem, sexual satisfaction, and sexual self-efficacy. There was

not a significant relationship between relationship status and self-esteem when analyzed as a whole, but there was a significant relationship when analyzing only males. This is not consistent with previous research in that being in a relationship has typically been linked to having higher self-esteem due to using partners as a resource to make them feel more confident (Murray et al., 2001; Rill et al., 2009). This is true for males but not females, who are stereotyped to be much more “relationship oriented” according to the sexual script (Kreager et al., 2016). According to this study, women are much less reliant on a significant other to improve their self-esteem.

The same is true for hypotheses two and three in that males were more sexually satisfied and had more sexual self-efficacy when in a committed relationship, but there was not a significant relationship for females. Even though there was not a significant relationship for females, hypothesis two was supported overall, saying that people, regardless of gender, are more sexually satisfied when in a relationship. The analysis overall is consistent with previous research in that people in relationships have more sexual satisfaction (Lehmiller et al., 2014), but inconsistent in that there is not a significant relationship for females. Amos and McCabe (2017) had found that women are more comfortable in relationships making them feel more sexually satisfied, but this was not supported in the current study.

Sexual self-efficacy was also not found to be impacted by relationship status in the overall model and for only females, but again the relationship was significant for only males. This is partially inconsistent with previous research, such that Hewitt-Stubbs et al. (2016) had found that people in relationships typically have more sexual self-efficacy compared to their single counterparts. Though there is a relationship for males, Aumer (2014) had found that women who had a positive sexual perception of themselves had more sexual partners. It is possible that this relationship has a difference in cause and effect, such that women who feel sexually self-

efficacious are going to seek out more sexual partners instead of feeling more sexually self-efficacious because of their number of sexual partners; however, that reversal of causation was not tested in this study. The overall model may not have shown that relationship status has a large effect on people, but males seem to be much more reliant on their significant others than previously expected.

Number of Sexual Partners and Relational and Sexual Experiences

Hypotheses four, five, and six looked at how relationship status, sexual orientation, and age of sexual debut have an effect on a person's number of sexual partners. Hypotheses four and six were both supported in that people who are in a committed relationship have a lower number of sexual partners, and people who younger at their age of sexual debut have more sexual partners. This is consistent with previous research, such that Lehmler et al. (2014) found that people in a relationship had fewer sexual partners, and Dewaele et al. (2017) found that an earlier age at sexual debut predicts a higher number of sexual partners. These hypotheses, again, were broken down by gender, showing some different results. Males who are in a relationship have fewer sexual partners, but females in a relationship have more sexual partners. This may imply that men who are not in a relationship have more sexual freedom to have multiple partners according to the sexual script, whereas women who are not in a relationship may be more likely to wait until they are in a relationship to engage in any sexual activity. This is consistent with previous research on the sexual script, since women are "supposed to" have emotional reasons for having sex but men have more physical reasons (Sakaluk et al., 2014).

Hypothesis five was not supported, in that there is not a significant relationship between the number of sexual partners and sexual orientation. Blake et al. (2001) found that gay men tend to have more sexual partners than other sexual orientations, but this study did not find that there

is any difference between groups. This implies that all sexual orientations have a similar number of sexual partners and that one group does not stand out amongst the rest. Baumeister et al. (2001) explains that there is a stereotype that gay men are more promiscuous, but this study found no differences; such beliefs thus remain the stereotype and may not be the truth.

Number of Sexual Partners and Individual and Relational Outcomes

Hypotheses seven through nine examined whether the number of sexual partners would have an effect on self-esteem, sexual satisfaction, and sexual self-efficacy. Each of these hypotheses were not significant overall or when analyzing only females, but were significant when analyzing only males. Men who had more sexual partners had higher self-esteem, more sexual satisfaction, and more sexual self-efficacy. The results for males only are consistent with previous research because it is following the sexual script and the sexual double standard that men are not only free to have multiple sexual partners but are praised for it by other men (Reid et al., 2011). Such praise, according to this study, may then lead to higher self-esteem, more sexual satisfaction, and more sexual self-efficacy.

