

Sexual Well-Being in Single, Sexually Active College Females:

A Matter of Agency and Openness

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Abstract

This study explored multiple predictors of sexual well-being in a sample of 253 single, sexually active undergraduate females at a public Mid-Atlantic university. Several factors were identified from past research that might impact sexual well-being: casual sex, sexual agency, sexual attitudes, and sexual desire. Of the four factors, only sexual agency and sexual attitudes were found as significant predictors of sexual well-being. The results suggest that – of single, sexually active undergraduate females – those with a greater sense of agency and choice in their sexual interactions and those who maintain more open attitudes toward casual sex have a higher level of sexual well-being. Agency and openness may be important factors in the development of sexual well-being for young women. Limitations of the study, as well as implications for future research and psychoeducational and therapeutic interventions, are addressed.

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Chapter 1: Introduction

The Problem and its Setting

The problem. In 2007, the American Psychological Association addressed the status of young females' psychological sexual health in their *Task Force on the Sexualization of Girls* (American Psychological Association [APA], 2007). The chief concern addressed in the publication was the detriment to well-being that dominant American culture may impose on young women by the way in which it glorifies and exploits female sexuality. The result, the APA (2007) suggests, is a society of young females who cannot take full ownership of their sexuality because culture maintains that it is an object to be possessed by others. This task force engendered debate in the community – some feminist sectors, for instance, were concerned that female agency over desire and pleasure would be minimized by the APA's suggestions toward reducing the sexualization of girls (Lerum & Dworkin, 2009). This debate highlights the extent to which the field is still grappling with a proper definition of the psychological component of sexual health for young females (Lamb, 2010). Researchers suggest that studies in this area be directed toward determining which factors comprise “healthy” and “holistic” sexuality for female youth (Halpern, 2010, pp. 6-7).

The context of the problem. Much of the concern and uncertainty surrounding female sexuality is focused on the nature of sexual relationships, specifically the degree to which sexual acts are happening in partnerships lacking commitment (Adimora, Schoenbach, Taylor, Kahn, & Schwartz, 2011; Bradshaw, Kahn, & Saville, 2010; Grello, Welsh, & Harper, 2006; Owen & Fincham, 2011b; Yost & Zurbriggen, 2006). Such non-committed sexual behavior is often termed “casual sex” (Andrinopoulos, Kerrigan, & Ellen, 2006; Eisenberg, Ackard, Resnick, & Neumark-Stainzer, 2009; Fielder & Carey, 2010; Grello et al., 2006; Owen & Fincham, 2011a).

Research suggests that casual sex is especially common during the college years for both females and males (Bogle, 2008; Fielder & Carey, 2010; Grello et al., 2006; Littleton, Tabernik, Canales, & Backstrom, 2009; Owen, Rhoades, Stanley, & Fincham, 2010). In a study by Owen et al. (2010), over 50% of both female and male undergraduate students, age 20 on average, reported engaging in sexual activity with an uncommitted partner. As one college female writes in a narrative essay, “It is very common for people to get involved sexually without romantic feelings for one another” (Banker, Kaestle, & Allen, 2010, p. 185). Another female student talks about the interplay of casual sex and alcohol within the college environment: “I think that’s the accepted way that it is and I think that people drink and then they hook up” (Bogle, 2008, p. 40). After conducting research on sexuality and religion within a number of universities and colleges across the nation, Freitas (2008, p. xviii) writes, “I was taken aback by students’ stories about the party scene and the degrading experiences that many of them, especially the women, endured regularly.”

Although casual sex appears to occur frequently, it is regarded as ‘less than ideal’ by females (Bogle, 2008; Fenigstein & Preston, 2007; Fugere, Escoto, Cousins, Riggs, & Haerich, 2008; Jonason, Li, & Cason, 2009; Schmookler & Bursik, 2007) and, in some studies, by males as well (Banker et al., 2010; Pedersen, Putcha-Bhagavatula, & Miller, 2011; Smith, Nezelek, Webster, & Paddock, 2007). Freitas (2008, p. xiv) encapsulates this conviction as she writes about the female students who encouraged her to research casual sex: “We’re not happy with the hookup culture, they said. We feel a constant pressure to do things that make us feel unsettled.” This experience that Freitas writes about implicates two additional factors that may impact young females’ sexual well-being: sexual agency and sexual attitudes. One concern is the lack of agency that females may have when consenting to sexual activity; oftentimes consent can be an

unclear process for women in which they engage in activities they do not fully desire (Bay-Cheng & Eliseo-Arras, 2008; Bogle, 2008; Crown & Roberts, 2007; Freitas, 2008; Giordano, Manning, & Longmore, 2010). Another concern is the potential dissonance between attitudes and behaviors of students. There are currently mixed results regarding whether a breach between values and behaviors contributes to lower well-being – Owen et al. (2010) found that such a dissonance does influence well-being, however Muise, Preyde, Maitland, and Milhausen (2010) and Yost and Zurbriggen (2006) found that it did not. Studies suggest that over half of young women have engaged willingly in sexual activities they do not actually desire (Bay-Cheng & Eliseo-Arras, 2008; Crown & Roberts, 2007). Foley, Kope, and Sugrue (2012, p. 92) refer to sexual desire as “being interested in or receptive to sexual activity.” Given the implications in the current literature around casual sex, sexual agency, sexual attitudes, and sexual desire, this study addresses their impact on college female’s sexual well-being.

Significance

Importance. Though results are somewhat mixed (Eisenberg et al., 2009; Fugere et al., 2008), the majority of research suggests that a sexual double standard exists in which the negative implications of casual sex are greater for women than they are for men (Bogle, 2008; Freitas, 2008; Grello et al., 2006; Tiegs, Perrin, Kaly, & Heesacker, 2007; Weaver, MacKeigan, & MacDonald, 2011). Within the college female population, there are a variety of poor affective experiences related to casual sex (Bogle, 2008; Fielder & Carey, 2010; Grello et al., 2006; Weaver et al., 2011) – or “the hookup culture” – as Freitas (2008, p. xiv) calls it. Emotional experiences related to casual sex can involve guilt and loneliness for women (Andrinopoulos et al., 2006; Bogle, 2008; Fielder & Carey, 2010; Freitas, 2008; Grello et al., 2006). For instance, when asked about her feelings after hooking up, one female student wrote, “I try to suppress

memories of the night before, misplaced guilt wells up, and I am somewhat miserable” (Freitas, 2008, p. 155). Another factor of concern is the frequency with which casual sex (Adimora et al., 2011; Bogle, 2008; Freitas, 2008; Turchik, Garske, Probst, & Irvin, 2010) and non-agentive sex (Bay-Cheng & Eliseo-Arras, 2008) co-occurs with substance use.

Research suggests that sexual distress is not compartmentalized; though it is unique from general distress, it can influence it (Davison, Bell, LaChina, Holden, & Davis, 2009).

Researchers and institutions are in agreement – there is currently a strong need for research exploring the factors related to psychological sexual health (APA, 2007; Centers for Disease Control and Prevention, 2000; Halpern, 2010). Many studies focus on a particular niche within this area; for instance, Higgins, Trussell, Moore, and Davidson (2010) focused on virginity loss and found that females are more satisfied with virginity loss that occurs within a committed relationship. What is the college female’s sense of herself in relation to a wider lens of her sexual behaviors? This study attempts to address these questions quantitatively by investigating multiple predictors of sexual self-esteem including casual sex behaviors, sexual agency, sexual attitudes, and sexual desire.

Contributions. This study offers contributions to several areas of knowledge and practice. Primarily, it offers quantitative data on multiple predictors of sexual well-being. It is a correlational study; the data suggests avenues that longitudinal research can explore to identify causal factors. Unfortunately, young people currently name the media as their primary source of information about sexuality (DeLamater & Friedrich, 2002; Sprecher, Harris, & Meyers, 2008). The knowledge gained from this study can support programs at the university level that address the psychological aspects of sexuality, ultimately increasing the potential that young women receive accurate and positive messages about their sexual health. Finally, the

outcomes of this study can influence psychoeducation and interventions provided within the context of therapy for adolescents, young adults, and their parents.

Rationale

Approach. Several qualitative studies exploring sexual well-being have provided rich and meaningful data, but have not by their nature been statistical (Andrinopoulos et al., 2006; Bogle, 2008; Freitas, 2008; Impett & Tolman, 2006; Schalet, 2010). For instance, these words from a young female in Andrinopoulos et al.'s (2006, p. 136) study demonstrate the suffering that can occur as the result of non-committed sexual activity: ““feel as though...he had sex with me...made me feel good...blow you off...you'll be hurt again.”” Now that qualitative research has captured the disappointment women may feel when they engage in sexual activity with casual partners, it is appropriate and timely to direct efforts toward quantifying this experience.

Many of the quantitative studies on well-being and casual sex have focused on indicators such as general self-esteem and depression. For instance, Fielder and Carey (2010) used a 10-item global self-esteem scale and a 9-item depression inventory to measure the implications of casual sex over the course of a year for freshman college students, finding that females who engaged in casual intercourse had the lowest self-esteem and the highest depression scores. Grello et al. (2006) and Shulman, Walsh, Weisman, and Schelyer (2009) also measured depression as it relates to casual sex. Research suggests, however, that there is a separate dimension of self-appraisal related specifically to sexuality (Guindon, 2002; Oattes & Offman, 2007; Zeanah & Schwarz, 1996). This study extends the current research by focusing specifically on the sexual dimension of well-being by employing a sexual self-esteem measure.

Studies indicate that college is regarded as a time for individuals to experiment with their sexuality, and – for many – it may comprise the time frame in which they engage in the most

liberal sexual behaviors in their lifetime (Bogle, 2008; Fergus, Zimmerman, & Caldwell, 2007). Results are mixed in regards to the degree of sexual change across the developmental periods from teenage to adult years (Adimora et al., 2011; O’Sullivan & Majerovich, 2008; Whetherill, Neal, & Fromme, 2010). As such, this study cannot generalize to various developmental periods; it assesses sexual well-being within the college years exclusively.

Design. This study used online, self-report surveys in which young adult females answered a variety of questions about their sexuality through a battery of measures. Research suggests that self-report measures have solid reliability with sexual topics (Hamilton & Morris, 2010). Though concern often arises about the sensitive nature of the material, sexual surveys have *not* been found to increase distress among participants (Savell, Kinder, & Young, 2006). Finally, studies suggest that the online format is the best manner by which to collect sexual material (Wood, Nosko, Desmarais, Ross, & Irvine, 2006). Given the recruitment and incentive methods (detailed in chapter three), this researcher also made a battery of similar sexual measures available to male college students, in order to distribute incentive opportunities evenly between both genders. This author’s focus is on the female data, however the male data may be made available for other research inquiry.

