"People aren't mind readers": A study of sexual self-concept, partner communication, and sexual satisfaction

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“People aren’t mind readers”:
A study of sexual self-concept, partner communication, and sexual satisfaction

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Keywords: Committed sexual partners, casual sexual partners, sexual activity discrepancy, condom use

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DEDICATION

I wholeheartedly dedicate this dissertation to my incredible parents, Liz and Don Blunt. This, and all of my accomplishments, are thanks to your unwavering support; emotionally, financially and in so many other ways I cannot even name. You have allowed and encouraged me to spread my wings and follow my dreams, and you have been there to catch me every time I stumble. I could not have done any of it without you, and I will never find the words to sufficiently show my appreciation. Thank you for everything you’ve always done, and continue to do, for me.

Thank you to my sister Lisa, for being an wonderful role model of how to be a strong and independent young woman. Your example gave me the confidence to branch out and move away, knowing that our family would always be there when we came back home. You showed me how to follow my dreams and push myself to be everything I wanted to be.

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necessary, for having patience when I was way too busy, and for always making me laugh.

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ABSTRACT

Sexual health is an important component to overall well-being and quality of life. Yet so much of sexual health research is focused solely on the negative consequences of sexuality, such as unintended pregnancy and transmission of sexually transmitted infections. Recently, the need for a positive, health promotion focused framework for research and understanding sexual health has received attention, including from the World Health Organization and the Centers for Disease Control and Prevention. This transition of public health research and practice from a disease-based framework to a positive, health promotion framework necessitates exploring what factors are associated with positive sexuality and how it is experienced. This study contributed to fulfilling this need.

This study focused on healthy sexuality in young college women. Specifically, this study sought to explore what young women find sexually satisfying in different types of sexual relationships (e.g., casual and committed partners). Next, this study identified variables that are important to the healthy sexuality of young college women, including sexual self-concept, communication with sexual partners, sexual satisfaction, and condom use. Lastly, this study aimed to understand the statistical relationship between these variables.

This was a two-phase mixed methods study. Phase one consisted of thirty face to face individual interviews with college women aged 18-25 years, and took place in the
fall semester of 2011 and the spring semester 2012 at a large public urban university located in the southeastern United States. Phase two took place in the spring semester 2012 and consisted of an online quantitative survey measuring sexual self-concept, communication with partners, sexual satisfaction and condom use. Analyses for the quantitative data included bivariate correlations and structural equation modeling.

Qualitative results indicated that these young college women experienced sexual satisfaction with both committed and casual sexual partners, although they identified different reasons why each type of partnership was satisfying. Specifically, the emotional connection and comfort felt with committed relationship partners made sex satisfaction. With more casual or uncommitted partners, these women identified the benefits of maintaining their freedom and not having an obligation to another person. These young women shared their thoughts on how sex could be more satisfying for women and they indicated that communicating sexual desires and needs to partners as one of the most important factors.

The quantitative portion of this study found that sexual self-concept was directly positively associated with communication with sexual partners \( (B=1.45, 95\% \text{ CI}=1.05 \text{ to } 1.84, \beta=.72) \), and directly positively related to sexual satisfaction \( (B=.49, 95\% \text{ CI}= .70, 2.35, \beta=.49) \). Communication with partners was associated with lower discrepancies between wanted and experienced sexual activities \( (B=-3.96, 95\% \text{ CI}=-4.96, -2.95, \beta=-.41) \). For respondents reporting on committed partnerships, communication with partners was directly related to higher sexual satisfaction \( (B=.74, 95\% \text{ CI}= .17, 1.32, \beta=.43) \). For those reporting on casual sexual partners, communication was related to
sexual satisfaction only through lower sexual activity discrepancy scores ($B=.07$, $95\% CI=.01, .13$, $\beta=.04$).

Overall the findings from this study suggest that communicating with casual sexual partners impacts sexual satisfaction partially through decreasing the discrepancies between wanted and experienced sexual activities. However, for committed partners, discrepancies were not significantly related to sexual satisfaction, directly or indirectly, although communication was directly associated with sexual satisfaction. This suggests that communication is impacting sexual satisfaction through a different mechanism for committed partners than casual partners.

The significance of this study lies in its contribution to the positive sexuality literature, which is currently still in its infancy. This study has implications for public health practice in the improvement of health promotion/sex education programs. This study identified sexual self-concept and communication between partners as important factors for achieving authentic sexual experiences. The implications of this study for public health research include the identification of variables important to understanding women’s experience of positive sexuality. Specifically, this study found sexual self-concept to be important to communication and sexual satisfaction, and identified communication as important for both risk reduction (e.g., condom use) and sexual health promotion (e.g., sexual satisfaction).
CHAPTER 1:

INTRODUCTION AND STATEMENT OF THE PROBLEM

Historically, sexual and reproductive health efforts focused on decreasing the occurrence of negative outcomes of sex, including decreasing the number of unintended pregnancies and the spread of sexually transmitted infections (STIs). Females ages 15-19 and 20-24 years have the highest and 2nd highest rates of chlamydia and gonorrhea, and almost half of all new STI cases are in individuals from these age groups (Centers for Disease Control and Prevention, 2008). Although teen pregnancy rates are on the decline (Centers for Disease Control and Prevention, 2011; Hamilton & Ventura, 2012), recent data show a jump in the rate of unintended pregnancies in women ages 20-24 years (Finer & Zolna, 2011), which remains a significant public health concern.

While reducing unintended pregnancy and STIs are imperative goals, recent work has highlighted the need for public health to expand its focus of sexual health to include pleasure and satisfaction as well (Elders, 2010; Higgins, Mullinax, Trussell, Davidson, & Moore, 2011). In 2002, the World Health Organization revised its definition of sexual health beyond preventing disease and unintended pregnancy to include aspects of physical, psychological, emotional, and mental health, in addition to specifically identifying pleasure as a component of sexual health.

Sexual health is a state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to
sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence (World Health Organization, 2002).

Mirroring this, Healthy People 2020 acknowledged that reproductive and sexual health is a key component to the overall health and quality of life for both men and women (U.S. Department of Health & Human Services, 2012), and additional research has identified sexual satisfaction as a key component of well-being and happiness (Hooge, 2012; Rosen & Bachmann, 2008). Additionally, the importance of developing a healthy sexuality and sexual identity before reproductive intent is receiving more attention in the literature. Over the past decade, researchers have started to focus on the more positive aspects of sexuality during adolescence, including pleasure, satisfaction, desire, sexual agency, and sexual self-concept (e.g., Auslander et al., 2007; Impett & Tolman, 2006; Rostosky, Dekhtyar, Cupp, & Anderman, 2008; Sanchez & Kiefer, 2007; Tolman & Szalacha, 1999).

Entry into college may be a particularly important time in regard to sexuality (Wetherill, Neal, & Fromme, 2010). According to the American College Health Association (ACHA), over 70% of college students reported having at least one sexual partner in the past 12 months (American College Health Association, 2010, Spring). Researchers (e.g., Auslander et al., 2007) have suggested that adolescence is a time period for developing a sense of sexual self, and have highlighted the importance of studying sexual satisfaction in adolescents, as it may impact later adult functioning. The transition into college is a time when young adults are continuing to develop this sense of sexual self and may be more likely to explore their sexuality (Curtin, Ward, Merriwether,
& Caruthers, 2011; Lindgren, Schacht, Pantalone, & Blayney, 2009). Previous research indicates that during adolescence, parents, friends and religion are primary influences regarding sexual behavior (Gardner & Steinberg, 2005; Lock & Vincent, 1995; Wetherill et al., 2010). However, in college, personal wishes appeared to be more important in determining sexual behavior of college women (Haavio-Mannila & Kontula, 1997; Lindgren et al., 2009). The transition to college provides increased opportunities for sexual activity compared to high school (Haavio-Mannila & Kontula, 1997; Lindgren et al., 2009) and has been linked to an increase in number of sexual partners (Fromme, Corbin, & Kruse, 2008). Additionally, during the college years young adults are exposed to new people with differing opinions and values, including about sexuality. This experience may encourage students to reevaluate their values and thoughts on sexuality and may promote exploration and/or adoption of new beliefs and behaviors (Carpenter, 2010), which could be positive or negative.

Forming a positive sense of sexual self is an important milestone. Researchers have noted that “[o]ne of the key developmental tasks is acquiring or maintaining a positive sense of self as a sexual being while learning when, where and how to initiate, resist, and manage sexual interactions with a partner” (Rostosky et al., 2008, p. 279). A positive sense of sexual self has been linked to refusing unwanted sex (Salazar et al., 2004), use of contraception (Breakwell & Millward, 1997; Winter, 1988), and communicating with parents about sex (Lou, Chen, Li, & Yu, 2011; Salazar et al., 2004) but has not been studied directly relating to communication with sexual partners.

Communication between sexual partners is a vital part of happy, positive sexual relationships. One aspect of communication, sexual assertiveness, has been linked to
higher likelihood of refusing unwanted sexual activity (Quina, Harlow, Morokoff, & Burkholder, 2000) and to increased likelihood of using contraception (Noar, Carlyle, & Cole, 2006; Zamboni, Crawford, & Williams, 2000). Various types of communication between partners, including self-disclosure and communication specifically about sexual issues, also have been shown to be associated with increased sexual and relationship satisfaction (Byers & Demmons, 1999; Greene & Faulkner, 2005; MacNeil & Byers, 2005).

Many young women receive mixed and negative messages about sexuality. Examples include: they should not have sexual desires; they are responsible for being sexual “gatekeepers”; and should not allow themselves to explore their sexual feelings or needs (Impett & Tolman, 2006). These negative messages can have long lasting detrimental effects on women who embrace them. Further, it has been suggested that negative feelings about sex could interfere with the likelihood of obtaining and using effective means of contraception, particularly for younger populations (Winter, 1988). Negative messages about sexuality are linked to later sexual dysfunction and lack of pleasure or satisfaction in sexual relationships, in addition to feelings of depression and guilt surrounding sexual feelings and behaviors (Curtin et al., 2011). Since women are typically silenced regarding sexual desire and satisfaction, it is important to provide young women with the opportunity to reflect and discuss what they want from sexual experiences and what could help make sexual experiences more satisfying and positive.

The existing research on sexual satisfaction has primarily focused on participants in committed, monogamous relationships. However, sexual activity often occurs outside of these relationships and some research has found important differences in variables that
influence behavior when comparing people who are in serious versus casual sexual relationships (Seal, Minichiello, & Omodei, 1997). Therefore, research on sexual satisfaction should include participants reporting on various types of sexual partnerships to further understand the possible differences in sexual outcomes based on relationship type.

As the field of public health evolves into exploring sexual satisfaction and other positive outcomes of sexuality, it is important to have a broad understanding of how development at younger ages contributes to healthy sexual decision making and outcomes throughout the lifespan. Because the transition to college is an important period of time in regard to sexual development, increasing independence, and exploring new values, it is a good starting point to explore the interaction between self-development and sexual health outcomes.

**Statement of Need**

Due to the call for public health research to include issues of sexual pleasure and satisfaction in its study of sexual health, research is needed that focuses on how to increase these positive outcomes of sex, in addition to decreasing the negative outcomes. Research on this topic in young adult populations is particularly warranted. Focusing on young adult populations is imperative to aid in the development of healthy attitudes and behaviors at a younger age that will continue and strengthen over time. This is particularly true for young women, since women are frequently the targets of societal norms and messages that aim to control sexuality, labeling women as sexual gatekeepers and restricting sex and enjoyment of sexual behavior (L. M. Ward & Wyatt, 1994).
It is important to not only understand the individual components that are associated with positive sexual health, but also to understand how those variables interact and influence one another. Individually, the constructs of sexual self-concept and communication have been shown to be important for healthy sexuality. However, it is the relationships between these and other constructs and how they influence one another that paints a more complete picture of healthy sexuality.

Because this area of research is still relatively new in public health, it is necessary to gather information from the population of interest to determine an appropriate direction and to inform future research. This study focused on young women as the population of interest.

**Purpose of the Study**

This study had two overarching aims, consisting of 5 specific research questions (see Table 1). The first aim was to determine the sexual activities and behaviors that young college women want, and to explore what they identify as factors contributing to sexual satisfaction. To address this aim, qualitative methods were used to provide young adult women an opportunity to reflect on what they want from sexual encounters, and what factors may increase the likelihood of fulfilling these wants.

The second aim of this study was to explore the statistical relationship between sexual self-concept, communication between sexual partners, and positive sexual health outcomes (satisfaction and condom use) in college women. Determining these relationships can help explain how certain factors contribute to positive sexual experiences and possible mechanisms that may mediate this, such as communication with sexual partners. Additionally, this will contribute to understanding the ways through
which communication and sexual self-concept are associated with positive sexual health outcomes.

Table 1: Aims and Research Questions

<table>
<thead>
<tr>
<th>Research Aim</th>
<th>Research Question</th>
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<tr>
<td><strong>Phase 1:</strong></td>
<td></td>
</tr>
<tr>
<td>Research Aim #1: To determine what young college women want from sexual encounters</td>
<td>1. What do young women indicate that they want from sexual encounters?</td>
</tr>
<tr>
<td><strong>Phase 2:</strong></td>
<td></td>
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<tr>
<td>Research Aim #2: To explore the relationship between sexual self-concept and positive sexual health outcomes</td>
<td>2. What is the relationship between sexual self-concept and:</td>
</tr>
<tr>
<td></td>
<td>a) communication between partners</td>
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<td></td>
<td>b) sexual satisfaction</td>
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<td></td>
<td>c) condom use</td>
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<td></td>
<td>3. What is the relationship between communication between sexual partners and:</td>
</tr>
<tr>
<td></td>
<td>a) sexual satisfaction</td>
</tr>
<tr>
<td></td>
<td>b) condom use</td>
</tr>
<tr>
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<td>4. What is the relationship between sexual satisfaction and condom use in this sample?</td>
</tr>
<tr>
<td></td>
<td>5. What is the relationship between sexual self-concept, communication between sexual partners, sexual satisfaction, and condom use in this sample?</td>
</tr>
</tbody>
</table>

Results from this study contribute to the body of knowledge on positive sexuality in a couple of ways. First, these findings add to the scarce literature on what young women want from sexual relationships, and do so uniquely through qualitative methods providing young women with a voice to describe perspectives on, and their own experiences of, sexual satisfaction. Second, this research builds on previous sexual satisfaction research by reporting on the relationships between sexual self-concept, communication, and sexual satisfaction. Third, this study contributes to the safer sex
research by reporting on the relationship of condom use to sexual self-concept, communication, and sexual satisfaction.
DEFINITION OF TERMS

Sexual Self-Concept: A person’s view of themselves as a sexual person, including positive and negative feelings (O’Sullivan, Meyer-Bahlburg, & McKeague, 2006; Rostosky et al., 2008)

Agentic Sexuality: A person’s awareness of their own sexual feelings including desire, and freedom and confidence to engage or not engage in sexual behaviors (Averett, Benson, & Vaillancourt, 2008)

Sexual Satisfaction: Feeling fulfilled and satisfied with one’s sexual life, may include both physical and psychological/emotional satisfaction (Higgins, Trussell, Moore, & Davidson, 2010)

Communication between sexual partners: open discussion with sexual partners about sex including wants, needs, likes/dislikes, and contraceptive use, as examples (Byers & Demmons, 1999)

Sexual self-efficacy: Confidence in ability to engage in sexual behaviors (including refusal and condom use) (Rostosky et al., 2008)

Femininity Ideology: ideas, norms, and restrictions about what constitutes “normal”, acceptable, ideal womanhood (Curtin et al., 2011)

Discrepancy: The difference between desired and actual sexual activities.

Reserved Approach: Being careful and responsible about sexuality, including protection against sexually transmitted infections and pregnancy (Vickberg & Deaux, 2005).
**Negative Association:** Negative feelings sometimes associated with sex- guilt, anxiety, feeling pressured or forced (Vickberg & Deaux, 2005).
CHAPTER 2:
REVIEW OF THE LITERATURE

Reproductive public health traditionally focuses on preventing negative outcomes, such as unintended pregnancy, sexually transmitted infections (STIs), and sexual dysfunction, with much less attention paid to positive experiences such as sexual satisfaction. This is particularly true concerning younger populations, such as adolescents and young adults. As an example, a recent review article (House, Bates, Markham, & Lesesne, 2010) explored the literature on competence (social/behavioral, cognitive, emotional, and moral) and various sexual health outcomes, including sexual experience, age of debut, number of partners, use of contraception/condoms, and pregnancy. This review failed to include any measures of positive outcomes such as pleasure, satisfaction and well-being. As Amaro and colleagues (2001) state regarding the treatment of women’s sexuality by the public health field, “…the focus has not been on health but rather on pathology or public health problems ‘caused’ by sexuality (e.g., adolescent pregnancy, sexual transmitted diseases)” (Amaro, Raj, & Reed, 2001, p. 326).

Although most research has focused on unintended pregnancy and STIs, recently the research scope is broadening to include studies of positive outcomes, such as well-being, sexual subjectivity and pleasure (Jolly, 2007, May; Rostosky et al., 2008; Russell, 2005; Tucker Halpern, 2010). Several researchers are now focusing on more positive
aspects of sexuality during adolescence, including pleasure, satisfaction, desire, sexual agency, and sexual self-concept (e.g., Auslander et al., 2007; Impett & Tolman, 2006; Rostosky et al., 2008; Sanchez & Kiefer, 2007; Tolman & Szalacha, 1999). Because women’s positive sexuality has traditionally been ignored, it is important that we now begin to explore women’s experiences and help them to discover their own healthy sexuality. Researchers note that “until women see themselves as sexual actors with desires, needs, and priorities of their own, and not merely as objects of men to be desired, they will never be capable of true and full sexual health” (Averett et al., 2008, p. 332).

The importance of developing good sexual habits and decision making before the reproductive years is also gaining support (Tucker Halpern, 2010). Adolescence and young adulthood are important developmental time periods that often include increasing independence from parents and working to develop a sense of self, including sexual self (Auslander et al., 2007). The transition into college is likely to continue this development while providing young adults with opportunities to explore their attitudes and behaviors. Learning healthy sexual attitudes and behaviors early may be key to successful and healthy sexuality in adulthood.

There are multiple variables in the sexuality literature that are all conceptually related to the idea of taking ownership of and embracing one’s sexuality. Indeed, other researchers note that these terms have been vaguely defined and are often thought of as synonymous constructs (Zeanah & Schwarz, 1996). These conceptually related variables are described using the terms sexual self-concept (Hensel, Fortenberry, O'Sullivan, & Orr, 2010; Lou et al., 2011; O'Sullivan et al., 2006; Winter, 1988), sexual agency (Averett et al., 2008; Lesch & Kruger, 2005; O'Sullivan et al., 2006), sexual subjectivity
(Horne & Zimmer-Gembeck, 2005, 2006), sexual self-efficacy (Rosenthal, Moore, & Flynn, 1991; Rostosky et al., 2008), sexual self-esteem (Oattes & Offman, 2007; Rosenthal et al., 1991), sexual self-acceptance (Tschann & Adler, 1997), sexual identity (Muise, Preyde, Maitland, & Milhausen, 2010), and sexual empowerment (Peterson, 2010). Through various different pathways, these variables have been associated with refusing unwanted sexual activity, negotiating condom use, expressing sexual desires and needs, and feeling entitled to gaining pleasure and satisfaction from sexual activity (both solo and partnered). In the current study, the construct of sexual self-concept was used to represent the overarching idea of embracing one’s sexuality in a positive manner.

According to the American College Health Association (ACHA), over 70% of college students report having at least one sexual partner in the past 12 months (American College Health Association, 2010, Spring). In addition, college students often experience an increase in independence and are presented with opportunities to expand their network of friends, potential partners, and other influences on their decisions. Because of this, entry into college may be a particularly important time period to understand in regard to sexual development, sexual experiences, and sexual health outcomes.

Sexual Self-Concept

The sexual self-concept is one component of an overall larger idea of self-concept. This term has been defined in differing ways, including “…an individual’s view of him- or her-self as a sexual person” (O'Sullivan et al., 2006, p. 140), “the belief in one’s ability to deal with oneself and others as a sexual person and to feel in control of the sexual aspects of one’s life” (Johnson, Rew, Fredland, & Bowman, 2010, p. 45) and “an individual’s positive and negative perceptions and feelings about his or herself as a
sexual being” (Rostosky et al., 2008, p. 277). Sexual self-concept is noted to be multidimensional and complex (Hensel et al., 2010; Johnson et al., 2010) and has been described as encompassing three different factors. One study identified these three factors as 1) Reserved Approach, 2) Agentic Sexuality, and 3) Negative Associations (Vickberg & Deaux, 2005). O’Sullivan and colleagues similarly identified the three factors as 1) Sexual Arousability, 2) Sexual Agency, and 3) Negative Sexual Affect (O’Sullivan et al., 2006). Finally, Hansel and colleagues included 1) Sexual Openness, 2) Sexual Esteem, and 3) Sexual Anxiety (Hensel et al., 2010) as the three factors of sexual self-concept.

It has been suggested that the concept of the self as a sexual person is fluid and changing over time and, like more general self-concept, develops with age (Winter, 1988). Winter (1998) found that older teens (17-19 years) had more positive sexual self-concepts than younger groups (14-16 years), and that older college students had more positive sexual self-concepts than younger college students. This study found no gender differences in sexual self-concept. A recent longitudinal study also found a trend towards increasingly positive sexual self-concept over a 4 year time period (Hensel et al., 2010). Because sexual experience is prevalent in younger college students, it is important to identify how early development of sexual self-concept impacts sexual health outcomes.

As evidence for the increasing research interest in sexual self-concept, recent years have seen the development of various scales to measure sexual self-concept, including the Multidimensional Sexual Self-Concept Questionnaire (MSSQ; Snell, 1998), and specifically for females, the Women’s Sexual Self-Concept Scale (WSSCS; Vickberg & Deaux, 2005) and the Sexual Self-Concept Inventory for Early Adolescent Girls (SSCI; O’Sullivan et al., 2006).
Sexual self-concept has often been studied in marginalized or disadvantaged populations. For example, Johnson and colleagues (2010) studied the development of sexual self-concept in sexually abused homeless youth and found gender differences in the relationship between sexual self-concept and risks, barriers and experiences of living on the streets (Johnson et al., 2010). Wagner and Rehfuss (2008) looked at sexual self-concept and self-injurious behavior in Christian-raised youth and concluded that developing a sexual self-concept may aid in reducing self-injurious behaviors in addition to enhancing personal health and wholeness (Wagner & Rehfuss, 2008). Sexual self-concept has also been studied in people with physical disabilities (McCabe, Aleporos, & Dip, 2003). However, it is important to understand how it relates to healthy sexuality in “normal” populations as well.

Some previous research has found that people with positive sexual self-concepts report having more lifetime sexual partners (Andersen & Cryanowski, 1994; Breakwell & Millward, 1997; Impett & Tolman, 2006; Randall, 2008). Because higher numbers of sexual partners can be associated with increased risk for STIs, it is important to determine whether those respondents with more positive sexual self-concepts are indeed at greater risk. One study found that participants with positive sexual self-concepts were equally as likely to use condoms than those with a less positive sexual self-concept (Breakwell & Millward, 1997). Winter (1988) found that sexual self-concept predicted frequency of contraceptive use, contraceptive use at most recent intercourse, and use of more effective methods of contraception. However, sexual self-concept did not significantly predict contraceptive use at first sex (Winter, 1988). It is important to better understand the relationship of sexual self-concept with sexual health risks and outcomes.
In understanding how sexual self-concept relates to sexual risk taking and sexual health outcomes, it is important to also include positive outcomes such as sexual satisfaction. Only one study was found that directly studied sexual self-concept and sexual satisfaction together. This study found sexual self-concept to be significantly positively related to sexual satisfaction at most recent intercourse in 12th grade females (Impett & Tolman, 2006).

Young women with more positive sexual self-concepts may be more comfortable with sexuality and thus more likely to communicate with their sexual partners about a variety of sexual issues, including wants/needs and condom/contraception use. Hensel and colleagues (2010) suggested that “… young women with higher sexual esteem [may] place higher value on their sexual being and experiences, and by extension are willing to engage a sexual partner in discussing the issues related to sexual encounters, such as satisfaction, emotions and willingness to participate in risk” (Hensel et al., 2010, p. 2). Although sexual self-concept has been associated with communication with parents (Lou et al., 2011), it has not been studied with communication with partners.

**Communication Between Sexual Partners**

Communication between sexual partners is important for maintaining healthy sexuality. Rosenthal (1996) reported that "… the need for young people to communicate to each other their sexual needs and desires has been identified as a key ingredient in maintaining sexual health" (p.331). Additionally, Rickert and colleagues (2002) noted that “[a] young woman’s ability to effectively communicate her sexual beliefs and desires is a necessary step toward her development of healthy sexual intimacy, and is critical if
she is to adequately protect herself against unwanted or unsafe sexual activities” (Rickert, Sanghvi, & Wiemann, 2002, p. 178).

Much of the literature on communication between young people (including adolescents and college students) and their sexual partners has focused on the impact of communication on contraceptive and condom use (Baete Kenyon, Sieving, Jerstad, Pettingell, & Skay, 2010; Crosby et al., 2002; Noar et al., 2006; Whitaker, Miller, May, & Levin, 1999; Widman, Welsh, McNulty, & Little, 2006). More limited research has studied comfort levels when discussing sexual issues sexual partners (Coleman & Ingham, 1999) and characteristics that predict communication (Ryan, Franzetta, Manlove, & Holcombe, 2007). Overall, these findings suggest that higher levels of communication between teenage sexual partners is associated with increased contraceptive use (Tschann & Adler, 1997; Widman et al., 2006), and that increased comfort using direct and explicit communication supports the ability to refuse unwanted sexual activity (Rosenthal & Peart, 1996).

Communication with sexual partners has also been associated with other sexual health outcomes, including sexual satisfaction, in heterosexual adult and young adult populations (Byers & Demmons, 1999; Greene & Faulkner, 2005; MacNeil & Byers, 2005; Thomsen & Chang, 2000). Some studies have looked at communication in terms of sexual self-disclosure (e.g., telling a sex partner about likes/dislikes) and found it to be related to increased satisfaction (Byers & Demmons, 1999; MacNeil & Byers, 2005). Inhibited sexual communication was found to be negatively associated with physical sexual satisfaction (Davis et al., 2006). It is important that future research include
communication with sexual partners as a variable when exploring positive sexual outcomes including condom/contraceptive use and satisfaction.

The mechanism through which communication is associated with sexual satisfaction is not well understood. It has been suggested that communication may facilitate feelings of closeness to one’s partner which may indirectly impact satisfaction, or that communication may inform partners of sexual preferences and desires, which may directly increase the likelihood of receiving preferred sexual behaviors and activities (Bridges, Lease, & Ellison, 2004; Meston & Trapnell, 2005). In a sample of young adult heterosexual dating couples, MacNeil & Byers (2005) found that increased self-disclosure was related to higher reported sexual satisfaction in both males and females, although the mechanism through which this relationship worked differed between the genders. For women this association was through a pathway termed the “expressive pathway” which suggested that sexual self-disclosure increased feelings of closeness and emotional connection with the partner, which increased sexual satisfaction.

No research, to my knowledge, has tested the indirect relationship between communication and sexual satisfaction through receiving desired and preferred sexual activities. Further research is needed to better understand this relationship.

Women’s Sexual Desires

Although popular-literature books on what women want and why they have sex are increasing in popularity (e.g., Pease & Pease, 2009), little empirical research has focused on what young adult women want from sexual relationships and experiences and the extent to which they receive what they want. Consistent with the typical public health framework, the vast majority of the research on women’s sexuality has focused on sexual
problems and dysfunctions, rather than sexual successes. A quick search of the literature on women’s sexual desire will produce numerous articles and books on sexual dysfunction, arousal disorders and low sexual desire (e.g., Basson et al., 2003; Brotto, Bitzer, Laan, Leiblum, & Luria, 2010; West et al., 2008) but comparatively minimal research on positive sexuality (Higgins et al., 2011; Tucker Halpern, 2010).