On the other hand, the results for females were not significant, showing that there is not a significant relationship between number of sexual partners and self-esteem, sexual satisfaction, and sexual self-efficacy. This is not consistent with previous research, such that women have been found to have more defeating thoughts and lower self-esteem when they internalize the double standard (Tolman, 2002; Young et al., 2016). This implies that women are not as affected by the sexual double standard as research has previous found, and it is possible that society is changing their opinions on what is deemed as acceptable sexual behavior. Females may also be feeling more empowered and less likely to be influenced by the negative messages of the sexual double standard.

Limitations

The first limitation of this study is the disproportionate number of males versus females who participated in the survey. There were significantly more males who participated than females, which may have had an effect on the overall results. Many of the results were significant when only analyzing men, which may or may not be because of the disproportionate number, as larger samples have more statistical power to detect effects. In order to ensure that I would have enough people for each of the four sexual orientations that I was studying, I created four separate surveys for each group. Future researchers may divide the heterosexual group and bisexual group into two surveys for each sexual orientations – one for males and one for females – in order to ensure a better sample of groups.

This study was also not very inclusive of participants who did not identify as heterosexual, bisexual, gay, or lesbian. If participants did not identify as one of the four choices, then they were not able to continue taking the survey. Similarly, this study was also less inclusive of individuals who identified as transgender, genderqueer, agender, intersex, or trans*. Individuals who identified with these labels were still included in the overall analysis but were excluded when analyzed by the binary genders. Future research may consider including all sexual orientations and gender identification in order to get a better representation of the LGBTQ+ community.

My hypothesis about sexual orientation and number of sexual partners was also analyzed by grouping together LGB individuals versus heterosexual individuals. This may have an impact on the overall results, considering each sexual orientation may foster a different range for number of sexual partners. It was thought that one group among the LGB individuals may have a significantly large number of sexual partners whereas another group may have a significantly low number of sexual partners, therefore balancing out the number. In this study, we did not

technically compare the number of sexual partners of gay men to heterosexuals, bisexuals and lesbians, but this was tested in a post-hoc analysis. There was no significant difference between the groups, $t(368) = -1.57, p = .12$. The mean number of partners for gay men was 7.70 with a standard deviation of 11.46, and the mean number of women and non-gay men was 6.53 with a standard deviation of 10.85.

There was also an interesting finding within this study from the overall analysis that included transgender individuals in that self-esteem was significantly lower when in a committed relationship compared to the self-esteem levels of cisgender males and cisgender females. It is possible that being in a relationship as a transgender individual may have some harmful effects, so future researchers may consider how much of an impact relationship status has on identity and self-esteem or whether identity and self-esteem have an impact on relationship status.

Future research may also take into consideration whether or not a participant had engaged in sexual activity that was non-consensual. Almost half of the participants had reported that they have, which is a large number considering previous research. This also does not specify if the participant was the person who did not consent or if his or her partner was the one who did not consent, which may also foster different results. Analyzing sexual assault and how that may affect a person's number of sexual partners would be interesting to look at in the future. Future research may also want to consider including frequency of sexual activity into their analysis. I collected this data qualitatively and asked participants to explain how frequently they participate in sexual activity, but the data was not analyzed due to the non-inclusion within my model. This may also play a role in self-esteem, sexual satisfaction, and sexual self-efficacy and would be interesting to analyze.

It is also important to note that this study was completed on an online database where elements of diversity may not be fully represented. Participants would need to have access to the internet and would need to know about and understand how to use MTURK, which may exclude or limit certain populations from accessing this survey.

Clinical and Theoretical Implications

The present study has many implications for clinicians working with both couples and individuals. Overall, the number of sexual partners that an individual reports may not have much of an effect on their individual and relational well-being, but males tend to be affected by more things than women. If an individual male or couple is presenting with some sort of sexual issue, it may be important for clinicians to ask questions about their clients' sexual history and learn more about how their number of partners may influence their current sex life and self-esteem. It is also important to keep in mind that a person's number of sexual partners may be difficult to discuss in front of a partner, especially if it has never been discussed before. Clinicians may want to check in with the client individually about their level of comfort in discussing this topic with their partner.