Theoretical Framework

Biosocial. Biosocial theory proposes that both innate/biological factors as well as social factors exert influence over individuals, and it is incredibly difficult – if not sometimes impossible – to isolate and assess for the contribution of one versus the other (Stinson, Sales, & Becker, 2008; Smith, Hamon, Ingoldsby, & Miller, 2009a). It also maintains that evolution plays a crucial role in human experience and that adaption to environmental circumstances is exceptionally slow (Stinson et al., 2008; Simth et al., 2008). Human sexuality is influenced both

by innate physical responses and desires as well as sociocultural messages (Boul, Hallam-Jones, & Wylie, 2009), making it a difficult area to navigate (DeLamater & Friedrich, 2002). Sexual desire alone is found to have both physical and emotional components (Boul et al., 2009). Both males and females have hormonal drives motivating them toward sexual activity (Boul et al., 2009) and drives for connection and intimacy (Goldhammer & McCabe, 2011). Alcohol's role is particularly influential in navigating physical and social factors of sex, as it loosens human inhibitions and makes it more difficult to ignore the social implications of biological urges (Fielder & Carey, 2010).

Evolutionary perspectives suggest that, in many animal species, males maintain the role of “competing for” and “requesting” female sexuality, while females maintain the role of “denying or granting” advances toward sexuality and “being selective” to ensure the most positive outcomes for their offspring (Caro, 1985; Charlesworth, 2006; Rutberg, 1983; Stinson et al., 2008). Biologically, women do not have to “want” sex to have it – some level of erection is necessary for intercourse and reproduction but vaginal lubrication, for instance, is not (Stinson et al., 2008). These evolutionary perspectives are especially pertinent when considering the amount of non-agentic sexual behaviors in which females engage.

Research shows that men and women maintain these evolutionary precedents within their sexual scripts (Bartoli & Clark, 2006; Bogle, 2008; Egan & Hawkes, 2008; Freitas, 2008). In regards to women being “selective,” qualitative studies demonstrate that men do compete for “prize, selective” females (Bogle, 2008; Freitas, 2008). For instance, one college male stated, “guys try to go for the trophy ones that hook up with people seldomly or with a select few” (Bogle, 2008, p. 106). This quote elucidates how men value women who *do not* engage in casual sex, and research suggests females are quite aware of this dynamic (Bogle, 2008; Freitas, 2008).

Men, and sometimes women, report that the partners they choose for casual sexual encounters are fairly opposite in characteristics from those they choose for committed relationships (Andrinopoulos et al., 2006; Bogle, 2008). In one of Bogle's (2008, p. 37) interviews, one college male emphasized this particularly:

“If I see a girl and I think we're going to just hook up, then it's probably like we can do whatever and it's not a big deal...but if it's a girl that I want to have a relationship with and she does do all of that in the beginning, then I would perceive her as dirty.”

If casual sex makes females “dirty” and unvalued to males, what impact does engaging in it have on their sexual self-worth? The women's movement has attempted to un-do years of evolutionary sculpting to level the playing field between women and men in the sexual arena (Greenwood & Guner, 2010; Kleiman, 1977). Given that biosocial theory assumes adaptations take a great many years to manifest (Stinson et al., 2008), humans may not have fully adapted to the force of this social change that took place only 50 years ago (Greenwood & Guner, 2010).

It is also noteworthy that only 3% of mammals (Kleiman, 1977) – and 15% of all primates (Rutberg, 1983) – are monogamous. Evolutionary theories suggest that monogamy is a *social* feature rather than an *innate* feature, and that creatures become monogamous to provide a more organized and fruitful social structure for their offspring (Kleiman, 1977; Rutberg, 1983; Wittenberger & Tilson, 1980). Humans originally evolved into polygynous societies in which men had sex with a variety of women and women had sex with one man, due to women's specialized commitment to offspring through pregnancy and breastfeeding (Stinson et al., 2008). This engendered and maintained a social environment that was more hostile toward females having nonmonogamous sexual encounters than males (Stinson et al., 2008). Within dominant culture, it continues to be socially acceptable for men to have more casual sexual encounters than females

(Bogle, 2008; Senn, Scott-Sheldon, Seward, Wright, & Carey, 2011). This college male participant in Bogle's (2008, p. 104) research clearly expresses this double standard: "A girl sleeps with a lot of guys, she's a slut. A guy sleeps with a lot of girls, he's a stud."

It is theorized that monogamy developed in humans because of both the length of time required to raise young (Kleiman, 1977) and females' inability to raise offspring alone (Wittenberger & Tilson, 1980). Prior to the women's revolution and female access to jobs and relatively fair wages, it *was* difficult for them to raise children alone (Greenwood & Guner, 2010). However, it is becoming increasingly possible in American society for women to raise children without a mate. For instance, through donor insemination, females can conceive and birth children without a romantic relationship or a sexual encounter (Murray & Golombok, 2005). This creates new meanings for women regarding their sexuality and partnership decisions, however ambivalence currently remains surrounding the notion of single mothering in this way (Murray & Golombok, 2005). Evolution has bred an environment in which women "accept" sex for relational purposes and men "spread their seed" for physical purposes (Boul et al., 2009), yet American society is currently grappling with changes to social realities that influence this process. Given that social domains strongly influence evolutionary processes over time, biosocial theory coincides appropriately with social exchange theory, a framework that focuses on the costs and benefits of relational interactions.

Social Exchange. Social exchange theory assumes that individuals are always weighing the risks and benefits associated with their actions (Boul et al., 2009; Greenwood & Guner, 2010; Smith, Hamon, Ingoldsby, & Miller, 2009b). For females, casual sex may mean temporary physical satisfaction (Boul et al., 2009) but longer-term risk to their social reputation (Bogle, 2008; Freitas, 2008; Senn et al., 2011; Tiegs et al., 2007). Men in casual sexual partnerships gain

– for the most part – enhanced social reputation among other men and access to immediate physical gratification (Jonason et al., 2009; Senn et al., 2011). Female participants in the research of Tiegs et al. (2007) indicated that there were greater costs to casual sex for them because it involved a violation of social roles. There is some suggestion that males are beginning to gain a poor reputation for casual sex as well, especially by women (Garcia, 2006). Additionally, some men report that monogamous relationships are ideal to them as well (Banker et al., 2010), however dominant culture entails that they will gain more and lose less by participating in casual sex than will women (Bogle, 2008; Freitas, 2008; Senn et al., 2011).

The social risk inherent in casual sex creates a sense for females that they need to *control themselves* within immediate situations to prevent a poor image into the future, enabling the most fruitful outcomes for themselves in terms of long-term partnering (Freitas, 2008). Research does suggest that both males and females seek mates with a minimal numbers of sexual partners (Andrinopolous et al., 2006; Garcia, 2006; Garcia & Markey, 2007; Sylwester & Pawlowski, 2011). The social risks and benefits inherent in casual sex lead men to view monogamy as a sacrifice (Fenigstein & Preston, 2007; Schmookler & Bursik, 2007) and women to view monogamy as a preference (Andrinopolous et al., 2006; Bradshaw et al., 2010; Schmookler & Bursik, 2007). Thus, ambivalence in regards to casual sex is common as females negotiate their various needs as well as the social consequences to their actions (Banker et al., 2010; Bogle, 2008; Freitas, 2008). Research suggests that college students now attend parties or socialize in groups rather than go on dates in couples (Bogle, 2008; Freitas, 2008). Given this culture, casual “hooking up” has become the norm by which potential romantic partners become involved with one another, and young women struggle with the dichotomy between maintaining their reputation and hooking up in order to seek long term-partners (Bogle, 2008; Freitas, 2008).

Both biosocial and social exchange theories are useful frameworks to understand how both genders – but especially females – are enshrouded in a confusing, complex time within history in which to be exploring and negotiating their sexuality. A variety of factors exert influence over females: physical desires (Andrinopolous et al., 2006; Boul et al., 2009), evolutionary roles (Caro, 1985; Charlesworth, 2006; Rutberg, 1983; Stinson et al., 2008), social messages to become more liberated in their sexuality (Lamb, 2010; Lerum & Dworkin, 2009; Peterson, 2010), and social messages that deem them an unfit mate if they are so liberated (Bogle, 2008; Freitas, 2008; Tiegs et al., 2007). Qualitative research suggests that women are ultimately looking for long-term partners through casual sex, but men lose respect and regard for the women with whom they have casual sex (Bogle, 2008; Freitas, 2008). *What implication does this have for young females' sexual well-being?*

Purpose of the Study

Goals. The ultimate goal of this research is to increase the psychological sexual health of young females in the United States. This study will contribute to such an ambitious goal by exploring how casual sex and sexual agency, attitudes, and desire might predict sexual well-being. This data can support future research including longitudinal investigations, sexual education programs at the high school and college levels, and therapeutic interventions.

Research Question

1. How do casual sex, sexual agency, sexual attitudes, and sexual desire predict sexual well-being in single, sexually active college females?

Chapter 2: Literature Review

Introduction

This section explores a variety of factors identified within the current research that relate to sexual well-being during college. First, the college years are framed within a developmental perspective. Then, sexual well-being is defined and examined. Sexual behavior among college students is explored as it relates to a number of factors and perceptions. The various sexual partnership types and activities, in addition to their vernacular, are covered. Lastly, gender differences and cultural factors inherent to the issue are described.

Sexual Development and the College Years

Research suggests that one's sexual identity – the sense of his or her sexual self in relation to thoughts, feelings, and actions (Auslander, Rosenthal, & Blythe, 2006) – changes throughout the life span (Auslander et al., 2006; DeLamater & Friedrich, 2002). However, the current understanding of the degree and pattern of this development are still unclear (Archer & Grey, 2009). The mixed results in this area may indicate that sexual development is a highly individual process (Auslander et al., 2006). On one hand, research shows that changes in one's sexuality are influenced more by *experience* than by age (Bogle, 2008; Zimmer-Gembeck, Ducat, & Boislard-Pepin, 2011). Conversely, Adimora et al. (2011) found, in their study of individuals ranging in age from 15 to 44, that younger women were more likely to have multiple sexual partners within one time period. This discrepancy may relate to the fact that, over time, American people – both males and females - are engaging in more casual sex (DeLamater & Friedrich, 2002; Earle et al., 2007).

College, specifically, has become a phase of the lifespan identified in part by the engagement in casual sexual activities (Bogle, 2008; Fielder & Carey, 2010; Freitas, 2008;

Grello et al., 2006; Owen et al., 2010). In other words, it may have become *normative* to have casual sexual relations with various people while in college (Bogle, 2008; Fielder & Carey, 2010; Freitas, 2008; Grello et al., 2006; Owen et al., 2010). Bogle (2008) explored this phenomenon in her qualitative research; she discovered that college campuses are devoid of “dating” in the traditional sense. Instead, individuals begin relationships by “hooking up” at parties and bars, as emphasized by this female’s interview (Bogle, 2008, p. 48): ““Most people I know, just meet people by meeting them at a bar and hooking up and then from there if somebody is interested, then they might see you out more, I don’t think anyone really goes on dates...”” Hence, during the college years, the courtship process seems to be replaced by engaging in sexual behaviors. In general, it has been found that those who demonstrate risky sexual behaviors in high school continue to maintain such a pattern in college (Whetherill et al., 2010). However, Fergus et al. (2007) found that Black youth tend to be riskier across their life span during their high school years, while White youth are riskier in college. Archer and Grey (2009) recommend that researchers investigate the factors comprising sexual well-being appropriate to the developmental phase.