Other studies have explored the differences in levels of desired frequency of intercourse between women and their sexual partners (Davies, Katz, & Jackson, 1999; Mark, 2012). But little attention has been paid to what women individually want from sexual relationships, and no literature was found that looked at women’s desire for various specific sexual activities and the frequency with which they receive them in relation to sexual satisfaction.

**Sexual Satisfaction**

Until recently, positive sexual outcomes including sexual satisfaction, were absent from study and definition of sexual health. In 2002 the World Health Organization revised their definition of sexual health to include emotional, mental and social well-being in addition to the experience of pleasure (World Health Organization, 2002). Following this revision, sexual satisfaction has been identified as a gap in the public health sexuality research. Recently, research has started to address this gap by studying predictors and correlates of sexual satisfaction.

Sexual pleasure and satisfaction are important to study in younger populations due to the potential impact they have on later sexual functioning and sexual health. Satisfaction and pleasure may be important in both partnered and solo acts, as noted by Welles (2005); “[t]he discovery of masturbation and sexual pleasure by an adolescent can
ultimately lead to her ability later on to make healthier, self-oriented decisions about her sexual involvement with men rather than playing the sexual accommodation game described by many females” (Welles, 2005, p. 37).

One study (Ott, Millstein, Ofner, & Halpern-Felsher, 2006) asked adolescents about their expectations about sexual activity and results showed that adolescent females valued intimacy more, and sexual pleasure less, than adolescent males. These results may be evidence of the continued double standard in Western society that females should not desire or enjoy sex, but should engage in it to further the intimacy of their relationship. On the contrary, males are expected to enjoy sexual intercourse and to value that pleasure more than the intimacy it creates. Additionally, sexually experienced participants reported higher expectations for pleasure than inexperienced teens, suggesting that teens may not be educated about the potential pleasure of sexual activity until after they experience it for themselves (Ott et al., 2006). Because of this, and because females often do not feel they are entitled or do not expect to feel satisfaction or pleasure during sexual activity (Averett et al., 2008) research is needed that explores young women’s thoughts about sexual satisfaction and their ideas about how to achieve it.

One recent study (Higgins et al., 2010) separately assessed physical and psychological sexual satisfaction. Results showed that respondents who reported high rates of psychological satisfaction also reported higher physiological satisfaction. This study also compared satisfaction variables across different relationship types, and found significantly greater psychological satisfaction reported by those respondents who were in committed loving relationships or who were “steady dating”, which was particularly true for women (Higgins et al., 2010). These and other findings (Seal et al., 1997) suggest
that it is important to study sexual satisfaction in various types of relationships, as there may be differences in sexual satisfaction within an exclusive versus casual partnerships.

More recently, Higgins and colleagues (2011) were among the first to explore sexual satisfaction in a large sample of university students. This study looked at variables predicting physical and psychological sexual satisfaction. Several variables were found to be predictors of both physical and psychological satisfaction, including sexual comfort, pre-meditation of sex, self-respect, and exclusive relationship status (Higgins et al., 2011). Frequency of intercourse and of orgasm were also important for physical sexual satisfaction (Higgins et al., 2011).

In addition to correlates of sexual satisfaction, it may be important to determine how women’s self-development contributes to their expectations and experiences of sexual satisfaction. Galinsky and Sonenstein (2010) explored the relationship between developmental aspects of emerging adulthood (autonomy, self-esteem, and empathy) and three measures of sexual enjoyment (frequency of orgasm, enjoyment of giving and enjoyment of receiving oral sex). Although significantly fewer women than men in this study reported experiencing orgasm regularly, results showed that for women, autonomy, self-esteem, and empathy were all significantly associated with three measures of sexual pleasure (Galinsky & Sonenstein, 2010). This provides some initial evidence that self-development may be associated with sexual satisfaction and pleasure.

**Casual Sexual Relationships**

Casual sexual relationships are a topic receiving more attention in the literature recently. For the most part this research has assessed the potential detrimental effects of casual sex, particularly for young females. Results of these studies have been mixed.
Earlier research appeared to show that casual sexual relationships may be associated with depressive symptomology for females, but not for males (Grello, Welsh, & Harper, 2006). A more recent study found the same to be true but only for casual sexual encounters that included vaginal intercourse (Fielder & Carey, 2010a). Another study found that participants reporting on both casual and committed partnerships enjoyed their “hookups” less than their most recent romantic relationship and had more regret about their most recent hookup than their most recent relationship interactions (Fielder & Carey, 2010b). In contrast, other recent research has found no differences in psychological well-being when comparing male and female respondents who did and did not engage in casual sexual encounters (Eisenberg, Ackard, Resnick, & Neumark-Sztainer, 2009).

Comments on the hookup culture of youth and young adults today have suggested that the Western double standard (that casual sex is ok for males but not for females) may add to the stigma and negative outcomes and feelings about casual sex in women (Armstrong, Hamilton, & England, 2010). Further research is needed to better understand how young women feel about casual sexual relationships and the sexual health outcomes associated with such sexual partnerships, including sexual satisfaction.

**Condom Use**

Condom use is vitally important for healthy sexuality, as it prevents both unintended pregnancy and the spread of STIs. Unfortunately, condom use is often associated with decreased pleasure (Randolph, Pinkerton, Bogart, Cecil, & Abramson, 2007), although a recent study found that condom protected intercourse was rated no less pleasurable than unprotected intercourse (Sanders et al., 2010). Additionally, there were
no statistically significant differences in experience of orgasm for either partner when 
comparing condom protected intercourse with unprotected intercourse (Sanders et al., 
2010). Other research showed that increased use of condoms is positively associated with 
satisfaction with the sexual relationship (Auslander et al., 2007). With continued 
developments of new condom types, often aimed at improving feel and sensitivity, 
research should continue to assess the associations between condom use and sexual 
satisfaction.

**Literature Gaps and Limitations**

As is evident from the review above, the variables sexual self-concept, sexual 
satisfaction and communication between sexual partners have been the focus of several 
studies. However, this previous research has several gaps and limitations. Five main 
gaps/limitations have been identified and are discussed below.

First, much of the research on communication or sexual satisfaction focuses solely 
on outcomes of first sexual intercourse. While this is an important issue, rarely is one’s 
first sexual partner also their last. Therefore, it is important to study outcomes in 
subsequent relationships as well. Additionally, many studies have restricted participants 
to those in exclusive monogamous relationships. Studies of exclusive relationships often 
have inclusion criteria that participants have been dating for a certain period of time (e.g., 
Lawrance & Byers, 1995). However, sexual activity often occurs outside of committed or 
exclusive relationships and that many sexually active young adults will have more than 
one sexual partner (Fielder & Carey, 2010b; Owen, Rhoades, Stanley, & Finchman, 
2010). Previous research has found differences in self-efficacy and sexual assertiveness 
for women who were and were not in committed sexual relationships (Curtin et al.,
However, no research was found that explored communication patterns and outcomes comparing women in exclusive versus casual sexual relationships. Additionally, those people with more than one sexual partner may be at higher risk for STIs and are therefore particularly important to study in terms of communication and condom use. Finally, there may be differences in communication about sexual preferences with committed versus casual sexual partners, however no research has directly studied these differences. Therefore, research exploring communication and/or sexual satisfaction and pleasure needs to include participants outside of traditional, monogamous relationships in addition to new sexual partnerships beyond sexual debut.

Second, the variable of “sexual communication” is often not described in terms of actual topics covered (such as likes/dislikes, contraception use, types of sexual activity, etc.). Some studies have used only self-disclosure as the communication variable (MacNeil & Byers, 2005), others have looked at ‘sexual communication’ in general but have failed to specify which topics were/were not discussed (Tschann & Adler, 1997). This inconsistent operationalization of the communication variable can be troublesome when comparing findings across studies (Noar et al., 2006). The current study separately measures several types of sexual communication, including communication about sexual history, birth control, and sexual preferences.

It is important to determine how communication impacts sexual satisfaction. Previous research has suggested that communication may foster a sense of connection and intimacy with one’s partner (MacNeil & Byers, 2005), while others (Meston & Trapnell, 2005) have suggested that communication about sexual wants and desires may increase the likelihood of having those wants fulfilled. The current study is the first, to
my knowledge, to measure the discrepancy between the sexual activities that are wanted versus received in sexual partnerships, and the relationship of this discrepancy to communication and sexual satisfaction.

The literature on ‘contraceptive use’ does not always specify the specific measurement of contraception (e.g., condoms, hormonal contraception) used in the study (Widman et al., 2006). It is important to distinguish what type of contraception is being used, as many contraceptive methods leave individuals susceptible to STIs. Due to the high rates of STIs in adolescent and young adult age groups (Centers for Disease Control and Prevention, 2008) it is important to measure not only contraceptive use, but the use of methods to prevent the spread of disease as well. Additionally, traditional dichotomous measures of condom use (yes/no) do not provide a full picture. Because condoms are often used for part of a sexual encounter but not the entire time (e.g., starting without a condom but subsequently using one) a dichotomous measure does capture potential exposure to STIs even when a condom is used for pregnancy prevention.

Although several variables have been identified that predict sexual satisfaction (Higgins et al., 2011), the extent to which specific sexual activities are wanted and received is also likely to impact sexual satisfaction. A larger discrepancy between what is wanted and what is received might likely result in lower satisfaction than if the discrepancy between what young women want and get is smaller. No research has looked at the impact of such a discrepancy on sexual satisfaction, or identified factors that may be important for decreasing discrepancies (e.g., communication).
Finally, despite the research that has been done, public health literature lacks research on the positive aspects of sexual partnerships, including sexual satisfaction, particularly for young women.

Theory

One of the major weaknesses of the sexuality literature is the lack of research based on theoretical frameworks. Overall, most of the theories cited in previous sexuality research included concepts such as attitudes, intentions, expectations, norms, external influences (e.g., societal, family, etc.), and beliefs. Work by Salazar and others (Salazar et al., 2004) has supported the need to include several concepts from different theoretical frameworks in the study of adolescent sexuality, including Social Cognitive Theory (SCT; Bandura, 1986), Theory of Planned Behavior (TPB; Azjen & Driver, 1991), and the Health Belief Model (HBM; Janz & Becker, 1984). However, consistent with much of the existing public health literature on sexual health, these theories and frameworks address sexuality from a problem-focused angle.

Future research on sexuality and sexual health requires new theoretical guidance to aid in framing our research from a health-promotion angle, rather than risk avoidance. The current study was guided by two theories which provide a positive orientation for the study of sexuality.

Feminist Theory

The qualitative portion of this study was broadly guided by Feminist Theory, due to the overarching theme of empowering women and providing women with a voice and safe space to explore their sexual desires and feelings. Amaro and colleagues (2001)
noted the importance of feminist theory when studying the social construction of sexuality, particularly in that it highlights the “interactive and contextual aspects of sexuality” (p.325). Amaro and colleagues (2001) also stated that “[f]eminist theory and research are rarely used to inform public health problems related to sexuality and research does not address the contextual factors noted as critical by feminist researchers” (p.326). The current study hopes to help contribute to building a public health research base including feminist theory.

Schick and colleagues (2008) explored two components of feminist theory that are particularly important to the current study: consciousness raising and sexual liberation. Consciousness raising applies to “…recognizing external structures of oppression and unlearning internalized norms of sexism” and sexual liberation refers to helping “…women resist gender norms that impede female sexual subjectivity” (p.226-227). It is anticipated that concepts related to these may arise through interviews with young women about sexuality. This has been found in previous research. For example, Schick and colleagues (2008) found that feminist ideology was directly positively related to sexual subjectivity and to sexual motivation, and indirectly related to sexual satisfaction and condom use self-efficacy.

Additionally, the qualitative portion of this study gave young college women an opportunity to reflect and identify what it is that they are looking for from different types of sexual encounters, and how sex can be more satisfying for women. This is consistent with feminist theory in assisting young women with exploring their own feelings and thoughts, and providing them with voice to discuss topics that are often restricted and considered taboo for them to talk openly about.
**Self-Regulation Theory**

Self-Regulation Theory (SRT) posits that individuals assess their “actual” state of being compared to their “goal” state, and engage in behaviors to decrease the discrepancy between these states (Mithaug, 1993). This theory assumes that individuals have control over their cognitions, motivations and behaviors, and that those with good self-regulation will adjust and regulate their behavior based on their environment and assessment of desired and actual states (Bandura, 1991). Self-Regulation Theory also suggests that engaging in behavior that is consistent with personal preferences and values will result in positive feelings, while behavior that is inconsistent with personal standards will elicit negative feelings (Sanchez, Phelan, Moss-Racusin, & Good, 2012).

In sexuality research, Self-Regulation Theory has primarily been applied to the study of sexual offenders and sexual restraint (T. Ward, Hudson, & Kennan, 1998), but has also been used when looking at sexual risk taking (Crockett, Raffaelli, & Shen, 2006; Raffaelli & Crockett, 2003) and sexual functioning (Bruner & Boyd, 1999).

One previous study utilizing self-regulation theory found that when sexual behavior is consistent with sexual preferences, sexual satisfaction is higher. Sanchez and colleagues (2012) found that women’s sexually submissive behavior was negatively associated with their own and their partner’s sexual satisfaction. However, this relationship was mitigated by preference for partner dominance. That is, for sexually submissive women who preferred dominant partner behavior, sexual submission was not related to their own or their partner’s sexual satisfaction. This suggests that sexually submissive behavior only negatively impacted sexual satisfaction when it was inconsistent or discrepant with women’s sexual preferences (Sanchez et al., 2012).
To the extent that positive sexuality is associated with acting in accordance to personal values and beliefs, the measurement of sexual self-concept and its relationship to communication with partners and sexual satisfaction is tied to SRT. Based on this theory, it is predicted that women with positive sexual self-concepts will be more likely to communicate with partners and will have higher sexual satisfaction scores. This may be partially because communicating with partners and engaging in desired sexual activities may be consistent with their personal values. In comparison, those with more negative sexual self-concepts who engage in sexual activity may be acting inconsistently with their values, thus resulting in a discrepancy between their personal standards and their behavior which may cause negative feelings about sexuality, and be associated with less sexual satisfaction.

Other research has assessed a different kind of discrepancy with sexual activity. Sexual desire discrepancies between relationship partners have been a focus in recent research on sexual and relationship satisfaction (Bridges & Horne, 2007; Davies et al., 1999; Mark, 2012). One study found that discrepancies in sexual desire levels between sexual partners were related to lower sexual and relationship satisfaction in heterosexual couples. This was true for ratings of perceived discrepancies as well as actual discrepancies (calculated by subtracting men’s sexual desire scores from their partner’s) (Davies et al., 1999). Another study found that in same-sex relationships, women who indicated that desire discrepancy was a problem in their relationship also reported lower sexual satisfaction (Bridges & Horne, 2007).

Sprecher and Cate (2004) suggested that discrepancy between an individual’s desired and actual frequency of sexual activity may be related to sexual satisfaction, but
did not directly study this (Sprecher & Cate, 2004). Recent studies have explored discrepancies between actual and desired intercourse frequency (Willoughby & Vitas, 2012) in predicting relationship satisfaction among couples. This study looked only at sexual intercourse, which is only one of many sexual activities that couples may engage in. Therefore it may be important to also include other sexual activities when exploring how sexual activity desire and experience discrepancies impact satisfaction.

Only one study was found that directly measured discrepancies between actual and desired frequency of various sexual activities. Santtila and colleagues (2008) assessed reports of desired and actual frequency of six sexual activities (e.g., vaginal intercourse, oral sex, masturbation, etc.) with sample of men and women between 33-43 years of age. In this study sexual satisfaction was defined as no discrepancy between ratings of actual and desired frequency. Negative discrepancies (wanted the activity more frequently) and positive discrepancies (wanted the activity less frequently) were both categorized as sexual dissatisfaction. This sexual satisfaction measurement was used to predict relationship satisfaction, and respondents with discrepancies between actual and desired frequency of sexual activities reported lower relationship satisfaction compared to those without discrepancies (Santtila et al., 2008). No studies were found that look at discrepancies between desired and experienced sexual activities and communication between partners.

Interviews with women in Phase 1 of this study indicated that communicating with partners was important as a mechanism for increasing sexual satisfaction. This communication was described as a way to decrease the occurrence of sexual activities they did not enjoy and to increase the likelihood of activities that they want and find
pleasurable. Therefore, in application to the Self-Regulation Theory, if the “goal” state is sexual satisfaction, it is necessary to decrease the discrepancy between the sexual activities that they want and the sexual activities that they are engaging in, and communication with partners was identified as one way to decrease this discrepancy (See figure 2a and 2b). To this end, Self-Regulation Theory contributed to the development of the Sexual Want/Get Discrepancy (SWGD) Scale that was developed for Phase 2 of this study, which is described in more detail in Chapter 3.
Figure 2a: Self-Regulation Theory Decision Tree

Figure 2b: Self-Regulation Theory Decision Tree Applied to Sexual Satisfaction

CHAPTER 3:

METHODS

In order to address the two main aims of this research (see Table 2), this study employed a multi-phase, mixed methods design, utilizing both quantitative and qualitative data collection. In phase 1, the qualitative phase, participants completed a one-time individual face to face interview. In phase 2, the quantitative phase, a second set of participants completed a one-time confidential online survey. All study activities and data collection instruments were reviewed and approved by the University of South Florida (USF) Institutional Review Board (IRB).
Table 2: Research Aims, Research Questions, and Data Collection Methods

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<th>Research Aim</th>
<th>Research Question</th>
<th>Data Collection Method</th>
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<td><strong>Phase 1:</strong></td>
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<td><strong>Research Aim #1:</strong></td>
<td>To determine what young college women want from sexual encounters</td>
<td>1. What do young women indicate that they want from sexual encounters?</td>
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<td><strong>Phase 2:</strong></td>
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<td><strong>Research Aim #2:</strong></td>
<td>To explore the relationship between sexual self-concept and positive sexual health outcomes</td>
<td>2. What is the relationship between sexual self-concept and:</td>
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<td>c) condom use</td>
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<td>3. What is the relationship between communication between sexual partners and:</td>
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<td>a) sexual satisfaction</td>
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<td>4. What is the relationship between sexual satisfaction and condom use in this sample?</td>
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<td>5. What is the relationship between sexual self-concept, communication between sexual partners, sexual satisfaction, and condom use in this sample?</td>
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**Population and setting**

The population for this study consisted of female undergraduate students attending a large urban public university in the southeastern United States, between the ages of 18-25 years.

**Exclusion criteria**

The sample for this study was restricted to USF students, and English speaking individuals. The sample was also restricted to females based on findings from previous
literature that communication styles as well as factors that contribute to sexual satisfaction differ significantly between males and females (Haavio-Mannila & Kontula, 1997; Lindgren et al., 2009). Additionally, participants were restricted to those reporting heterosexual sexual activity, since previous studies with similar samples have found numbers of students identifying as homosexual to be too small for statistical comparisons between groups.

Phase 1: Qualitative

The first phase of this study utilized qualitative data collection methods seeking information about what sexual activities and behaviors young adult women want to engage in, what factors contribute to satisfying sexual experiences, and what young women feel could increase the likelihood of satisfying sexual experiences for them and others like them. Individual semi-structured interviews were conducted with 30 undergraduate females, between the ages of 18-25 years. The purpose of these interviews was two-fold: 1) to produce a list of sexual activities and behaviors that young college women engage in, which was subsequently included as a scale in the Phase 2 survey, and 2) to explore what young college women find satisfying about sexual experiences and different types of sexual partnerships.

Study population

The study population for the qualitative phase of this study included all female students, between the ages of 18-25 years, currently enrolled in any section of the Sex, Health, and Decision-Making or Women’s Health elective undergraduate courses at USF in the fall semester 2011 and the spring semester 2012.
**Inclusion criteria**

The Phase 1 sample of female undergraduate students was restricted to those who were aged 18-25 years, and who identified as heterosexual. Students from any year in their undergraduate studies were eligible to participate, in order to explore a variety of different experiences. Since older students may have more experience and insight into their experiences from which to draw on in the interviews, they were included in addition to younger women, which were the focus of this study.

**Data Collection Procedures**

Qualitative data were collected through individual face-to-face, semi-structured interviews, which asked about young college women’s experiences of sexual satisfaction with committed and casual sexual partners, including the sexual behaviors or activities they engage in, and factors that improve sexual experiences for young women. Participants met individually with the Principal Investigator (PI) in a private room on campus at a mutually convenient time.

**Recruitment**

Participants for the face-to-face individual interviews were recruited from elective undergraduate public health courses (*Sex, Health, and Decision-Making* and *Women’s Health*) at USF. Course instructors posted an announcement about the study on the course Blackboard site and additionally emailed the study announcement to female students (Appendix A). The announcement included the purpose of the study, what was required for participation, and contact information for the PI. Students were instructed to contact the PI if they were interested in participating in the interview. Course instructors were never aware of whether or not any student chose to participate in the interviews.
Thirteen interviews were conducted during the fall 2011 semester and the remaining 17 were conducted in the spring semester 2012.

**Incentive**

All participants received a thank-you in the form of a $10 gift card for participating in the interview. Participants received the gift card in-person at the conclusion of the interview.

**Instrumentation**

A semi-structured qualitative interview guide was developed specifically for this study and was reviewed by experts and pilot tested prior to data collection (Appendix C). During the interview, participants were asked questions about the type of sexual activities and behaviors they engage in and/or activities and behaviors that they believe women their age typically engage in. They were also asked to share their thoughts about satisfying sex with committed and casual sexual partners, what factors they felt contributed to satisfying sex with each partner type. They were also asked what things they felt could improve sexual satisfaction for young adult women.

Additionally, at the end of the interview, each interviewee was presented with a pre-generated list of sexual activities and behaviors that young women may engage in (e.g., vaginal, oral, anal sex) compiled by the PI based on previous literature and discussions with colleagues. Participants were asked to review the list and revise it by indicating items that should be removed or added as they saw applicable to women their age. The PI updated the list after each participant so that subsequent interviewees were presented with a list that included the additions from all previous participants. Items that participants suggested be removed from the list were not removed until at least three
participants suggested removing that item. By the end of the 30 interviews, participants were neither adding nor removing any items from the list, and it was determined that consensus had been reached.

**Data collection**

The PI conducted all interviews. Interested students contacted the PI to schedule a mutually convenient time to conduct the interview. Participants met individually with the PI in a private room located in the USF College of Public Health. Upon arriving for the interview, participants first read and signed an informed consent document (Appendix B) and, with their consent, interviews were audio-recorded. All participants presented for their scheduled interview time. No participant refused to answer any question during the interview and no participants withdrew from the interview. Interviews ranged from approximately 15 minutes to 57 minutes in length (M=29:03 minutes, SD=0.37).

**Data Analysis**

**Coding**

Audio-recordings of the interviews were transcribed verbatim, five interviews were transcribed by the PI and the remaining twenty-five through CiviCom’s Transcription Wing services (www.transcriptionwing.com). Transcripts of the interviews were analyzed using NVivo9 software, utilizing the constant comparative method (Glaser & Strauss, 2009). An initial codebook was developed to guide coding. If additional codes emerged in the process of coding, the codebook was updated. If any additional codes were added, all transcripts coded prior to that were re-reviewed and re-coded based on the most recent updated codebook. This was a continual process.
Although a rather extensive interview was conducted (see Appendix C for full interview guide), for the purposes of this dissertation the analyses presented here focus on the questions most relevant to the specific research question for this section, as well as the overall research aims of the study.

As noted above, a list of expected codes was developed a priori based on previous literature. This list served as the initial codebook. Upon review of the interview transcripts, the codebook was revised and updated to provide more detailed descriptions and appropriate uses of the codes. The codebook was reformatted to reflect primary and secondary codes and to include descriptions of appropriate uses for each code/sub-code. When appropriate, the codebook also included circumstances that the code should not be used (see Appendix D for final codebook). Based on this version of the codebook, the PI and an additional independent coder began coding interviews.

The following system was used to determine inter-rater reliability: 1) both coders separately each coded two interview transcripts, the NVivo files were merged and compared. The two coders met to discuss and resolve any differences in coding of these two interviews. Upon resolving discrepancies, coding of the interviews was revised in both files based on the consensus and the codebook was updated; 2) both coders separately each coded three new interviews based on the revised codebook, merged the files in NVivo, and met to discuss and resolve any differences. Upon resolving discrepancies, the codebook was updated and coding of the interviews was revised in both files based on consensus; 3) both coders separately each coded five additional interview transcripts using the most up to date codebook and the NVivo files were merged. Inter-rater reliability was calculated based on these final five interview
transcripts, requesting a Kappa statistic through NVivo9. Kappa results ranged between 0.61-1.0, which represents substantial to almost perfect agreement (Landis & Koch, 1977). Discrepancies in the final five interviews were discussed and resolved, and the coding of all previously coded transcripts updated. The PI coded the remaining interviews using the most up to date codebook. Moving forward, the PI discussed overarching themes and interpretations with the 2nd coder to increase the trustworthiness of the data. Results and themes from these interviews are presented in Chapter 4.

**List Revisions**

In addition to the interview questions, at the end of the interview participants were presented with the pre-generated list of sexual activities and behaviors. Participants were asked to look over the list and to recommend changes, including removing or adding items, to make the list representative of the types of sexual activities and behaviors women their age want and engage in. Each interview participant was asked to review the list and to indicate if anything on the list was something that women their age did not do, or if there were any sexual activities that were missing from the list. After each participant, the list was revised to include their added suggestions. However, any behaviors recommended for removal remained on the list until at least 3 participants recommended removing it.

The final edited list of sexual activities and behaviors became part of a scale (the Sexual Want/Get Discrepancy (SWGD) Scale) used on the phase 2 quantitative survey. This scale represented a measure of what sexual activities participants want from sexual encounters, the extent to which they engage in the desired activities and a rating of how satisfying those activities were.
Phase 2: Quantitative

Phase 2 of this study consisted of an anonymous quantitative online survey. The survey measured variables including sexual self-concept, communication between sexual partners, and several sexual health outcomes (including condom/contraception use and sexual satisfaction). The survey also included a measure specifically developed for this study, assessing the sexual activities and behaviors young women engage in, and want to engage in (based on results from Phase 1).

Study Sample

The Phase 2 study sample included female first and second year undergraduate students, attending a large urban public university in the southeastern United States, between the ages of 18-25 years.

Inclusion criteria

Phase 2 participants were restricted to first and second year female undergraduate students between the ages of 18-25 years, who identified as heterosexual. Because the selection criteria available to the Registrar’s Office is limited to gender, year in school, and age, invited participants could not be restricted to those who identify as heterosexual, as this information is not available to the Registrar’s Office. Additional inclusion criteria (i.e., heterosexual orientation and sexual experience) were indicated in the invitation email as well as on the study consent form.

Data Collection Procedures

Recruitment

The recruitment plan followed the guidelines from Dillman’s tailored method (Dillman, Smyth, & Christian, 2009), including an initial email invitation followed by
three reminder emails (Appendix E), each sent one week apart. Each reminder email thanked those who had already completed the survey and encouraged those who had not yet participated to complete the survey, with the 3rd and final email emphasizing the short time period left to participate (Dillman et al., 2009). However, due to a policy change at the Registrar’s Office regarding emails to students, only the initial email and one follow-up email were sent. Emails were generated by the USF Registrar’s Office and the initial email invitation was sent to 4,109 email addresses of female undergraduate students, between the ages of 18-25 years, enrolled in their first or second year at USF. Each student who met the recruitment criteria received an email explaining the purpose of the study, the need for their participation, and included a link to the informed consent document and contact information for the PI for any questions or concerns. Each of these students also received a 2nd reminder email about the survey, also sent through the USF Registrar’s Office. Because the email addresses could not be linked to survey data, it was not possible to limit reminder the emails to those who had not yet participated. Therefore, the reminder email thanked those who had already completed the survey and encouraged those who had not yet complete the survey to participate.