Clinicians should also learn more about whether being in a committed relationship with a partner has an effect on their clients' self-esteem. Though there was not a significant relationship between self-esteem and relationship status when analyzing the sample as whole as well as only females, there was still a relationship when only analyzing males. It may be good for clients to feel more positively about themselves when they are in a relationship, but clinicians should discuss the importance of independence and self-love as well. Our clients should not rely on a relationship to boost their self-esteem and should be happy with themselves whether they are in a

relationship or not. Clinicians should discuss this concept with their clients so that people will feel confident in themselves before, during, and after a relationship ends.

When analyzing only women, their number of sexual partners does not seem to have much of an effect on how they view themselves as a person as well as how they view themselves sexually. This fits in perfectly within Feminist theory in that women are feeling much more empowered and are not allowing men to have all the power in both society and relationships. Feminist theory would say that the women in this study are making their own choices based off of what they want to do instead of what they “should” do according to men’s standards. They can have as many sexual partners as they would like without feeling the negative effects that society often puts on them.

Similarly, women seem to be going against the sexual script theory in that they are no longer believing that having multiple sexual partners gives them a bad reputation. Women’s self-esteem, sexual satisfaction, and sexual self-efficacy are not negatively affected by their number of partners, showing that they are feeling empowered instead of ashamed. Women may no longer be experiencing the negative stigma of the sexual double standard, or they at least are not reporting that their self-esteem is any lower because of it. Men, on the other hand, are affected by many more things than women. The sexual script entails that men still believe that having many sexual partners will make them look “cooler” around other people, and they feel much more adequate in their sexual abilities. However, given that the (nonsignificant) effect of the number of sexual partners on women’s sexual satisfaction and sexual self-efficacy was negative, it may be that these negative stereotypes are still in effect but were too small to detect in the women-only sample.

Social learning theory may also have an impact on why women are less likely to be impacted by the sexual double standard, such that the present day is becoming much more open and accepting of people's love and sex lives. Women may no longer see or experience the negative attitudes that people previously had against women with many sexual partners. Women, instead, are watching others become more accepting of everyone's sexual choices and are less likely to feel pressure to behave a certain way. Men, on the other hand, are still experiencing and observing the "locker room talk" and feel that having a lot of sexual activity or having a lot of sexual partners will enhance their reputation.

Conclusion

The present study found that men have higher self-esteem when in a relationship; people, especially men, have more sexual satisfaction when they are in a relationship; males have more sexual self-efficacy when they are in a relationship; people who are in a relationship have fewer sexual partners; people who were younger at their sexual debut have more sexual partners, males with more partners have higher self-esteem, sexual satisfaction, and sexual self-efficacy. The number of partners had significantly more of an effect on males than females, and females are much less prone to the sexual double standard than originally believed. The findings demonstrate that clinicians should be much more aware about their clients', especially male clients', sexual history and number of sexual partners when working on issues around self-esteem and sex. Though not all hypotheses were supported, there is plenty of insight about gender differences involving sex and self-esteem.

REFERENCES

- Ackard, D. M., Kearney- Cooke, A., & Peterson, C. B. (2000). Effect of body image and self-image on women's sexual behaviors. *International Journal of Eating Disorders, 28*, 422-429.
- Allen, K. R. (2016). Feminist theory in family studies: History, reflection, and critique. *Journal of Family Theory & Review, 8*, 207–224. doi:10.1111/jftr.12133
- Amos, N., & McCabe, M. (2017). The importance of feeling sexually attractive: Can it predict an individual's experience of their sexuality and sexual relationships across gender and sexual orientation? *International Journal of Psychology, 52*, 354-363.
doi:10/1002/ijop.12225
- Anderson, M., Kunkel, A., & Dennis, M. R. (2010). “Let’s (not) talk about that”: Bridging the past sexual experiences taboo to build healthy romantic relationships. *Journal of Sex Research, 47*, 1-11. doi:10.1080/00224499.2010.482215
- Apt, C., Hurlbert, D., Pierce, A., & White, C. (1996). Relationship satisfaction, sexual characteristics and the psychological well-being of women. *Canadian Journal of Human Sexuality, 5*, 195-210.
- Aumer, K. (2014). The influence of culture and gender on sexual self-schemas and satisfaction in romantic relationships. *Sexual & Relationship Therapy, 29*, 280–292.
doi:10.1080/14681994.2014.890282
- Baumeister, R. F., Catanese, K. R., & Vohs, K. D. (2001). Is there a gender difference in strength of sex drive? Theoretical views, conceptual distinctions, and a review of relevant evidence. *Personality and Social Psychology Review, 5*, 242–273. doi:10.1207/S15327957PSPR0503_5.