Sexual Well-being

Relevance and definition. The APA reports that “sexual well-being is an important part of healthy development and overall well-being, yet evidence suggests that the sexualization of girls has negative consequences in terms of girls’ ability to develop healthy sexuality” (APA, 2007, p. 3). However, sexual well-being is a wide and subjective concept, open to a variety of interpretations. Laumann et al. (2006, p. 1) define it as “the cognitive and emotional evaluation of an individual’s sexuality.” The New Oxford American Dictionary defines well-being as *the state of being comfortable, healthy, or happy*. Bancroft, Long, and McCabe (2011, pp. 726 - 727)

report that “the assessment of sexual well-being has varied across studies, and is usually based on a small number of questions.” It has been operationalized in numerous ways – from overarching, simplistic questions (Bancroft et al., 2011) to measures of sexual self-efficacy, esteem, and satisfaction (Hucker, Mussap, & McCabe, 2010) to measures of sexual awareness and body image (Muise et al., 2010). Indicators, therefore, fall within a wide spectrum of cognitive or emotional aspects of sexuality regarded along a continuum of negative to positive. Within this framework, researchers choose how to operationalize sexual well-being based on the focus of their study.

The role of values. Sexual values are often studied within the context of sexual well-being and sexual identity clarity, i.e. how solidified one is in regards to their sexual preferences, orientation, and beliefs (Archer & Grey, 2009; Hucker et al., 2010; Muise et al., 2010). Some researchers find that higher amounts of dissonance between one’s values and actions contributes to lower sexual well-being (Owen et al., 2010; Wentland, Herold, Desmarais, & Milhausen, 2009), while others show that dissonance is not a factor in this way (Muise et al., 2010). This relationship may depend on the type and strength of values. Religious and cultural values, for instance, may be significant factors in one’s sexuality (Vazsonyi & Jenkins, 2010). For instance, research suggests that “religious” females have fewer sexual partners and fewer sexual experiences than “spiritual” females (Burriss, Smith, & Carlson, 2009). Women identifying as “feminist” may have less dissonance in general between values and actions because their values are not tied to dominant cultural norms (Bay-Cheng & Zucker, 2007). However, this is a complex factor. Studies show that women subconsciously maintain traditional gender role beliefs even though they may identify otherwise (Kiefer, Sanchez, Kalinka, & Ybarra, 2006). Regardless of how they identify, women are also subjected to gendered social roles through

various ways in society (Good & Sanchez, 2010). Though women value relationships and may attempt to secure them through casual sex, this often fails as a method (Andrinopolous et al., 2006; Bogle, 2008; Freitas, 2008) – leaving them at a point of dissonance between their values/objectives and the outcomes of their actions.

Sexual Behavior in College Students

Substance use. Alcohol is a key element often involved in sexual activities (Adimora et al., 2011; Owen, Fincham, & Moore, 2011; Turchik et al., 2010). Turchik et al. (2010) found that weekly drinking rates were related to increased sexual risk taking, i.e. more casual sexual partners and less use of STD/contraceptive protection. The research of Owen et al. (2011) demonstrates that alcohol use also increases the *extent* of sexual behaviors; college students who drank the most during the past month also engaged in the most *penetrative* sexual activities (oral/vaginal/anal sex) with casual partners. Students who reported an absence of casual sexual activities also reported the lowest alcohol use, while students reporting the mid-range of alcohol use reported engaging in non-penetrative sexual activities (anything from kissing to hand-genital stimulation; Owen et al., 2011). Interestingly, Adimora et al. (2011) found that the co-occurrence of alcohol use and risky sex differed by race – Hispanic females were the most likely to have used alcohol at all in recent sexual encounters while White women were the most likely to report having sex after binge drinking. Black women – after all other races – were the least likely to have used alcohol in recent sexual encounters (Adimora et al., 2011). The researchers found a similar pattern among ethnicity and drug use during sexual activity – Hispanic women were the most likely to use drugs, with marijuana as the most common substance of choice, over other ethnicities (Adimora et al., 2011).

Non-agentic sexual experiences of young women. Bay-Cheng and Eliseo-Arras (2008) found that alcohol use increases the amount of non-agentic (consensual but undesired) sexual activity for women. Crown and Roberts (2007, p. 389) define non-agentic sex as “sexual interactions that lack agency” and report that it occurs with high frequency during the college years. Additionally, non-agentic sex is more likely to occur within casual relationships rather than committed partnerships (Humphreys, 2007). Women may specifically have trouble denying unwanted sexual advances when the relationships feel unrequited to them (Kaestle, 2009). Research indicates that females pursue casual sex to form relationships but men are not looking for relationships through casual sex (Andrinopolous et al., 2006; Bogle, 2008; Freitas, 2008; Jonason et al., 2009; Littleton et al., 2009); thus, much of casual sex may not be entirely wanted by females. Females may engage in casual sex that they do not want because they feel it is the only method by which to form relationships (Andrinopolous et al., 2006; Bogle, 2008; Freitas, 2008; Jonason et al., 2009; Littleton et al., 2009). Additionally, Katz and Tyron (2009) found that women endorsing traditional gender roles accept sexual activity that is more nonconsensual in nature. Peterson (2010) describes that female sexual empowerment, or agency within the sexual domain, may be a developmental process as yet unclear and urges further studies in this area.

Other factors. In addition to alcohol and females’ lack of agency, a variety of other factors may be related to sexual experiences during the college years. One of these factors, clearly logistical in nature, is the location of students’ homes. College students that live with their parents are much less likely to engage in casual sex (Bailey, Haggerty, White, & Catalano, 2011). This statistic highlights the environmental factors inherent in the frequency of casual sex. For many students, the college environment provides newfound freedom in which young people

must rely on self-control rather than imposed control (Bogle, 2008; Freitas, 2008). Stephenson, Ahrold, and Meston (2011) report that motivational factors are crucial to understanding casual sexual behaviors – though most females in their study reported engaging in sex due to relational motives, some reported engaging due to physical pleasure motives. Hill (2007) suggests that females motivated by physical reasons are less conservative than those motivated by relational reasons. Patrick and Lee (2010) found that, in addition to reporting their motivations as relational, female students who lost their virginity within the first six months of college did not have firm values surrounding sexuality.

Perceptions. Though research demonstrates that many females prefer their sexual experiences to happen with committed romantic partners, (Andrinopoulos et al., 2006; Banker et al., 2010; Bogle, 2008; Freitas, 2008; Marelich, Lundquist, Painter, & Mechanic, 2008) studies also show that refraining from sexual activity entirely during the adolescent and young adult years has adverse consequences of its own (Brady & Halpern-Felsher, 2008; Woo & Brotto, 2008). Therefore, casual sex may not be ideal to females, but they may perceive it as acceptable if romantic relationships are not available to them (Bogle, 2008; Freitas, 2008). Studies show that females are hopeful that casual sexual partnerships will develop into committed romantic partnerships (Andrinopolous et al., 2006; Bogle, 2008; Freitas, 2008). Yet males do not have this same hope or expectation, and they often seek out different partners for casual sex than those they seek for romantic relationships (Pedersen et al., 2011). This may add to the guilt and shame young women experience from their casual sexual behaviors (Andrinopolous et al., 2006; Littleton et al., 2009).

Parental factors are often considered in relation to young people's sexuality, however research suggests that peers are more influential on one's sexual actions than are parents

(Lefkowitz & Espinosa-Hernandez, 2007). An important concept is young people's tendency to overestimate the amount of casual sex in which their population engages. College students particularly tend to believe that most other college students are having riskier sex than statistics suggest (Bogle, 2008; Lewis, Lee, Patrick, & Fossos 2007; Stephenson & Sullivan, 2009). This becomes an issue because young people evaluate their own behaviors relative to their perceived population norms; interpreting the population to be engaging in high frequencies of casual sex increases their own engagement in casual sex (Bogle, 2008; Lewis et al., 2007). Stephenson and Sullivan (2009) found that youth with the greatest misperceptions also report the lowest sexual satisfaction.

Sexual Partnership Types and Activities

During the college years, students form a variety of sexual relationships (Bay-Cheng, Robinson, & Zucker, 2009; Bogle, 2008; Eisenberg et al., 2009; Freitas, 2008; Grello et al., 2006). Some of their sexual partners may indeed be committed partners whom they call "boyfriend" or "girlfriend" (Bogle, 2008; Freitas, 2008). Other sexual partners, however, can fall into a classification system that ranges from someone a student has just met to a platonic friend of the student with whom they occasionally or often engage in sexual activity (Bogle, 2008; Freitas, 2008; Grello et al., 2006). These various sexual partnership types have common slang terms associated with them often used by college students (Bay-Cheng et al., 2009; Bogle, 2008; Eisenberg et al., 2009; Freitas, 2008; Grello et al., 2006).

One of the most frequent partnership types is called "a hookup" (Bay-Cheng et al., 2009; Bogle, 2008; Bradshaw et al., 2010; Fielder & Carey, 2010; Freitas, 2008). A hookup is one of the most vague partnership classifications (Bay-Cheng et al., 2009; Bogle, 2008). In her qualitative research, Bogle (2008) asked 76 students to define a hookup; she found a range of

relational dynamics and sexual activities within this term. The common denominator of a hookup however, is that the partners are not in a committed relationship and they have not established a sexual routine (Bay-Cheng et al., 2009; Bradshaw et al., 2010; Littleton et al., 2009). Therefore, hookup implies *random* (Bay-Cheng et al., 2009; Littleton et al., 2009). Relationships within the hookup category can include someone a student has just met the evening they initiate sexual activity, someone she has seen on campus or at parties before, someone she has a class with, or someone in her group of acquaintances (Bogle, 2008; Freitas, 2008). Sexual *activities* within the hookup classification also have a wide range – they can include anything from kissing to sexual intercourse (Banker et al., 2010; Bay-Cheng et al., 2009; Bradshaw et al., 2010; Owen & Fincham, 2011b). Bogle (2008) explains that the ambiguous nature of the term hookup conveniently allows a student to imply that she or he did less or more than actually transpired.

Sexual activities are commonly split into two groups by sexuality researchers: penetrative and non-penetrative acts (Owen et al., 2011; Fisher, Davis, Yarber, & Davis, 2011). Penetrative acts include activities in which genital body parts either enter or are entered by a body part of the partner: oral sexual acts, vaginal intercourse, and anal intercourse. In their Sexual Risk Survey, Turchik and Garske (2009) define non-penetrative acts as including “passionate kissing, making out, fondling, petting, oral-to-anal-stimulation, and hand-to-genital stimulation” (Turchik & Garske, 2009, p. 946).