**Incentive**

Participants were given the opportunity to provide their email address to be entered into a random drawing for a chance to win one of several gift card incentives: five $50 Visa gift cards, ten $25 Visa gift cards, and fifteen $10 Target gift cards. Previous research has indicated that the use of lottery systems for incentive distribution increases participation without coercion (Laguilles, Williams, & Saunders, 2011). Email addresses provided for the incentive drawing were downloaded into a Microsoft© Excel
document and duplicate email addresses were removed. A total of 499 unique email addresses were received. An online random digit generator was used to generate numbers between 0-499, which corresponded to cases in the excel file. Winners were selected if their row number in the Excel document was selected by the random digit generator. Winners were sent an email via the email address provided notifying them that they had been selected to receive a gift card and detailing how to receive it (either pick up from campus or have it mailed to them).

**Instrumentation**

Where appropriate, participants were asked to answer questions based on their current or most recent sexual partner, including measures of communication, sexual satisfaction, and condom/contraception use. Researchers (Impett & Tolman, 2006) have recommended that more research is needed assessing sexual experiences over multiple occasions rather than focusing solely on one specific event. So where possible, this study utilized more global measures rather than event-specific measures.

**Demographics.** Demographic variables included race/ethnicity, year in school, sexual orientation, school enrollment (full/part time), membership in a sorority, (American College Health Association, 2010, Spring), current relationship status (adapted from Sanders et al., 2010), and age (Appendix F).

**Sexual self-concept.** Sexual self-concept was measured using the Women’s Sexual Self-Concept Scale (WSSCS; Vickberg & Deaux, 2005, see Appendix G). This scale was developed specifically to measure three factors of sexual self-concept in women, 1) Agentic Sexuality (awareness of sexual feelings, confidence/freedom to engage in sexual activities), 2) Negative Associations (negative feelings such as anxiety,
guild, pressure), and 3) Reserved Approach (faithful, responsible about sex). When tested with a sample of undergraduate females, the WSSCS was shown to have good internal consistency of all three subscales (Agentic Sexuality reliability $\alpha=.89$, Negative Associations $\alpha=.80$, and Reserved Approach $\alpha=.68$) (Vickberg & Deaux, 2005). Evidence of convergent validity was also found when comparing to the Sexual Self-Schema Scale (Vickberg & Deaux, 2005). Score reliability of the original scale in the current sample was reasonable for two of the three subscales (Negative Associations $\alpha=.795$, Agentic Sexuality $\alpha=.828$). Consistent with the original data testing this scale, in the current sample the Reserved Approach subscale had the lowest reliability at $\alpha=.509$. Score reliability for the full scale data was $\alpha=.630$.

During the structural equation modeling analysis in this study, the Sexual Self-Concept scale was revised (see chapter 4 for details). Reliability of the revised scale data was as follows: Agentic Sexuality $\alpha=.753$; Negative Associations $\alpha=.827$; and Reserved Approach $\alpha=.558$. Overall revised scale $\alpha=.599$.

**Sexual history.** Specific questions about sexual experiences were asked, including experience of oral, anal, and vaginal sex, age at first experience, and number of lifetime and past 12 month partners for each type of sex. Additionally, participants were asked about unintended pregnancy, and if they had been tested in the past 12 months, and/or ever told that they had one of eight different STIs (gonorrhea, chlamydia, HIV/AIDS, trichomoniasis, genital herpes, HPV, genital warts, and syphilis) (Buhi et al., in press) (See Appendix H for all sexual health and behavior questions).
Current/most recent sexual partner. Specific questions were asked about respondents’ current/most recent sexual partner, including relationship type [relationship partner (boyfriend, spouse); casual/dating partner; ex-boyfriend/girlfriend; friend with benefits; hook-up/booty call; and new acquaintance]; where they first met this partner (including in person vs. online); partner gender; and number of vaginal sex experiences with this partner. When answering several other questions (described below) participants were asked to respond based on their current/most recent sexual partner.

Condom Use. Where applicable, participants were asked about condom use at first vaginal sex with this partner as well as last/most recent vaginal sex with this partner. For example “The first time you had vaginal sex with this partner was a condom used?” Response options included: no, not at all; yes, for part of the time; yes, the whole time from start to finish (adapted from Buhi et al., 2012).

Contraceptive use. Where applicable, contraceptive use was measured at first and last/most recent vaginal sex with this partner. For example: “The first time you had vaginal sex with this partner, which of the following methods did you use to prevent pregnancy. Choose all that apply”. Methods included: Birth control pills; vaginal ring (NuvaRing); shot (Depo-Provera); birth control implants (Implanon); intrauterine device (IUD); birth control patch; male condom; female condom; diaphragm /cervical cap/contraceptive sponge; spermicide (foam); fertility awareness (calendar, basal body temperature); withdrawal; sterilization (hysterectomy, tubes tied, vasectomy); none (American College Health Association, 2011).

Orgasm. Where applicable, participants were asked separately about their own and their partner’s experience of orgasm at first and last/most recent oral and vaginal sex
with the current/most recent sexual partner. For example, “The first time you had vaginal sex with this partner, did you have an orgasm?” or “The first time you gave oral sex to this partner did he/she have an orgasm?” Response options included: Yes; No; Unsure; Don’t remember (adapted from Herbenick et al., 2010).

**Communication between partners.** Communication between sexual partners was measured using the Sexual Communication Satisfaction Scale (Wheeless, Wheeless, & Baus, 1984; see Appendix I). This is a 12-item scale, rated on a 7-pt Likert scale ranging from “disagree” to “agree”. An example item is “I let my partner know things that I find pleasing during sex”. Internal consistency for a longer version of this scale was reported at .94 (Wheeless et al., 1984). Reliability from the current data was also high ($\alpha=.939$). In this study, participants were instructed to think about their current/most recent sexual partner when responding to this scale.

Additionally, participants indicated whether and when they typically initiate conversations about birth control, sexual history, and sexual preferences with sexual partners, as well as whether and when they initiated these conversations with their current/most recent sexual partner (Appendix J). Participants were first asked if they had ever initiated a conversation with their partner about these three topics. If they responded yes, they were then asked when these conversations were initiated. Response options included: in a non-sexual situation; right before engaging in sexual activity; during sexual activity; and immediately after sex (Brown et al., 2009, Winter).

**Sexual Want/Get Discrepancy Scale.** The Sexual Want/Get Discrepancy (SWGD) Scale was developed specifically for this study, based on the list of sexual activities and behaviors revised by Phase 1 participants. The SWGD Scale consisted of a
list of 24 sexual activities/behaviors (e.g., cuddling, genital touching, oral, anal, vaginal intercourse), of which participants were asked to rate in three domains: how often they want to engage in the activity, and how often they do engage the activity (see Appendix K). Each item/activity was rated using a Likert scale from 1-5 (never-always) for each of the three domains. A SWGD score was calculated for each sexual activity/behavior by subtracting how often they do the activity from how often they want the activity. Based on the data from this study, discrepancy scores produced good reliability (α=.836).

**Sexual Satisfaction.** Sexual satisfaction was measured with the Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995), which consists of five statements rated on a 7-point bipolar scale. Participants rate these five statements in response to the question stem “overall, how would you describe your sexual relationship with your partner?”. The bipolar pairs are: very bad-very good; very unpleasant-very pleasant; very negative-very positive; very unsatisfying-very satisfying; and worthless-very valuable (see Appendix L). The scale has shown good two-week test-retest reliability (r=.84) and internal consistency (α=.90-.96) (Byers, Demmons, & Lawrance, 1998; Lawrance & Byers, 1995), and good three-month test-retest reliability in another sample (r=.78) (Byers et al., 1998).

No published studies were found that used the GMSEX with participants outside of committed dating relationships, Therefore, the use of this scale with the sample in this study was a new application. Score reliability for the GMSEX scale in the current study was high (α=.955).

**Honesty.** At the end of the survey respondents were asked three questions pertaining to how honestly they answered the survey questions. Questions included: “Did
you ever respond on this survey that you did something when you really didn’t do it?”,
“Did you ever respond on this survey that you did not do something when you really did
do it?”; and “Overall, how honest were you in answering these questions?”. Response
options for the final question included: not at all honest; not very honest; fairly honest;
very honest; and completely honest (Buhi et al., 2012) (Appendix M).

Data collection

Participants received the measures described above via an online survey format.
The survey was developed in Qualtrics®, an online survey program
(www.qualtrics.com). The survey went live on March 19th, 2012 and remained open until
April 13th, 2012. The initial invitation email was sent on March 19th and the reminder
email was sent March 26th. Students who accessed the survey link included in the email
invitation were first taken to an online consent form (Appendix N). After agreeing to
participate, students were linked directly to the online survey. Surveys were completed
confidentially, so no identifying information was collected. Participants were able to
complete the survey at a time and location of their preference, and were encouraged to
complete the survey at a home/personal computer for increased privacy. At the end of the
survey, participants were taken to a separate, unlinked survey and given an opportunity to
provide their email address to be entered into a drawing for a chance to win one of
several gift cards as a thank you for their participation. Email addresses could not be
linked to survey data.

Data management

Data were collected through the Qualtrics® system, and were monitored and
downloaded into IBM SPSS v.20 daily for the first week, to check for any potential
survey and system errors or issues. After the first week data were monitored and downloaded as a backup three times per week. Once the survey closed on April 13th, the final data were downloaded into IBM SPSS v20.

**Data cleaning.** The survey invitation was sent to 4,109 email addresses of undergraduate females in their first or second year, between the ages of 18-25 years. A total of 702 responses were initiated in the online Qualtrics® survey. Of these, 556 reached the end of the survey, and 536 reported answering questions honestly, as indicated by the three honesty questions at the end of the survey.

Although inclusion criteria were specified in the recruitment email as well as the informed consent form, some respondents reported never having engaged in oral, anal or vaginal sex and were removed from the data file, leaving 504 cases. Five cases had completely missing data on at least one of the variables included in the structural equation model and were removed. Respondents who did not identify as heterosexual or were not in their first or second year as an undergraduate student at USF were also removed. Finally, despite identifying as heterosexual, seven participants indicated their most recent sexual partner was female. Since this study is focused on heterosexual sexual behavior, these cases were removed. This left a final sample of 469 responses included in the analyses reported here (see Figure 3a), resulting in a final response rate of 11.4%.
Data Analysis

Univariate and Bivariate Statistics

Analysis for the quantitative phase of the study included univariate, bivariate, and multivariate statistics. All initial descriptive statistics were conducted using IBM SPSS v20. Univariate statistics were performed to provide descriptive statistics, and to assess data for normality using the Shapiro-Wilk test for skewness and kurtosis (Stevens, 2009). Basic descriptive statistics consisted of frequencies, percentages, means, and standard deviations (where applicable) of the demographic and sexual history data, including age, relationship type, experience of oral, anal and vaginal sex, age at first sex and number of lifetime and past 12 month partners for each sex type.
Bivariate correlations were performed using IBM SPSS v.20 to determine the statistical relationships between variables included in the study, which answer research questions 2-4 (see Table 3). Due to non-normality of the data, Spearman’s rho statistic was used for correlations (Neuman, 2003).

Additionally, independent samples t-tests and chi-square analyses were performed to compare differences between respondents with committed versus casual sexual partners on variables such as communication and sexual satisfaction. These analyses were performed using IBM SPSS v.20. Independent samples t-tests are used to compare the means of two groups on a continuous variable of interest (Howell, 1999).

**Structural Equation Modeling**

To test the relationship between sexual self-concept, communication, SWGD scores, and sexual satisfaction (research question #5) data were analyzed with structural equation modeling (SEM) using Mplus software v.6 (http://www.statmodel.com/). Structural equation modeling is designed to simultaneously test the underlying relationships between multiple variables in a model, thereby limiting the type 1 error inflation caused by using multiple bivariate correlations (Buhi, Goodson, & Neilands, 2007; Tabachnick & Fidell, 2007).

Structural equation modeling provides a mechanism for the exploration of direct and indirect effects of the model as a whole, which also allows for testing of mediation (Raykov & Marcoulides, 2006). Another important benefit of SEM is that it estimates and controls for measurement error in observed variables and allows inclusion of latent variables (sexual self-concept, as an example) (Tabachnick & Fidell, 2007). Additionally, *Mplus* has the capability of handling continuous, categorical, count, and binary variables...
by utilizing the weighted least squares estimation technique (B. Muthen & Asparouhov, 2002).

Structural equation modeling statistical programs (such as Mplus) include a built in feature for handling missing data, similar to the full information maximum likelihood (FIML) procedure (Buhi et al., 2007), an advantage when dealing with survey responses where participants may have missing data on some items.

In the current study, the model was tested comparing respondents reporting on committed versus casual sexual relationships. This tested for differences in the relationship between sexual self-concept, communication and sexual satisfaction between participants in different sexual partnerships.

Structural equation modeling was conducted in a two-step process in this study (Buhi et al., 2007). The cleaned SPSS datafile was converted and imported into Mplus. In the first SEM step, the measurement model was tested, which involves a confirmatory factor analysis assessing the model fit of the individual scale items as they infer the latent variable or construct. The second step involves testing the structural model, which provides estimates of the relationships between the latent and measured variables of interest in the model.

**Estimation method.** A variety of estimation methods are available when conducting structural equation modeling using Mplus software. Maximum Likelihood (ML) is the default estimator in Mplus when variables are continuous. When dealing with ordinal, categorical or dichotomous variables, Weighted Least Squares (WLS) estimation is recommended (L. Muthen & Muthen, 1998-2010). Although Likert scale data does not strictly represent interval data and should be classified as ordinal, the range of the scales
included in this study were interpreted by Mplus as continuous data, and the default ML estimation was applied even when WLS was requested. Based on the normality violations of the data in the current study, the MLR estimation method was requested. MLR is a version of Maximum Likelihood estimation in which standard errors and chi-square tests are robust to non-normality and non-independence of observations (L. Muthen & Muthen, 1998-2010).

**Model identification.** In order to estimate a proposed model, the model must be “identified”. There are two criteria necessary for model identification a) the number of observations is equal to or greater than the number of free parameters being estimated and b) each latent variable must be assigned a scale (Kline, 2005). Models that do not meet these criteria are referred to as “underidentified” and may encounter estimation convergence problems. The model tested in this study was overidentified, therefore meeting identification requirements.

**Assessing model fit.** When assessing the fit of a proposed model with the data, several model fit indices are available. In the current study, model fit was assessed using the following fit statistics: a) chi-square test of model fit ($\chi^2$), b) comparative fit index (CFI), c) root mean square error of approximation (RMSEA), and d) standardized root mean square residual (SRMR). These fit indices are produced in Mplus output.

The chi-square statistic is a measure of the discrepancy between the expected and observed covariance matrices based on the proposed model, with a null hypothesis that the matrices are the same (Hu & Bentler, 1999). A significant chi-square result indicates that the observed and expected matrices differ, which suggests the model may not be correct based on the observed data. However, chi-square tests are sensitive to sample
size, and with large sample sizes even small differences in the covariance matrices (Hu & Bentler, 1995) or misspecification can lead to the rejection of the tested model (Bentler & Bonett, 1980). The RMSEA and SRMR are measures of absolute fit, and the CFI is a measure of incremental fit (Hu & Bentler, 1995).

Several guidelines have been developed to help with interpreting model fit statistics. However, consensus does not exist in regard to absolute cut-off values for making model judgments based on fit statistics (Fan, Thompson, & Wang, 1999). Some literature suggests that CFI scores above .90 are usually considered to represent adequate fit between the tested model and the data, and results above .95 are considered good fit (Hu & Bentler, 1999; Kline, 2005). For RMSEA and SRMR typically scores of .08 or below indicate adequate fit and below .06 are interpreted as indicating “close” fit (Hu & Bentler, 1999).

**Structural equation modeling diagrams.** Structural equation modeling diagrams utilize specific shapes and lines to depict relationships between the variables. In structural equation models, measured variables are represented by rectangles, while latent variables are indicated by ovals. Solid lines between variables indicate a direct relationship between the variables, while dotted lines are used to represent indirect pathways.

**Interpreting SEM results.** Structural equation modeling produces several different types of estimates which warrant explanation here. In the measurement model, SEM produces estimates of the item-to-factor correlations (sometimes called factor loadings), which represent the relationship between an individual item on a scale and the latent construct the scale is intending to measure.
The structural model builds on the measurement model and estimates the underlying structure and relationship between the variables included in the model. The estimates produced here represent the coefficients for the relationship between the variables and are represented as standardized beta-weights ($\beta$).

Table 3: Research Questions and Analyses

<table>
<thead>
<tr>
<th>Research Aim</th>
<th>Research Question</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Aim #1: To determine what young college women want from sexual encounters</td>
<td>1. What do young women indicate that they want from sexual encounters?</td>
<td>Qualitative Constant Comparative Coding</td>
</tr>
<tr>
<td>Phase 2:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Aim #2: To explore the relationship between sexual self-concept and positive sexual health outcomes</td>
<td>2. What is the relationship between sexual self-concept and:</td>
<td>Bivariate correlation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) communication between partners</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) sexual satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) condom use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. What is the relationship between communication between sexual partners and:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) sexual satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) condom use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. What is the relationship between sexual satisfaction and condom use in this sample?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. What is the relationship between sexual self-concept, communication between sexual partners, sexual satisfaction, and condom use in this sample?</td>
<td></td>
</tr>
</tbody>
</table>

Protection of Human Subjects

This study received approval from the USF IRB prior to the commencement of data collection. There were no serious threats to subjects in this study. Participants may potentially have felt embarrassed answering questions about sexuality and sexual behavior, however all data collected were kept entirely confidential. Survey responses
were confidential. Students were informed of the purpose and content of the study prior to providing consent to participate. Participants provided informed consent prior to partaking in the interview and also prior to initiating the online survey. The informed consent documents provided participants with contact information for the Principal Investigator, and for the IRB office at USF in the event of any concerns or issues.

During the informed consent process for the interviews participants were notified that they could stop the interview at any time if they wished to do so. For the online survey, participants were able exit the survey at any point if they chose. During both the qualitative and quantitative data collection, participants were allowed to skip any question they did not feel comfortable answering.

Transcriptions from the interviews did not contain any identifying information and participant names were not used in analysis of these interviews. Interview transcription files were stored in a password-protected file on an encrypted, locked computer. Data from the surveys was stored in Qualtrics® and downloaded to IBM SPSS throughout the data collection period. Once downloaded, data were kept in a password-protected file on an encrypted, locked computer.
CHAPTER 4: RESULTS

Phase 1: Qualitative (Research Question 1)

The first phase of this study was exploratory in nature and was designed based on the lack of previous qualitative research into women’s sexual satisfaction. This phase of the study consisted of face-to-face, individual, semi-structured interviews. The purpose of the interviews was to allow women to explore perspectives on, and their feelings about, sexual experiences with both committed and casual sex partners and to reflect on what makes sex satisfying for them. They were also asked to suggest ways that women could increase their own sexual satisfaction. This study is unique in that very few studies have qualitatively explored how young women experience sexual satisfaction and what they desire from sexual experiences.

Study Sample

A total of 30 in-depth, face-to-face, individual interviews were conducted with undergraduate women aged 18-25 years. Characteristics of the participants are presented in Table 4. The majority of participants represented younger ages (age 21 or younger), but were more evenly spread across academic year. Just over half (57%) of the participants reported being in a committed relationship at the time of the interview. Three participants were excluded from further analyses due to not meeting sexual activity eligibility criteria (i.e., experience of oral, anal, or vaginal sex).
Table 4: Descriptive characteristics of interview participants (N=30)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Categories</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (M=20.14, SD=1.77)</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>8</td>
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<td>22</td>
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<tr>
<td></td>
<td>24</td>
<td>1</td>
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<tr>
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<td>1</td>
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<tr>
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<td>Not identified</td>
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</tr>
<tr>
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<tr>
<td></td>
<td>Sophomore</td>
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</tr>
<tr>
<td></td>
<td>Junior</td>
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</tr>
<tr>
<td></td>
<td>Senior</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Not identified</td>
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</tr>
<tr>
<td>Relationship Status</td>
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</tr>
<tr>
<td></td>
<td>In a relationship</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Dating but not committed</td>
<td>2</td>
</tr>
<tr>
<td>Relationship length (if in a relationship, N=17, or dating, N=2)</td>
<td>1-3 months</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>4-6 months</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>7-12 months</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>More than year</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Not identified</td>
<td>1</td>
</tr>
</tbody>
</table>

The qualitative interviews addressed Research Aim #1 and Research Question #1 in this study.

**Research Question 1.** What do young women indicate they want from sexual encounters?

The purpose of the first research question in this study, which pertains to the qualitative portion, was to determine what young women want from sexual experiences. At the beginning of each interview, participants were asked to brainstorm and share the types of sexual behaviors and activities that young women their age commonly desire and/or engage in. The purpose of this question was to
generate an inclusive list of behaviors common to women this age, to aid in
developing a scale for the Phase 2 quantitative portion of this study. After pilot
testing this question responses were not producing the responses intended. As a
backup, a list of potential answers was developed and presented to participants at the
end of the interview to review and revise.

**Sexual activities and behaviors.** Consistent with the pilot testing of the first
sexual activity question (described in Chapter 3), answers from interviewees in response
to this question did not produce adequate results. The question wording included
examples “ranging from cuddling and kissing to anal sex and playing with sex toys” (see
Appendix C for full interview guide). The most commonly mentioned sexual activities
included “regular sex”, which primarily referred to vaginal sex, but sometimes also
included oral sex. Oral sex and anal sex were also mentioned frequently, although
sometimes to indicate that participants did not engage in or enjoy these activities. Use of
sex toys was also mentioned frequently. However, since cuddling, anal sex and sex toys
were all mentioned as examples in the introduction and explanation of the question this
may have biased the answers from participants. Table 5 includes the number of
participants mentioning the most frequently discussed sexual behaviors, and a review of
selected commonly mentioned sexual activities is provided below.

<table>
<thead>
<tr>
<th>Sexual Activity</th>
<th>N (Number of Participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toys</td>
<td>15</td>
</tr>
<tr>
<td>Oral sex</td>
<td>14</td>
</tr>
<tr>
<td>Cuddling</td>
<td>13</td>
</tr>
<tr>
<td>Anal sex</td>
<td>13</td>
</tr>
</tbody>
</table>
Sex toys. Using sex toys with partners was discussed as an activity that was becoming more common and accepted recently, according to most of the interviewees. However, the following quotes demonstrate that the use of sex toys was still not a frequent activity, nor was it included in the most common sexual activities.

I [have] used a toy in the bedroom with my boyfriend but like, it’s not like something I desire all the time.-age 22, junior, in a relationship, interview 7

Um, sex toys. It’s a lot more common than it was like, before, I never really heard anyone talking about it, until like recently. So, like within maybe like the past 2 years, more of my friends are like experimenting with that, um, I know myself also…-age 22, senior, in a relationship, interview 3

Um I only know a couple of girls that play with toys with their boyfriends, like together, but I don’t really consider that common… -age 21, year unspecified, in a relationship, interview 23

Other interviewees indicated that sex toys were still taboo and not something that was common among women their age.

Respondent: I don’t use like any like toys or anything but my friends do. I’m kind of just - I’m old school so….

Interviewer: What do you mean by that?

Respondent: I just like - I don’t know. I’ve never really experimented with like toys or like lingerie or anything. I mean I wouldn’t oppose to but I just haven’t. I don’t know. It’s just - I don’t know. It’s a little taboo I guess for me.- age 21, senior, in a relationship, interview 13

Sex toys, I don’t think – no sex toys.-age 19, freshman, in a relationship, interview 20
The use of sex toys was sometimes discussed as use with partners, but also sometimes in terms of solo use. Additionally, several participants also mentioned that friends often went shopping for sex toys together or bought toys for each other. This also supports the idea that the use of sex toys is becoming more accepted and less taboo.

For Christmas we did this uh, Secret Santa and so a lot of us ended up giving each other dildos. I gave one to one of my friends and she has her boyfriend use it on her.-age 21, junior, in a relationship, interview 30

And I have a lot of friends actually who um [laugh], decided their freshman year to go get, vibrators and stuff. I actually took one of my friends to get one, because she was having a hard time finding a guy that she was interested in so I took her to the store and she decided to get um, a vibrator. –age 19, sophomore, single, interview 2

Oral sex. Many participants mentioned oral sex when discussing common sexual activities for women their age. Receiving oral sex was primarily regarded in a positive way but participants suggested that giving oral sex was not as enjoyable. Overall, more participants spoke positively about oral sex in general (N=12) than negatively (N=5). The following quotes demonstrate that some participants felt oral sex was a give-and-take activity, and that giving oral sex was something required if they also wanted to receive it.

Um, definitely a big fan of oral sex and I feel like a lot of people are. More getting than you know giving it out, but you know it’s usually a two way street.-age 20, junior, dating, interview 4

Yes, I think everybody likes that [oral sex] but if you want to get it, you have to give it, you know.-age 20, junior, in a relationship, interview 9

One participant felt that women did not enjoy giving or receiving oral sex, as indicated by this quote:
Respondent: And a lot of people like in my girlfriend says there are a lot of people opposed to oral sex. So...They just like in terms of the females they find it to be degrading.

Interviewer: Okay. How about receiving it?

Respondent: They are uncomfortable. They wouldn’t want that. They would feel uncomfortable so...-age 19, year not indicated, in a relationship, interview 19

One participant indicated the opposite of most of the other participants, stating that among her friends, giving oral sex was accepted but receiving it was uncommon. She commented:

... especially with the girls that I talk to, it's more of uh, they would go down on the guy but not the guy would ever really go down on the girl.-age 21, junior, in a relationship, interview 30

**Cuddling.** Cuddling was mentioned by 13 participants specifically indicating that they enjoy and engage in this activity. Participants also frequently mentioned activities such as kissing and holding hands. As noted above, cuddling was given as an example during the question introduction and therefore may have biased participant responses. Despite this, the results indicate that this is very common for young women to desire and thus is an important insight for sexual satisfaction research. Participants in both committed and casual relationships mentioned cuddling as something they like to do. The quotes provided here are examples of participant narrative about cuddling.

*I know like everybody I talk to, cuddle time is very, very important especially for me being so busy...Like a lot of times if we don’t have time to have sex, we just cuddle and just sitting next to me is very comforting so we do a lot a lot of cuddling.*-age 21, junior, in a relationship, interview 27
I like cuddling and stuff like that. I don’t go out and like – like have sex with a lot of guys unless they’re my boyfriend.–age 18, freshman, single, interview 16

One participant shared that she felt cuddling could be an indication of how and whether the relationship will continue or progress into something more. She stated:

Um, earlier in a relationship definitely like cuddling, kissing, getting a feel for your partner, you know like, how they are, how you react to them like touching you and, you know cuz if it’s not good in the beginning you don’t want to continue anything else.–age 20, junior, dating, interview 4

Anal sex. Anal sex was mentioned frequently in response to the question about sexual activities of young women. However, more women noted that they did not engage in anal sex or that they felt that it was not common among women their age (N=12) compared to those who spoke positively about it (N=4). The first two quotes here demonstrate that anal sex was not common:

I’ve only ever heard of one of my friends tell me about it [anal sex] and she said she would never try it again.–age 21, senior, in a relationship, interview 15

Uh, I personally like everything except for anal sex. –age 18, freshman, in a relationship, interview 1

However, other participants felt that anal sex was becoming more popular. For example, one participant said:

I guess um, I haven’t heard too many, like with myself um, never done anal and I actually have quite a few friends that have. It’s supposed to be, getting on the rise I guess you could say cuz more and more people are experimenting with that. I haven’t, like I say I haven’t yet, or I haven’t at all, I don’t know if I ever will, but um, I think that, it’s coming, it’s kind of increasing. –age 22, senior, in a relationship, interview 3
One participant spoke about a party she recently had where she and her friends were discussing sex, and anal sex was mentioned.

*Um, some girls – some girls actually do have anal sex. Like there was like, uh, half in the party like half the girls like the anal sex and half of them didn’t.* –age 18, freshman, in a relationship, interview 5

Another participant suggested that while some girls may have anal sex, it was one thing that was kept private and not discussed among friends.

*I think also like, anal sex is like more you don’t talk about that, if you did or you just keep that to yourself in my personal opinion.* –age 21, senior, in a relationship, interview 6

**Satisfying sex.** To further explore what young women want from different types of sexual experiences, the interview guide included questions about satisfying sexual experiences with committed and casual sex partners. Specifically interviewees were asked to identify what made a sexual experience with each type of partner satisfying. Following these questions, participants were asked to share their ideas about what could make sex more satisfying for women, including things that women could do as an individual and/or as part of a couple. Presented here are the qualitative analyses of these interview questions.