- Bentler, P. M. (2006). EQS 6 structural equations program manual. Encino, CA: Multivariate Software, Inc.
- Berntson, M. A., Hoffman, K. L., & Luff, T. L. (2014). College as context: Influences on interpersonal sexual scripts. *Sexuality & Culture, 18*, 149-165. doi:10.1007/s12119-013-9180-7
- Blake, S. M., Ledsky, R., Lehman, T., Goodenow, C., Sawyer, R., & Hack, T. (2001). Preventing sexual risk behaviors among gay, lesbian, and bisexual adolescents: The benefits of gay-sensitive HIV instruction in schools. *American Journal of Public Health, 91*, 940-946. doi:10.2155/AJPH.91.6.940
- Bradshaw, C., Kahn, A. S., & Saville, B. K. (2010). To hook up or date: Which gender benefits? *Sex Roles, 62*, 661-669.
- Braun, V., Gavey, N., & McPhillips, L. (2003). The “fair deal?” Unpacking accounts of reciprocity in heterosex. *Sexualities, 6*, 237-261. doi:10.1177/1363460703006002005
- Centers for Disease Control. (2012). Youth risk behavior surveillance _ United States, 2011. MMWR, 61(SS-4). Retrieved from <http://www.cdc.gov/MMWR/PDF/SS/SS6104.PDF>
- Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior, 25*, 375-395. doi:10.1002/job.251
- Courtice, E. L. & Shaughnessy, K. (2018). The partner context of sexual minority women’s and men’s cybersex experiences: Implications for the traditional sexual script. *Sex Roles, 78*, 272–285. doi:10.1007/s11199-017-0792-5
- Cook, D. W. (1976). Social learning theory and behavior change. *Psychosocial Rehabilitation Journal, 1*, 32–36. doi:10.1037/h0099800

- Dewaele, A., Van Houtte, M., Symons, K., & Buysse, A. (2017). Exploring first sexual intercourse, sexual orientation, and sexual health in men. *Journal of Homosexuality, 64*, 1832–1849. doi:10.1080/00918369.2016.1267467
- Dworkin, S. L., & O’Sullivan, L. (2005). Actual versus desired initiation patterns among a sample of college men: Tapping disjunctures within traditional male sexual scripts. *Journal of Sex Research, 42*, 150–158. doi:10.1080=00224490509552268
- England, P., & Bearak, J. (2014). The sexual double standard and gender differences in attitudes toward casual sex among US university students. *Demographic Research, 30*, 1327-1338. doi:10.4054/DemRes.2014.30.46
- Farvid, P., Braun, V., & Roney, C. (2016). ‘No girl wants to be called a slut!’: Women, heterosexual casual sex and the sexual double standard. *Journal of Gender Studies, 26*, 544–560. doi:10.1080/09589236.2016.1150818
- Fielder, R. L., & Carey, M. P. (2010). Predictors and consequences of sexual “hookups” among college students: A short-term prospective study. *Archives of Sexual Behavior, 39*, 1105-1119. doi:10.1007/s10508-008-9448-4
- Furman, W., & Shaffer, L. (2011). Romantic partners, friends, friends with benefits, and casual acquaintances as sexual partners. *Journal of Sex Research, 48*, 554-564. doi:10.1080/00224499.2010.535623
- Glenn, N. & Marquardt, E. (2001). *Hooking up, hanging out, and hoping for Mr. Right: College women on dating and mating today*. New York, NY: Institute for American Values.
- Golden, R. L., Furman, W., & Collibee, C. (2016). The risks and rewards of sexual debut. *Developmental Psychology, 52*, 1913-1925. doi:10.1037/dev0000206