When sexual activity with a hookup partner is more frequent and routine but a romantic relationship does not exist, the partner becomes someone college students typically refer to as a “friend with benefits,” a classification that most frequently includes penetrative sexual activity (Grello et al., 2006; Jonason et al., 2009; Weaver et al., 2011). “Friends with benefits” often implies that a platonic relationship exists, and the individuals also relate to one another socially

(Banker et al., 2010; Bay-Cheng et al., 2009; Grello et al., 2006; Nelson, Morrison-Beedy, Kearney, & Dozier, 2011; Weaver et al., 2011). Researchers find that “friends with benefits” relationships typically involve more warmth, intimacy, and regard than other casual sexual relationships (Bay-Cheng et al., 2009; Bogle, 2008; Grello et al., 2006; Nelson et al., 2011; Weaver et al., 2011), however they are still not considered committed or exclusive romantic relationships (Bay Cheng et al., 2009; Bogle, 2008; Freitas, 2008; Weaver et al., 2011). Though women report feeling better about engaging in “friends with benefits” than “hookups” (Bay-Cheng et al., 2009), Owen and Fincham (2011a) still find negative emotional experiences for women engaging in friends with benefits. The participants in Weaver et al.’s (2011) study note that a double standard exists around friends with benefits as well, such that women are looked upon less favorably than men for engaging in this type of partnership. Notably, research also demonstrates that – although the terms “hookup,” and “friends with benefits” denote specific classifications – they can be used synonymously depending on the covertly negotiated use of the terms within social groups (Banker et al., 2010; Bay-Cheng et al., 2009; Bogle, 2008; Weaver et al., 2011).

Gender Differences and Cultural Messages

Viewing the world as a whole, women in societies with greater equality between men and women show the most sexual satisfaction (Laumann et al., 2006). Given this statistic, it is concerning that Giordano et al. (2010) found that relationships with the least gender equality contain the most sexual activity. Though the United States is considered one of the most equal nations in regards to gender (Laumann et al., 2006), the underlying cultural messages surrounding sexuality may not have caught up with this reputation yet. Messages remain that males who have casual sex are accomplished; yet females who do so are “slutty” (Senn et al.,

2011). Men continue to maintain the role of pressuring for sexual activity while females maintain the role of denying or accepting sexual advances (Bartoli & Clark, 2006; Egan & Hawkes, 2008). Men give more physical and self motives to engage in sex while females give more relational and partner motives (Boul et al., 2009; Jonason et al., 2009; Patrick, Maggs, & Abar, 2007). It has also been found that females experience more intrusive thoughts during sexual activity, making it less enjoyable for them than for males (Purdon & Holdaway, 2006). Therefore, though the United States may be considered relatively gender neutral as world nations are concerned, gender differences and unequal cultural messages still abound relative to sex. An important factor to consider when studying female sexuality is whether females accept the dominant messages of society. For instance, young women defining themselves as “feminist” (Schick, Zucker, & Bay-Cheng, 2008) and/or “sexual” (Wentland et al., 2009) may defy sexual messages and differ in their sexual identities and esteem from those women who consciously or subconsciously accept the dominant messages.

Research Question and Hypotheses

1. How do casual sex, sexual agency, sexual attitudes, and sexual desire predict sexual well-being in single, sexually active college females?
 - a. Hypothesis 1: Casual sex will be inversely related to sexual well-being.
 - b. Hypothesis 2: Sexual agency will be positively related to sexual well-being.
 - c. Hypothesis 3: Conservative sexual attitudes will be inversely related to sexual well-being.
 - d. Hypothesis 4: Sexual desire will be positively related to sexual well-being.

Chapter 3: Methods

Design of the Study

To investigate multiple predictors of sexual well-being in the population of single, sexually active college females, a quantitative study was employed. Self-report surveys were administered through an on-line database to participants recruited from a public Mid-Atlantic university. Females completed one measure for the dependent variable of sexual well-being. They completed four measures for the independent variables – measures of casual sex, sexual agency, sexual attitudes, and sexual desire.

Participants also completed an extensive demographic questionnaire encompassing a series of demographic items. Given that extra credit for courses were offered to participants as an incentive for participation, this researcher was also encouraged to make a comparable research opportunity available to males. Therefore, a battery of measures was available for men to complete online as well, however their results were not analyzed for this study. The scores on all measures were computed, and multiple regression analysis was used to test the fit of the independent variables on predicting the dependent variable of sexual well-being.

Study Participants

The participants in this study were female undergraduate students at a Mid-Atlantic state university recruited through psychology and human sexuality courses. Though it is this researcher's understanding that such courses typically involve a number of students who are not pursuing social science degrees, it is important to recognize that these courses may draw a sample of individuals who are particularly thoughtful about their sexuality. A demographic question concerning the participants' areas of study was employed to analyze the percentage of participants that majored in social sciences. The participants had to be enrolled at the university

in order to have access to the extra credit database and the course websites that advertised the online surveys. Undergraduate students had to be between the ages of 18 and 24 to participate, given that students 25 and older may be at a different stage in their sexual development (Adimora et al., 2011).

This author intended to recruit at least 100 participants. Across the classroom based course sections, the human sexuality class was expected to include nearly 350 students. The psychology department maintains a central extra credit database of research opportunities that all undergraduate students in psychology courses may use to sign up for studies. Over 1000 students have access to this database. Therefore, between the human sexuality courses and the psychology courses, it was anticipated that 100 participants was a realistic goal. Given the sensitivity of the subject matter, participants were able to gain partial credit. Students were granted full points for answering over 70% of the survey questions, half points for answering between 30% and 69%, and 0 points for answering less than 30% of the survey questions.

Questions were included in the demographics section that could be used to eliminate potential confounds during the analysis. Such confounds could include homosexual orientation and marital status. Studies suggest that individuals with a homosexual orientation may experience their sexuality in an entirely different way than those with a heterosexual orientation (Auslander et al., 2006). Those who are married may be experiencing a set of sexual difficulties relating to married life (Crown & Roberts, 2007; DeLamater & Friedrich, 2002) rather than relating to the developmental stage of college, which this study analyzed. Surveys of students with these characteristics could be excluded during the analysis stage if they involved outliers in the data.

Procedures

During the summer 2012 semester, this author gained the rights to the measures proposed for use. They were entered into SurveyMonkey, a secure Internet survey site. The first section of the study contained an online informed consent, followed consecutively by the demographics section and the various sexuality measures. This author pilot tested the battery of measures for timing and any erroneous aspects by having at least two young adults of each gender complete the measures.

At the beginning of the fall 2012 semester, information about the study and links to the surveys were made available to undergraduate students in psychology and human sexuality courses. For human sexuality students, this information was posted in their course scholar sites. For psychology students, this information was part of the department's extra credit research database to which they have access.

Once participants accessed the Internet web site for the surveys, they first encountered an informed consent page. The informed consent portrayed the general purpose, risks, and benefits of the study. It let the participants know that their participation was anonymous and voluntary and could be reneged at any time. It directed the participants to local mental health resources on and near the main campus should they have any concerns related to their participation in the study. This page also informed the participants of the total time needed to complete all the measures, as well as brief general instructions. It required the students to enter their university personal identifier before proceeding to the remaining survey measures, describe whether they are seeking credit for psychology or human sexuality courses, and verify that they were 18 years of age. Participants were notified that their answers would never be examined in relation to their identifier – that it was only being collected to grant them extra credit toward their courses.

Once the participants entered their identifier, they proceeded to the section titled “Part 1- Demographics.” Thereafter they proceeded to “Part 2- Sexuality Measures.” Each measure was presented on a separate page; a “next” button at the bottom of the page took them to the next measure. The last measure included a “done” button. After the participants were finished completing all of the measures, they were taken to a page thanking them for their participation and once more providing the mental health resources in the vicinity of the university.

Instruments

Sexual well-being. This study operationalized sexual well-being by a measure of sexual self-esteem. The Adaptiveness subscale of the Sexual Self Esteem for Women (SSEIW; Zeanah & Schwarz, 1996) was used to measure how positively participants regard the sexual aspects of their life. The SSEIW “was developed to assess affective reactions to self-appraisals of sexuality” (Zeanah & Schwarz, 1996, p. 1). It consists of five total scales, however only the Adaptiveness subscale was used for this study. The Skill and Experience and Attractiveness subscales are unrelated to this study. The Control and Moral Judgment subscales capture constructs that were measured as possible predictors of sexual well-being, rather than inclusive within it. The Adaptiveness subscale consists of 15 total items and is defined by Zeanah and Schwarz (1996, p. 3) as “the congruence...of one’s sexual experience with...aspirations.” Participants rated statements on a 6-point Likert scale, with higher scores indicating a more positive appraisal of one’s sexual self; scores on this subscale can range from 15 to 90 in a continuous fashion. The development sample included 345 undergraduate females at a New England university (Zeanah & Schwarz, 1996). Sample statements include “All in all, I feel satisfied with my sex life”, “Sexual relationships have caused more trouble for me than they’re worth”, and “In general, I feel my sexual experiences have given me a more positive view of

myself” (Zeanah & Schwarz, 1996, p.4). The Chronbach’s alpha for the scale tested by the authors at 0.90. The scale correlated negatively with sexual guilt and positively with general self-esteem (Zeanah & Schwarz, 1996).

Casual sex. The Sexual Risk Survey (SRS; Turchik & Garkse, 2009) was used to measure participants’ engagement in casual sex. Research has shown that “sex” is a very subjective word for youth (Peterson & Muehlenhard, 2007; Planes et al., 2009). Therefore it is crucial to define “sex” when asking young people to report on their sexual behaviors. The Sexual Risk Survey (SRS; Turchik & Garske, 2009) is a measure of casual sex that specifically defines the two categories of sexual activity about which it asks. The SRS also includes an item related to substance use and casual sex, which is important given the research that suggests alcohol is often a crucial factor in nonmonogamous sexual relations (Adimora et al., 2011; Bogle, 2008; Freitas, 2008; Turchik et al., 2010).

This measure consists of 23 total items split amongst five subscales. On the face of them, the subscale of most interest to this study is “Sexual Risk Taking with Uncommitted Partners,” however all but one subscale (3 items measuring anal sex) was utilized as they all include items pertinent to this study. Only the question concerning substance use was used from the Risky Sex Acts subscale, as the remainder of items on that subscale concern the use of contraceptives and are unrelated to this study. Participants answered each question with a continuous number. They were given the following instructions to aid them in answering (Turchik & Garkse, 2009, p. 946):

“Record the number that is true for you over the past six months...try to estimate the number as close as you can. Thinking about the average number of times the behavior happened per week or per month might make it easier to estimate an accurate number,

especially if the behavior happened fairly regularly. If you've had multiple partners, try to think about how long you were with each partner, the number of sexual encounters you had with each, and try to get an accurate estimate of the total number of each behavior.”

The participants were encouraged to use a calendar as an aide.