**Themes**

Several themes were identified in the interviews regarding satisfying sexual experiences. The following results focus on participants’ responses to questions about sexual satisfaction with different sexual partner types (committed and casual sexual partners), and ways to increase women’s sexual satisfaction. All participants included in the analyses had engaged in oral, anal or vaginal sex at some point in time.
Partner types.

Committed partners. A committed sex partner was described as an exclusive or monogamous relationship partner. Overall, participants frequently referred to the fact that sex with committed partners was “more” than just sex and several of the themes identified encompassed this idea, such as the emotional connection they felt with the person, feelings of trust and comfort, and feeling that they really knew the person. Table 6 presents the number of participants discussing each of the sub-codes about satisfying sex with committed sexual partners.
Table 6: Codes for Committed Partners

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>N (Number of participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional connection</td>
<td>For text mentioning emotions/emotional connection, closeness, bond with partner, love/being in love. Can also be regarding a LACK of emotional connection (e.g., unsatisfying sex, casual partner)</td>
<td>17</td>
</tr>
<tr>
<td>Trust/comfort</td>
<td>Refers to trusting partner, feeling comfortable with them</td>
<td>11</td>
</tr>
<tr>
<td>Know partner</td>
<td>Reference to knowing your partner, knowing what they like, or length of time sexual partners have or “should” know each other</td>
<td>9</td>
</tr>
<tr>
<td>Communication</td>
<td>Any mention of communication between sexual partners.</td>
<td>7</td>
</tr>
<tr>
<td>Experimenting</td>
<td>When a participant specifically mentions experimenting in regards to sexual behaviors</td>
<td>5</td>
</tr>
<tr>
<td>Equality</td>
<td>Partner caring about her orgasm or pleasure as well, not being selfish</td>
<td>2</td>
</tr>
<tr>
<td>Personal characteristics/personality</td>
<td>Refers to characteristics about the partner in specific, such as being a “good guy”, being good to the respondent/treating her well, etc. Can also be negative personality characteristics</td>
<td>2</td>
</tr>
<tr>
<td>Physical</td>
<td>For text mentioning physical attributes (attractive sexual partner, size), physical needs (hormones, release), sexual technique, etc.</td>
<td>1</td>
</tr>
</tbody>
</table>

Emotional Connection. The most common theme arising from participants’ narrative about satisfying sex with a committed relationship partner was the emotional
connection between partners. Participants expressed that this emotional connection intensified and improved the sexual experience. Specifically, loving the person or the feelings of love improving sex with that person was discussed, as shown in the quotes provided. Some of the women expressed that specifically the exclusivity or monogamy of the committed relationship added to sexual satisfaction.

It’s satisfying because you have an emotional connection with them.... And you’re engaging in sex because you’re committed, you’re loving of each other. –age 18, freshman, single, interview 14

... that if you love that person...that’s always - it always makes the sex more better, more passionate, meaningful. –age 18, freshman, dating, interview 26

I guess the connection you guys have, like the bond since you know that you’re only with him and he’s only with you. –age 20, sophomore, single, interview 18

Trust/Comfort. A second theme that emerged regarding committed partners was the trust and comfort that participants felt in this type of relationship. Participants reported feeling more comfortable with committed partners than casual partners and that trust and increased comfort levels added to sexual satisfaction.

I guess if you – it’s just that if you really trust someone like obviously if you’re with them just that maybe for a while and you trust them, you feel less a – or you feel like you’re more comfortable with – like the thought of having sex with him. That’s a really intimate thing. So you feel more comfortable doing that you’d be more willing to do it. –age 21, senior, in a relationship, interview 15

Um I think that you’re so comfortable with that person it’s reassuring. - age 18, freshman, dating, interview 26
A couple of other interviewees expressed that this comfort came from not feeling judged or not having to worry about impressing the partner in the bedroom, or worry about whether she was good enough.

* I would say the fact that you don’t have to worry about am I doing it as good as an expert – you know, like am I – am I as good, is my body as good or that…* -age 19, year not indicated, in a relationship, interview 19

* I think so like – maybe like with a committed partner, you can just feel more relaxed and not feel like you have to impress someone like with a show or something. It’s like you can be more of yourself.* -age 22, year not indicated, single, interview 24

**Knowing the person.** Knowing their partner was another theme that participants spoke about in regard to satisfying sex with a committed partner. Specifically, this often referred to knowing what each partner likes in terms of sexual activities, because of the amount of time they have/had been together and how well they know each other.

* Um, I guess if you really know that person, you know how to uh satisfy them better. * -age 20, junior, single, interview 28

* Well I think if you’ve been that far along, that person knows what you like, what you don’t like. So they’ll be more inclined to do what you like and they’ll make it more satisfying in general. * -age 21, junior, in a relationship, interview 30

**Communication.** Another theme that came up about satisfying sex with committed partners was the ability to communicate with them. Some participants mentioned being able to communicate about sexual topics and specifically about what sexual activities they like and don’t like, or want to try.
...the communication if you have committed partner because you guys have been together for a while, or maybe you haven't, but if you're in a relationship, it’s – you guys can be more open with each other so you guys – I think it might be more satisfying because you can tell him exactly what you like, what you don't like...-age 19, sophomore, in a relationship, interview 10

You guys can like just – just discuss you know, like, “Oh, well, do you want to try this today or just that, or something else?”-age 22, year not specified, single, interview 24

One participant specifically expressed that it would be easier to communicate about what you do like with a committed partner but that partner type didn’t matter in regard to communication about dislikes.

... You can tell anybody “don’t do that”. -age 20, junior, in a relationship, interview 9

Another participant shared her story about how communicating with her partner helped improve the relationship when it started to “go downhill”.

[at first we had] wonderful sex and then after that, it just kind of started going downhill because it became to the point where the initial zazz wasn’t there anymore and I think that’s when we finally – thank goodness, I have a boyfriend who’s very open with things and we sat down and we talked about, you know, what do you like? What do I like? And we kind of make a list and, you know, “Well, I like it when you do this” and us talking about it and like very clearly telling each other what we like completely turned everything around like we made a giant U-turn.

And it works great and I feel that after we had that initial conversation, I’m more willing to go up to him more and be like, “Hey, I want to try this” and I feel comfortable telling him different things I want to try and yes. It’s really – it’s really nice to be able to talk to him.-age 21, junior, in a relationship, interview 27

Experimenting. A few participants mentioned that they could be more willing or open to experimenting sexually with a committed partner than a casual partner. This
seemed to be partially because these women felt that a committed partner would still be around after experimenting, while a casual partner may not be.

...just have fun with it. You guys can like just – just discuss you know, like, “Oh, well, do you want to try this today or just that, or something else?” Yeah and maybe it’s like if you care for the other person, you know what their um, needs coming out of you know, having sex. You’d be more open to try other things that you’re not really comfortable with but you know...-age 22, year not indicated, single, interview 24

...it’s more comfortable because, I feel like I can try different things if I’m more committed to you, like if I know it’s just casual like, it’s kind of like you’re probably going to leave after so let’s just it done so you can go. – age 20, junior, dating, interview 4

Casual partners. Participants were next asked to think about and share what they believe makes sex satisfying with a casual or non-committed sexual partner. The question was purposively framed in a way that if participants had not experienced a casual sexual partnership they were encouraged to think about what they thought might make that experience satisfying, or to think about what they may have heard from friends regarding casual sexual partners. Overall the general consensus was that casual partnerships were time limited and short-term. Table 7 presents the number of participants identifying each sub-code under casual sexual partners. These themes are presented in more detail below.
Table 7: Codes for Casual Partners

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>N (Number of Participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom/no obligation</td>
<td>Refers to freedom to see other people, to only see that partner when you want to, no commitment/obligations of regular relationships, not having time for a relationship</td>
<td>14</td>
</tr>
<tr>
<td>Experiment</td>
<td>When a participant specifically mentions experimenting in regards to sexual behaviors</td>
<td>10</td>
</tr>
<tr>
<td>No emotion</td>
<td>For text mentioning no lack of emotion or no emotion or connection outside the bedroom between partners</td>
<td>6</td>
</tr>
<tr>
<td>No judgment</td>
<td>No worrying about other person’s perceptions, your reputation, being judged</td>
<td>4</td>
</tr>
<tr>
<td>Pleasure</td>
<td>Any mention of pleasure, it feels good, enjoying sex, etc.</td>
<td>3</td>
</tr>
<tr>
<td>Me</td>
<td>Focus on her, all about her, not worrying about partner</td>
<td>2</td>
</tr>
<tr>
<td>Physical</td>
<td>For text mentioning physical attributes (attractive sexual partner, size), physical needs (hormones, release), sexual technique, etc.</td>
<td>1</td>
</tr>
</tbody>
</table>

Freedom/no obligation. Participants acknowledged that committed relationships entail a lot of work, and entail much more time and effort outside of the sexual relationship. They discussed that casual partnerships may not be as demanding as committed partnerships in regard to time and effort required for a relationship, and that that may be beneficial for some women because of their busy schedules. Other women just expressed that they enjoyed the freedom of not being restricted to dating one person.

Oh, [a] relationship is very time-consuming and very difficult and everybody has needs. So a casual sex partner, I mean you’d be able to fulfill your needs without having the, “I need to call you, see how you’re doing. I need to spend time with you.”...And also the stress of having to
worry about the other person. – age 21, junior, in a relationship, interview 27

People don’t have time for committed relationships anymore. They’re busy in their everyday lives. It can just be a one-night thing and you’ll be done ... – age 18, freshman, single, interview 14

Just like I’m in college you know, I don’t want to be tied down. – age 18, freshman, single, interview 16

One participant described this by comparing her committed relationship to a friend’s casual sexual partnership and shared:

Even outside of the bedroom like oh, you know, he needs my help cleaning out around the house or like, you know, “Oh he wants me to go to this place with him,” while she’s like, “All I have to do is have sex with him and then like I can go do my own thing. See who I want to see, you know, because we’re not committed to each other.” So, that I think she enjoys that better. Just the casual sex like when she needs it, he’s there and when he needs it, she’s there. – age 22, junior, in a relationship, interview 7

Experimenting. Experimenting with sex was one theme that came up when discussing both committed and casual sexual partnerships. Although some participants indicated that they would be more comfortable experimenting with a committed partner, others talked about experimenting in casual sexual partnerships. Some women suggested that casual sex was a time and an opportunity to experiment sexually and to try things that are out of the ordinary for them, or that they would not do with a committed partner. Sometimes this was discussed in relation to casual partnerships being a short-term relationship and therefore allowing women to try something new or be “a different person” as one participant stated:

Maybe you can just be like a different person, but this - I guess sometimes it's good for experiences you know. So if you're with a committed person,
then you know what you do like and you're not just like figuring it out all over.- age 20, junior, in a relationship, interview 9

...if you had an encounter with somebody and you did something with them that you never did before that you wouldn’t have liked otherwise, but it’s just the simple fact that, oh, it’s so different... But then if you go and try it with the person that you’re in a committed relationship with, you wouldn’t probably like it. Like – so...so I’m thinking the whole like different atmosphere, different environment, different attitude towards it, different views towards it [with a casual partner]. Where if it’s – if you only do it once, it’s not – not part of your character. ..Like, “It doesn’t define me because I don’t do it all the time, but I can do it once.”-age 21, year not identified, single, interview 11

No emotion. Some participants indicated that the lack of emotion with casual sexual partners might make it more satisfying (in contrast to committed partners where an emotional connection made it more satisfying). Some participants mentioned their goal or desire to have no emotion attached to the relationship, and some spoke about not needing to care about their casual sexual partner’s emotions. It was acknowledged by two participants that women had a harder time not involving emotion compared to men in casual relationships.

Basically like – you don’t want to have that emotional kind of tie to it...I mean it’s hard for girls not to have emotion with it but I’m learning. –age 18, freshman, single, interview 16

And, you know, I guess you don’t really care about their emotions. As long as you satisfy yourself...-age 21, year not identified, in a relationship, interview 23

Less judgment. Often tied in with experimenting was the idea that sex with casual partners provided a situation to explore new sexual behaviors without the fear of being judged. Since casual partners were seen as a short-term or one-time experience, participants didn’t have as much concern for what the partner would think of them.
I think some people like maybe the thrill of knowing like, “okay I'm not going to see him again so I can do whatever I do want” maybe….Maybe I feel like that's kind of their – yeah, maybe their way of doing something out of the ordinary...Like there won’t be any judgment because, you know, it's just casual. – age 19, sophomore, in a relationship, interview 10

If you do something wrong, you're never going to see them again it doesn't matter….You can see whatever you want and it's just like, "You don’t like it? I don’t care." – age 21, junior, in a relationship, interview 30

Pleasure. A few of the women indicated that pleasure specifically could be a benefit to casual sexual partners. It was not implied that sex with a committed partner was not pleasurable, but that pleasure may be a main reason for which people might engage in casual sexual relationships.

I think it depends on the gender. Like if it’s for the guy, it’s just the ability for them to brag more. [Laughter] And also I guess for just pleasure. And then for girls, probably just pleasure. – age 21, senior, in a relationship, interview 15

...it’s definitely all about you. It’s what’s pleasing you at that moment. – age 19, sophomore, single, interview 22

Me. Another theme that emerged about casual partners was the ability for women to focus on themselves and what they want, without having to worry about their partner’s needs, wants, or feelings.

Casual side, ah it’s definitely all about you... Um I mean like in a relationship I’m more likely to do things for him versus for me. It’s not like do this for me, it’s what can I do for you...When you’re casually having sex I feel like it’s more demanding, it’s more “do this for me, do this for me, do this for me”. – age 19, sophomore, single, interview 22

It’s like, when you’re with someone casual, like from my personal experience, you don’t really care... you’re not really worried about what they want too much. – age 18, freshman, in a relationship, interview 1
...the ones with the no-strings-attached is kind of like you don't feel, you don't feel the need to please them... – age 21, junior, in a relationship, interview 30

One participant compared her committed relationship to a friend’s casual relationship, and touched on the difference in focusing on another person in a committed relationship versus only worrying about yourself in a casual sexual partnership.

She just thinks he’s [casual partner] like really a great lover, like selfless, like totally like makes sure that she gets what she wants beforehand and like, you know, she doesn’t have to deal with the whole burden of, you know, that guy always there, like, because she takes care of herself. I'm always thinking about what I need to do for my [committed] partner, you know? – age 22, junior, in a relationship, interview 7

Not as good as committed. Several participants had a difficult time coming up with things that were or might be satisfying about casual sex and indicated that it was less satisfying than sex with a committed relationship partner.

So, that was kind of awkward and something I didn’t really enjoy, you know, because even though I was, you know, like casually hooking up with them, I wouldn't say that I didn’t like them, you know, and I couldn’t see something going further but like when you just kind of get that like “okay, that’s it, bye” sort of feeling, you know? – age 22, junior, in a relationship, interview 7

...if I have a casual partner I’m just, I’m the type of female, I don’t like to think about him messing with other girls, so I wouldn’t. -age 19, sophomore, single, interview 2

Improving Satisfaction. After discussing satisfying sexual experiences with committed versus casual sexual partners, participants were asked what could make sex more satisfying for women. This was framed as either things that women could do
themselves, or things that could be done as part of a partnership. Several themes were common among participants and examples are provided below. Table 8 provides the distribution of codes under improving satisfaction.

Table 8: Codes for Improving Satisfaction

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>N (Number of Participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Any mention of communication between sexual partners.</td>
<td>18</td>
</tr>
<tr>
<td>Knowledge of self</td>
<td>Any mention of knowledge of own body or knowing what you want in the bedroom.</td>
<td>10</td>
</tr>
<tr>
<td>Relationship</td>
<td>Mention of sex being better if in a relationship</td>
<td>5</td>
</tr>
<tr>
<td>Experiment</td>
<td>Trying new things makes sex better</td>
<td>5</td>
</tr>
<tr>
<td>Confidence</td>
<td>Self-esteem or confidence</td>
<td>4</td>
</tr>
<tr>
<td>Masturbation</td>
<td>Any mention of masturbation. If participant mentions masturbation with toys, gets double coded with TOYS code</td>
<td>4</td>
</tr>
<tr>
<td>Equality</td>
<td>Partner caring about her orgasm or pleasure as well, not being selfish</td>
<td>3</td>
</tr>
<tr>
<td>Know partner</td>
<td>Reference to knowing your partner, knowing what they like, or length of time sexual partners have or “should” know each other</td>
<td>2</td>
</tr>
<tr>
<td>Trust/comfort</td>
<td>Refers to trusting partner, feeling comfortable with them</td>
<td>2</td>
</tr>
<tr>
<td>Own decisions</td>
<td>Mention of doing things on their own accord, not just complying with a partner’s wants</td>
<td>2</td>
</tr>
<tr>
<td>Education about sex</td>
<td>Mention of education about sex/sexuality, either sex education they received or suggesting better sex education for women.</td>
<td>1</td>
</tr>
</tbody>
</table>
Communication with partner. Communication with sexual partners was the most common theme in regard to improving sexual satisfaction. Participants indicated that telling the partner what they wanted him to do, what they enjoy and what they do not enjoy was a key way to increase sexual satisfaction.

Um, I think communication is really big. I just – I feel like a lot of people aren’t okay with that. Like they think, “Oh well, if he really or she really likes me that much, they’ll just know what I want” but it’s not how, people aren’t mind readers.- age 19, sophomore, in a relationship, interview 10

Talk to your partner. Tell him like what you like, um, what you don’t like... –age 18, freshman, dating, interview 26

Knowing yourself. These women expressed the importance of knowing themselves, knowing their bodies, and knowing what they find pleasurable in order to be able to increase sexual satisfaction. This included suggestions for women to physically discover what they personally find pleasurable, to understand themselves on a “deeper level”, and also to educate themselves about their body.

To be able to do things that, things that are going to help you be more satisfied sexually knowing about your body. I mean like this um health class that I’m taking right now, learning about like physically what, how it works definitely has, you know, like educated me... to know what’s going to satisfy me. So also like books, I mean like self-help books, knowing yourself on a deeper level, how can you be satisfied on a deeper level.- age 19, sophomore, single, interview 22

You know, and also personally, like, experiment themselves ...but just seek any kind of information, you know, or try certain things out. Um, uh, yeah, I guess that’s about it. Just being aware of what satisfies you, and I am sure that will resonate sexually.-age 25, transfer student 2nd semester, in a relationship, interview 25
Knowing themselves and what they find pleasurable was also sometimes tied to communication, with one participant specifying that women need to know what they find pleasurable in order to tell their partner.

_I mean girls can play with toys to help themselves figure out what they need... And in turn that could help them communicate with their partner what they need._-age 21, year not indicated, in a relationship, interview 23

**Relationships.** Some participants indicated that sex would be more satisfying for women if they wait until they are in a committed relationship with the person. No participants indicated that sex would be better for young women in casual sexual partnerships rather than committed partnerships.

_I think it would be better for um, ha, for younger women to actually be in a relationship and not, you know, having multiple casual partners... I think that would be more satisfying to have it with one partner than, just, you know, experiencing with a lot._-age 19, sophomore, single, interview 2

_I don’t really know, like, personally, it’s just more satisfying...the whole waiting thing is kind of like stigmatized, but it’s so true. It’s like sex is so much better, your relationship is so much better when you like, I don’t know... like personally taking a guy that you’ve known each other for like a week, and then having a relationship, it’s like, a lot more different..._ -age 21, senior, in a relationship, interview 6

**Sexual Activity and Behaviors List.** Due to the failure of the initial interview question regarding sexual activities and behaviors to produce the intended responses, the pre-generated list of sexual activities/behaviors, presented to interviewees at the end of the interview became the primary source to answer Research Question #1 in this study. All but one item from the initial list was retained by the end of the revisions.

When reviewing the list, several participants indicated that they did not know what “fetishes” was, and after explaining what it meant, they indicated it was not
common among their age group. Therefore, this item was removed. Per the recommendation of one early interviewee, “voyeurism” was added to the list. However several following participants did not know what this meant. Once it was explained and discussed with these participants, “voyeurism” was replaced with “strip teasing”. Participants ended up adding the following behaviors to the initial list: strip teasing, role playing, sexting, and skype/cybersex. Fetishes was the only item removed from the final list.

One participant recommended adding experimenting with same-sex partners to the list, and subsequent participants retained this item. However, because of additional information gathered during the interviews (described later in this chapter), the final survey included separate questions about same-sex desire and experience and therefore this activity was not included in the list of behaviors. Finally, based on participant feedback, examples and clarifications of items were also included in the final list (e.g., specifying using sex toys “with partner”, examples of “genital touching” (fingering, clitoral stimulation)). By the final interview, no further changes (including adding or removing activities/behaviors) were suggested.

This final version of the list was developed into a Sexual Want/Get Discrepancy (SWGD) Scale that was used on the Phase 2 online survey (see appendix K). Table 9 provides descriptive statistics representing participants’ ratings of how often they want each of the sexual activities included in the list. Each item was rated on a scale from 1 (never), 2 (rarely), 3 (sometimes), 4 (often), to 5 (always).
As can be seen in this table, the most commonly desired sexual activities include: mouth kissing, cuddling, verbal affirmations, vaginal sex, and body kissing, which all received an average rating of 4 or greater on a scale of 1 to 5 (with 5 indicating “always”). The least commonly desired behaviors were anal sex, anal play, multiple partners, skype/cybersex and watching porn with partner. Each of these received an average rating of less than 2, which indicates that the majority of participants rated wanting this behavior between “never” and “rarely”. These results demonstrate that the wording of the initial interview question regarding desired sexual activities and behaviors...
may have influenced participant responses since the list retained items that participants reported wanting infrequently or never.

**Other information.** In addition to the questions analyzed above, at the end of the interviews participants were asked if there was anything else they would like to share or if there were questions they thought should have been asked during the interview that had not been asked. At this point, a few participants brought up the fact that all questions were asked about male partners. Even after explaining that that the focus of the study was on heterosexual women, participants indicated that it was not uncommon for females who identify as heterosexual to have same-sex experiences. Specifically one participant explained that women may feel more comfortable sexually with another woman, even if she identifies as heterosexual.

...*Because I guess like sometimes like other people can feel like more stimulated more [by] the same sex even if they’re heterosexual though...And like sometimes some people might like feel more comfortable with the same sex touching them even if they’re heterosexual.* -age 19, sophomore, single, interview 8

One participant discussed the fact that kissing girls was considered to be normal and expected, and just something that college girls did. She shared that her friends were surprised when she told them she had not kissed a girl.

*Um, I guess like their – like the bisexuality phase... I guess when you become in college that’s the thing to do. ...Like my friends are visiting from back home and they’re like “[name], you haven’t kissed a girl?” “Well, no,” I’m like “I haven’t.” “Oh, but you’re in college. You’re supposed to.” [Laughter] So I’m like “No.”* -age unidentified, freshman, single, interview 29
Another participant also expressed that she felt same-sex experimenting was common.

When asked about satisfaction with a same-sex partner, she expressed that it was completely mentally satisfying in addition to physically satisfying.

\textit{You know, I mean I don't think it's going to be as common but I mean especially if you're aiming towards heterosexual [in this study] but I feel like a lot of young women do experiment. There's plenty of that going on. Um, I know I've done it so I feel like there's probably and I know that they're going to probably be girls of my age, so I'm sure that that's also relevant.}

When prompted about motivations for same-sex experience and whether satisfaction was a component of same-sex experiences she responded:

\textit{I see it as complete satisfaction mentally. It's -- I mean like physically, sure, I mean I would say it's physically satisfying, too, um just because it's a whole mindset thing again. You know, I mean it's a -- it's definitely like you know if you physically want to be satisfied ah mentally you kind of want to be, then I think a lot of times if you're with someone that knows best what your body is like and what you like...It's more easily pleased....}

-age 19, sophomore, single, interview 22

One participant recommended adding same-sex experience to the sexual activities list which participants revised at the end of the interviews. Initially, this item was added, and was retained by subsequent participants. Due to additional information and discussion about same-sex experience described here, specific questions regarding same-sex experience, desire for same-sex experience, and gender of the most recent sexual partner were asked on the Phase 2 survey, separately from the SWGD Scale.
Phase 2: Quantitative (Research Questions 2-5)

Study sample

The invitation to participate in the Phase 2 survey was sent to all first and second year undergraduate females, between the ages of 18-25 years. This resulted in the email invitation being sent to 4,109 email addresses, as determined by the USF Registrar’s Office. After data cleaning (described in chapter 3), there were 469 responses in the dataset, representing a response rate of 11.4%. This response rate is lower than similar studies utilizing online surveys with college students (Buhi et al., 2012; Cook, Heath, & Thompson, 2000; Sheehan, 2001). Demographic characteristics of these participants are described below and presented in Table 10.

Demographics and Descriptives

The majority of participants identified as White (74%) or Hispanic (20.9%) and were enrolled in school full-time. The number of participants from first and second year was equally split half and half. Over half of participants (58.9%) reported being in a committed relationship at the time of the survey. Almost all respondents had engaged in oral sex (96.6%) and/or vaginal sex (93.8%), and one quarter (24.9%) reported having had anal sex. The average number of lifetime vaginal sex partners (4.15) was higher than oral sex partners (3.84), and the average number of anal sex partners was the lowest (1.41).
Table 10: Descriptive characteristics of survey participants (N=469, unless otherwise stated)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>105 (22.4%)</td>
</tr>
<tr>
<td>19</td>
<td>251 (53.5%)</td>
</tr>
<tr>
<td>20</td>
<td>101 (21.5%)</td>
</tr>
<tr>
<td>21</td>
<td>6 (1.3%)</td>
</tr>
<tr>
<td>22</td>
<td>4 (.9%)</td>
</tr>
<tr>
<td>23</td>
<td>2 (.4%)</td>
</tr>
<tr>
<td>1st year undergraduate</td>
<td>232 (49.5%)</td>
</tr>
<tr>
<td>2nd year undergraduate</td>
<td>237 (50.5%)</td>
</tr>
<tr>
<td><strong>Race/Ethnicity (N=461)</strong></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>98 (20.9%)</td>
</tr>
<tr>
<td>White</td>
<td>341 (74.0%)</td>
</tr>
<tr>
<td>Black</td>
<td>67 (14.5%)</td>
</tr>
<tr>
<td>Asian</td>
<td>26 (5.6%)</td>
</tr>
<tr>
<td>Hawaiian/Pacific Islander</td>
<td>4 (0.9%)</td>
</tr>
<tr>
<td>Indian/Alaska Native</td>
<td>7 (1.5%)</td>
</tr>
<tr>
<td><strong>Sorority membership</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>33 (7.0%)</td>
</tr>
<tr>
<td>No</td>
<td>436 (93.0%)</td>
</tr>
<tr>
<td><strong>Enrollment status (N=467)</strong></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>462 (98.9%)</td>
</tr>
<tr>
<td>Part time</td>
<td>5 (1.1%)</td>
</tr>
<tr>
<td><strong>Current relationship status</strong></td>
<td></td>
</tr>
<tr>
<td>Single not dating</td>
<td>123 (26.2%)</td>
</tr>
<tr>
<td>Single and dating</td>
<td>70 (14.9%)</td>
</tr>
<tr>
<td>Committed relationship, not living together</td>
<td>224 (47.8%)</td>
</tr>
<tr>
<td>Committed relationship, living together</td>
<td>49 (10.4%)</td>
</tr>
<tr>
<td>Married</td>
<td>3 (0.6%)</td>
</tr>
<tr>
<td><strong>Ever vaginal sex (yes)</strong></td>
<td>440 (93.8%)</td>
</tr>
<tr>
<td><strong>Ever oral sex (yes) (N=468)</strong></td>
<td>453 (96.6%)</td>
</tr>
<tr>
<td><strong>Ever anal sex (yes)</strong></td>
<td>117 (24.9%)</td>
</tr>
<tr>
<td><strong>Ever same-sex experience (N=465)</strong></td>
<td>65 (14%)</td>
</tr>
<tr>
<td><strong>Variable</strong></td>
<td><strong>M(sd)</strong></td>
</tr>
<tr>
<td>Age at first vaginal sex</td>
<td>16.57 (1.57)</td>
</tr>
<tr>
<td>Num. lifetime vag sex partners</td>
<td>4.15 (4.96)</td>
</tr>
<tr>
<td>Num. 12 month vag sex</td>
<td>1.93 (1.85)</td>
</tr>
<tr>
<td>Age at first oral sex</td>
<td>16.29 (1.92)</td>
</tr>
<tr>
<td>Num. lifetime oral sex partners</td>
<td>3.84 (4.48)</td>
</tr>
<tr>
<td>Num. 12 month oral sex</td>
<td>1.79 (1.93)</td>
</tr>
<tr>
<td>Age at first anal sex</td>
<td>17.71 (1.28)</td>
</tr>
<tr>
<td>Num. lifetime anal sex partners</td>
<td>1.41 (1.57)</td>
</tr>
<tr>
<td>Num. 12 month anal sex</td>
<td>0.79 (.057)</td>
</tr>
</tbody>
</table>
Normality

Before conducting any analyses, the data were examined for normality and outliers using measures of skewness and kurtosis. Data with a normal distribution produces skewness and kurtosis values of zero (Tabachnick & Fidell, 2007). Normality statistics for each of the scales analyzed here can be found in Table 11. The scales for sexual satisfaction (GMSEX), communication (CommScore), condom use at first sex (condom 1st sex) and the subscales of Agentic Sexuality (SSCAgentic) and Reserved Approach (SSCReserved) of the Sexual Self-Concept Scale were all negatively skewed, demonstrating that scores on these scales tended to pile up towards the higher end of the scale. The Negative Association subscale of the SSC (SSCNegAssn), condom use at most recent sex (condom last sex), and SWDG scores were positively skewed, suggesting that scores on these scales tended to be on the lower end of the scale. Kurtosis values for all scales except condom use were positive, indicating that the distribution of scores was positively peaked with most scores gathering closely around the mean.