- Hewitt-Stubbs, G., Zimmer-Gembeck, M. J., Mastro, S., & Boislard, M.A. (2016). A longitudinal study of sexual entitlement and self-efficacy among young women and men: Gender differences and associations with age and sexual experience. *Behavioral Sciences, 6*, 1-14. doi:10.3390/bs6010004
- Hill, B. J., Rahman, Q., Bright, D. A., & Sanders, S. A. (2010). The semantics of sexual behavior and their implications for HIV/AIDS research and sexual health: US and UK gay men's definitions of having "had sex." *AIDS Care, 22*, 1245–1251. doi:10.1080/09540121003668128
- James-Kangal, N., Weitbrecht, E. M., Francis, T. E., & Whitton, S. W. (2018). Hooking up and emerging adults' relationship attitudes and expectations. *Sexuality & Culture, 22*, 706–723. doi:10.1007/s12119-018-9495-5
- Kan, M. L., Cheng, Y. A., Landale, N. S., & McHale, S. M. (2010). Longitudinal predictors of change in number of sexual partners across adolescence and early adulthood. *Journal of Adolescent Health, 46*, 25–31. doi:10.1016/j.jadohealth.2009.05.002
- Kleinplatz, P. J., Ménard, A. D., Paquet, M. P., Paradis, N., Campbell, M., Zuccarino, D., & Mehak, L. (2009). The components of optimal sexuality: A portrait of "great sex". *Canadian Journal of Human Sexuality, 18*, 1-13.
- Kreager, D., Staff, J., Gauthier, R., Lefkowitz, E., & Feinberg, M. (2016). The double standard at sexual debut: Gender, sexual behavior and adolescent peer acceptance. *Sex Roles, 75*, 377–392. doi:10.1007/s11199-016-0618-x
- Lafrance, M. N., Stelzl, M., & Bullock, K. (2017). 'I'm not gonna fake it': University women's accounts of resisting the normative practice of faking orgasm. *Psychology of Women Quarterly, 41*, 210–222. doi:10.1177/0361684316683520

- Lavie-Ajayi, M., & Joffe, H. (2009). Social representations of female orgasm. *Journal of Health Psychology, 14*, 98–107. doi:10.1177/1359105308097950
- Lehmiller, J. J., VanderDrift, L. E., & Kelly, J. R. (2014). Sexual communication, satisfaction, and condom use behavior in friends with benefits and romantic partners. *Journal of Sex Research, 51*, 74-85. doi:10.1080/00224499.2012.719167
- Marks, M. J., & Fraley, R. C. (2005). The sexual double standard: Fact or fiction? *Sex Roles, 52*, 175–186. doi:10.1007/s11199-005-1293-5
- McCarthy, B. (2015). *Sex made simple*. Eau Clair, WI: PESI Publishing.
- Murray, S. H. (2018). Heterosexual men’s sexual desire: Supported by, or deviating from, traditional masculinity norms and sexual scripts? *Sex Roles, 78*, 130–141. doi:10.1007/s11199-017-0766-7
- Murray, S. L., Bellavia, G., Feeney, B., Holmes, J. G., & Rose, P. (2001). The contingencies of interpersonal acceptance: When romantic relationships function as a self-affirmational resource. *Motivation & Emotion, 25*, 163–189. doi:10.1023/A:1010618010115
- Ng, E. M. I., Borrás-Valls, J. J., Pérez- Conchillo, M., & Coleman, E. (2000). *Sexuality in a new millennium*. Bologna, Italy: Editrice Composition.
- Norton, M. K., Smith, M. V., Magriples, U., & Kershaw, T. S. (2016). Masculine ideology, sexual communication, and sexual self-efficacy among parenting adolescent couples. *American Journal of Community Psychology, 58*, 27-35. doi:10.1002/ajcp.12078
- Ostovich, J. M., & Sabini, J. (2004). How are sociosexuality, sex drive, and lifetime number of sexual partners related? *Personality and Social Psychology Bulletin, 30*, 1255-1266. doi:10.1177/0146167204264754