There are alternate ways to score this measure. The authors note that scores on the scale are typically skewed, given the variance of sexual activity in which young adults engage. Thus, they recommend either coding the data ordinally based on frequency distributions or performing a logarithmic or inverse transformation normalizing technique. Items were added for total measure scoring, with higher scores indicating more casual sex. The development sample tested was 613 undergraduate students at a Midwestern university (Turchik & Garkse, 2009). With the anal sex subscale removed, the authors found that the Chronbach's alpha for the total scale was 0.88, and its test-retest reliability was .93.

The Sexual Risk Taking with Uncommitted Partners subscale consists of eight items; a sample question is “How many times have you had sex with someone you don't know well or just met?” (Turchik & Garske, p. 947). The author's Chronbach's alpha = .88, the Test-retest reliability = .90, and the correlation with a weekly drinking measure was $r = .38$, significant at the 0.001 level. The Impulsive Sexual Behaviors subscale consists of five items; a sample question is “How many partners have you engaged in sexual behavior with but not had sex with?” (p. 946). The author's Chronbach's alpha = .78, the Test-retest reliability = .79, and the correlation with a sensation seeking measure was $r = .21$, significant at the 0.001 level. The Intent to Engage in Risky Sexual Behaviors subscale consists of two items; a sample question is “How many times have you gone out to bars/parties/social events with the intent of ‘hooking up’ and engaging in sexual behavior but not having sex with someone?” (p. 946). The author's

Chronbach's alpha = .89, the Test-retest reliability = .70, and the correlation with a measure of sexual excitability was $r = .26$, significant at the 0.001 level.

Sexual agency. The ability of participants to be agentive in denying unwanted sexual advances was measured by the Female Sexual Resourcefulness Scale (FSRS; Fisher et al., 2011; Humphreys & Kennett, 2010; Kennett, Humphreys, & Patchell, 2009). This measure was designed to capture "the self-control strategies women use to deal with unwanted sexual encounters" (Fisher et al., 2011, p. 612). It consists of 19 statements that participants rate on a 6-point Likert scale ranging from *very uncharacteristic of me* to *very characteristic of me*. With certain items being reverse-scored, items are totaled and higher scores reflect greater sexual agency in dealing with unwanted sexual advances. Therefore, the scores can range from 19 to 114 in a continuous fashion. The authors tested the measure for reliability and validity with two sets of female undergraduate participants, numbering 150 and 152 individuals. A total of 62 individuals returned to enable test-retest reliability. Sample questions include "I often give in to unwanted sexual activity" (reverse scored; Fisher et al., 2011, p. 614), "When I am in the middle of sexual play and am aroused, but do not want the activity to progress any further, I am often able to change my aroused feelings so that I am able to prevent the activity from progressing" (p. 614), and "I plan in advance how far I want to go with any sexual activity, and am able to stop the activity before it goes too far" (p. 614). The author's Chronbach's alpha = .91, the Test-retest = .78, and the measure correlated positively with a general measure of learned resourcefulness and correlated negatively with enumerated acts of unwanted sex.

Attitudes toward casual sex. Participants' personal attitudes toward casual sex was measured with the Permissiveness subscale of the Brief Sexual Attitudes Scale (BSAS-P; Fisher et al., 2011; Hendrick, Hendrick & Reich, 2006). This measure was developed to assess several

dimensions of attitudes toward sexuality. The Permissiveness subscale includes 10 items and the authors describe it to assess “a casual, open attitude toward sex” (Fisher et al, 2011, p. 71). With some items being reverse scored, participants rate statements on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. The total score is then added from the items; higher scores reflect a more permissive attitude toward casual sex. Scores can therefore range from 10 to 50. Hendrick et al. (2006) used a sample of 674 university students to test the brief scale for reliability and validity. Sample questions include “I do not need to be committed to a person to have sex with him”, “It is ok for sex to be just good physical release”, and “The best sex is with no strings attached” (Hendrick et al., 2006, p. 80). The author’s Chronbach’s alpha = .93 and the scale correlated negatively with scores of commitment ($r = -.33, p < .001$).

Sexual desire. It is also important to subjectively assess participants’ innate desires toward sexuality. Female sexual desire is complex and subjective. For instance, Foley et al. (2012) contrast female sexual desire with male sexual desire – explaining that, for women, sexual desire is much more complex than basic hormone levels. Basson (2010) describes that women may show physiological signs of sexual desire or arousal without subjectively feeling interested in sexual activity and vice versa. Thus, asking women to rate their sexual desire (as opposed to measuring hormones, for instance) can be considered a valid method by which to gain sexual desire information.

The Sexual Desire Inventory, Dyadic Scale (SDI-D; Fisher et al., 2011; Spector, Carey, & Steinberg, 1996) was used to measure participants’ levels of sexual desire. The authors report that “sexual desire was defined as interest in sexual activity, and it was measured as primarily a cognitive variable through amount and strength of thought directed toward approaching or being receptive to sexual stimuli” (Fisher et al., 2011, p. 192). The questionnaire consists of 8 items

that measure “dyadic sexual desire (interest in behaving sexually with a partner)” (p. 193). Questions concerning frequency of desire are answered by choosing one of seven multiple choice responses ranging from *not at all* to *more than once a day*. Questions concerning strength of desire and importance of sexual activity are all rated on an 8-point Likert scale ranging from either *no desire* or *not at all important* to *strong desire* or *extremely important*. Higher scores reflect higher desire, and scores can range continuously from 0 to 62 on the Dyadic subscale. The authors of the scale researched its reliability and validity with 380 college students (Fisher et al., 2011). A sample question is “When you first see an attractive person, how strong is your sexual desire?” (Fisher et al., 2011, p. 194). The author’s Chronbach’s alpha for the dyadic subscale = .86, the Test-retest reliability = .76 after one month, and dyadic desire was moderately and positively correlated with actual dyadic sexual incidents ($r = .34, p < .0001$).

Demographic items. Two questions in the demographics portion were used to assess how participants view their sexual behaviors relative to their perceptions about their peers and most college students of their gender. Several questions were asked about participants’ current relationship status, satisfaction, and equality levels. Questions were asked about religion and religious adherence of self and parents. Participants were asked to identify themselves in relation to beliefs about gender role equality. Also, Greek life membership and year in school were gathered as well.

Analyses

This author established a code book for all pertinent notes as the measures were scored and the data was transferred from the online database into the SPSS database for statistical analysis. The first step of analysis involved exploring the data through descriptive statistics, frequencies, and graphic plotting. It was important to test the internal consistency of the various

measures within the sample. The central tendencies and variance of all measures were noted to determine the potential representativeness and plausibility of the correlation coefficients.

Multiple regression was used to analyze the amount of variance in sexual well-being accounted for by the independent variables – as well as the strengths of the correlations.

Chapter 4: Manuscript

Abstract

This study explored multiple predictors of sexual well-being in a sample of 253 single, sexually active undergraduate females at a public Mid-Atlantic university. Several factors were identified from past research that might impact sexual well-being: casual sex, sexual agency, sexual attitudes, and sexual desire. Of the four factors, only sexual agency and sexual attitudes were found as significant predictors of sexual well-being. The results suggest that – of single, sexually active undergraduate females – those with a greater sense of agency and choice in their sexual interactions and those who maintain more open attitudes toward casual sex have a higher level of sexual well-being. Agency and openness may be important factors in the development of sexual well-being for young women. Limitations of the study, as well as implications for future research and psychoeducational and therapeutic interventions, are addressed.

Sexual Well-Being in Single, Sexually Active College Females:
A Matter of Agency and Openness

Introduction

In 2007, the American Psychological Association addressed the status of young females' psychological sexual health in their *Task Force on the Sexualization of Girls* (American Psychological Association [APA], 2007). The chief concern highlighted in the publication was the detriment to well-being that dominant American culture may impose on young women by the way in which it glorifies and exploits female sexuality. The result, the APA (2007) suggests, is a society of young females who cannot take full ownership of their sexuality because culture maintains that it is an object to be possessed by others. This task force engendered debate in the community – some feminist sectors, for instance, were concerned that female agency over desire and pleasure would be minimized by the APA's suggestions toward reducing the sexualization of girls (Lerum & Dworkin, 2009). This debate highlights the extent to which the field is still developing an accurate model of sexual well-being for young females (Lamb, 2010).

The APA reports that “sexual well-being is an important part of healthy development and overall well-being, yet evidence suggests that the sexualization of girls has negative consequences in terms of girls' ability to develop healthy sexuality” (APA, 2007, p. 3). Sexual well-being can be a wide and subjective concept, open to a variety of interpretations. Laumann et al. (2006, p. 1) define it as “the cognitive and emotional evaluation of an individual's sexuality.” The New Oxford American Dictionary defines well-being as *the state of being comfortable, healthy, or happy*. Bancroft, Long, and McCabe (2011, pp. 726 - 727) report that “the assessment of sexual well-being has varied across studies, and is usually based on a small number of questions.” It has been operationalized in numerous ways – from one or two general questions

(Bancroft et al., 2011) to measures of sexual self-efficacy, esteem, and satisfaction (Hucker, Mussap, & McCabe, 2010) to measures of sexual awareness and body image (Muise, Preyde, Maitland, & Milhausen (2010). Indicators, therefore, fall within a wide spectrum of cognitive or emotional aspects of sexuality regarded along a continuum of negative to positive. For the purpose of this study, we used Laumann et al.'s (2006, p.1) definition and operationalized sexual well-being using a sexual self-esteem measure, as detailed in this article under the measures section.

Casual sex. Much of the concern and uncertainty surrounding female sexuality is focused on the nature of sexual relationships, specifically the degree to which sexual acts are happening in partnerships lacking commitment (Adimora, Schoenbach, Taylor, Kahn, & Schwartz, 2011; Bradshaw, Kahn, & Saville, 2010; Grello, Welsh, & Harper, 2006; Owen & Fincham, 2011b; Yost & Zurbriggen, 2006). Such uncommitted sexual behavior is often termed “casual sex” (Andrinopoulos, Kerrigan, & Ellen, 2006; Eisenberg, Ackard, Resnick, & Neumark-Stainzer, 2009; Fielder & Carey, 2010; Grello et al., 2006; Owen & Fincham, 2011a). Research suggests that casual sex is especially common during the college years (Bogle, 2008; Fielder & Carey, 2010; Grello et al., 2006; Littleton, Tabernik, Canales, & Backstrom, 2009; Owen, Rhoades, Stanley, & Fincham, 2010). In a study by Owen et al. (2010), over 50% of both female and male undergraduate students, age 20 on average, reported engaging in sexual activity with an uncommitted partner. Qualitative research also supports this evidence, exemplified by this college female who wrote, ““It is very common for people to get involved sexually without romantic feelings for one another”” (Banker, Kaestle, & Allen, 2010, p. 185).