The Sexual Self-Concept subscales were revised during the structural equation modeling analysis (described later in this chapter). Normality data for the revised subscales are presented as well. The skewness and kurtosis for each of the revised subscales is in the same direction as the original scales, however with slightly higher skewness and kurtosis values.

Because of the nature of the discrepancies scores, and that women could indicate that they were either engaging in a behavior more or less than they would like, discrepancy scores could be positive or negative. Most statistical programs are not
capable of handling negative data values, and therefore absolute values of the SWGD Scale are also presented.

The Shapiro-Wilk statistics test for normality was also conducted to explore normality. The significant results on this test indicate that the data from each scale deviate significantly from normal distributions (Shapiro & Wilk, 1965) (see Table 12). Shapiro-Wilk statistics for the revised Sexual Self-Concept subscales were slightly lower, however still statistically significant. No transformations were conducted on these variables as statistical methodology was selected that is robust to violations of normality (described later).
Table 11: Descriptive statistics of scales

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Statistic</td>
<td>Std. Deviation</td>
<td>Statistic</td>
</tr>
<tr>
<td>GMSEX</td>
<td>469</td>
<td>1</td>
<td>7</td>
<td>5.99</td>
<td>1.36</td>
<td>-1.58</td>
</tr>
<tr>
<td>CommScore</td>
<td>469</td>
<td>1</td>
<td>6</td>
<td>4.87</td>
<td>1.10</td>
<td>-1.05</td>
</tr>
<tr>
<td>SSC: AgenticSexuality</td>
<td>443</td>
<td>1.63</td>
<td>5.95</td>
<td>4.50</td>
<td>.691</td>
<td>-0.597</td>
</tr>
<tr>
<td>SSC: Revised</td>
<td></td>
<td></td>
<td></td>
<td>5.10</td>
<td>.699</td>
<td>-1.17</td>
</tr>
<tr>
<td>SSC: NegativeAssn</td>
<td>445</td>
<td>1.25</td>
<td>4.50</td>
<td>2.33</td>
<td>.593</td>
<td>.833</td>
</tr>
<tr>
<td>SSC: Revised</td>
<td>469</td>
<td>1.00</td>
<td>5.33</td>
<td>1.94</td>
<td>.825</td>
<td>1.35</td>
</tr>
<tr>
<td>SSC: ReservedApproach</td>
<td>467</td>
<td>2.00</td>
<td>6.00</td>
<td>5.35</td>
<td>.773</td>
<td>-1.41</td>
</tr>
<tr>
<td>SSC: Revised</td>
<td>469</td>
<td>2.00</td>
<td>6.00</td>
<td>5.285</td>
<td>.892</td>
<td>-1.49</td>
</tr>
<tr>
<td>SWGD Overall</td>
<td>462</td>
<td>.82</td>
<td>2.25</td>
<td>.227</td>
<td>.397</td>
<td>1.24</td>
</tr>
<tr>
<td>SWGD Overall (Absolute value)</td>
<td>462</td>
<td>0.00</td>
<td>2.25</td>
<td>.534</td>
<td>.358</td>
<td>1.19</td>
</tr>
<tr>
<td>Condom 1st sex</td>
<td>428</td>
<td>1</td>
<td>3</td>
<td>2.48</td>
<td>.817</td>
<td>-1.09</td>
</tr>
<tr>
<td>Condom last sex</td>
<td>386</td>
<td>1</td>
<td>3</td>
<td>1.87</td>
<td>.926</td>
<td>.266</td>
</tr>
</tbody>
</table>

Italicized scales are the revised scales based on the SEM analysis
Table 12: Shapiro-Wilk tests for normality

<table>
<thead>
<tr>
<th>Scale</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMSEX</td>
<td>.736</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>CommScore</td>
<td>.869</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SSC: AgenticSexuality</td>
<td>.984</td>
<td>342</td>
<td>.001</td>
</tr>
<tr>
<td>SSC: Agentic Sexuality Revised</td>
<td>.919</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SSC: NegativeAssn</td>
<td>.940</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SSC: Negative Assn Revised</td>
<td>.860</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SSC: ReservedApproach</td>
<td>.812</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SSC: Reserved Approach Revised</td>
<td>.784</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SWGDOverall</td>
<td>.918</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SWGDOverall (Absolute value)</td>
<td>.927</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Condom 1st sex</td>
<td>.613</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Condom last sex</td>
<td>.698</td>
<td>342</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
Bivariate Relationships (Research Questions 2-4)

**Bivariate Correlations.**

*Assumptions.* Several assumptions need to be met when conducting bivariate correlations, based on which test statistic is used. Pearson’s product-moment correlation coefficient assumes data are measured on interval or ratio scales, and that data are approximately normally distributed (Howell, 1999). Spearman’s rank-order correlation is a non-parametric test statistic used for ordinal data, and is a better option when the assumptions of Pearson’s r correlation are violated (Howell, 1999).

*Analysis.* Given the violations of normality in the current data, Spearman’s rank-order correlation was used to answer research questions 2-4. Bivariate correlations are presented in Table 13.

**Chi-Square.**

*Assumptions.* The chi-square test is a non-parametric test used to determine statistical associations between groups on discrete or categorical variables of interest (Tabachnick & Fidell, 2007). Therefore, chi-square tests do not require that data meet the normality assumptions like correlations.

*Analysis.* Chi-square tests were conducted using IBM SPSS v.20.

**Independent Samples t-tests.**

*Assumptions.* T-tests are conducted under the assumption that the dependent variable is normally distributed, that the two groups have equal variances on the dependent variable, and that the scores for the two groups are independent of each other (Howell, 1999; Stevens, 2007). Levene’s test for equality of variances indicates whether
or not the data meet the equality of variances assumption (Tabachnick & Fidell, 2007). If not, the statistic reported should include the adjustment for equal variances not assumed.

**Analysis.** Independent samples t-tests were performed using IBM SPSS v.20. A significant t-test indicates that the means on the variable of interest statistically differ for each of the two groups.
Table 13: Spearman’s bivariate correlations of original and revised scale (N=469)

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SSC Agentic Sexuality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. SSC Agentic Sexuality Revised</td>
<td>.746**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. SSC Negative Assn</td>
<td></td>
<td>-.405**</td>
<td>-.420**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. SSC Negative Assn Revised</td>
<td></td>
<td>-.420**</td>
<td>-.438**</td>
<td>.900**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. SSC Reserved Approach</td>
<td>.179**</td>
<td>.331**</td>
<td>-.195**</td>
<td>-.221**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6. SSC Reserved Approach Revised</td>
<td>.115*</td>
<td>.255**</td>
<td>-.125**</td>
<td>-.163**</td>
<td>.910**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. GMSEX</td>
<td>.490**</td>
<td>.471**</td>
<td>-.508**</td>
<td>-.510**</td>
<td>.239**</td>
<td>.129**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8. Communication</td>
<td>.535**</td>
<td>.486**</td>
<td>-.462**</td>
<td>-.473**</td>
<td>.267**</td>
<td>.194**</td>
<td>.684**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. SWGD Overall Absolute Values</td>
<td>.071</td>
<td>.015</td>
<td>.074</td>
<td>.111**</td>
<td>-.180**</td>
<td>-.163**</td>
<td>-.269**</td>
<td>-.275**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. SWGD Overall Absolute Values</td>
<td>-.085</td>
<td>-.152**</td>
<td>.286**</td>
<td>.279**</td>
<td>-.243**</td>
<td>-.206**</td>
<td>-.415**</td>
<td>-.412**</td>
<td>.600**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11. Condom 1st sex</td>
<td>-.035</td>
<td>.013</td>
<td>-.020</td>
<td>-.024</td>
<td>.242**</td>
<td>.235**</td>
<td>.009</td>
<td>-.002</td>
<td>-.021</td>
<td>-.008</td>
<td>1</td>
</tr>
<tr>
<td>12. Condom last sex</td>
<td>-.133*</td>
<td>-.040</td>
<td>.017</td>
<td>.086</td>
<td>.161**</td>
<td>.197**</td>
<td>-.103*</td>
<td>-.093</td>
<td>.327**</td>
<td>.033</td>
<td>.327**</td>
</tr>
</tbody>
</table>

*p<.05  
**p<.001
Research question 2.

a) What is the bivariate relationship between sexual self-concept and communication between partners. Communication significantly related to sexual self-concept, but in differing directions for the subscales. Agentic Sexuality and Reserved Approach subscales were both positively associated with communication between partners ($r_s = .535$, and $r_s = .267$, respectively $p < .001$). The Negative Association subscale was negatively related to communication ($r_s = -.462$, $p < .001$).

b) What is the bivariate relationship between sexual self-concept and sexual satisfaction. Agentic Sexuality ($r_s = .490$, $p < .001$) and Reserved Approach ($r_s = .239$, $p < .001$) were positively associated with sexual satisfaction Negative Association was negatively associated with sexual satisfaction ($r_s = -.508$, $p < .001$).

c) What is the bivariate relationship between sexual self-concept and condom use. Only one subscale of the sexual self-concept scale was significantly associated with condom use. The Reserved Approach subscale was positively correlated with condom use at first sex and at most recent sex ($r_s = .242$ and $r_s = .161$, respectively, both $p < .001$). The Agentic Sexuality subscale was not related to condom use at first sex ($r_s = -.035$, $p = .478$), but was negatively correlated with condom use at most recent sex ($r_s = -.133$, $p < .05$). The Negative Association subscale was not related to condom use at first sex or most recent sex ($r_s = -.20$, $p = .681$; $r_s = .017$, $p = .751$, respectively).

Research question 3.

a) What is the bivariate relationship between communication between partners and sexual satisfaction. Communication between sexual partners was positively associated with sexual satisfaction ($r_s = .684$, $p < .001$). Additionally, chi-square tests were
conducted specifically on communication about sexual preferences before first sex and orgasm at first sex, and produced significant results ($\chi^2=4.98$, df=1, $p<.05$). Therefore, women who communicated about sexual preferences before first sex were more likely to report experiencing orgasm at first sex with this partner.

b) What is the bivariate relationship between communication between partners and condom use. Communication as measured with the communication scale was not associated with condom use at first sex ($r_s = .002, p = .962$) or at most recent sex ($r_s = -.093, p = .068$). Chi-square tests were conducted with communication specifically about birth control before first sex and condom use at first sex and produced significant results ($\chi^2 = 6.95$, df=1, $p < .01$). Therefore, communicating about birth control before first sex was positively associated with using a condom at first sex with this partner.

**Research question 4.** What is the bivariate relationship between sexual satisfaction and condom use in this sample?

a) Condom use at first sex was not significantly related to sexual satisfaction ($r_s = .009$, $p = .845$). Condom use at most recent sex was negatively related to sexual satisfaction ($r_s = -.103$, $p < .05$). Chi-square tests also indicated that orgasm at last sex was less likely with a condom at last sex ($\chi^2 = 4.07$, df=1, $p < .05$).

**Committed vs. Casual Partners**

To explore differences between committed and casual sexual partners, independent samples t-tests were run examining sexual self-concept, communication, and sexual satisfaction. For the purpose of these analyses, partner type was divided so that the “current partner” relationship status of “relationship partner (boyfriend/girlfriend/significant other, spouse or domestic partner)” was categorized as
committed sexual partner, and all other relationship statuses (casual/dating partner, ex-boyfriend/girlfriend, friend with benefits, hook-up/booty call, and new acquaintance) were categorized as casual sexual partners.

**Sexual self-concept.** There were no statistically significant differences in overall sexual self-concept between participants reporting on committed vs. casual relationships (t=1.76, df=413, p=.080). However, participants with a current committed partner reported higher scores on the Agentic Sexuality subscale of the Sexual Self-Concept Scale compared to those reporting a casual sexual partner (t=7.45, df=434, p<.001).

**Communication.** There was a statistically significant difference in communication scores reported by participants with committed versus casual partners. Participants reporting on committed partnerships had higher communication scores (t=7.96, df=253.05, p<.001) than those reporting on casual partners.

**Sexual satisfaction.** Sexual satisfaction scores were also significantly different between committed and casual sexual partners. Sexual satisfaction scores were higher for those participants reporting committed sexual partnerships compared to casual sexual partnerships (t=9.64, df=217.79, p<.001).

**Discrepancies.** SWGD scores were also statistically significantly different between committed and casual sexual partners. Participants reporting about casual sexual relationships had higher discrepancy scores (t= -5.720, df=257.72, p<.001), indicating that people with casual partners had more discrepancy between the sexual activities they want and those they are engaging in compared to those with committed partners.

**Condom use.** When examining condom use at first sex, there was no statistically significant difference between committed and casual partners ($\chi^2=1.18$, df=1, p=.278).
However, condom use at last/most recent sex was less likely with committed partners than casual sexual partners ($\chi^2=6.76$, df=1, p<.05).

**Structural Equation Modeling (Research Question 5)**

**Research question 5**

Structural equation modeling was used to answer Research Question #5 in the current study: What is the relationship between sexual self-concept, communication between sexual partners, sexual satisfaction, and condom use in this sample? Because condom use was not statistically related to the main communication measure or to sexual satisfaction in the bivariate correlations, it was excluded from the structural equation model.

**Measurement model.** Data to explore the relationship between these variables was analyzed using *Mplus* version 6 ([http://www.statmodel.com/](http://www.statmodel.com/)). In this study, structural equation modeling was conducted using a 2-step approach (Buhi et al., 2007). First, the measurement model was tested, which employs a confirmatory factor analysis method to determine if the covariance matrix of the observed data fit the expected values based on the specified model. This process measures the relationship between the indicators or items of a scale and the latent variable or construct they are intending to measure (Raykov & Marcoulides, 2006).

In the first measurement model included the Sexual Self-Concept, Communication, SWGD scores, and Sexual Satisfaction scales. The Sexual Self-Concept scale was represented as a second order latent variable, with the 3 subscales as first order latent variables each consisting of several items or indicators. The subscales were as
follows: Agentic Sexuality (19 items), Negative Associations (20 items), and Reserved Approach subscales (3 items).

Communication was measured by a single latent variable, consisting of 12 indicators. Sexual Satisfaction was measured as a single latent variable with 5 indicators. Finally, in this initial measurement model the 24 discrepancy scores for each sexual activity were modeled as individual indicators on a “discrepancy” latent variable. Because of the inability for Mplus to handle negative value indicators, the absolute values of the discrepancy scores were used in this model.

**Measurement model results.** The results reported here are the standardized estimates using STDYX standardization type, which standardizes estimates based on the means and variances of continuous latent variables as well as of the background and outcome variables (L. Muthen & Muthen, 1998-2010). The standardization of estimates provides for easier interpretation of relationships between measures that may have different scaling.

Initial model fit of some indices for the full measurement model were mixed ($\chi^2=8828.317$, df=3311, $p<.001$, RMSEA=.060, CFI=.67, SRMR=.08). These results show a significant chi-square, which indicates that the observed covariance matrix differs significantly from the proposed model. The RMSEA value does meet the guideline for close fit and the SRMR value of .08 indicates adequate fit. However, the CFI value of .67 is significantly lower than the recommended .95.

When fit statistics are undesirable, there are several steps that can be taken to help improve the model fit. Upon examination of the item estimates on their latent variables, 11 items on the Communication Scale and the Sexual Satisfaction Scale produced high
factor loadings and were retained as in their original scales. After exploring previous research using discrepancy scores in structural equation modeling, common practice is to use a sum or average of the discrepancy scores as a measured variable in SEM. Based on this precedent, SWGD scores were summed and treated as a measured variable, and thus were not included in the measurement model.

Several items on the Sexual Self-Concept subscales loaded at below acceptable levels. Guidelines suggest that items loading at less than .32 are weak and should be removed as indicators of that factor (Tabachnick & Fidell, 2007), although in practice typically loadings at <.40 are removed (Raubenheimer, 2004). Only one factor analysis was previously reported on this SSC scale (Vickberg & Deaux, 2005), and produced questionable results including retaining items that are not considered good fit by guidelines (Tabachnick & Fidell, 2007). Therefore, to better understand the dimensions of this scale, an exploratory factor analysis was conducted separately for each of the SSC subscales.

**Exploratory factor analysis.** Parallel analysis (PA), which uses polychoric correlations, is suggested to be the most appropriate method of determining factors to be retained with ordinal data (Flora & Curran, 2004). Additionally, polychoric correlation method is recommended when univariate items have non-normal kurtosis and skewness values (Flora & Curran, 2004). The ordinal Likert scale measures, and the skewness and kurtosis of the data in this study support the use of parallel analysis to determine factors to be retained. Parallel analysis involves the development of random correlation matrices based on the real data set. The eigenvalues from the random correlation matrices are compared to the observed correlation matrices in the data to determine meaningful
differences (Hayton, Allen, & Scarpello, 2004). Factors are retained if they produce eigenvalues from the real data which are larger than that from the random data. Parallel analysis for the current study was conducted using Factor software v8.1 (http://psico.fcep.urv.es/utilitats/factor/Download.html).

**Agentic sexuality.** Parallel analysis was first conducted on the Agentic Sexuality subscale to explore the factor structure of this subscale. The purpose of the parallel analysis was to determine the number of factors to be accepted. Results of the PA for the 18 items from the original Agentic Sexuality subscale found 3 factors within the subscale. Factor loadings on the three factors are presented in Table 14.
Table 14: Exploratory factor analysis loadings for Agentic Sexuality subscale

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1 loading</th>
<th>Factor 2 loading</th>
<th>Factor 3 loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensual</td>
<td>.279</td>
<td>.293</td>
<td>.040</td>
</tr>
<tr>
<td>Seductive</td>
<td>-.101</td>
<td>.636</td>
<td>.042</td>
</tr>
<tr>
<td>Passionate</td>
<td><strong>.465</strong></td>
<td>.202</td>
<td>.078</td>
</tr>
<tr>
<td>Erotic</td>
<td>-.265</td>
<td><strong>.753</strong></td>
<td>.044</td>
</tr>
<tr>
<td>Romantic</td>
<td><strong>.526</strong></td>
<td>.004</td>
<td>.175</td>
</tr>
<tr>
<td>Sensitive to partner’s needs</td>
<td><strong>.636</strong></td>
<td>-.084</td>
<td>.139</td>
</tr>
<tr>
<td>Aware of own sexual feelings</td>
<td><strong>.774</strong></td>
<td>-.034</td>
<td>-.042</td>
</tr>
<tr>
<td>Willing to have sex before marriage</td>
<td><strong>.466</strong></td>
<td>.104</td>
<td>-.038</td>
</tr>
<tr>
<td>Knowledgeable about own body</td>
<td><strong>.682</strong></td>
<td>-.045</td>
<td>-.006</td>
</tr>
<tr>
<td>Open about sexuality</td>
<td><strong>.415</strong></td>
<td>.189</td>
<td>-.101</td>
</tr>
<tr>
<td>In love</td>
<td>.088</td>
<td>-.001</td>
<td><strong>.864</strong></td>
</tr>
<tr>
<td>In a relationship</td>
<td>-.047</td>
<td>.022</td>
<td><strong>.912</strong></td>
</tr>
<tr>
<td>Likely to desire sex</td>
<td>.334</td>
<td><strong>.416</strong></td>
<td>.041</td>
</tr>
<tr>
<td>Likely to enjoy sex</td>
<td><strong>.571</strong></td>
<td>.162</td>
<td>.099</td>
</tr>
<tr>
<td>Likely to initiate sex</td>
<td>.117</td>
<td><strong>.403</strong></td>
<td>.190</td>
</tr>
<tr>
<td>Likely to experiment</td>
<td>.013</td>
<td><strong>.547</strong></td>
<td>-.052</td>
</tr>
<tr>
<td>Likely to fantasize about sex</td>
<td>.120</td>
<td><strong>.524</strong></td>
<td>-.192</td>
</tr>
<tr>
<td>Insists on having own sexual needs met</td>
<td>.023</td>
<td><strong>.389</strong></td>
<td>-.045</td>
</tr>
</tbody>
</table>

Items from factor 1 were then included in the Mplus model. Items with loadings below .40 in Mplus were removed. Items with *were retained in the Mplus model.

Examination of the factors uncovered in the exploratory factor analysis suggested that Factor 1 is representative of “positive sexuality”, including knowledge of one’s own body and awareness of one’s own sexual feelings. Factor 2 appears to represent a more exotic measure of sexuality, with items such as seductive, erotic, and likely to experiment with sex loading together and highly on this factor. Factor 3 contains only two items, both of which relate to committed relationships (in love and in a relationship). Because the subscale of Agentic Sexuality should represent a single factor, and based on the factors uncovered in this analysis, I selected Factor 1 as most representative of the
positive sexuality construct intended to be measured by the Agentic Sexuality subscale in this study. Additionally, since some items that loaded on Factor 2 had a negative loading (albeit small) on Factor 1, it was determined that these factors were not representing the same construct. Therefore, Agentic Sexuality will be represented by the items loading on Factor 1 for the purpose of this study.

**Negative associations.** Parallel analysis was also conducted for the Negative Associations subscale of the Sexual Self-Concept Scale. Items comprising this subscale loaded on one factor, and results of these loadings are presented in Table 15.

Table 15: Exploratory factor analysis loadings for Negative Associations subscale

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1 loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerned about sexual appearance of body</td>
<td>.027</td>
</tr>
<tr>
<td>Not interested in sex</td>
<td>-.390</td>
</tr>
<tr>
<td>Don’t think about sexuality often</td>
<td>-.183</td>
</tr>
<tr>
<td>Feel pressured to have sex</td>
<td>-.727*</td>
</tr>
<tr>
<td>Pretend to enjoy sex</td>
<td>-.591*</td>
</tr>
<tr>
<td>Guilty</td>
<td>-.725*</td>
</tr>
<tr>
<td>Depressed</td>
<td>-.825*</td>
</tr>
<tr>
<td>Deny desire</td>
<td>-.571*</td>
</tr>
<tr>
<td>Taken advantage of</td>
<td>-.696*</td>
</tr>
<tr>
<td>Afraid during sex</td>
<td>-.670*</td>
</tr>
<tr>
<td>Bad reputation</td>
<td>-.333</td>
</tr>
<tr>
<td>Worry about impression</td>
<td>-.367</td>
</tr>
<tr>
<td>Forced to have sex</td>
<td>-.717*</td>
</tr>
<tr>
<td>Passive</td>
<td>-.258</td>
</tr>
<tr>
<td>Repressed</td>
<td>-.578*</td>
</tr>
<tr>
<td>Partner initiate</td>
<td>-.109</td>
</tr>
<tr>
<td>Insensitive to partner’s needs</td>
<td>-.496</td>
</tr>
<tr>
<td>Anxious</td>
<td>-.582*</td>
</tr>
<tr>
<td>Confused about sexuality</td>
<td>-.628</td>
</tr>
<tr>
<td>Orientation</td>
<td>-.542</td>
</tr>
</tbody>
</table>

Items from factor 1 were then included in the Mplus model. Items with loadings below .40 in Mplus were removed. Items with *were retained in the Mplus model.
The items selected to represent the one-factor Agentic Sexuality subscale, and the items that loaded significantly on the Negative Associations subscale were then entered into the Mplus measurement model. Because Mplus employs a confirmatory factor analysis approach during the measurement model stage, item loadings on their scale latent variables differed from the parallel analysis results. Items with factor loadings below .40 in Mplus were removed systematically, starting with the lowest value and re-running the analysis after each item was removed. Additionally, one indicator on the Reserved Approach subscale that loaded below .40 in the Mplus model and was removed. This resulted in six items representing the Agentic Sexuality Subscale of the Sexual Self-Concept Scale, ten items remained to comprise the Negative Associations Subscale, and two items remained for the Reserved Approach Subscale. The communication and sexual satisfaction scales in their original form were also included (see Figure 4a).

Loadings for latent variable indicators for all scales and subscales are presented in Table 16. Model fit for this revised measurement model was improved but results from the fit indices remained mixed ($\chi^2=1397.260$, df=554, p<.001, RMSEA=.06, CFI=.87, SRMR=.06). Compared to the initial measurement model, both the SRMR and CFI values improved, while the RMSEA value stayed consistent. The chi-square improved but remained significant.
Table 16: Measurement model item-to-factor correlations

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Item</th>
<th>β loading on latent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Self Concept</td>
<td>Agentic Sexuality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passionate</td>
<td>-.724 (.066)</td>
</tr>
<tr>
<td></td>
<td>Romantic</td>
<td>.651 (.054)</td>
</tr>
<tr>
<td></td>
<td>Sensitive to partner’s needs</td>
<td>.565 (.048)</td>
</tr>
<tr>
<td></td>
<td>Aware of own sexual feelings</td>
<td>.548 (.057)</td>
</tr>
<tr>
<td></td>
<td>Knowledgeable about own body</td>
<td>.540 (.056)</td>
</tr>
<tr>
<td></td>
<td>Likely to enjoy sex</td>
<td>.558 (.054)</td>
</tr>
<tr>
<td>Negative Associations</td>
<td>I feel pressured to have sex</td>
<td>.680 (.064)</td>
</tr>
<tr>
<td></td>
<td>Likely to pretend to enjoy sex</td>
<td>.577 (.055)</td>
</tr>
<tr>
<td></td>
<td>Likely to feel guilty after having sex</td>
<td>.531 (.045)</td>
</tr>
<tr>
<td></td>
<td>Likely to be depressed after having sex</td>
<td>.736 (.037)</td>
</tr>
<tr>
<td></td>
<td>Likely to deny feelings of desire</td>
<td>.753 (.034)</td>
</tr>
<tr>
<td></td>
<td>Likely to be taken advantage of</td>
<td>.541 (.046)</td>
</tr>
<tr>
<td></td>
<td>Afraid during sex</td>
<td>.579 (.054)</td>
</tr>
<tr>
<td></td>
<td>Forced to have sex</td>
<td>.617 (.043)</td>
</tr>
<tr>
<td></td>
<td>Sexually Repressed</td>
<td>.483 (.062)</td>
</tr>
<tr>
<td></td>
<td>Likely to be anxious about having sex</td>
<td>.511 (.050)</td>
</tr>
<tr>
<td>Reserved Approach</td>
<td>Careful about sex</td>
<td>-.269 (.082)</td>
</tr>
<tr>
<td></td>
<td>Responsible for protection from pregnancy or STDs</td>
<td>.625 (.125)</td>
</tr>
<tr>
<td>Communication</td>
<td>I tell my partner when I am especially sexually satisfied</td>
<td>.716 (.031)</td>
</tr>
<tr>
<td></td>
<td>I am satisfied with my partner's ability to communicate her or his sexual desires to me</td>
<td>.799 (.027)</td>
</tr>
<tr>
<td></td>
<td>I let my partner know things that I find pleasing during sex</td>
<td>.759 (.028)</td>
</tr>
<tr>
<td></td>
<td>I do not hesitate to let my partner know when I want to have sex with him or her</td>
<td>.648 (.037)</td>
</tr>
<tr>
<td></td>
<td>I tell my partner whether or not I am sexually satisfied</td>
<td>.690 (.034)</td>
</tr>
<tr>
<td></td>
<td>I am satisfied with the degree to which my partner and I talk about the sexual aspects of our relationship</td>
<td>.841 (.027)</td>
</tr>
</tbody>
</table>
Table 16 cont.

