

12-2013

# Sexual Pleasure and Enhancement: Implications for College Sexuality Education

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**Sexual Pleasure and Enhancement: Implications for College Sexuality Education**

**Sexual Pleasure and Enhancement: Implications for College Sexuality Education**

**A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Science in Health Science**

**by**

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University of Maine at Farmington  
Bachelor of Science in Community Health Education, 2011**

**December 2013  
University of Arkansas**

**This thesis is approved for recommendation to the Graduate Council.**

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## ABSTRACT

*Objective.* The purpose of this study was to determine what sexual activities and behaviors college students are participating in, including the use of sexual enhancement products during both partnered and solo sexual activities. Pleasure and sexual satisfaction remain largely absent from today's sexuality education curricula, resulting in most young adults not being aware of the importance of "sexual pleasure, including autoeroticism, as a source of physical, psychological, intellectual and spiritual well-being" (WAS, 1994). This study looked at college students and their use of sexual enhancement products during partnered and solo sexual activities, in order to provide a set of baseline measures from which improvements to currently sexuality education can be made. In particular, this study aimed to inform education regarding positive sexual health benefits including pleasure and sexual satisfaction. *Methods.* A sample of 956 college students completed a cross-sectional survey on sexual pleasure and enhancement. The survey examined students' current and past sexual behaviors, sexual satisfaction, sexual comfort, use of sexual enhancement products, motivation, and beliefs and attitudes associated with sexual enhancement products. *Results.* Findings indicated that age was associated with solo product use ( $p < .001$ ) and partnered product use ( $p < .001$ ). Participants over the age of 25 are more likely to use products during their solo and partnered sexual activities than 18-24 years olds. Results suggest that individuals who use products are more sexually satisfied in regard to masturbation, ( $p = .001$ ), solo sexual activities ( $p = .004$ ), partnered masturbation ( $p = .002$ ), partnered sexual activities ( $p = .002$ ), ability to have orgasms during solo sexual activities ( $p < .001$ ), and partnered sexual activities ( $p = .003$ ), than individuals who do not use products. *Conclusion.* Results indicate that college students are participating in product use during their solo and partnered sexual activities, and there is a lack of education in college sexuality curricula to educate students on products and pleasure. This

**study aimed to better educate health professionals on the need for new innovative venues that may be appropriate for the delivery of sexual health education on college campuses.**

## ACKNOWLEDGEMENTS

This thesis would not have been possible without the support and encouragement from my thesis committee chair and mentor Dr. Kristen Jozkowski. Her passion for research has inspired me to cultivate new ideas and opportunities for research in health education. I sincerely thank Dr. Jozkowski for taking me under her wing and helping me realize the value and educational gain of research that will help serve as a platform for my future career goals. I would also like to recognize and thank Dr. Bart Hammig and Dr. Jean Henry for their consistent support and guidance throughout my Master's Degree at the University of Arkansas; you both have provided me with quality opportunities in both career and service that will help pave the way for me in my future endeavors.

Many thanks to Dr. Jaquelyn Wiersma and all of the faculty members that allowed me take time out of their class schedule to distribute this study; and to all of the students for participating in the study.

Lastly, I would like to thank my parents and siblings for all their love and support during my time here at the University of Arkansas. To my mother, the rock I swim to in a storm, you have always had faith in my decisions and have taught me more than the world could know.

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## **I. INTRODUCTION**

Currently, today's sexuality education positive aspects of sexuality such as desire, arousal, lubrication, orgasms, and the use of sex toys remain under-studied among high school and college curricula. There is a lack of opportunities for young adults to receive sexuality education outside of the risk-focused lens that focuses solely on sexually transmitted infections and unintended pregnancies (Jozkowski, Schick, Herbenick, & Reece, 2012). There is a need to identify new innovative venues that may be appropriate for the delivery of sexual health education, specifically education focused on positive aspects of sexuality such as sexual pleasure and enhancement (Reece, Herbenick & Sherwood-Puzzello, 2004; Jozkowski, Schick, Herbenick, & Reece, 2012).

### **High School Sexual Education**

Sexuality education in the United States remains a politically and ideologically controversial issue. High school sexuality education programs are typically categorized in two ways: (1) abstinence-only or abstinence-only until marriage education and (2) comprehensive education (Albert, 2007; Dailard, 2001). Both abstinence-based and comprehensive sexuality education models are similar in that their ultimate goal is to delay the age of first intercourse in order to reduce the rate with which individuals engage in intercourse, individuals' overall number of sexual partners, rates of unintended pregnancy, sexually transmitted infections (STIs), and human immune deficiency virus (HIV) (Silva, 2002).