- Paul, E. L., McManus, B., & Hayes, A. (2000). "Hookups": Characteristics and correlates of college students' spontaneous and anonymous sexual experiences. *Journal of Sex Research, 37*, 76-88. doi:10.1080/00224490009552023
- Puts, D. A., Pope, L. E., Hill, A. K., Cárdenas, R. A., Welling, L. L., Wheatley, J. R., & Breedlove, S. M. (2015). Fulfilling desire: Evidence for negative feedback between men's testosterone, sociosexual psychology, and sexual partner number. *Hormones and Behavior, 70*, 14-21. doi: 10.1016/j.yhbeh.2015.01.006
- Regnerus, M. & Uecker, J. (2011). *Premarital sex in America: How young Americans meet, mate, and think about marrying*. New York, NY: Oxford University Press.
- Reid, J. A., Elliott, S., & Webber, G. R. (2011). Casual hookups to formal dates: Refining the boundaries of the sexual double standard. *Gender & Society, 25*, 545-568.
doi:10.1177/0891243211418642
- Rill, L., Baiocchi, E., Hopper, M., Denker, K., & Olson, L. N. (2009). Exploration of the relationship between self-esteem, commitment, and verbal aggressiveness in romantic dating relationships. *Communication Reports, 22*, 102–113.
doi:10.1080/08934210903061587
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press
- Rossi, E., Poulin, F., & Boislard, M.-A. (2017). Trajectories of annual number of sexual partners from adolescence to emerging adulthood: Individual and family predictors. *Journal of Youth & Adolescence, 46*, 995–1008. doi:10.1007/s10964-016-0571-6

- Salisbury, C. M. A., & Fisher, W. A. (2014). "Did you come?" A qualitative exploration of gender differences in beliefs, experiences, and concerns regarding female orgasm occurrence during heterosexual sexual interactions. *Journal of Sex Research, 51*, 616-631. doi:10.1080/00224499.2013.838934
- Sakaluk, J. K., Todd, L. M., Milhausen, R., & Lachowsky, N. J. (2014). Dominant heterosexual sexual scripts in emerging adulthood: Conceptualization and measurement. *Journal of Sex Research, 51*, 516–531. doi:10.1080/00224499.2012.745473
- Sigusch, V. & Schmidt, G. (1971). Lower class sexuality: Some emotional and social aspects of West German males and females. *Archives of Sexual Behavior, 1*, 29-44.
- Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior, 13*, 97–120.
- Simon, W., & Gagnon, J. H. (2003). Sexual scripts: Origins, influences, and changes. *Qualitative Sociology, 26*, 491–497.
- Snell Jr, W. E. (2001). Measuring multiple aspects of the sexual self-concept: The Multidimensional Sexual Self-Concept Questionnaire. In W. E. Snell Jr. (Ed.), *New Directions in the psychology of human sexuality. Research and theory*. Cape Girardeau, MO: Snell Publications. Retrieved from <http://cstl-cla.semo.edu/snell/books/sexuality/sexuality.htm>.
- Tate, C. (2011). The "problem of number" revisited: The relative contributions of psychosocial, experiential, and evolutionary factors to the desired number of sexual partners. *Sex Roles, 64*(9-10), 644-657. doi:10.1007/s11199-010-9774-6
- Tolman, D. L. (2002). *Dilemmas of desire: Teenage girls talk about sexuality*. Cambridge, MA: Harvard University Press.