Although young adult females may engage in casual sex, research suggests that they regard it as ‘less than ideal’ (Bogle, 2008; Fenigstein & Preston, 2007; Fugere, Escoto, Cousins,

Riggs, & Haerich, 2008; Jonason, Li, & Cason, 2009; Schmookler & Bursik, 2007). Results are somewhat mixed (Eisenberg et al., 2009; Fugere et al., 2008), however research suggests that a sexual double standard exists in which the negative implications of casual sex are greater for women than they are for men (Bogle, 2008; Freitas, 2008; Grello et al., 2006; Tiegs, Perrin, Kaly, & Heesacker, 2007; Weaver, MacKeigan, & MacDonald, 2011). For instance, Fielder and Carey (2010) used a 10-item global self-esteem scale and a 9-item depression inventory to measure the implications of casual sex over the course of a year for freshman college students, finding that females who engaged in casual intercourse had the lowest self-esteem and the highest depression scores.

Though research demonstrates that many females prefer their sexual experiences to happen within committed partnerships, (Andrinopoulos et al., 2006; Banker et al., 2010; Bogle, 2008; Freitas, 2008; Marelich, Lundquist, Painter, & Mechanic, 2008) studies also show that refraining from sexual activity entirely during the adolescent and young adult years has adverse consequences of its own (Brady & Halpern-Felsher, 2008; Woo & Brotto, 2008). Therefore, casual sex may not be ideal to females, but they may perceive it as acceptable if romantic relationships are not available to them (Bogle, 2008; Freitas, 2008). Studies show that females are hopeful that casual sexual partnerships will develop into committed romantic partnerships (Andrinopolous et al., 2006; Bogle, 2008; Freitas, 2008). Yet males may not have this same hope or expectation, and they often seek out different partners for casual sex than those they seek for romantic relationships (Pedersen, Putcha-Bhagavatula, & Miller, 2011). This may lead to guilt and shame in young women's experiences after casual sexual behaviors (Andrinopolous et al., 2006; Littleton et al., 2009). Given the body of research, in the present study, we were interested in how casual sex might affect sexual well-being.

Sexual attitudes, desire, and agency. Given that casual sex has been implicated in lower well-being, another important factor to consider is the attitudes of participants *toward* casual sexual activity. There are currently mixed results regarding whether a dissonance between attitudes and behaviors contributes to lower well-being – Owen et al. (2010) found that such a dissonance does influence well-being, however Muise, Preyde, Maitland, and Milhausen (2010) and Yost and Zurbriggen (2006) found that it did not. For this reason, we found it important to incorporate a measure of participants’ attitudes toward casual sex.

Another concern is the lack of agency that college females may have when engaging in sexual activity (Crown & Roberts, 2007). Freitas (2008, p. xiv) encapsulates this concern when discussing the female students who encouraged her to research casual sex: “We’re not happy with the hookup culture, they said. We feel a constant pressure to do things that make us feel unsettled.” Oftentimes consent can be an unclear process for women in which they are not able to fully express their preferences (Bay-Cheng & Eliseo-Arras, 2008; Bogle, 2008; Crown & Roberts, 2007; Freitas, 2008; Giordano, Manning, & Longmore; 2010). Studies suggest that over half of young women have consented to sexual activities in which they do not desire or wish to participate (Bay-Cheng & Eliseo-Arras, 2008; Crown & Roberts, 2007). Desire, however, is a subjective term. Foley, Kope, and Sugrue (2012, p. 92) refer to sexual desire as “being interested in or receptive to sexual activity.” The sexual desire of females is especially complex and subjective; Foley et al. (2012) contrast it with male sexual desire – explaining that, for women, sexual desire is much more complex than basic hormone levels. Basson (2010) describes that women may show physiological signs of sexual desire or arousal without subjectively feeling interested in sexual activity and vice versa. Thus, asking women to rate their sexual desire (as

opposed to measuring hormones, for instance) can be considered a valid method by which to gain sexual desire information.

Non-agentive sex may be more likely to occur within casual relationships than committed partnerships (Humphreys, 2007). Given that research indicates females pursue casual sex to form relationships, however men do not (Andrinopolous et al., 2006; Bogle, 2008; Freitas, 2008; Jonason et al., 2009; Littleton et al., 2009), much of casual sex may not be entirely wanted by females. Females may engage in undesired casual sex because they feel it is the only method by which to form relationships (Andrinopolous et al., 2006; Bogle, 2008; Freitas, 2008; Jonason et al., 2009; Littleton et al., 2009).

Other factors. An important factor to consider when studying female sexuality is whether females accept the dominant messages of society. For instance, young women defining themselves as “feminist” (Schick, Zucker, & Bay-Cheng, 2008) and/or “sexual” (Wentland, Herold, Desmarais, & Milhausen, 2009) may defy sexual messages and differ in their sexual identities and esteem from those women who consciously or subconsciously accept the dominant messages. Katz and Tyron (2009) found that women endorsing conservative gender roles accept sexual activity that is more nonconsensual in nature. Another factor implicated in sexual agency is substance use; Bay-Cheng and Eliseo-Arras (2008) found that alcohol use decreases women’s agency level in their sexual interactions. Age of first sex has also been implicated in the existing body of research – Patrick and Lee (2010) found that female students who lost their virginity within the first six months of college demonstrated vacillating sexual attitudes.

Parental factors are often considered in relation to young people’s sexuality, however some research suggests that peers are more influential on one’s sexual actions than are parents (Lefkowitz & Espinosa-Hernandez, 2007). An important concept is young people’s tendency to

overestimate the amount of casual sex in which their population engages. College students particularly tend to believe that most other college students are having riskier sex than statistics suggest (Bogle, 2008; Lewis, Lee, Patrick, & Fossos 2007; Stephenson & Sullivan, 2009). This becomes an issue because young people evaluate their own behaviors relative to their perceived population norms; interpreting the population to be engaging in high frequencies of casual sex increases their own engagement in casual sex (Bogle, 2008; Lewis et al., 2007). Stephenson and Sullivan (2009) found that youth with the greatest misperceptions also report the lowest sexual satisfaction.

Theoretical underpinnings: Biosocial theory. Biosocial theory proposes that both innate/biological factors as well as social factors exert influence over individuals, and it is virtually impossible to isolate and assess for the contribution of one versus the other (Stinson, Sales, & Becker, 2008; Smith, Hamon, Ingoldsby, & Miller, 2009a). It also maintains that evolution plays a crucial role in human experience and that adaption to environmental circumstances is exceptionally slow relative to the human lifespan (Stinson et al., 2008; Simth et al., 2008). Human sexuality is influenced both by innate physical responses and desires as well as sociocultural messages (Boul, Hallam-Jones, & Wylie, 2009), making it a difficult area to navigate (DeLamater & Friedrich, 2002). Sexual desire alone is found to have both physical and emotional components (Boul et al., 2009). Both males and females have hormonal drives motivating them toward sexual activity (Boul et al., 2009) and drives for connection and intimacy (Goldhammer & McCabe, 2011).

Evolutionary perspectives suggest that, in many animal species, males maintain the role of “competing for” and “requesting” female sexuality, while females maintain the role of “denying or granting” advances toward sexuality and “being selective” to ensure the most

positive outcomes for their offspring (Caro, 1985; Charlesworth, 2006; Rutberg, 1983; Stinson et al., 2008). Biologically, women do not have to “want” sex to have it – some level of erection is necessary for intercourse and reproduction but vaginal lubrication, for instance, is not (Stinson et al., 2008). These evolutionary perspectives are especially pertinent when considering the amount of non-agentic sexual behaviors in which females may engage.

The women’s movement has in part attempted to reverse years of evolutionary sculpting to level the playing field between women and men in the sexual arena (Greenwood & Guner, 2010; Kleiman, 1977). Given that biosocial theory assumes adaptations take a great many years to manifest (Stinson et al., 2008), humans may not have fully adapted to the force of this social change that took place only 50 years ago (Greenwood & Guner, 2010). It is also noteworthy that only 3% of mammals (Kleiman, 1977) – and 15% of all primates (Rutberg, 1983) – are monogamous. Evolutionary theories suggest that monogamy was at first a *social* feature, and that creatures become monogamous to provide a more organized and fruitful social structure for their offspring (Kleiman, 1977; Rutberg, 1983; Wittenberger & Tilson, 1980). Humans originally evolved into polygynous societies in which men had sexual relations with a variety of women and women had sex with one man, due to women’s specialized commitment to offspring through pregnancy and breastfeeding (Stinson et al., 2008). This engendered and maintained a social environment that was more unfavorable toward females having nonmonogamous sexual encounters than males (Stinson et al., 2008).

It is theorized that monogamy developed in humans because of both the length of time required to raise young (Kleiman, 1977) and females’ inability to raise offspring alone (Wittenberger & Tilson, 1980). Prior to the women’s revolution and female access to jobs and relatively fair wages, it *was* difficult for them to raise children alone (Greenwood & Guner,

2010). However, it is becoming increasingly possible in American society for women to raise children without a mate. For instance, through donor insemination, females can conceive and birth children without a romantic relationship or a sexual encounter (Murray & Golombok, 2005). This may create new meanings for women regarding their sexuality and partnership decisions.

Present study. The chief aim of this study was to offer quantitative data on how casual sex, sexual agency, sexual attitudes, and sexual desire predict sexual well-being in college females. It was our goal to contribute to the existing body of research on models of sexual well-being for young females, so that society may move toward greater psychological sexual health of college women in the United States. Studies indicate that college may be a time for individuals to experiment with their sexuality, and – for many – may comprise the time frame in which they engage in the most liberal sexual behaviors in their lifetime (Bogle, 2008; Fergus, Zimmerman, & Caldwell, 2007). Results are mixed regarding the degree of sexual change across the developmental periods from teenage to adult years (Adimora et al., 2011; O’Sullivan & Majerovich, 2008; Whetherill, Neal, & Fromme, 2010). As such, this study cannot generalize to various developmental periods; it assesses female sexual well-being within the college years exclusively.

Many of the quantitative studies on well-being and sexual activity have focused on indicators such as general self-esteem and depression (Grello et al., 2006; Shulman, Walsh, Weisman, & Schelyer, 2009). Research suggests, however, that there is a separate dimension of self-appraisal related specifically to sexuality (Guindon, 2002; Oattes & Offman, 2007; Zeanah & Schwarz, 1996). This study extends the current research by focusing specifically on the sexual dimension of well-being through the use of a sexual self-esteem measure. Is casual sex predictive

of sexual well-being in college women? Are sexual agency, sexual desire, and sexual attitudes predictive of sexual well-being? We hypothesized that casual sex would be inversely related to sexual well-being, while liberal sexual attitudes, sexual desire, and sexual agency would increase sexual well-being.

Methods

Participants. Participants were 253 single, sexually active female undergraduate students at a public Mid-Atlantic university. “Single” status was defined as females who indicated they were not married, engaged, or in a committed romantic relationship. “Sexually active” was defined as females who had previously initiated vaginal sexual intercourse on at least one occasion. Participants ranged in age from 18 to 22 years ($M = 19.54$, $SD = 1.14$). The majority were Caucasian (80%); other ethnicities represented included Asian (12%), African American (4%) and other (4%). Faith identification included Christian (49%), Catholic (23%), Agnostic (12%), Spiritual (6%), Atheist (4%), and other (6%). Participants were engaged in a variety of degree programs, including Science (36%), Liberal Arts (26%), Life Sciences (14%), Business (12%), undecided (7%), and other (5%). Over half lived off-campus without relatives (66%), while others lived in co-ed dormitories (25%), female dormitories (5%), and sorority houses (4%). The majority of participants indicated their parents were married (79%), while others indicated divorced parents (12%), remarried parents (4%), separated parents (3%), widowed or never married parents (2%). Participants were asked to describe their parents’ income level on a Likert scale. Most indicated somewhat high (45%) or medium (36%) income, while others rated very high (12%), somewhat low (5%), and very low income (2%).