<table>
<thead>
<tr>
<th>Communication cont.</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not afraid to show my partner what kind of sexual behavior I like</td>
<td>.772 (.034)</td>
</tr>
<tr>
<td>I would not hesitate to show my partner what is a sexual turn on for me</td>
<td>.751 (.035)</td>
</tr>
<tr>
<td>My partner shows me what pleases him or her during sex</td>
<td>.759 (.028)</td>
</tr>
<tr>
<td>My partner tells me when he or she is sexually satisfied</td>
<td>.713 (.036)</td>
</tr>
<tr>
<td>I am pleased with the manner in which my partner and I communicate with each other about sex</td>
<td>.899 (.017)</td>
</tr>
<tr>
<td>It is never hard for me to figure out if my partner is sexually satisfied</td>
<td>.633 (.043)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sexual Satisfaction</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>.941 (.010)</td>
</tr>
<tr>
<td>Pleasant</td>
<td>.934 (.015)</td>
</tr>
<tr>
<td>Positive</td>
<td>.846 (.028)</td>
</tr>
<tr>
<td>Satisfying</td>
<td>.908 (.014)</td>
</tr>
<tr>
<td>Valuable</td>
<td>.870 (.023)</td>
</tr>
</tbody>
</table>

Reported here are the STDYX standardized item-to-factor correlations (SD)
Figure 4a: SEM Measurement Model with revised Sexual Self-Concept Scale (Estimates presented are STDYX standardized beta estimations)
Figure 4a cont.: Measurement model
**Structural model.** As step 2 of the structural equation modeling process, the structural pathways were estimated. Based on previous research utilizing Sexual Self-Concept scales also comprised of three subscales, structural equation modeling studies have treated each of the subscales as measured variables in the structural model (Lou et al., 2011; Pai, Lee, & Yen, 2011). Following this approach, the sum scores for the Agentic Sexuality, Negative Associations, and Reserved Approach subscales were used as measured indicators of the Sexual Self-Concept latent variable in the structural model.

Initial structural pathways included only direct pathways between Sexual Self-Concept and communication, communication and discrepancy scores, and discrepancy scores and sexual satisfaction (see Figure 4b). Model fit for this structural model was poor ($\chi^2=918.711$, df=187, $p<.001$, RMSEA=.09, CFI=.84, SRMR=.20). However, all pathway coefficients were significant at $p<.001$.

Based on previous research, additional hypothesized pathways between the variables, including indirect effects, were added to the model (see Figure 4c). All additional parameters estimated were also significant, including indirect effects (see figure 4d for model with pathway coefficients). The addition of these pathways improved model fit ($\chi^2=736.392$, df=185, $p<.001$, RMSEA=.08, CFI=.88, SRMR=.05). The RMSEA value of .08 meets the criteria for adequate fit and the SRMR value of .05 is slightly above the “good” fit criteria rule of thumb. The CFI value of .88 is lower than the recommended .90-.95. This may be partially due to the fact that CFI does not inherently include a parsimony adjustment and the current model is not considered particularly parsimonious.
Figure 4b: Structural Model with measured Sexual Self-Concept subscales, direct pathways only
Figure 4c Full model including indirect effects
**Relationships with sexual satisfaction.** Each of the scales had a pathway, whether direct or indirect, estimating the variable relationship with sexual satisfaction in the model.

*Sexual self-concept.* The pathway between Sexual Self-Concept and communication had one of the highest parameter estimates and was statistically significant (B=1.45, 95% CI=1.05 1.84, β=.72). The pathway from sexual self-concept directly to sexual satisfaction was also significant (B=.49, 95% CI=.70, 2.35, β=.49). The indirect pathway from sexual self-concept to sexual satisfaction through communication was also significant (B=.71, 95% CI=.24, 1.18, β=.23). Additionally, there was a significant indirect pathway from sexual self-concept → communication → discrepancy scores → sexual satisfaction (B=.14, 95% CI=.05, .24, β=.05).

*Communication.* Communication had a direct negative effect on discrepancy scores (B=-3.96, 95% CI=-4.96, -2.95, β=-.41) and a direct positive effect on sexual satisfaction (B=.49, 95% CI=.13, .86, β=.31). Therefore, higher communication scores were directly linked to lower discrepancy scores and higher sexual satisfaction. The indirect pathway from communication to sexual satisfaction through discrepancy scores was small but significant (B=.10, 95% CI=.04, .16, β=.06).

*Sexual want/get discrepancy scores.* The direct pathway from SWGD scores to sexual satisfaction was significant, negative and moderate in size (B=-.03, 95% CI=-.04, -.01, β=-.15), such that higher discrepancy scores were directly related to lower sexual satisfaction scores.
Figure 4d: Structural model with path coefficients ($\beta$) for full sample (N=469)

Estimates presented are STDYX standardized beta estimations

*p<.05

$\chi^2=736.392$, df=185, p<.001, \text{RMSEA}=.08, \text{CFI}=.88, \text{SRMR}=.05
Model differences between sexual partner types. After determining the best fitting structural equation model based on the full data sample, the final model was tested separately for committed and casual sexual partners.

Committed sexual partners. The sample of responses from participants reporting on committed partners only produced a sample of N=298. Model fit for the committed sexual partners differed marginally on several of the fit indices compared to the full model, but still produced adequate fit ($\chi^2=494.280, \text{df}=185, p<.001, \text{RMSEA}=.08, \text{CFI}=.87, \text{SRMR}=.06$). See Figure 4e.

Sexual self-concept. Similar to the full sample model the pathway between Sexual Self-Concept and communication had one of the highest parameter estimates although it was slightly lower for committed partners than the full sample ($B=.79, 95\% \text{CI}=.39, 1.20, \beta=.69$). The pathway from sexual self-concept directly to sexual satisfaction was also slightly lower than for the full sample but remained significant ($B=.73, 95\% \text{CI}=.04, 1.42, \beta=.36$). The indirect pathway from sexual self-concept to sexual satisfaction through communication remained significant for committed partners and produced a path estimate higher than for the full sample ($B=.59, 95\% \text{CI}=.24, .94, \beta=.29$). The indirect pathway from sexual self-concept, to communication, to discrepancy scores, to sexual satisfaction was no longer significant when looking at committed partners only ($B=.06, 95\% \text{CI}=-.04, .15, \beta=.03$).

Communication. Communication had a direct negative significant path estimate to discrepancy scores for committed partners that was slightly higher than for the full sample ($B=-6.40, 95\% \text{CI}=-9.28, -3.53, \beta=-.45$). The direct effect of communication on sexual satisfaction was also significant and higher for committed partners only than for
the full sample (B=.74, 95% CI=.17, 1.32, β=.43). The indirect pathway from communication to sexual satisfaction through discrepancy scores was no longer significant for this sample (B=.07, 95% CI=-.03, .17, β=.04).

*Sexual want/get discrepancy scores.* The direct pathway from discrepancy scores to sexual satisfaction was negative but no longer significant (B=.01, 95% CI=-.03, .01, β= -.09) in the committed partners-only sample.

*Casual sexual partners.* Model fit for casual sexual partners only resulted in some fit indices with less desirable estimates compared to the full and the committed samples ($\chi^2=496.838$, df=185, p<.001, RMSEA=.10, CFI=.84, SRMR=.07). This may be partially due to the small sample size of casual sexual partners (N=164). See figure 4f.

*Sexual self-concept.* Similar to results for the full sample and the committed partners model, the pathway between Sexual Self-Concept and communication was the highest parameter estimates although it was slightly lower than committed partners but remained significant (B=1.53, 95% CI=.76, 2.29, β=.63). The pathway from sexual self-concept directly to sexual satisfaction was also significant and was highest in this sample compared to the other two (B=1.89, 95% CI=.27, 3.50, β=.50). Contrary to the other two samples, the indirect pathway from sexual self-concept to sexual satisfaction through communication was not significant in this model (B=.65, 95% CI=-.01, 1.30, β=.17). Interestingly, the indirect pathway from sexual self-concept, to communication, to discrepancy scores, to sexual satisfaction was significant for the full sample and for casual partners (B=.10, 95% CI=.00, .20, β=.03), but was not significant for committed partners.
Communication. The direct pathway between communication and discrepancy scores was negative and significant for casual sexual partners (B=-2.01, 95% CI=-3.17, - .84, β= -.23), like both the full model and the committed partner sample. The direct pathway from communication to sexual satisfaction was not significant for casual sexual partners (B=.42, 95% CI=-.08, .93, β= .28). The indirect pathway from communication to sexual satisfaction through discrepancy scores was significant in this sample (B=.07, 95% CI=.01, .13, β=.04), but was not for committed partners.

Sexual want/get discrepancy scores. The direct pathway from SWGD scores to sexual satisfaction was negative and significant, (B=-.03, 95% CI=-.05, -.02, β= -.19) as it was for the full sample but not for committed partners.

See Table 17 for path coefficients for all three models.
Table 17: Estimated standardized path coefficients, $\beta$, for full model, committed partners, and casual partners

<table>
<thead>
<tr>
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<th>SSC $\rightarrow$ comm</th>
<th>Comm $\rightarrow$ disc</th>
<th>Disc $\rightarrow$ sexsat</th>
<th>SSC $\rightarrow$ sexsat</th>
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<th>SSC $\rightarrow$ comm $\rightarrow$ disc $\rightarrow$ sexsat</th>
<th>Comm $\rightarrow$ disc $\rightarrow$ sexsat</th>
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<tbody>
<tr>
<td><strong>Full sample</strong></td>
<td>.72 ***</td>
<td>-.41 ***</td>
<td>-.15 **</td>
<td>.49 ***</td>
<td>.31 **</td>
<td>.05 **</td>
<td>.23 **</td>
</tr>
<tr>
<td><strong>Committed Partners</strong></td>
<td>.69 ***</td>
<td>-.45 ***</td>
<td>-.09</td>
<td>.36 **</td>
<td>.43 **</td>
<td>.03</td>
<td>.29 ***</td>
</tr>
<tr>
<td><strong>Casual Partners</strong></td>
<td>.63 ***</td>
<td>-.23 **</td>
<td>-.19 **</td>
<td>.50 **</td>
<td>.28</td>
<td>.03 *</td>
<td>.17</td>
</tr>
</tbody>
</table>

***p<.001  
**p<.01  
*p<.05  
Full sample (N=496)  
Committed Partners (N=298)  
Casual Partners (N=164)
Figure 4e: Structural model with standardized beta path coefficients ($\beta$) for committed partners (N=298)

Estimates presented are STDYX standardized beta estimations

* $p<.05$

$\chi^2=494.280$, df=185, $p<.001$, RMSEA=.08, CFI=.87, SRMR=.06
Figure 4f: Structural model with standardized beta path coefficients (β) for casual partners (N=164)

Estimates presented are STDYX standardized beta estimations
CHAPTER 5:
DISCUSSION

The first phase of this two-phase study involved individual face-to-face interviews with young college women. The aim of these interviews was to explore what young women find sexually satisfying in committed and casual sexual partnerships, in addition to ways to improve sexual satisfaction. Overall, communication was identified as important for sexual satisfaction in both partnership types. Several differences were found regarding factors that contributed to satisfying sex in committed versus casual partnerships. Interpretations and conclusions of these findings are discussed below.

The second phase of this study, the quantitative portion, explored the statistical relationships between several variables identified as important to positive sexuality, including sexual self-concept, communication, sexual activity discrepancy scores, and sexual satisfaction. Results showed a number of similarities between respondents reporting on committed versus casual sexual partnerships. For example, communication and sexual self-concept were related to sexual satisfaction for both partnership types. However, there were also some interesting differences in the relationships between these variables based on partnership type. For example, sexual activity discrepancy scores were related to sexual satisfaction only for those respondents reporting on casual partnerships. These discrepancy scores also partially mediated the relationship between communication and sexual satisfaction for casual sexual partners but not for committed
sexual partners. Potential meanings and implications of these findings are discussed below.

**Phase 1: Qualitative**

One of the unique contributions from this study is the description of factors contributing to satisfying sex in participants’ own words. Qualitative research on sexual satisfaction in young women is particularly lacking and this study takes a first step to addressing this gap in the literature. The young women in this study spoke about sexual satisfaction within committed and casual sexual relationships, and identified different factors contributing to satisfaction in each of these relationship types. Participants also provided their thoughts more generally on ways in which young women can increase their own sexual satisfaction. These are discussed in more detail below.

**Satisfying Sex with Different Partner Types**

Young women who participated in the face-to-face individual interviews were asked to talk about what makes sex satisfying with committed and casual sexual partners. This is one of the first studies to provide young women with a voice to discuss sexual satisfaction (Impett & Tolman, 2006), and no studies to my knowledge have specifically asked about the differences in sexual satisfaction between committed and casual sexual partners in a qualitative manner. Frequently, research on sexual satisfaction includes only participants in committed relationships (e.g., Lawrance & Byers, 1995; MacNeil & Byers, 2005) and much of the research on casual sexual partnerships is focused on the risks and negative impacts (Fielder & Carey, 2010a; Grello et al., 2006), consequently ignoring what women may want or gain from casual partnerships. Results from the 120
current study suggest that young women may find casual sexual relationships satisfying as well, but that different elements contribute to sexual satisfaction within these different relationship types. This study highlights the need to study the benefits young women may see regarding casual sexual relationships, as this is particularly lacking in the literature and may have implications for public health research involving casual sexual partnerships (discussed later in this section).

Several themes emerged from the qualitative data analysis of these interviews. This discussion summarizes and interprets the results that emerged about sexual satisfaction in committed and casual sexual partnerships.

**Committed partners.** Consistent with previous research (Armstrong, England, & Fogarty, 2012; Armstrong et al., 2010), results from this study suggest that, for the most part, young women typically find sex with a committed partner more sexually satisfying compared to sex with a casual sexual partner. In the current study, emotional connection was the most commonly identified factor that contributed to satisfying sex with a committed partner. This is consistent with previous research which found emotional connection to be among the top three most important factors to achieving sexual satisfaction (Kleinplatz & Menard, 2007). When describing emotional connection, participants in the current study spoke specifically about the feelings they had for the person, being in love, and feeling that the other person loved them.

Some of the women specifically mentioned commitment or monogamy as a reason that sex was more satisfying with committed partners. This is also consistent with other research which has also found commitment between sexual partners to be positively related to sexual satisfaction (Armstrong et al., 2012; Pearson, 2008).
These young women identified that communication with a committed partner added to sexual satisfaction, and that this included communicating specifically about the sexual activities they do and do not like. The overarching theme regarding communication was that it provided an opportunity for participants to inform their partners about what they do and do not like sexually. Other research has also identified the importance of communication to sexual satisfaction in qualitative research examining both casual and committed partnerships (Armstrong et al., 2012).

Participants also discussed knowing and trusting their committed partner as contributing to more sexually satisfying experiences. Knowing partners included specifically knowing each other’s sexual preferences, and trusting partners meant trusting that they were being monogamous. This finding is also consistent with previous research finding that, among young people, sexual satisfaction at first intercourse was increased with a partner they care for and trust (Higgins et al., 2010).

Casual partners. Since experience with casual sexual partners was not a criterion for participating in the interviews, not all of the women who were interviewed had experienced a casual sexual relationship. However, wording of the interview questions allowed for all women to share their ideas about why sex with this type of partner might be satisfying.

Participants in this study framed casual sexual partnerships as a time-limited situation. Many participants referred to never seeing the person again after the sexual encounter. This is consistent with previous research which found that over half of females thought their most recent casual sexual encounter was a “one time thing” and 14% identified that it was “experimentation” (Grello et al., 2006).
These young women primarily expressed that the freedom and lack of obligation towards the other person would be a benefit of casual sexual partnerships compared to committed relationships. They indicated that committed relationships were “hard work” and that being in college and being busy with school did not always make committed relationships easy or desirable. Having someone to satisfy their sexual needs without requiring any other time commitment was identified as something that was satisfying about sex with a casual partner.

Contrary to committed partnerships, women identified that the lack of emotions as satisfying for casual sexual partnerships. Women expressed that if they knew ahead of time that a sexual encounter was going to remain casual, they did not have to worry about emotions coming into play. However, one participant did indicate that it was difficult to avoid emotions, particularly for women.

As a result of the assumed short-term connection with a casual sexual partner, some women in the current study also thought that a casual sexual partner was someone they were able to experiment with sexually. They suggested that there might be less judgment with a casual partner compared to a committed partner in regard to trying new sexual techniques and activities. Additionally, these women thought they might care less about what a casual sexual partner would think of them, since they were not going to see the person again, which would make sexual experimentation more comfortable.

**Comparison of satisfying sex with different partner types.** Experimenting was a theme that arose with both committed and casual partners, however, participants had differing opinions on whether they were more likely to experiment with committed versus casual partners. Some women indicated that feeling comfortable with committed
partners made experimenting with this type of partner sexually satisfying, however, other women indicated that the one-time nature of casual relationships and therefore the lack of judgment by the partner made casual relationships more inviting of sexual experimentation. This did not differ based on the interviewee’s current relationship status.

Emotion was also a theme that spanned across both partnership types. In committed partnerships, emotional connection added to sexual satisfaction, while in casual partnerships the lack of emotions was sexually satisfying.

**Improving Satisfaction**

Consistent with what participants said regarding satisfying sexual relationships with committed partners, communication was the *most common* recommendation as to how women could increase their sexual satisfaction. Specifically, participants mentioned communication about sexual desires and preferences as a way to increase the likelihood of engaging in desired sexual behaviors and to decrease the occurrence of unwanted behaviors. This is consistent with other research which notes that “[f]or most participants, great sex required excellent communication, and it was seen as crucial to the success of a sexual encounter whether the relationship lasted 3 hours, 3 years, or 35 years” (Kleinplatz & Menard, 2007, p. 75).

The second most common idea for increasing sexual satisfaction was for women to know themselves and what they like sexually. Knowing oneself was sometimes discussed in conjunction with communicating with partners. For example, participants mentioned that in order to help a partner understand what she likes, she first had to understand that herself. This is also similar to previous research in which interview
participants mentioned that “[b]efore one can hope to communicate sexually with another, one must first take responsibility for knowing about one’s own arousal” (Kleinplatz & Menard, 2007, p. 75). Participants in the current study recommended that women could masturbate or experiment with sex toys on their own in order to determine what they find pleasurable and then communicate this with sexual partners. One participant also mentioned that knowing themself on a “deeper level” would also help women identify their wants and desires.

Consistent with the overarching theme that sex is better in a committed relationship, some interviewees indicated that sexual satisfaction could be improved if young women waited until they were in a committed relationship before having sex with a partner. This also included knowing the person better and trusting them prior to starting a sexual relationship, which was also reflected in what interviewees discussed about sexual satisfaction with committed partners.

**Sexual Activities and Behaviors**

Most research on sexual satisfaction has not included measures of cuddling and kissing, although such activities have been found to be important in relationship and partner satisfaction (Gulledge, Gulledge, & Stahmann, 2003). The results from the current study suggest that these activities may be important for young women’s sexual satisfaction as well. Descriptive quantitative statistics from the current study indicated that participants most frequently desired kissing, cuddling, verbal affirmations, vaginal sex, genital touching and receiving oral sex. It is important for future research on sexual satisfaction and specific sexual behaviors to include these activities.
What was Missing

One interesting topic that was absent from interview responses was sexual safety and protection. None of the participants commented about condom or contraceptive use (or non-use) with either committed or casual partners. Only one participant mentioned protection against STIs or pregnancy when discussing sexual satisfaction. This participant was specifically referring to not needing to worry about STIs with committed sex partners. However, even this narrative did not specifically mention the use of condoms or contraception.

Other Information

One of the unexpected findings that came from this qualitative research was that engaging in sexual behaviors with same-sex partners appeared to be somewhat common among heterosexual college women in this sample. Other research has reported similar results (Scheer et al., 2003; Vrangalova & Savin-Williams, 2010), and previous literature has suggested that sexual orientation and identity may be fluid over time (Diamond & Savin-Williams, 2000). Because this was an unanticipated finding since current study was focused on heterosexual sexual satisfaction, follow up questions did not uncover the extent of these same-sex behaviors. Some research has indicated that same-sex kissing has become common place among heterosexual college women (Yost & McCarthy, 2012), but most previous research of college women’s experience of same versus opposite sex experience has focused on risk (Eisenberg, 2001). Further research is needed to better understand heterosexually-identified young women’s motives for same-sex behavior and how these women experience and interpret sexual satisfaction with male versus female partners.
Conclusions

The findings from this qualitative research contribute to understanding how young women experience sexual satisfaction, and provide a first look at what young women find sexually satisfying in different sexual partnership types. Overall, the participants in these interviews conveyed the impression that they felt entitled to receiving sexual pleasure. However, it is important to note that the participants in this study self-selected to participate in the interviews and thus may not be representative of other young college-aged women who chose not to participate, or young women more generally. Additionally, recruitment for these interviews came from a select group of young women enrolled in sexuality and sexual health related courses, which may further bias the views shared these women shared through these interviews. The young women interviewed for this study may be more open, knowledgeable, or in touch with their sexuality than typical undergraduate females. Future research should aim to recruit women who may be more representative of typical college-aged women to study their views and experiences of sexual satisfaction.

Contribution to Phase 2

The results from the qualitative phase of this study informed the Phase 2 quantitative portion in several ways. Most importantly was the development of the SWGD Scale, which was established based on the list of sexual activities and behaviors that interviewees revised during the interviews.

Second, the results from the qualitative interviews advised the use of Self-Regulation Theory as a guiding theoretical framework for the quantitative phase. This theory addressed the importance of congruence between personal values and
actions/behaviors (in this study this was represented by sexual self-concept, communication, and sexual satisfaction).

Finally, participants’ discussion about the impact of communication on sexual satisfaction further reiterated the importance of including communication as a variable when studying sexual satisfaction in the quantitative phase.

Phase 2: Quantitative

Following the interview phase, an online quantitative survey was developed to explore the statistical relationships between some of the variables identified by women in the interviews. Many of the scales included in the online survey had been developed and tested by other researchers, however, one scale was developed specifically for this study.

Scale Development

One novel contribution of this study is the development of the SWGD Scale. Developed based on feedback from the population of interest via interviews, this scale consisted of 24 sexual activities/behaviors that young women reported wanting or engaging in. Survey respondents rated how often they *wanted* each of 24 sexual activities and how often they actually *engaged* in each. These ratings were used to calculate a discrepancy score for each sexual activity for each participant. A sum of the absolute values of the discrepancy scores for each participant was then used in the bivariate correlations and the structural equation model.

The SWGD Scale provided an innovative measure of specific sexual activities in relation to sexual satisfaction. Only one previous sexual activity discrepancy scale was found, which consisted only of six sexual behaviors (Santtila et al., 2008). Santtila and colleagues (2008) used their discrepancy scale as a proxy for sexual satisfaction in the
prediction of relationship satisfaction. However, results from the current study suggest that while discrepancies are related to sexual satisfaction, they are not synonymous, and a lack of discrepancy should not be treated as equivalent to sexual satisfaction.

Although the SWGD Scale was developed based on participant input in this study, several items on the scale had very low endorsements (including anal sex, watching pornography, and three-somes). Therefore, further testing is necessary to refine this instrument for use in future research, in addition to testing with different samples and potential development of an alternative version of this scale for other populations, such as non-heterosexual populations, and men.

**Bivariate Associations**

**Sexual self-concept.** Based on the validity issues with the Sexual Self-Concept Scale, caution should be taken when interpreting these findings. However, the Sexual Self-Concept subscales did show evidence of statistical relationships with other variables in this study. For example, participants with high Agentic Sexuality scores also tended to have higher communication scores and higher sexual satisfaction scores. Respondents with high Agentic Sexuality scores were also more likely to report having a current/most recent committed partner (rather than casual partner). This study found that Agentic Sexuality was negatively associated using a condom at most recent sex. However, since condom use is less likely with committed partners than casual partners, as shown in this study and others (Bolton, McKay, & Schneider, 2010; Fortenberry, Wanzhu, Harezlak, Katz, & Orr, 2002; Sanders et al., 2010), future research should look at the interaction between Agentic Sexuality, relationship status and condom use at most recent sex to better understand possible effects.
The Negative Associations subscale of the Sexual Self-Concept measure also showed some significant relationships with other variables. The Negative Associations subscale was inversely associated both with communication and with sexual satisfaction. Therefore, people who endorsed Negative Associations about sexuality (e.g., being afraid during sex, feeling guilty after sex) reported lower communication scores with their partners and reported lower levels of sexual satisfaction in their current/most recent sexual partnership. Based on Self-Regulation Theory this lack of positive sexual experiences could be due to sexual actions being incongruent with personal values and feelings about sexuality.

Higher scores on the Reserved Approach subscale were related to higher scores on the communication and sexual satisfaction scales, and lower scores on the SWGD Scale. This means that participants who endorsed the Reserved Approach items had higher communication scores, reported more consistency between the sexual activities they want and that they engage in, and reported being sexually satisfied. Reserved Approach was also positively correlated with condom use at first sex and at most recent sex. Such a finding was not surprising since the Reserved Approach subscale specifically measures feelings of responsibility for preventing pregnancy and STIs.

These findings contribute to the limited previous literature on this particular measure of women’s Sexual Self-Concept (Vickberg & Deaux, 2005), and provide new evidence for associations between sexual self-concept and other important positive sexual health outcomes (e.g., sexual satisfaction, communication, condom use).

**Communication.** Communication was positively associated with sexual satisfaction, and negatively associated with SWGD scores. This means that people with
higher communication scores also reported lower discrepancy scores and higher sexual satisfaction. This communication measure was not statistically significantly related to condom use at first sex or most recent sex with the current/most recent partner.

In addition to the overall communication scale, more specific communication questions were asked, including communication about birth control and sexual preferences prior to first sex. Findings here showed that, consistent with previous studies (Manlove, Ryan, & Franzetta, 2003; Stone & Ingham, 2002), communication specifically about birth control prior to first sex was associated with condom use at first sex. This study also found that communication about sexual preferences before first sex was associated with orgasm at first sex.

The finding that different communication types were associated with different sexual outcomes highlights the importance of the type and timing of communication on early sexual practices and experiences. This may be especially important since sexual experiences early in a partnership, including sexual satisfaction, orgasm, and condom use, may shape both whether or not the relationship continues, as well as influence future safe sex decisions within the partnership. These findings may help to explain previous mixed findings about the influence of communication on protection and satisfaction (Randolph et al., 2007; Sanders et al., 2010). Too frequently studies include only a general measure of communication, which may not be tapping into the importance of the type of communication on specific sexual health behaviors and outcomes.

**Condom use.** Finally, condom use at first sex was not related to sexual satisfaction, however condom use at most recent sex was negatively associated with sexual satisfaction. Condom use at most recent sex was significantly less likely with a
committed partner than with a casual partner, which is consistent with previous findings that condom use is more prevalent in early relationships than established relationships (Bolton et al., 2010; Fortenberry et al., 2002; Manlove, Ryan, & Franzetta, 2007; Sanders et al., 2010). Some research suggests that as relationships continue over time and trust and comfort grows, condom use may become less likely (Bolton et al., 2010). Therefore, it is possible that condom use with a committed partner at most recent sex may indicate issues of mistrust, which may have also contributed to the negative association between condom use at last sex and sexual satisfaction. Future research should explore the interaction between partnership type with condom use and sexual satisfaction.