Comprehensive sexuality education programs aim to delay sexual initiation among high school students in general, increase condom use among those who are sexually active (Kirby et al., 2004) and educate students about HIV/STI, refusing sex, and the consequences of unprotected sex (Kirby et al., 2004). Aspects of sexuality such as, "desire, pleasure, and sexual

entitlement rarely, if ever, exist in the formal agenda of public schooling on sexuality” (Fine, 1988, p.33). If and when sexuality is discussed in school systems, the discussions often focus on the negative consequences of sex. As such, the implicit message is that desire and pleasure can consequently affect your emotional, physical, moral, and reproductive health in only harmful ways (Freedenberg, 1987). The current lack of positive discourse on pleasure and satisfaction leaves students unable to explore and assess for themselves what is good and bad, desirable and undesirable within sexuality (Fine, 1988).

Abstinence-only sexuality education programs promote the social, psychological, and health-related benefits of abstaining from sexual activity. Abstinence-only programs instruct that abstinence is the only certain way to avoid pregnancy, STIs, and other health-related problems (U.S. Department of Health and Human Services, 1998; Walcott et al., 2011). Sexual pleasure and desire are seldom, if ever, explored in the context of abstinence-based sexuality education programs, again, except to describe the potential for negative consequences. For example, abstinence-based programs often utilize scare tactic analogies which warn students that the “flames of passion” can ignite and have detrimental, harmful outcomes (Sexuality Information and Education Council of the United States [SIECUS], 2012). The (not so) implicit message to students remains that engagement in sexually desired activities that may feel good will result in very bad outcomes that students should fear. As a result, abstinence-based sexuality education programs fully eliminate the potential opportunity for students to explore sexually in terms of what may be desirable or undesirable or what might feel good or not so good (Fine, 1988).

Pleasure and desire are important sexuality topics that are seemingly absent in high school sexuality curricula. Within the abstinence-only framework, the discussion of alternative options for the expression of sexual pleasure and satisfaction via auto-eroticism and masturbation

is also limited. Some comprehensive sexuality education programs discuss masturbation as a safe and healthy alternative to partnered sex; however, most do not (SEICUS, 2011). Even political leader, Dr. Jocelyn Elders, Surgeon General of the United States under the Clinton Administration, found it impossible to discuss safe and universal sexual practices of self-pleasure for high school students. Her controversial opinion to promote masturbation as a safe form of sexual expression ultimately led to her resignation after only a year of serving in the position (Elders, 1996). Elders believes that masturbation is a part of human sexuality and is something that high school students should be educated on as a means to healthfully express one's sexuality while still preventing the transmission of STIs and HIV, preventing unintended pregnancy, and promoting students' overall sexual health (Elders, 1996). Masturbation remains widely contested in regard to sexuality education, and is often discouraged among abstinence-only sexual education programs and rarely discussed among comprehensive based sexuality education programs (SIECUS, 2011).

### **Importance of Pleasure**

Today's sex education is structured around the negative consequences of sexual activity and diminishing risks of sexual activity, overlooking the importance of sexual pleasure and satisfaction. Sexual pleasure consists of positive feelings of pleasure and satisfaction, resulting from sexual arousal, genital stimulation, (e.g., genital to genital, hands, mouth, sex-toys) and orgasms (Abramson & Pinkerton, 1995). There is an absence of positive public discourse in the realm of sexual pleasure, resulting in most Americans not being aware of the psychological and psychosocial health benefits of sexual expression (Davey Smith et al., 1997; Reiss, 1990). The World Association for Sexual Health (WAS) declares the importance of "sexual pleasure, including autoeroticism, as a source of physical, psychological, intellectual and spiritual well-

being” (WAS, 1994, p.1). The World Health Organization (WHO) has labeled sexual pleasure as part of the Nation’s Sexual Bill of Rights, stating that sexual rights are universal human rights based on the essential components of freedom, dignity, and equality of all human beings. Health is a fundamental human right, and so sexual health should be a human right (WHO, 2002). The WHO recognizes the importance of sexual pleasure by placing it on the Sexual Bill of Rights, yet why sexual pleasure is important and why it should be taught throughout sex education is still completely absent throughout literature.