Most participants identified as Egalitarian (67%) in regards to gender role beliefs, while others identified as traditional (18%), feminist (8%), and unsure (7%). Over 95% of participants

identified as heterosexual. Participants' reported sexual initiation age ranged from 13 to 21, with all measures of central tendency reflecting an average of 17 years of age at first vaginal sex ($SD = 1.46$). This sample reported a diverse number of vaginal sexual partners, ranging from 1 to 53 ($M = 5$, $SD = 5.34$, median = 3, mode = 1). Over 75% indicated between 1 and 5 total sexual partners, while the next 19% indicated between 6 and 12 partners, and the remaining 5% reported over 12 sexual partners.

Procedures. Over the course of one semester, participants were recruited through the psychology department's online SONA database and the human sexuality class at the university. The SONA database is available to all students taking an undergraduate psychology course of any level, while the human sexuality course has no prerequisites and is open to students of any degree program. A brief advertisement describing the study was included in the SONA database and in the course Scholar website. When participants clicked the link included in the advertisement, they were taken to a secure survey site hosting the informed consent information and the questionnaires. The informed consent portrayed the general purpose, risks, and benefits of the study. It advised the students that their participation was anonymous and voluntary. The participants were required to enter their university ID and verify that they were at least 18 years of age before proceeding to the remaining survey measures. Students were notified that their answers would never be examined in relation to their ID – that it was only collected in order to grant them extra credit toward their courses. The informed consent page was followed consecutively by the demographics section and the various sexuality measures. Each measure was presented on a separate page; “next” and “back” buttons were provided. After completion, a thank you page was displayed, providing a list of local mental health resources on and near the main campus should participants have any concerns related to their participation.

Extra credit was granted as compensation for completing the study. Given the sensitivity of the subject matter, students were able to gain partial credit for their participation. Participants were granted full points for answering over 70% of the survey questions, half points for answering between 30% and 69%, and 0 points for answering less than 30% of the survey questions. At the end of the semester, extra credit was assigned to the participants and the data was securely de-identified prior to analysis.

Measures. Demographics. A total of 31 demographic questions were administered, comprising basic demographics as well as information relative to student status, parents, relationships, and sexuality. Basic demographics included sex, age, race/ethnicity, and faith/worldview. Student information included year in school, full or part time status, degree focus, living status, employment status, and sorority membership. Parent information included parents' marital status, income level, and faith/worldview. Participants were asked to rate their own and their parents' level of involvement in their faith. They were asked, "How active are you [or your parents] in your faith?" Choices ranged from 0, "N/A", to 4, "Very active". Relationship information included relationship status, length, and satisfaction. Sexual information included gender equality beliefs, sexual orientation, age of first sex, and number of sexual partners. Students were also asked to rate the liberalness of their sexual behaviors compared to both their friends and to "most female college students" on a Likert scale from 1 to 5. For gender equality, participants were asked to choose whether they considered themselves (a) feminist, (b) egalitarian – believe in gender equality but do not consider self feminist, (c) traditional or (d) unsure. For age of first sex, participants were asked, "At what age did you first have vaginal sexual intercourse? If you have never had vaginal sexual intercourse, enter a 0." For number of

partners, participants were asked to report the number of “total vaginal sexual intercourse” partners they have had.

Sexual well-being. This study operationalized sexual well-being using the Adaptiveness subscale of the Sexual Self Esteem Inventory for Women (SSEIW; Zeanah & Schwarz, 1996), which measures how positively participants regard the sexual aspects of their lives. The SSEIW “was developed to assess affective reactions to self-appraisals of sexuality” (Zeanah & Schwarz, 1996, p. 1). Though the entire measure consists of five subscales, only the Adaptiveness subscale was used for this study. The Skill and Experience subscale (measuring confidence with instrumental sexual skills) and the Attractiveness subscale (measuring body image) were determined to be unrelated to this study’s focus. The Control and Moral Judgment subscales capture the sexual agency construct that, for the purpose of this study, we considered a potential predictor of sexual well-being, rather than one component of it. The Adaptiveness subscale consists of 15 total items and is defined by Zeanah and Schwarz (1996, p. 3) as “the congruence...of one’s sexual experience with...aspirations.” Participants rate statements on a 6-point Likert scale, with higher scores indicating a more positive appraisal of one’s sexual self after reverse-scoring certain items. Scores on this subscale can range from 15 to 90 in a continuous fashion. Sample statements include “All in all, I feel satisfied with my sex life”, “Sexual relationships have caused more trouble for me than they’re worth”, and “In general, I feel my sexual experiences have given me a more positive view of myself” (Zeanah & Schwarz, 1996, p.4). The measure has demonstrated sound validity by correlating negatively with sexual guilt and positively with general self-esteem (Zeanah & Schwarz, 1996). The subscale demonstrated solid internal reliability in the present study’s sample ($\alpha = .91$).

Casual sex. Questions from The Sexual Risk Survey (SRS; Turchik & Garske, 2009) were used to measure participants' engagement in casual sexual activity over the past six months. Research has shown that "sex" is a very subjective word for youth (Peterson & Muehlenhard, 2007; Planes et al., 2009), therefore it is crucial to define "sex" when asking young people to report on their sexual behaviors. The Sexual Risk Survey (SRS; Turchik & Garske, 2009) specifically defines the two categories of sexual activity about which it asks: penetrative and non-penetrative acts. "Sex" is defined in the measure as penetrative acts that include oral, vaginal, and anal sex. "Sexual behavior" is defined in the measure as non-penetrative acts that include mutual masturbation, petting, and "making out". Common slang terminology is used in the glossary of the measure to clarify the various acts.

We selected nine different questions from the measure that relate to casual sexual activity, or sexual acts with uncommitted partners. To ensure participants remembered the time frame about which the survey inquires, we added "In the past six months," to the beginning of each question. Sample questions include, "How many partners have you had sex with?", "How many partners have you engaged in sexual behavior, but not sex, with?", and "How many times have you had sex with someone that you don't know well or just met?" (Turchik & Garske, 2009, pp. 946-947). Participants answered each question with a continuous number and they were given the following instructions to aid them in answering (Turchik & Garske, 2009, p. 946):

"Record the number that is true for you over the past six months...try to estimate the number as close as you can. Thinking about the average number of times the behavior happened per week or per month might make it easier to estimate an accurate number, especially if the behavior happened fairly regularly. If you've had multiple partners, try

to think about how long you were with each partner, the number of sexual encounters you had with each, and try to get an accurate estimate of the total number of each behavior.”

The participants were also encouraged to use a calendar as an aide if need be.

The authors note that scores on the measure are typically skewed and, thus, they recommend coding the data ordinally based on frequency distributions. As the continuous answers were negatively skewed in our sample, we re-coded each of the nine items to fit a 6-point Likert scale ranging from 0 to 5. As questions pertain to either number of partners or number of occasions, in this scale, 0 = zero / never, 1 = one / once, 2 = two to three, 3 = four to six, 4 = seven to ten, 5 = more than 10. Each item was added together to produce a total score that could range from 0 to 45 with higher scores indicating more casual sex. This casual sex measure developed from the Sexual Risk Survey (SRS; Turchik & Garske, 2009) demonstrated acceptable internal reliability in our sample ($\alpha = .83$).

Attitudes toward casual sex. Participants’ personal attitudes toward casual sex were measured with the Permissiveness subscale of the Brief Sexual Attitudes Scale (BSAS-P; Fisher, Davis, Yarber, & Davis, 2011; Hendrick, Hendrick & Reich, 2006). This measure was developed to assess several dimensions of attitudes toward sexuality. The Permissiveness subscale includes 10 items and the authors describe it to assess “a casual, open attitude toward sex” (Fisher et al, 2011, p. 71). Participants rate statements on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. Each item is added to produce a total score with higher scores reflecting a more permissive attitude toward casual sex. Scores can therefore range from 10 to 50. Sample questions include “I do not need to be committed to a person to have sex with him”, “It is ok for sex to be just good physical release”, and “The best sex is with no strings attached” (Hendrick et al., 2006, p. 80). Hendrick et al. (2006) used a sample of 674 university students to

test the brief scale for validity, finding that the scale correlated negatively with scores of commitment. The scale demonstrated sound internal reliability in the present study's sample ($\alpha = .90$).

Sexual desire. The Sexual Desire Inventory, Dyadic Scale (SDI-D; Fisher et al., 2011; Spector, Carey, & Steinberg, 1996) was used to measure participants' levels of sexual desire. The authors report that "sexual desire was defined as interest in sexual activity, and it was measured as primarily a cognitive variable through amount and strength of thought directed toward approaching or being receptive to sexual stimuli" (Fisher et al., 2011, p. 192). The questionnaire consists of eight items that measure "dyadic sexual desire (interest in behaving sexually with a partner)" (p. 193). Questions concerning *frequency* of desire are rated on a 7-point Likert scale ranging from *not at all* to *more than once a day*. Questions concerning *strength* of desire and *importance* of sexual activity are all rated on an 8-point Likert scale ranging from either *no desire* or *not at all important* to *strong desire* or *extremely important*. Higher scores reflect higher desire, and scores can range continuously from 0 to 62 on the Dyadic subscale. Sample questions include "During the last month, how often have you had sexual thoughts involving a partner?", "When you first see an attractive person, how strong is your sexual desire?", and "How important is it for you to fulfill your sexual desire through activity with a partner?" (Fisher et al., 2011, p. 194). The authors of the scale researched its validity with 380 college students (Fisher et al., 2011); dyadic desire was moderately and positively correlated with actual dyadic sexual incidents. The scale demonstrated solid internal reliability in the present study's sample ($\alpha = .90$).

Sexual agency. The ability of participants to be agentive in their sexual interactions was measured by the Female Sexual Resourcefulness Scale (FSRS; Fisher et al., 2011; Humphreys &

Kennett, 2010; Kennett, Humphreys, & Patchell, 2009). This measure was designed to capture “the self-control strategies women use to deal with unwanted sexual encounters” (Fisher et al., 2011, p. 612). It consists of 19 statements that participants rate on a 6-point Likert scale ranging from *very uncharacteristic of me* to *very characteristic of me*. With certain items being reverse-scored, items are totaled and higher scores reflect greater sexual agency in sexual activities. Therefore, the scores can range from 19 to 114 in a continuous fashion. Sample questions include “I often give in to unwanted sexual activity”, “When I am in the middle of sexual play and am aroused, but do not want the activity to progress any further, I am often able to change my aroused feelings so that I am able to prevent the activity from progressing”, and “I plan in advance how far I want to go with any sexual activity, and am able to stop the activity before it goes too far” (Fisher et al., 2011, p. 614). When the authors tested the measure for validity in a sample of 150 female undergraduate participants, the measure correlated positively with a general measure of learned resourcefulness and correlated negatively with enumerated acts of unwanted sex. The measure demonstrated strong internal reliability in the present study’s sample ($\alpha = .94$).