- Tuana, N. (2004). Coming to understand: Orgasm and the epistemology of ignorance. *Hypatia*, 19, 194–232. doi:10.1111/j.1527-2001.2004.tb01275.x
- Tuoyire, D. A., Anku, P. J., Alidu, L., & Amo-Adjei, J. (2018). Timing of first sexual intercourse and number of lifetime sexual partners in Sub-Saharan Africa. *Sexuality & Culture*, 22, 651–668. doi:10.1007/s12119-017-9488-9
- Vespa, J. (2017). *The changing economics and demographics of young adulthood: 1975-2016*. US Department of Commerce, Economics and Statistics Administration, US Census Bureau.
- Wade, L. D., Kremer, E. C., & Brown, J. (2005). The incidental orgasm: The presence of clitoral knowledge and the absence of orgasm for women. *Women and Health*, 42, 117–138. doi:10.1300=J013v42n01_07
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*, 76, 913-934. doi:10.1177/0013164413495237
- Young, M., Cardenas, S., Donnelly, J., & Kittleson, M. J. (2016). Perceptions of peer sexual behavior: Do adolescents believe in a sexual double standard? *Journal of School Health*, 86, 855–863.
- Young, M., Penhollow, T. M., & Bailey, W. C. (2010). Hooking-up and condom provision: Is there a double standard? *American Journal of Health Studies*, 25, 156-164.
- Zaikman, Y., & Marks, M. J. (2014). Ambivalent sexism and the sexual double standard. *Sex Roles*, 71, 333-344. doi:10.1007/s11199-014-0417-1

APPENDIX A. INFORMED CONSENT

RESEARCH PARTICIPANT CONSENT FORM

Study of Sexual Self-Perception

David P. Nalbone, PhD, and Crystal Niemeyer, BA

Dept. of Behavioral Sciences, Purdue University Northwest

Key Information

Please take the time to review this information carefully. This is a research study. Your participation in this study is voluntary which means that you may choose not to participate at any time without penalty or loss of benefits to which you are otherwise entitled. You may ask questions of the researchers about the study whenever you would like. If you decide to take part in the study, you will be asked to sign this form, so be sure to understand what you will do and any possible risks or benefits.

What is the purpose of this study?

You are being asked to participate in a study designed by Crystal Niemeyer, BA, and David P. Nalbone, PhD, of Purdue University Northwest. We want to understand how you feel about your sexual self-perception.

What will I do if I choose to be in this study?

If you choose to participate, you acknowledge that you are between 18 and 64 years old, live in the US, are a US citizen, and have engaged in sexual activity as a heterosexual. You will be asked to complete a questionnaire asking about your views on your sexual self-perception. You are free not to answer any particular questions if they make you feel uncomfortable, or to withdraw your participation at any time without penalty.

How long will I be in the study?

It should take approximately 20 minutes for you to complete the entire study.

What are the possible risks or discomforts?

Breach of confidentiality is a risk. To minimize this risk, only the researchers will access the data from this study, and no personally identifying information will be collected during the study. The questions involve no greater risk than that found in everyday life.

Are there any potential benefits?

You will not directly benefit from this study. You will have a chance to take part in research, and your participation thus may contribute to the scientific understanding of how people view social and political issues.

Will I receive payment or other incentive?

You will receive compensation of less than \$1 for participating in this research project, so long as you meet the study inclusion criteria and you complete the appropriate verification question to ensure your active participation.

Will information about me and my participation be kept confidential?

There is no personally identifying information on this questionnaire; all responses will remain anonymous, and will be used only in combination with the responses of other participants in this and related studies. In addition, you may choose not to answer particular questions, or to withdraw your participation at any time, without penalty. All data gathered in this study will be stored separately from the consent form, and will be accessed only by the researchers. The data file will be used for preparation of research reports related to this study, and kept for a period of three years after publication of any articles related to this study. The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight.

What are my rights if I take part in this study?

You do not have to participate in this research project. If you agree to participate, you can withdraw your participation at any time without penalty.

Who can I contact if I have questions about the study?

If you have any questions about this research project, you can contact David P. Nalbone at 219-989-2712. If you have concerns about the treatment of research participants, you can contact the Committee on the Use of Human Research Subjects at Purdue University, Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN, 47907-2114. The phone number for the Committee's secretary is (765) 494-5942. The email address is irb@purdue.edu.

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research project and my questions have been answered. I am prepared to participate in the research project described above.

I certify that I am at least 18 years old, a U.S. citizen living in the U.S., have engaged in sexual activity as a heterosexual, and agree to participate in this study.

APPENDIX B. QUESTIONNAIRE

Qualtrics Survey

Have you ever engaged in sexual activity?