**Sexual activity discrepancies.** This study included a novel measure of the extent to which young women want, and engage in, specific sexual activities. From the SWGD Scale, a discrepancy score was calculated. Higher discrepancy scores indicated incongruence between the frequency with which women want to engage in these sexual activities and the frequency with which they do engage in these activities. Therefore, a discrepancy score of zero is most appealing, indicating perfect congruence between wanted and desired sexual activities.

SWGD scores were negatively related to Agentic Sexuality and Reserved Approach subscales of the Sexual Self-Concept Scale, as well as to communication and sexual satisfaction. However, discrepancy scores were positively associated with the Negative Associations subscale of the Sexual Self-Concept Scale. These findings indicate that more positive scores on the Sexual Self-Concept Scale were related to lower discrepancy between wanted and experienced sexual activities. Higher communication scores were related to lower discrepancy scores, and lower discrepancy scores were
related to higher sexual satisfaction. Additionally, endorsement of more negative feelings as measured by the Negative Associations subscale was related to increased sexual activity discrepancy.

**Structural Equation Modeling**

Initial results from the measurement model step of the structural equation modeling indicated that there were measurement issues, particularly with the Sexual Self-Concept Scale. A number of actions were taken to improve the fit of the measurement model, including conducting an exploratory factor analysis and adjusting the indicators included in the Sexual Self-Concept subscales. During this process, several items were removed to better represent the constructs intended to be measured on each of the subscales. Once the best representation of the Sexual Self-Concept scale was determined, the measurement model was re-run and the structural model was tested.

Next, the structural model was analyzed and provided evidence of mixed but adequate fit. Issues with model fit statistics can be interpreted a few different ways. First, there exists no consensus on strict cut-off points for fit indices (Fan et al., 1999), so it is important to note that while fit indices help with interpretation and drawing conclusions about data, they are not the only important piece of evidence for model utility. Poor model fit may be caused by several possible issues. First, some model fit statistics are assessed based on model parsimony. The high number of indicators for the scales in this study does not create a very parsimonious model. Second, based on the number of parameters being estimated, sample size may be an issue.

Caution should be taken when drawing conclusions about the results of the structural equation modeling, based on the initial poor measurement model. However, the
significant pathways between all of the variables included in the structural model suggest that the relationships between these variables warrant further exploration. Specifically, in this study all variables (sexual self-concept, communication, discrepancy scores, and sexual satisfaction) were all significantly related to each other when using the full sample. Since this is the first study to assess the relationship between these variables as a whole, it contributes to the literature on this subject and suggests that these may be important variables and relationships to be included in future research.

The use of the sexual activity discrepancy scores is a novel approach to studying sexual satisfaction. As calculated, discrepancy scores could be either positive or negative, depending on whether participants reported engaging in a behavior more or less than they desired. However, due to the inability for the statistical programing to handle negative values, the absolute value of the discrepancy scores was used. Implications for this adjustment should be considered, as the direction of the discrepancy may potentially impact sexual satisfaction in differing ways. Future research should further explore whether directionality of the discrepancy impacts sexual satisfaction differently.

**Comparing committed and casual sexual partners.** There were several interesting differences in the path estimates of the structural equation model for committed and casual sexual partners. These results should be interpreted with caution due to the large difference in sample size between the two groups, and the relatively small sample size in the casual partner group. Overall, many of the statistical relationships between variables were significant for both committed and casual partners, although the actual beta coefficients differed slightly (e.g., sexual self-concept →
communication; communication $\rightarrow$ discrepancy scores; sexual self-concept $\rightarrow$ sexual satisfaction).

There were also differences in the significance of some of the pathways for committed versus casual partnerships. The direct pathway from communication to sexual satisfaction was significant only for committed partners. The indirect relationship of sexual self-concept to sexual satisfaction through communication was also only significant for committed partners. These results suggest that communication has a direct effect on sexual satisfaction with committed sexual partners but not with casual partners. Additionally, communication mediated part of the relationship between sexual self-concept and sexual satisfaction only for committed partners. This may indicate that in committed partnerships, increased communication may be one reason that those with more positive sexual self-concept also may report higher sexual satisfaction.

In committed partnerships, the direct relationship between discrepancy scores and sexual satisfaction was not significant, nor was the indirect path from communication to sexual satisfaction through discrepancy scores. These results suggest that discrepancies in desired and experienced sexual activities may not have a significant impact on sexual satisfaction in committed sexual relationships. It is possible that in committed relationships, participants may engage (or not engage) in certain sexual activities to please a partner, and that this may contribute to sexual satisfaction despite that these activities may not be the preferred activities for the individual. This is supported by some of the comments from interviewees from phase 1, who mentioned that sex with a committed partner is more than “just sex” and the fact that sex was about the “us” not “me”.
On the contrary, the direct relationship between sexual activity discrepancy scores and sexual satisfaction was significant for casual partners. This was also true regarding the indirect pathway from sexual self-concept to sexual satisfaction through communication and discrepancy scores for casual partners, whereas the pathway from sexual self-concept to sexual satisfaction through communication only (not including discrepancy scores) was significant for committed partners. This suggests that discrepancies between desired and experienced sexual activities may play a more important role in sexual satisfaction with casual partners than committed partners. This is also consistent with some of the findings from the Phase 1 interviews, such as participants mentioning that casual sexual relationships are an opportunity to explore new and different sexual activities without worry of being judged, and also that in casual sexual partnerships women can be much more focused on themselves rather than their partner.

Conclusions

Despite mixed results of the fit statistics, all path coefficients between the variables in the structural model with the full sample were significant, which suggests that there are significant relationships between these concepts. Therefore, this model supports several important conclusions.

This is the first known study to provide evidence that sexual self-concept is positively related to communication between sexual partners. Previous research had found this relationship regarding communication between parents and children (Lou et al., 2011), but no study had assessed the relationship of sexual self-concept with partner communication. This is an important finding since, particularly as adolescents and young
adults transition into college, partners and peers become a bigger influence on behaviors and decision-making than parents. In the current study, more positive feelings about sexuality (including being knowledgeable about one’s own body, aware of their own sexual feelings, and being passionate and romantic) were related to higher levels of communication with partners.

This study also provides evidence that sexual self-concept has a direct relationship with sexual satisfaction, such that women in this study with more positive sexual self-concepts reported higher overall sexual satisfaction. This finding is consistent with the minimal previous research looking at sexual self-concept and sexual satisfaction (Impett & Tolman, 2006). This finding may be important for identifying how negative messages about sexuality in younger ages are linked with less positive sexual experiences in adulthood, including lower levels of contraceptive use (Winter, 1988).

Consistent with much of the previous research on communication and sexual satisfaction (Byers & Demmons, 1999; MacNeil & Byers, 2005), communication about sexual satisfaction with current/most recent sexual partner was directly related to higher sexual satisfaction in this study, although differently for casual versus committed partners. The direct relationship of communication with sexual satisfaction for committed partners may be consistent with MacNeil and Byers’ (2005) work showing that communication with partners is associated with sexual satisfaction through feelings of closeness and intimacy. Although the current study did not measure closeness or intimacy, this would be in line with qualitative data from Phase 1 participants about committed partners. Replication of the current study including measures of closeness and intimacy could test this theory.
Furthermore, this study was the first to look at discrepancies in desired and actual sexual activities and behavior, as it relates to both communication and sexual satisfaction in young women. In this study, higher communication scores were related to lower levels of sexual activity discrepancy for both casual and committed sex partners. In other words, communication with partners was related to congruence between wanted and experienced sexual activities. Previous studies have utilized discrepancy scores as direct measurements of sexual satisfaction (Santtila et al., 2008). However, results from this study show that although discrepancies are related to sexual satisfaction, they are not synonymous constructs and an absence of discrepancy should not be interpreted as sexual satisfaction.

This was also the first study to assess discrepancy scores as a mediator in the relationship between communication and sexual satisfaction. Interestingly, this mediation was significant for casual sexual partners but not for committed partners. This implies that communication between committed sexual partners impacts sexual satisfaction above and beyond the effect of receiving desired sexual activities. Further research is needed in this area.

**Study Strengths and Limitations**

**Study Strengths**

The current study has several strengths. First, by utilizing a mixed-methods approach this study capitalizes on the benefits of both qualitative and quantitative research, and balances out the advantages and disadvantages of each. The qualitative data provide in-depth personal accounts of young women’s experiences of sexual satisfaction.
The benefits of quantitative research include the ability to determine statistical relationships between variables in a multivariate way, and the ability to compare these results to previous research. Through quantitative data, this study was able to test new statistical relationships between several variables identified as important in predicting sexual satisfaction. The use of structural equation modeling specifically is a strength in this study as it controls for measurement error and estimates the relationships between variables simultaneously, thereby controlling for inflated type I error resulting from multiple comparison tests. The estimation of direct and indirect effects is also a benefit to the use of SEM, as it statistically evaluates mediation effects (Buhi et al., 2007). Finally, the treatment of missing data in SEM is far superior to other multivariate statistical techniques.

By using qualitative methods to inform scale development for the quantitative survey, this study provided an opportunity to develop and test a new measure of sexual outcomes (specifically, what is wanted and what is received). The use of sexual discrepancy scores is an innovative approach to exploring the mechanism through which communication between sexual partners is associated with sexual satisfaction. Because discrepancy scores from this measure produced reasonable reliability (based on Cronbach’s alpha scores), this scale may be useful as a new tool in future research assessing the degree to which the desire for specific sexual activities is achieved and how this relates to other sexual health outcomes.

This is the first study, to my knowledge, to explore the relationship between sexual self-concept, communication between sexual partners, and positive sexual
outcomes in a sample of young adults. Future research should aim to replicate this study with other populations.

**Limitations**

Although the use of a mixed-methods approach capitalizes on the benefits of each method, this study is also limited by the disadvantages of each.

**Qualitative limitations.** In regard to the qualitative data, the interview questions were purposively broadly worded so that participants could answer based on their own personal experience, or what their thoughts were more generally about the issues. However, this meant that I was unable to determine whether participants had actually experienced the sexually satisfying situations they described or whether they were speaking more generally about assumptions or fantasy. Additionally, specific information about participants’ sexual experiences, including the number or types of sexual partnerships they have experienced, is not available for the interview participants. The qualitative information is also limited to the questions that were asked and the way they were worded. It is possible that different responses would have arisen if the questions had been presented differently.

The presentation of the initial qualitative research question which was designed to elicit a list of sexual activities and behaviors was unfruitful. Based on the analysis of the responses to this question, the wording of the question stem (example behaviors including cuddling, anal sex and sex toys) appears to have influenced the responses from participants. For example, many participants mentioned *not* enjoying anal sex, rather than identifying sexual activities they *do* enjoy. As a result, the list of pre-generated sexual behaviors that participants edited at the end of the interview served as the primary basis
for the phase 2 scale development. Future research inquiring about sexual behavior preferences of young women should take a different approach. For example, asking young women to individually and privately write a list of the sexual activities they enjoy, either online or within a classroom environment and turn it in anonymously may provide better results. Alternatively, having participants perform a card sort of their preferred sexual activities may also produce results more representative of common or desired sexual behaviors.

Interview questions in this study were purposively worded in a general way, so that women who had not experienced both types of sex partners could still participate and speak about their thoughts and opinions about both. However, the limitation of this is that it is unknown whether and which types of relationship(s) the interviewees had experienced. Therefore I am unaware of whether participants were speaking based on personal experience. Future research should ask participants to share their experiences about the type of relationship(s) they have engaged in and if they have not experienced both types of partners, they could be asked to share their thoughts and predictions. However, this would help clarify if responses are based on personal experience or expectations. This would allow analysis separately of those with personal experience and without which may provide better insight for interpretations and conclusions.

Finally, qualitative data are not generalizable and inferences based on interview data are restricted to the current sample. This study included only young women enrolled in one university in Florida. Studies of younger or older women, women who are not in college, or women from a different geographical area may yield different results.
**Quantitative limitations.** The Reserved Approach subscale of the Sexual Self-Concept Scale produced a low reliability score even after revising the subscale. After revisions this subscale included only two items, one of which specifically measured responsibility for protection against pregnancy and STIs. Further testing and refining of this subscale is needed.

The initial poor model fit of the measurement model of the structural equation modeling in this study suggests that there are issues with one or more of the scales used. In particular, the Sexual Self-Concept scale performed poorly, with several indicators producing low loadings on their factors, and multiple factors being uncovered within a single subscale (Agentic Sexuality) during exploratory factor analysis. Despite adjustments made to test the best representation of Sexual Self-Concept in this study, it may be important to replicate this study with other sexual self-concept measures with better evidence of validity.

The Women’s Sexual-Self Concept Scale (Vickberg & Deaux, 2005), used in this study, was chosen despite a lack of research backing its use because based on face validity it appeared to be the most appropriate scale for the study population. Other sexual self-concept scales available were determined to be either too lengthy to be used in combination with the other measures in this study, or inappropriate for the age and developmental level of the sample in this study. The required adjustments to the subscale items call into question the validity of this scale as originally presented, and suggest that it may not be measuring the underlying concept for which it is intended. Even after the adjustments, reliability scores for the sexual self-concept scores remained low. Therefore, caution should be taken when interpreting findings based on these data.
Due to these questionable psychometric properties of the sexual self-concept scale, future research should aim to replicate this study with a sexual self-concept scale with better evidence of validity and reliability. This may require the development of a new sexual self-concept scale for adult and young adult women. Research in this area would benefit from the development of a new sexual self-concept scale for this population. Additionally, this study involved the first use of the discrepancy score scale developed for this study. Further testing and refinement of this measure are needed.

Because respondents to the online survey were asked to answer questions based on their current or most recent sexual partner, there are potential differences in the responses of those reporting on a current partner versus a recent partner (no longer current). Research shows that one’s perception and understanding of relationship termination impacts current coping (Kellas & Manusov, 2003) and feelings of stress and depressed mood (Collins & Clark, 1989). Regarding the current study, ratings of sexual communication, sexual activity discrepancy and sexual satisfaction in a recent partnership may be biased based on current perceptions, feelings and interpretations about the past relationship. Additionally, issues of communication or sexual satisfaction may have contributed to the partnership dissolution. Future research should factor in whether respondents are reporting on current or past (most recent) partners.

The cross-sectional nature of this study limits the ability to draw conclusions about causality between the variables of interest. It is possible that the temporal relationships between variables included in the structural equation model may be reversed or different than what was hypothesized and tested here. Indeed, poor model fit indicates that the tested model is not the ideal model. Additionally, the model tested in
this study is not exhaustive of the variables that may impact communication between sexual partners and/or sexual satisfaction. There may be numerous other variables that may also impact the variables in this study that were not measured. However, it is not possible to include all possible variables in any one study.

This study utilizes self-report data, which are vulnerable to several threats. First, participants may suffer from recall bias. Since this study asked participants to retrospectively report their feelings and behaviors (such as condom use and orgasm at first and last sex), it is possible that memory of events was inaccurate (Marsden & Wright, 2010). In order to help decrease the impact of recall bias on the survey responses, this study asked participants to focus on their current or most recent sexual partner when answering specific questions.

Due to the sensitive nature of the questions asked in this study, social desirability is also a concern. Participants may have been tempted to answer questions in a way that represents them in the most positive light (e.g., may report fewer sexual partners, since many partners is often judged to be negative). The confidentiality of the survey helps to limit desirability bias. When participants’ data cannot be linked back to them, they are more likely to respond honestly (Marsden & Wright, 2010). Additionally, the inclusion of the honesty questions at the end of the survey, and removal of cases indicating dishonesty may have helped to increase the truthfulness of the data.

This study used a convenience sample of students from a single university in Florida, and thus it is not generalizable to other populations. Additionally, this study was limited to women identifying as heterosexual and future research should aim to measure these concepts in same-sex partnerships and in males.
Study Implications

Despite some limitations, the findings from the current study have several implications for health education practice and future research.

Implications for Public Health Practice

This study has implications for broader public health issues, particularly based on the recent emphasis of sexual health on overall happiness and well-being (Hooge, 2012; Rosen & Bachmann, 2008), and the recent call for public health research to include positive sexuality (Centers for Disease Control and Prevention, 2010, December; U.S. Department of Health & Human Services, 2012). First, the findings of this study provide evidence that young women may find both committed and casual sexual relationships satisfying, but that for the most part, emotional connection with a committed partner was related to the most sexually satisfying experiences. Young women in this study also identified communication as an important component of sexual satisfaction, and quantitative results supported the idea that communication about birth control prior to first sex was related to condom use.

Aiding young women in developing the tools to achieve positive sexual health outcomes is important for healthy sexuality. Very limited research has explicitly examined the factors that enable young women to have positive, satisfying sexual experiences (Impett & Tolman, 2006). It has been suggested that if a “girl suppresses her own wishes and desires and objectifies her own body, she will be more likely to engage in risky sex” (Impett & Tolman, 2006, p. 141). Consistent with this idea, the current study found that young women with more positive sexual self-concepts, including being knowledgeable about their bodies and aware of their own sexual feelings, were more
likely to report positive sexual health outcomes including communicating with partners and higher levels of sexual satisfaction. This has implications for the types of messages and information we provide young women about their bodies and their sexual feelings and desires. It may be beneficial to educate young women about their bodies and encourage them to explore and evaluate their own sexual feelings, rather than endorsing traditional Western standards that females should not experience sexual desire. Educating young women about their bodies and how to be aware of their own sexual feeling and desires may promote more authentic sexual actions, resulting in more positive experiences.

These findings have implications for improving sex education programs. The development of a positive sexual self-concept can be promoted as a way to get in touch with one's feelings and values regarding sexuality, and as a way to act consistently with those. Communication can be emphasized as a way to convey sexual wants and needs, as well as boundaries. Communication can also be promoted in abstinence and positive youth development programs as an important way to refuse unwanted or unprotected sex and maintain abstinence. Additionally, this study highlighted the importance of promoting specific types of communication, including information about birth control, sexual history, and sexual preferences.

In this study, condom use at first sex was not significantly associated with sexual satisfaction, and had no impact on experience of orgasm at first sex. This is similar to other recent research (Sanders et al., 2010) that has found condom-protected intercourse to be equally satisfying as unprotected intercourse. These findings may have implications for promoting condom use, particularly in casual sexual relationships. In this study,
casual sexual partnerships were seen as a time limited encounter. Based on this, experience of orgasm may be more important than global sexual satisfaction (as measured by the sexual satisfaction scale in this study). If this is true, the fact that condom use did not impact experience of orgasm or sexual satisfaction at first sex may be important.

However, in this study condom use at most recent sex was negatively related to sexual satisfaction. Because condom use at most recent sex was significantly more likely with a casual partner than a committed partner, it may be important to look at condom use at most recent sex separately for casual and committed partnerships. Additionally, because the measure of sexual satisfaction in this study was a global satisfaction measure, it may be more applicable to longer-term couples than to casual sexual relationships. Indeed, this study was the first, to my knowledge, to use this scale with non-committed partners.

Communication and sexual satisfaction have both been linked to the success of marriages (Litzinger & Coop Gordon, 2005), and communication training has been recommended as a component of marital and sexual counseling (Cooper & Stoltenberg, 1987). Because communication plays a role in both the prevention of negative outcomes (condom use to prevent STIs and unintended pregnancy), and the promotion of positive outcomes (sexual satisfaction), it may be a key component to empowering young women to make healthy sexual decisions. This can direct the conversation about and marketing of sexual health from a fear-based prevention framework into a health-based promotion framework. Framing communication as a way to enable young women to ask for what
they want, both in regard to safety and pleasure of sexual experiences can help in this transition.

**Directions for Future Research**

As public health transitions into studying and promoting positive sexuality and sexual health, it is necessary to better understand how different people experience positive sexuality. Future research in this area should continue to utilize qualitative data collection methods to gain a comprehensive picture of what positive sexuality and sexual outcomes mean to a variety of different populations, including different ages, sexual orientations, and gender. Qualitative methods do not produce generalizable results, and since this study used a convenience sample of young women from one university it is important to continue such research with other samples.

The current study focused solely on young women attending college, results may differ with women not enrolled in college or of different ages, and should be explored in future research. Additionally, studying females is just one individual within a partnership. Since previous research indicates that there are significant differences in communication and sexual satisfaction between men and women, similar research should be conducted with men individually, and with couples (individually) including qualitative research on their experiences of sexual satisfaction, as well as informing the development of a Sexual Want/Get Discrepancy (SWGD) Scale for males.

Due to the current study’s finding of same-sex experience among heterosexually identified young women, future research would do well to explore how communication and sexual satisfaction compare between same- and opposite-sex partners of heterosexually or bisexually identified individuals. Because the current study was
focused solely on male sexual partners, future research should explore the types of sexual behaviors and activities desired in same-sex experiences, the role of communication in sexual satisfaction in these partnerships, and the mechanism through which communication impacts sexual satisfaction with same-sex partners (if applicable).

Findings from this study also suggest that sexual activity discrepancies may be an important focus for future research on sexual satisfaction and pleasure. Although not exploring discrepancies specifically, recent research found the specific sexual activities experienced during hookups and relationships were important for women’s experience of orgasm and enjoyment in these different partnership types (Armstrong et al., 2012). The SWGD Scale developed for this study requires further testing and refinement, but may be a good place to start in assessing how specific sexual activities, and sexual activity discrepancies are related to sexual communication and sexual satisfaction for young women.

Future research should further build on the structural equation model presented here. Utilization of scales with documented evidence of validity may improve the fit of the model tested in this study, and moving forward, research requires further testing and refining of a Sexual Self-Concept Scale for adult women. Additionally, there may be several other variables that were not included in this study that may also be contributing to the relationship between communication, sexual activity discrepancies and sexual satisfaction. Further research should aim to include other variables that may impact the relationships between the constructs, including demographic characteristics (e.g., age, previous sexual experience) and other factors identified in this study, such as emotional connection between partners.
The current study builds upon previous findings regarding communication and sexual health outcomes, and identified that a variety of different types of communication are important for a variety of different types of sexual partnerships. Findings from this study suggest that communication is an important component of sexual satisfaction in both committed and casual sexual partnerships, but through potentially different mechanisms. Future research should continue to explore how communication impacts sexual satisfaction in different types of sexual partnerships. Additionally, this study found that different types of communication were related to different sexual health outcomes. This highlights the importance of carefully operationalizing and selecting measurement tools when studying communication.

Additionally, it is important for research to clearly indicate the type of sexual satisfaction measure used in order to determine its applicability to different types of sexual satisfaction and pleasure. Finally, future studies should also look at different types of contraceptives, in addition to or in substitution of condom use, and impacts on orgasm as well as overall sexual satisfaction.

The significance of this study lies in its contribution to the positive sexuality literature, which is currently still in its infancy. This study is just the beginning to understanding how to tie together risk reduction and health promotion in a more holistic approach to sexual health.
References


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APPENDIX A: INTERVIEW RECRUITMENT LETTER

Dear students,

Are you a female undergraduate student? Do you want to help a fellow student researcher? You are being invited to participate in a short individual interview, to help a fellow student complete her dissertation research. This study is titled “Sexual self-concept, partner communication, and satisfaction” (IRB#: Pro00004792). The interview is expected to take between 25-40 minutes, and you will be given a $10 gift card as a thank you for your time. During the interview you will be asked general questions about what you think college women want from sexual partnerships.

If you have any questions, or if you are interested in participating, please contact Heather Blunt at hblunt@health.usf.edu to find out more information and to set up an interview time that is convenient for you!

Your participation would be greatly appreciated!!
Thank you!

Heather Blunt, MPH, PhD Candidate
Study Principal Investigator
USF College of Public Health
Email: hblunt@health.usf.edu
APPENDIX B: INTERVIEW CONSENT FORM

Study ID: Pro00004792 Date Approved: 10/10/2011 Expiration Date: 10/10/2012

Informed Consent to Participate in Research
Information to Consider Before Taking Part in this Research Study

IRB Study # Pro00004792

Researchers at the University of South Florida (USF) study many topics. To do this, we need the help of people who agree to take part in a research study. This form tells you about this research study. We are asking you to take part in a research study that is called: Sexual self-concept, partner communication, and satisfaction.

The person who is in charge of this research study is Heather Blunt. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge.

The research will be done at the University of South Florida.

Purpose of the study
The purpose of this study is to
- Explore what young college women want from sexual experiences.
- Determine the relationship between sexual self-concept, communication between sexual partners, and sexual health outcomes.
- This study is being conducted as a doctoral dissertation.

Study Procedures
In order to participate, you must be female, between the ages of 18-25 years, and have engaged in heterosexual (straight) sexual activity at some point in time.

If you take part in this study, you will be asked to:
1) Participate in a one-time individual interview with the Principal Investigator, which is expected to take approximately 25-40 minutes.

Alternatives
You have the alternative to choose not to participate in this research study.

Benefits
We don’t know if you will get any benefits by taking part in this study. Helping a fellow USF student, and contributing to research may result in positive feelings.
Risks or Discomfort
This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study. Answering questions about sexuality and sexual health can sometimes be embarrassing or uncomfortable. If there are any questions you are uncomfortable answering, please inform the interviewer and we will move on to the next question. If you wish to stop the interview at any time, you may do so by informing the interviewer.

Compensation
As a thank you for your time participating in the study, you will receive a $10 gift card to Target.

Confidentiality
We must keep your study records as confidential as possible. No identifying information will be asked during the interview. Your consent form and contact information will be kept separate from the records of the interview, so no one will be able to tie the information you provide during your interview to you. However, certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

- The research team, including the Principal Investigator, study coordinator, and all other research staff.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.) These include:
  - The University of South Florida Institutional Review Board (IRB) and the staff that work for the IRB. Other individuals who work for USF that provide other kinds of oversight may also need to look at your records.
  - The Department of Health and Human Services (DHHS).

We may publish what we learn from this study. If we do, we will not let anyone know your name. We will not publish anything else that would let people know who you are.

Voluntary Participation / Withdrawal
You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study, to please the investigator or the research staff. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Your decision to participate or not to participate will not affect your student status, grades, etc.

Questions, concerns, or complaints
If you have any questions, concerns or complaints about this study, email Heather Blunt at lblunt@health.usf.edu. If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-5638. If you experience an unanticipated problem related to the research call Heather Blunt at 813-966-4839.
Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study. If you want to take part, please sign the form, if the following statements are true.

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

______________________________  _______________________
Signature of Person Taking Part in Study                  Date

Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect.

I hereby certify that when this person signs this form, to the best of my knowledge, he or she understands:

- What the study is about.
- What procedures/interventions will be used.
- What the potential benefits might be.
- What the known risks might be.

______________________________  _______________________
Signature of Person Obtaining Informed Consent                  Date

Printed Name of Person Obtaining Informed Consent
APPENDIX C: INTERVIEW GUIDE

Hi, thank you for taking the time to meet with me today! My name is Heather Blunt, and I’m a PhD student here at USF. Right now I’m conducting my dissertation research looking at different types of sexual partnerships and sexual satisfaction in college females, like yourself. I will be using the information that I gather from these interviews to better understand what young women are looking for in their sexual experiences, and to develop a survey which will be sent out to undergraduate females here at USF later this semester. Although I was a freshman/sophomore at one point, I don’t want to assume that I know how things are now. So I need someone like you to tell me about it so I can get a sense or understand your experiences. I really appreciate your honest input.

As a reminder, I will be audio-recording this interview, but all the information you provide will be kept confidential. Is this still ok with you? You can also skip any question you don’t want to answer or stop the interview by letting me know that that’s what you would like to do. I’ll be compiling the results from all of the interviews so I will never use your name or any identifying information when reporting the results of these interviews, so no one will ever know your personal responses. Do you have any questions? Ok, then let’s jump right in and get started.

1. So let’s start just with you telling me a little bit about you. E.g., How old are you? What year are you in here at USF? What is your major?
2. What is your current relationship status?
3. What interested you about participating in this study?