Results

Cleaning and examining. Data was first cleaned by examining any text participants entered when a continuous number was requested, as this occasionally occurred in the open responses on the casual sex measure. As Brick and Kalton (1996) describe, missing or unusable data such as this is typically replaced by an assigned value. When a minimal amount of data is missing, it is appropriate to assign a value such as the mean rather than drop the data from analysis (Brick & Kalton, 1996). Oftentimes, a number could be reliably inferred from the participant’s written response. For instance, when a participant entered a range such as “3 to 5”,

the text was replaced by the median number. When a participant entered a range such as “3 to 4”, the text was replaced by the lower number. When a participant indicated a weekly average, this was computed across a span of six months about which the measure inquired. When a number could not be reliably inferred from the text, for instance when a participant entered a response such as “a lot”, the response was eliminated. Less than 10% of participants’ responses needed to be replaced with numerical data or eliminated in this manner.

The DV and the four IVs were examined for normality by reviewing boxplots, stem and leaf plots, histograms, and skewness and kurtosis values. All were found to be sufficient for analysis except the independent variable of casual sex. As per the measures section of this article, given the strong negative skew, we recoded each item on the casual sex measure categorically from 0 to 5. Categorical recoding was also suggested by the authors of the original measure. We then examined the normality of the recoded measure by the methods listed above, and it was found to be sufficient for analysis. Table 1 can be referenced for normality indicators of the DV and the four IVs.

Sample characteristics. Table 1 also reflects the characteristics of the present study’s sample on the DV (sexual well-being) and the four IVs (casual sex, sexual attitudes, sexual desire, sexual agency). Overall, our sample of single, sexually active college women demonstrated moderate sexual well-being ($M = 64$, $SD = 13.6$), low engagement in casual sex ($M = 8$, $SD = 5.5$), conservative sexual attitudes ($M = 25$, $SD = 8.6$), moderate sexual desire ($M = 32$, $SD = 11.7$), and a high degree of agency in their sexual interactions ($M = 86$, $SD = 16.5$).

Predictors of sexual well-being. To test our primary hypothesis that casual sex would impact sexual well-being negatively and sexual agency, open sexual attitudes, and sexual desire would impact sexual well-being positively, we ran simultaneous multiple linear regression. The

missing data were replaced with the mean (Brick & Kalton, 1996); less than 20% of respondents' values needed to be imputed in this manner. As shown in Table 2, sexual agency and sexual attitudes remained as the only significant predictors of sexual well-being ($R^2 = .19, \Delta R^2 = .18, F(4, 248) = 10.59, p < .0001$). Casual sex approached significance at the 0.05 level, however did not quite reach significance at this level. Eighteen percent of the variance in sexual well-being is explained with this model.

Discussion

Casual sex is not a significant factor of sexual well-being. Our results indicate that casual sex is not a significant factor in the development of sexual well-being for college females. This finding was contrary to our hypothesis that casual sex would have a negative impact on sexual well-being. One possible explanation for this finding is that, over time, American people – both males and females - are engaging in more casual sex (DeLamater & Friedrich, 2002; Earle et al., 2007). College, specifically, has become a phase of the lifespan identified in part by the engagement in casual sexual activities (Bogle, 2008; Fielder & Carey, 2010; Freitas, 2008; Grello et al., 2006; Owen et al., 2010). In other words, it may have become *normative* to have casual sexual relations with various people while in college (Bogle, 2008; Fielder & Carey, 2010; Freitas, 2008; Grello et al., 2006; Owen et al., 2010), thus making it more acceptable and less stigmatizing over time.

Significant predictors of sexual well-being: Agency and openness. As anticipated, our results indicate that sexual agency plays a significant role in the development of sexual well-being for college females. Participants who reported the ability to make sexual choices in line with their preferences demonstrated greater sexual well-being. Our results suggest that sexual agency and sexual well-being are two separate constructs, given that these variables were

moderately correlated in our data. A clear definition of sexual agency is important. Crown and Roberts (2007) explain that there is a continuum – a gray area – of agentive sexual interactions that can range from strong intrusion to complete lack of intrusion on the partner’s behalf. Many females, however, report that nonagentive sexual acts involve a personal sense of obligation to fulfill the partner’s needs rather than duress by a partner after expression of their own preferences (Burkett & Hamilton, 2012; Crown & Roberts, 2007). Phillips (2000, p. 225) defines agency as the “ability to advocate for oneself and one’s needs”. What leads some young women to lack advocacy of their own needs in sexual interactions – to feel obligated to relinquish control of their own bodies to their partners? To our knowledge, this question has not been adequately explored in the current research and was beyond the scope of the present study. General agency, or the ability to clearly express one’s preferences in multiple spheres, may play a role. Sexual trauma may also play a role, as studies have suggested that past sexual trauma is related to young women’s inability to trust themselves (Vaile Wright, Collinsworth, & Fitzgerald, 2010).

In the present study, open attitudes toward sexuality were also found to significantly predict sexual well-being. Females who demonstrated greater tolerance for casual sexual interactions reported greater sexual well-being. This is consistent with other research that has demonstrated a correlation between conservative sexual attitudes and negative emotional experiences associated with sexual behaviors (Owen et al., 2010). Open sexual attitudes may reflect the Five-Factor personality trait of openness. Those who possess a higher level of openness are creative, internally reflective, and sensual (Costa & McCrae, 1992). Being attuned to one’s inner world may engender a greater sense of agency; in other words, the first step in agency may be an understanding of one’s preferences in vivo. Additionally, the qualities of

imagination and sensuality may enable one to enjoy their sexual experiences more fully and feel more positively about their sexual self.

The broader view of our model seems to suggest that single, sexually active college females today develop healthier sexuality when their attitudes toward sex are less conservative and when they feel in control of their own bodies.

Limitations and future research. One limitation is the sample studied. Given that participants were recruited through social science courses, though the distribution of degree focus was fair, it is important to recognize that these courses may draw a sample of individuals who are particularly thoughtful about their sexuality. The sample lacked racial and ethnic diversity, and the majority of participants identified as Christian or Catholic. Methods could be replicated with a sample that is more diverse in race/ethnicity, faith/worldview, income level, and parents' marital status. As the sample was drawn from a large, public Mid-Atlantic university, this study could also be replicated using participants from other regions of the country and other types of colleges and universities.

It is important to note that the population investigated in this study was a subset of college females who are both single and sexually active. The sexual well-being of young women in committed relationships may relate more to their current partner than to the history of their experience (Crown & Roberts, 2007). Young women who have not initiated sexual intercourse may have a different sense of themselves sexually than those who have experienced intercourse (Higgins, Trussell, Moore, & Davidson, 2010). Future studies should address sexual well-being in both of these populations of college females. Additionally, as our study focused on college women, the sexual well-being of females who do not attend college is another area in need of exploration. Studies have indicated that American college students no longer engage in a

courtship process; rather than going on dates, they meet at parties and begin romantic relationships through sexual activity (Bogle, 2008; Freitas, 2008). Young adult females who do not go to college may still engage in a courtship process, therefore the impact of casual sexual encounters on their sexual well-being may be more significant. Casual sexual activity may be less normalized for them through a community of their peers. For instance, Bogle's (2008) qualitative study indicates that casual sex is less acceptable for females in their late twenties who have graduated college and are dating romantic partners rather than meeting them at parties.

Another potential limitation was the measures of casual sex we employed. Though this measure demonstrated fairly good internal reliability, it was drawn from an instrument of sexual risk activities that categorizes the breadth of sexual acts into two groups. To our knowledge, this was the best measure to use to capture the construct of casual sex. Future research should be devoted to developing a detailed measure of casual sexual activity that parcels sexual acts into more discrete categories – for instance, kissing could be a separate category from hand-genital manipulation. Sexual well-being studies could then be replicated with such a measure.

Given that sexual agency was found as the strongest predictor of sexual well-being in our sample, future studies should continue to examine this construct. Both qualitative and quantitative research could be initiated to discover how the process of agency works for women and how a sense of advocacy over one's body develops over time. Is sexual agency part of broader agency in one's life, or is it more exclusive to the sexual arena? How can females successfully increase their sexual agency? These important questions remain to be explored in the field.

Practical implications. Unfortunately, young people currently name the media as their primary source of information about sexuality (DeLamater & Friedrich, 2002; McKee, 2012;

Sprecher, Harris, & Meyers, 2008). Therefore, it is crucial to increase the amount of sexual education provided in public schools and colleges in order for youth to receive accurate and positive messages about their sexual health. Current public health sex education in the United States comprises messages about contraceptive use and pregnancy prevention, however lacks information surrounding the mental and emotional domains of sexuality (U.S. Department of Health & Human Services [DHHS], 2008). Oftentimes, sexuality programming centers on a message of abstinence (DHHS, 2008). Young people may seek sexual information through other sources beyond public health programming because sex education does not address their needs to understand the psychological aspect of sexuality (McKee, 2012).

Our study suggests that sexual agency and openness plays an integral role in the psychological sexual well-being of young women. Healthy sexuality appears to arise in part from the ability to advocate for one's own sexual needs in vivo. Psychoeducation interventions should promote agency and encourage young people to explore their sexuality safely. When engaged in individual or family psychotherapy, young women can also benefit from exploring their agency and the impact of personal values on their sexual selves. Our study indicates that, through both programs and psychotherapy, supporting the development of sexual agency and openness could lead to greater sexual well-being for college females.

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Tables

Table 1

Characteristics of DV and IVs in Sample

Measure	Possible Range	Range in Sample	Mean	Median	Mode	<i>SD</i>	Skewness	Kurtosis
Sexual Well-being	15-90	22-90	64	64	57	13.6	-0.12	-0.45
Casual Sex	0-45	0-23	8	7	5	5.5	0.66	-0.19
Sexual Attitudes	10-50	10-50	25	25	10	8.6	0.02	-0.67
Sexual Desire	0-62	0-60	32	33	33	11.7	-0.46	0.20
Sexual Agency	19-114	36-114	86	86	86	16.5	-0.38	-0.29

Table 2

Simultaneous Regression Model: Predictors of Sexual Well-Being

Predictor	<i>B</i>	<i>SE</i>	β	<i>t (df= 1)</i>	<i>p</i>
(Constant)	28.56	5.19		5.51	<.0001
Casual Sex	-.32	.16	-.13	-1.95	.052
Sexual Agency	.33	.05	.39	6.63	<.0001
Sexual Attitudes	.37	.10	.24	3.56	<.0001
Sexual Desire	.02	.07	.02	.34	.734

Note: N = 253. *SE* = standard error