- Yes (1)
- No (2)

Skip To: End of Survey If Have you ever engaged in sexual activity? = No

How would you describe your sexual orientation?

- Heterosexual
- Lesbian
- Gay
- Bisexual
- Pansexual
- Asexual
- Queer
- Other

Skip To: End of Survey If How would you describe your sexual orientation? != Heterosexual

Has any of your previous sexual activity been non-consensual?

Yes

No

What is your personal definition of sex?

How frequently do you engage in sexual activity with others?

What percentage of your sexual activity do you consider to be a "hookup?"

How frequently do you achieve orgasm during sexual activity with others?

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
On the whole, I am satisfied with myself. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At times I think I am no good at all. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I have a number of good qualities. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to do things as well as most other people. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I do not have much to be proud of. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I certainly feel useless at times. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I'm a person of worth, at least on an equal plane with others. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I could have more respect for myself. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All in all, I am inclined to feel that I am a failure. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a positive attitude toward myself. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The items in this questionnaire refer to people's sexuality. Please read each item carefully and decide to what extent it is characteristic of you. Give each item a rating of how much it applies to you

	1 – Not at all characteristic of me (1)	2 – Slightly characteristic of me (2)	3 – Somewhat characteristic of me (3)	4 – Moderately characteristic of me (4)	5 – Very characteristic of me (5)
I am satisfied with the way my sexual needs are currently being met. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the status of my own sexual fulfillment. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The sexual aspects of my life are personally gratifying to me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The sexual aspects of my life are satisfactory, compared to most people. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the sexual aspects of my life. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the ability to take care of any sexual needs and desires that I may have. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am competent enough to make sure that my sexual needs are fulfilled. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I have the skills and ability to ensure rewarding sexual behaviors for myself. (8)

I am able to cope with and handle my own sexual needs and wants. (9)

I have the capability to take care of my own sexual needs and desires. (10)

What gender do you identify with?

- Male
- Female
- Agender
- Trans*
- Transgender
- Transgender Male
- Genderqueer
- Intersex
- Other

What racial or ethnic group(s) do you identify with?

- White
- Black or African American
- Hispanic
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Indian Subcontinent

Middle Eastern

Multiracial

Other

What is your current age in years?

What religion do you identify with?

What is your highest level of education?

Less than high school

High school graduate

Trade school

Some college

2 year degree

4 year degree

Professional/Masters degree

Doctorate

What state do you live in?

What is your current employment status?

- Employed full time (11)
- Employed part time (12)
- Unemployed looking for work (13)
- Unemployed not looking for work (14)
- Retired (15)
- Student, employed full time (19)
- Student, employed part time (16)
- Student, not employed (20)
- Disabled (17)
- Other (18)

What is your household income?

- Less than \$10,000 (27)
- \$10,000 - \$19,999 (28)
- \$20,000 - \$29,999 (29)
- \$30,000 - \$39,999 (30)
- \$40,000 - \$49,999 (31)
- \$50,000 - \$59,999 (32)

\$60,000 - \$69,999 (33)

\$70,000 - \$79,999 (34)

\$80,000 - \$89,999 (35)

\$90,000 - \$99,999 (36)

\$100,000 - \$149,999 (37)

\$150,000 or more (38)

Are you currently in an exclusive committed relationship? (i.e., dating or married)

Yes

No

How old were you (in whole years) when you began participating in sexual activity (hand stimulation, oral stimulation, vaginal stimulation, or anal stimulation) with another person?

A sexual partner is having a sexual interaction with at least one other person in which at least one partner's genitals (penis, vagina, anus) are stimulated.

Based on this definition, how many sexual partners have you been with throughout your lifetime?

How many sexual partners have you had vaginal sex with penile insertion?

How many sexual partners have you had anal sex with penile insertion?

How many sexual partners have you anal sex with toy insertion?

How many sexual partners have you given or received oral sex to a vulva/vagina?

How many sexual partners have you given or received oral sex to a penis?

How many sexual partners have you given or received oral sex to an anus?

How many sexual partners have you given or received hand stimulation to genitals?