I’m going to ask you a few questions about what young women, like yourself, want from consensual sexual experiences. By consensual I mean by choice or not forced. I’m
looking to generate a long, inclusive list of the things that young women want, so please feel free to let me know anything that comes to mind. When I talk with people about sexual relationships and desires I hear a bit of everything, so nothing you say will shock me. So I really appreciate you being completely open and honest with me.

4. I’d like to spend a minute sort-of brainstorming about the things young women like. Again, feel free to tell me anything that comes to mind. These don’t have to be things that you personally are interested in, but maybe something a friend has told you they like or something else that you think young women like.

These can be things all along the spectrum, so for example: Cuddling, kissing, genital touching, oral sex, talking about what feels good or what you like, trying different positions, experimenting with sex toys, anal sex

5. Why do you have sex/why do you think young women have sex?
PROMPT: I know it can differ sometimes, but give me some examples.

6. A couple of minutes ago you told me about some behaviors (give examples of what they said). What is it about these things that you like or you think young women like?

7. During a sexual encounter in a committed relationship, what are 5-10 things that make it satisfying?
PROMPT: What are 5 physical things you like or want during sex with this type of partner?
PROMPT: What are 5 emotional things you like or want during sex with this type of partner?

8. During a sexual encounter with a casual partner, what are what are 5-10 things that make it satisfying?
PROMPT: What are 5 physical things you like or want during sex with this type of partner?
PROMPT: What are 5 emotional things you like or want during sex with this type of partner?

9. Considering all your sexual encounters, how often would you say sex is satisfying?
   PROMPT: 20%, 35%, 80%

10. What do you think are some reasons sex is sometimes not satisfying?

11. What are some ways to make sex more satisfying for young women? Either things women can do individually, or as part of a couple?
PROMPT: If communication comes up: What does that communication look like? When does it take place (non-sexual situation, before/during/after sex)? Where/How (in person, via phone, text, online chat?) Who initiates it? What topics are covered?

12. Think about your best sexual experience. You don’t need to provide specifics, but what was it about that experience that made it so satisfying? What was the context? Special occasion? Did your partner do something different or out of the ordinary?

13. Think about an unsatisfying or not so good consensual sexual experience. So, again sex that wasn’t forced. What was it about that experience that made it not so great?

14. Now I want to go back to some of the things we talked about earlier. At the beginning, I asked you about some of the things that young women want from sexual encounters. *Provide list*
a) Here is a list of some activities that other women have told me about, and you mentioned. Is there anything else that’s missing or should be added here?
b) Here are some of the reasons or benefits that other women have told me about, and you added. Can you think of anything else that’s missing or should be added here?
c) These are some things that women have told me about how they like sex to be. What else is missing or should be added here?

15. What do you wish someone had told you or what do you wish you knew about sex and sexuality, before now?

16. If you had a little sister, what would you want her to know about sex and sexuality, before she started having sex?
17. Is there anything else you’d like to share? Anything else you think I should know about young women’s sexuality?

1. Questions that were confusing or could be confusing?
   How could the question(s) be made to be more clear?
2. Which of these questions were difficult or uncomfortable to answer?
3. What else do you think I should have asked that I didn’t?
### APPENDIX D: INTERVIEW CODEBOOK

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PRIMARY CODE (NODE)</th>
<th>SECONDARY CODE</th>
<th>DESCRIPTION</th>
<th>DO NOT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction and partner types</td>
<td>Casual partner: Primarily regarding question about satisfying sex with casual vs. committed partner. <em>Casual partner:</em> Non-exclusive or non-committed sexual partners, including friends with benefits, one night stands, casual hookups, etc.</td>
<td>Freedom, no obligation</td>
<td>Refers to freedom to see other people, to only see that partner when you want to, no commitment/obligations of regular relationships, not having time for a relationship</td>
<td>NOT: not coded if a participant mentions a casual partner at another time (e.g., during description of unsatisfying sex, which would also get double coded)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical</td>
<td>For text mentioning physical attributes (attractive sexual partner, size), physical needs (hormones, release), sexual technique, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pleasure</td>
<td>Any mention of pleasure, it feels good, enjoying sex, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No emotion</td>
<td>For text mentioning emotions/emotional connection, closeness, bond with partner, love/being in love. Can also be regarding a LACK of emotional connection (e.g., unsatisfying sex, casual partner)</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimenting</td>
<td>When a participant specifically mentions experimenting in regards to sexual behaviors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No judgment</td>
<td>No worrying about other person’s perceptions, your reputation, being judged</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>Use of alcohol, being drunk, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Me</td>
<td>Focus on her, all about her, not worrying about partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Committed partner</strong>:</td>
<td>Primarily regarding question about satisfying sex with casual vs. committed partner.</td>
<td>An exclusive sexual partner, such as a boyfriend or committed partner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional connection</td>
<td>For text mentioning emotions/emotional connection, closeness, bond with partner, love/being in love. Can also be regarding a LACK of emotional connection (e.g., unsatisfying sex, casual partner)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical</td>
<td>For text mentioning physical attributes (attractive sexual partner, size), physical needs (hormones, release), sexual technique, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Any mention of communication between sexual partners.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know partner</td>
<td>Reference to knowing your partner, knowing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOT**: not coded if a participant mentions committed partner at another time (e.g., during description of best sexual experience, which would also get double coded)
<table>
<thead>
<tr>
<th><strong>Entrepreneurial Intent</strong></th>
<th><strong>Improving satisfaction</strong></th>
<th><strong>Masturbation</strong></th>
<th><strong>NOT:</strong> Answers to questions about satisfying sex, most satisfying sexual experience, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement in satisfaction: Only for responses to question asking what could make sex more satisfying for women</td>
<td>Masturbation</td>
<td>Any mention of masturbation. Can be double coded (e.g., sexual activities or behaviors, could add to sexual satisfaction, etc.). If participant mentions masturbation with toys, gets double coded with TOYS code</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Masturbation</td>
<td>Any mention of masturbation. Can be double coded (e.g., sexual activities or behaviors, could add to sexual satisfaction, etc.). If participant mentions masturbation with toys, gets double coded with TOYS code</td>
<td></td>
</tr>
<tr>
<td>Trust/comfortable</td>
<td>Refers to trusting partner, feeling comfortable with them</td>
<td>Masturbation</td>
<td></td>
</tr>
<tr>
<td>Equality</td>
<td>Partner caring about her orgasm or pleasure as well, not being selfish</td>
<td>Masturbation</td>
<td></td>
</tr>
<tr>
<td>Experimenting</td>
<td>When a participant specifically mentions experimenting in regards to sexual behaviors</td>
<td>Masturbation</td>
<td></td>
</tr>
<tr>
<td>Personal characteristics/personality</td>
<td>Refers to characteristics about the partner in specific, such as being a “good guy”, being good to the respondent/treating her well, etc. Can also be negative personality characteristics</td>
<td>Masturbation</td>
<td></td>
</tr>
<tr>
<td>NOT:</td>
<td>Physical characteristics about the partner – those are coded as physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>communication between sexual partners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>Self-esteem or confidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equality</td>
<td>Partner caring about her orgasm or pleasure as well, not being selfish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know partner</td>
<td>Reference to knowing your partner, knowing what they like, or length of time sexual partners have or “should” know each other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of self</td>
<td>Any mention of knowledge of own body or knowing what you want in the bedroom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust/comfort</td>
<td>Refers to trusting partner, feeling comfortable with them</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education about sex</td>
<td>Mention of education about sex/sexuality, either sex education they received or suggesting better sex education for women.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships</td>
<td>Mention of sex being better if in a relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimenting</td>
<td>Trying new things</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own decisions</td>
<td>Mention of doing this on your own accord</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E: SURVEY RECRUITMENT EMAILS

Recruitment E-mail #1:
E-mail subject header: Help a fellow USF student researcher! Participate in a research study!

E-mail message body:
Dear Student,
You have been selected to participate in a research study of female USF undergraduate students, titled “Sexual self-concept, partner communication, and satisfaction” (IRB# Pro00004792). This research is being carried out by a doctoral student in the USF College of Public Health, as part of a dissertation study. The purpose of the study is to look at how young women feel about themselves, their communication with sexual partners, and their overall sexual health.

Participation in this study involves completing a short anonymous online survey. I invite you to visit [survey link] to learn about the study. The survey is expected to take approximately 20-35 minutes to complete.

If you choose to participate, you will have the opportunity to win one of several gift cards, ranging from $10-$50! The prize drawing will take place the week of April 16th. Your information will be kept completely anonymous, and you will be helping a fellow student complete their dissertation research.

In order to be eligible to participate, you must be a female 1st or 2nd year undergraduate student, between the ages of 18-25 years, identify as heterosexual (straight), and have engaged in some sort of sexual activity at some point in time.

I would greatly appreciate your participation. If you have any questions or would like more information, please feel free to contact me at hblunt@health.usf.edu with the subject heading “dissertation survey”.

If you don’t have any questions, please visit [survey link] to get started with the survey!

Thank you!

Heather Blunt, MPH, PhD Candidate
Study Principal Investigator
USF College of Public Health
E-mail: hblunt@health.usf.edu

Recruitment E-mail #2
E-mail subject header: Help a fellow USF student researcher! Participate in a research study!

E-mail message body:
Dear Student,
About a week ago, I sent you an email invitation to participate in research study titled “Sexual self-concept, partner communication, and satisfaction” (IRB# Pro00004792). If you have already completed the survey, thank you very much!!

If you have not yet completed the survey, I invite you to visit [survey link] to learn about the study. The purpose of the study is to look at how young women feel about themselves and their communication with sexual partners and sexual health outcomes. Participation involves completing a short anonymous online survey about young women’s sexual experiences. The survey is expected to take approximately 20-35 minutes to complete.

If you choose to participate, you will have the opportunity to win one of several gift cards, ranging from $10-$50! You will have until April 13th to complete the survey. Your information will be kept completely anonymous, and you will be helping a fellow student complete their dissertation research.

In order to be eligible to participate, you must be a female 1st or 2nd year undergraduate student, between the ages of 18-25 years, identify as heterosexual (straight), and have engaged in some sort of sexual activity at some point in time.

I would greatly appreciate your participation. If you have any questions or would like more information, please feel free to contact me at hblunt@health.usf.edu with the subject heading “dissertation survey”.

If you don’t have any questions, please visit [survey link] to get started with the survey!

Thank you!

Heather Blunt, MPH, PhD Candidate
Study Principal Investigator
USF College of Public Health
E-mail: hblunt@health.usf.edu

Recruitment E-mail #3
E-mail subject header: Help a fellow USF student researcher! Participate in a research study!

E-mail message body:
Dear Student,

A couple of weeks ago you received an email invitation to participate in research study titled “Sexual self-concept, partner communication, and satisfaction” (IRB# Pro00004792). If you have already completed the survey, thank you very much!!!

If you have not yet completed the survey, I invite you to visit [survey link] to learn about the study. The purpose of the study is to look at how young women feel about themselves and their communication with sexual partners and sexual health outcomes. Participation involves completing a short anonymous online survey about young women’s sexual experiences. The survey is expected to take approximately 20-35 minutes to complete.

If you choose to participate, you will have the opportunity to win one of several gift cards, ranging from $10-$50! You have until April 13th to complete the survey. The prize drawing will take place the week of April 16th. Your information will be kept completely anonymous, and you will be helping a fellow student complete their dissertation research.

In order to be eligible to participate, you must be a female 1st or 2nd year undergraduate student, between the ages of 18-25 years, identify as heterosexual (straight), and have engaged in some sort of sexual activity at some point in time.

I would greatly appreciate your participation. If you have any questions or would like more information, please feel free to contact me at hblunt@health.usf.edu with the subject heading “dissertation survey”.

If you don’t have any questions, please visit [survey link] to get started with the survey.

Thank you!

Heather Blunt, MPH, PhD Candidate
Study Principal Investigator
USF College of Public Health
E-mail: hblunt@health.usf.edu

E-mail recruitment #4
E-mail subject header: This is your last chance to help a fellow USF student researcher! Participate in a research study!

E-mail message body:
Dear Student,
If you have already completed this survey, thank you very much!!

If you have not yet completed the survey, this is your last chance! Please visit [survey link] to take the anonymous survey. The survey will close on Friday, April 13th at 11:59pm.
This study is titled “Sexual self-concept, partner communication, and satisfaction” (IRB# Pro00004792). The purpose of the study is to look at how young women feel about themselves and their communication with sexual partners and sexual health outcomes. The survey is expected to take approximately 20-35 minutes to complete.

If you complete the survey, you will have the opportunity to win one of several gift cards, ranging from $10-$50! The prize drawing will take place the week of April 16th. Your information will be kept completely anonymous, and you will be helping a fellow student complete their dissertation research.

In order to be eligible to participate, you must be a female 1st or 2nd year undergraduate student, between the ages of 18-25 years, identify as heterosexual (straight), and have engaged in some sort of sexual activity at some point in time.

I would greatly appreciate your participation! If you have any questions or would like more information, please feel free to contact me at hblunt@health.usf.edu with the subject heading “dissertation survey”.

If you don’t have any questions, please visit [survey link] to get started with the survey!

Thank you!

Heather Blunt, MPH, PhD Candidate
Study Principal Investigator
USF College of Public Health
E-mail: hblunt@health.usf.edu
APPENDIX F: DEMOGRAPHICS

What is your gender?
Female
Male
Transgender

How old are you as of your last birthday?
Younger than 18
18
19
20
21
22
23
24
25
Older than 25

Are you Hispanic or Latino?
Yes
No

How do you usually describe yourself? (Choose all that apply)
White/Caucasian
Black/African American
Asian
Hawaiian/Pacific Islander
American Indian/Alaska Native
Other (specify)

How do you most closely identify?
Heterosexual/Straight
Bisexual
Gay/Lesbian
What is your year in school?
1st year undergraduate
2nd year undergraduate
3rd year undergraduate
4th year undergraduate
5th year undergraduate
Graduate Student

What is your current relationship status?
Single and not dating
Single and dating one or more people
In a committed relationship, but not living together
In a committed relationship, living with partner
Married
Divorced/Widowed

What is your enrollment status?
Full-time
Part-time

Do you belong to a sorority?
Yes
No
APPENDIX G: SEXUAL SELF-CONCEPT SCALE

Women’s Sexual Self-Concept Scale (Vickberg & Deaux, 2005)

Using the scale from "does not describe me at all" to "describes me completely", please rate how well each of the following statements describe your sexuality, starting the sentence with "I am...". (e.g., I am... sensual)

<table>
<thead>
<tr>
<th>Item</th>
<th>Does not describe me at all</th>
<th>Describes me completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seductive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Items:
1. Likely to desire sex
2. Seductive
3. Sensual
4. Passionate
5. Likely to enjoy sex
6. Likely to initiate sex
7. Likely to experiment
8. Erotic
9. Sensitive to partners’ needs
10. Open about sexuality
11. Aware of own sexual feelings
12. Expresses sexuality through appearance
13. Willing to have sex before marriage
14. Insists on having own sexual needs met
15. Likely to fantasize about sex
16. Romantic
17. Knowledgeable about own body
18. In love
19. In a relationship
20. Concerned about the sexual appearance of own body
21. Not interested in sex
22. Don’t think about own sexuality very much
23. Feel pressured to have sex
24. Likely to pretend to enjoy sex
25. Likely to feel guilty after having sex
26. Likely to be depressed after having sex
27. Likely to deny feelings of desire
28. Likely to be taken advantage of
29. Afraid during sex
30. Concerned about getting a bad sexual reputation
31. Worries about making a good sexual impression on others
32. Forced to have sex
33. Passive about voicing own sexual desires
34. Sexually repressed
35. Let my partner take the initiative in sex
36. Insensitive to partners’ needs
37. Likely to be anxious about having sex
38. Confused about sexuality
39. Confused about sexual orientation
40. Careful about sex
41. Responsible for protection against pregnancy and STDS
42. Faithful to a partner

Subscales:
   Agentic Sexuality= 1-19
   Negative Associations= 20-39
   Reserved Approach= 40-42
APPENDIX H: SEXUAL HEALTH AND BEHAVIOR QUESTIONS

Have you ever had vaginal sex? (Vaginal sex is when a man inserts his penis into a woman's vagina)
   Yes
   No

How old were you when you first had vaginal sex?

Think about all of the people with whom you have had vaginal sex at least one time. With how many different people have you ever had vaginal sex?

How many people have you had vaginal sex with in the past 12 months?

Have you ever had oral sex? (Oral sex is when you put your mouth on someone's genitals, such as their penis, vagina or anus/rectum, or when someone puts their mouth on your genitals)
   Yes
   No

How old were you when you first had oral sex?

Think about all of the people with whom you have had oral sex at least one time. With how many different people have you ever had oral sex?

How many people have you had oral sex with in the past 12 months?

Have you ever had anal sex? (Anal sex is when a man inserts his penis into someone else's rectum, ass, or butt)
   Yes
   No

How old were you when you first had anal sex?

Think about all of the people with whom you have had anal sex at least one time. With how many different people have you ever had anal sex?

How many people have you had anal sex with in the past 12 months?
Have you ever become pregnant when you didn't want to get pregnant?
   Yes
   No

If yes, how many times have you become pregnant when you didn't want to get pregnant?

In the past 12 months, have you been tested for the following sexually transmitted infections (STIs)?:
   Yes  No  Not Sure
   Chlamydia
   Gonorrhea
   HIV/AIDS
   Trichomoniasis (“trick”)
   Genital Herpes
   Human Papilloma Virus (HPV)
   Genital Warts
   Syphilis

Have you ever been told by a doctor or nurse that you have/had any of the following?:
   Yes  No
   Chlamydia
   Gonorrhea
   HIV/AIDS
   Trichomoniasis (“trick”)
   Genital Herpes
   Human Papilloma Virus (HPV)
   Genital Warts
   Syphilis

What best describes your relationship with your current/most recent sexual partner?
   Relationship partner (boyfriend/girlfriend/significant other; spouse or domestic partner)
   Casual/dating partner (someone I am casually dating/hanging out with)
   Ex-boyfriend/girlfriend
   Friend with benefits
   Hook-up/booty call
   New acquaintance (someone I just met)
   Other (please specify)

The first time you had vaginal sex with this partner, was a condom used?
   No, not at all
   Yes, for part of the time
   Yes, the whole time from start to finish
The last (most recent) time you had vaginal sex with this partner, was a condom used?
   No, not at all
   Yes, for part of the time
   Yes, the whole time from start to finish

The first time you had vaginal sex with this partner, did you have an orgasm?
   Yes
   No
   Unsure
   Don’t remember

The last (most recent) time you had vaginal sex with this partner, did you have an orgasm?
   Yes
   No
   Unsure
   Don’t remember
APPENDIX I: COMMUNICATION SCALE

Sexual Communication Satisfaction Scale (Wheeless et al., 1984)

Think about your current/most recent sexual partnership and rate your communication about sex using the following scale: 1—strongly disagree, 6—strongly agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I tell my partner when I am especially sexually satisfied</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my partner’s ability to communicate her or his sexual desires to me</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>I let my partner know things that I find pleasing during sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not hesitate to let my partner know when I want to have sex with him or her</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I tell my partner whether or not I am sexually satisfied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the degree to which my partner and I talk about the sexual aspects of our relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am not afraid to show my partner what kind of sexual behavior I like</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would not hesitate to show my partner what is a sexual turn-on for me</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My partner shows me what pleases her or him during sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My partner tells me when he or she is sexually satisfied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am pleased with the manner in which my partner and I communicate with each other about sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is never hard for me to figure out if my partner is sexually satisfied</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I tell my partner when I am especially sexually satisfied
2. I am satisfied with my partner’s ability to communicate her or his sexual desires to me
3. I let my partner know things that I find pleasing during sex
4. I do not hesitate to let my partner know when I want to have sex with him or her
5. I tell my partner whether or not I am sexually satisfied
6. I am satisfied with the degree to which my partner and I talk about the sexual aspects of our relationship
7. I am not afraid to show my partner what kind of sexual behavior I like
8. I would not hesitate to show my partner what is a sexual turn-on for me
9. My partner shows me what pleases her or him during sex
10. My partner tells me when he or she is sexually satisfied
11. I am pleased with the manner in which my partner and I communicate with each other about sex
12. It is never hard for me to figure out if my partner is sexually satisfied
APPENDIX J: ADDITIONAL COMMUNICATION QUESTIONS

When did you first talk to your current/most recent partner about sexual preferences (what you do/don’t like)?
- I have not discussed sexual preferences with this partner
- In a non-sexual situation
- Right before engaging in sexual activity
- During sexual activity
- Immediately after sex

Did you discuss sexual preferences with your current/most recent partner before having sex for the first time?

When did you first talk to your current/most recent partner about birth control?
- I have not discussed birth control with this partner
- In a non-sexual situation
- Right before engaging in sexual activity
- During sexual activity
- Immediately after sex

Did you discuss birth control with your current/most recent partner before having sex for the first time?

When did you first talk to your current/most recent partner about sexual history/sexually transmitted infections (STIs)?
- I have not discussed sexual preferences with this partner
- In a non-sexual situation
- Right before engaging in sexual activity
- During sexual activity
- Immediately after sex

Did you discuss sexual history/STIs with your current/most recent partner before having sex for the first time?
APPENDIX K: SEXUAL WANT/GET DISCREPANCY (SWGD) SCALE

“The following are sexual activities that some women like to do. Please rate how often you WANT this and how often you DO this with your current/most recent sex partner. Please select a rating for EACH of the columns for EACH of the statements.”

<table>
<thead>
<tr>
<th>I want this...</th>
<th>I do get this...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
</tr>
<tr>
<td>Never</td>
<td>Rarely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cuddling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kissing (mouth/lips)</td>
</tr>
<tr>
<td>Kissing (body)</td>
</tr>
<tr>
<td>Breast/nipple stimulation (by hand)</td>
</tr>
<tr>
<td>Breast/nipple stimulation (by mouth)</td>
</tr>
<tr>
<td>Genital touching (fingering, clitoral stimulation)</td>
</tr>
<tr>
<td>Giving oral sex</td>
</tr>
<tr>
<td>Receiving oral sex</td>
</tr>
<tr>
<td>Vaginal sex</td>
</tr>
<tr>
<td>Trying different positions</td>
</tr>
<tr>
<td>Talking about what I want/what feels good</td>
</tr>
<tr>
<td>Dirty talk</td>
</tr>
<tr>
<td>Anal sex</td>
</tr>
<tr>
<td>Anal play (fingering, licking)</td>
</tr>
<tr>
<td>Using condoms</td>
</tr>
<tr>
<td>Watching porn with partner</td>
</tr>
<tr>
<td>Variety (e.g., different locations)</td>
</tr>
<tr>
<td>Multiple partners (e.g., three-some)</td>
</tr>
<tr>
<td>Verbal affirmations (e.g., “you’re sexy”, “I love you”)</td>
</tr>
<tr>
<td>Using sex toys with partner</td>
</tr>
<tr>
<td>Role playing</td>
</tr>
<tr>
<td>Strip teasing</td>
</tr>
<tr>
<td>Skype/cybersex</td>
</tr>
<tr>
<td>Sexting</td>
</tr>
</tbody>
</table>
APPENDIX L: SEXUAL SATISFACTION SCALE

- Global Measure of Sexual Satisfaction (Lawrance & Byers, 1995)

Overall, how would you describe your sexual relationship with your current/most recent partner?

<table>
<thead>
<tr>
<th>Very bad</th>
<th></th>
<th>Very good</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Very bad

<table>
<thead>
<tr>
<th>Very pleasant</th>
<th></th>
<th>Very unpleasant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Very pleasant

<table>
<thead>
<tr>
<th>Very negative</th>
<th></th>
<th>Very positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Very negative

<table>
<thead>
<tr>
<th>Very unsatisfying</th>
<th></th>
<th>Very satisfying</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Very unsatisfying

<table>
<thead>
<tr>
<th>Worthless</th>
<th></th>
<th>Very valuable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Worthless
APPENDIX M: Honesty Questions

Did you ever respond on this survey that you did something when you really didn't do it?
   Yes
   No

Did you ever respond on this survey that you did not do something when you really did do it?
   Yes
   No

Overall, how honest were you in answering these questions?
   Not at all honest
   Not very honest
   Fairly honest
   Very honest
   Completely honest
APPENDIX N: SURVEY CONSENT FORM

Informed Consent to Participate in Research
Information to Consider Before Taking Part in this Research Study

IRB Study #Pro00004792

Researchers at the University of South Florida (USF) study many topics. To do this, we need the help of people who agree to take part in a research study. This form tells you about this research study. We are asking you to take part in a research study that is called: Sexual self-concept, partner communication, and satisfaction.

The person who is in charge of this research study is Heather Blunt. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge.

The research will be done at the University of South Florida.

Purpose of the study
The purpose of this study is to:

- Explore what young college women want from sexual experiences.
- Determine the relationship between sexual self-concept, communication between sexual partners, and sexual health outcomes.
- This study is being conducted as a doctoral dissertation.

Study Procedures
In order to participate, you must be female, 1st or 2nd year USF undergraduate student, between the ages of 18-25 years, and have engaged in heterosexual (straight) sexual activity at some point in time.

If you take part in this study, you will be asked to:
1) Complete an anonymous, on-time online survey, estimated to take approximately 20-35 minutes to complete
2) You may complete the survey at a time, location and computer of your preference. I encourage you to take the survey in a private location (such as your dorm room or apartment) with a personal computer to increase confidentiality and privacy.
Alternatives
You have the alternative to choose not to participate in this research study.

Benefits
We don’t know if you will get any benefits by taking part in this study. Helping a fellow USF student, and contributing to research may result in positive feelings.

Risks or Discomfort
This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study. Answering questions about sexuality and sexual health can sometimes be embarrassing or uncomfortable. If there are any questions you are uncomfortable answering, please just leave them blank. You may exit the survey at any time without penalty, by exiting out of the browser window.

Compensation
As a thank you for your time participating in the study, you can be entered into a random drawing for a chance to win one of:
5 $50 Visa gift cards
10 $25 Visa gift cards
15 $10 Target gift cards

At the end of this survey, you will be directed to a link that is separate from your survey, where you can provide your email address to be entered into the prize drawing. No connection will be made between your responses on the survey and your email address. The prize drawing will take place the week of April 16th.

Confidentiality
We must keep your study records as confidential as possible. Because the survey is anonymous, none of your identifying information will be tied to the survey and no one will ever know who completed each survey. However, certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

The research team, including the Principal Investigator, study coordinator, research nurses, and all other research staff.
Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.) These include:
• The University of South Florida Institutional Review Board (IRB) and the staff that work for the IRB. Other individuals who work for USF that provide other kinds of oversight may also need to look at your records.
• The Department of Health and Human Services (DHHS).
• We may publish what we learn from this study. If we do, we will not let anyone know your name. We will not publish anything else that would let people know who you are.

Voluntary Participation / Withdrawal
You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study, to please the investigator or the research staff. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Your decision to participate or not to participate will not affect your student status, grades, etc.

Questions, concerns, or complaints
If you have any questions, concerns or complaints about this study, email Heather Blunt at hblunt@health.usf.edu. If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-9343. If you experience an unanticipated problem related to the research call Heather Blunt at 813-966-4839.

Consent to Take Part in this Research Study
It is up to you to decide whether you want to take part in this study. If you want to take part, please click on the “I AGREE” link, if the following statements are true. I freely give my consent to take part in this study. I understand that by clicking this link I am agreeing to take part in research.

I AGREE to participate...Take me to the survey!

**You must select "finish" at the end of the survey for your responses to be recorded and enter your e-mail address in the drawing for prizes**

I DISAGREE...I do not wish to participate.
ABOUT THE AUTHOR

Heather Blunt grew up in Oakville, Ontario, Canada with her parents and older sister. She attended the University of Waterloo in Ontario to earn a bachelor’s degree in Psychology. She moved to Florida in 2005 to pursue the MPH in behavioral health at the University of South Florida (USF). Following this she continued into the doctoral program at the USF College of Public Health, Department of Community and Family Health. Heather is passionate about both teaching and research and hopes to continue into a career that allows her to fulfill both of these interests. Heather’s future research will focus on understanding and promoting positive sexuality and sexual health as an integrated model with risk reduction.