### **Physical Health Benefits**

There has been copious research on the negative physical aspects of sexual activity, such as the education of STI’s and teenage pregnancy, and not enough research concerned with pleasure and how masturbation and partnered sexual activity may enhance our overall quality of life. Trudel et al. (2000), explains that sexual activity and pleasure that comes from masturbation can enhance happiness, immunity, longevity, pain management, and sexual and reproductive health. There have even been studies that look at sexual activity and the possibility of reducing risks in heart disease as well as cancer (Ebrahim et al., 2002; Petridou et al., 2000). Specifically, a study done on breast cancer revealed that sexual expression led to a decrease in risk of breast cancer due to increased levels of oxytocin ( known as the “cuddle chemical”) and dehydroepiandrosterone (DHEA), both linked to arousal and orgasms (Murrell, 1995). Even increased frequency of ejaculation in men can cause a decreased risk of acquiring prostate cancer (Leitzman et al., 2004). Men who participated in more frequent ejaculations (four or more a week) were one-third less likely to develop prostate cancer (Giles et al., 2003). Research done on the college population has shown that students who engage in sexual activity resulting in orgasms help increase a healthy immune system in both women and men (Charnetski &

Brennan, 2001). Their study of 112 college students done by Charnetski & Brennan (2001) examined students immunoglobulin level (helps with fighting infections within the immune system) and found that those who were engaging in sexual intercourse (once or twice a week) had 30% higher immunoglobulin levels than those who participated in abstinence. Even our general physical well-being can be affected positively by orgasms and pleasure from sexual activities. For example, having orgasms results in better sleep and sleep patterns, with one study reporting that 32% of 1,866 women who reported masturbating participated in this activity to help sleep (Ellison, 2000). Fitness and exercise are another aspect of sexual activity that helps with an individual's quality of life and overall well-being, resulting in the burning of calories and positive dietary habits compared to those who are less sexually active (Ellison, 2000). Overall, it is important for individuals to know that orgasms and sexual pleasure result in general physical well-being; yet the focus of negative consequences in correlation with sexuality activity and pleasure have blocked new venues and discourse on the positive health aspects of sexual expression.

### **Sexual and Reproductive Health Benefits**

Sexual and reproductive health is influenced by an individual's engagement in sexual activities and experiences. Participating in sexual activities can have positive effects on your sexual health in many ways. Many studies have been done on the relationship between menstrual cycles and consistent sexual activity in females. Women, who engage in penile-vaginal intercourse at least once (not during menstration), were more likely to have a regular period than those who did not engage in penile-vaginal intercourse (Cutler, 1991). Another recent study done in the U.S., of 1,900 women, found that 9% of women who engaged in masturbation in the past 3 months had relief of menstrual cramps (Ellison, 2000). There are many positive health benefits

for men as well; for example, frequent ejaculation can help in preventing chronic non-bacterial prostatitis (Yavascaoglu et al., 1999). Many men and women experience some types of sexual dysfunction or complications during their lifetime. Postmenopausal women might experience vaginal atrophy (inflammation of the vagina) that decreases their vaginal lubrication; but consistent solo or partnered sexual activity after menopause can help with an increase of vaginal lubrication (Laan & van Lunsen, 1997). For men, maintaining regular erections and frequent sexual activity helps in keeping healthy penile tissue, through increased blood flow (Montorsi et al., 1997). Sexual activity can also help in relieving pain, by orgasms and sexual arousal; increasing endorphin levels raising pain tolerance; and easing pain associated with arthritis, menstrual cramps, and migraines (Ellison, 2000). Both men and women, who are sexually active, will have a prolonged sex life and even improve their overall life satisfaction (NIPO, 2003).

### **Psychological, Emotional, and Social Health Benefits**

Overall quality of life is closely correlated with sexual experiences and satisfaction (Planned Parenthood). Analysis of midlife adults and their sexual activities showed that their sexual pleasure and satisfaction was a solid predictor of higher quality of life (Weeks, 2002). Laumann et al., (1994), examined results from a survey of 3,500 women and men, and reported that both sexes agreed that their personal happiness is associated with orgasms and their frequency of sexual activity. Both men and women find sexual health significantly crucial with 84% of married women and 91% of married men reporting that sexual satisfaction is important in both individual lives as well as relationships (Marwick, 1999). Sexual experiences and orgasms are linked to relieving stress, eliminating tension and stimulating mood, feelings of warmth, and relaxation (Weeks, 2002). Even younger married women have reported that sexual pleasure and positive sexual experiences have resulted in a boost of self-confidence and self-

esteem (Hurlbert & Whittaker, 1991). Research done by Hurlbert and Whittaker (1991), found that there is a correlation between masturbation and self-esteem; women who engaged in masturbation scored higher on the self-esteem index than those who did not participate in masturbation. Sexual activity and pleasure is also an important aspect of social health; sexual desire is the basic element in bonding and sexual relationships (Davies et al., 1999). Pleasure and satisfaction in couples are increased when they fulfill each other's sexual desires, needs, and wants (Davies et al., 1999).

### **Importance of Sex Toys**

Sex toys are a healthy option for many individuals, because they can result in a fulfilled sex life and offer many health benefits (Berman, 2010, p.1). Research from the Kinsey Institute found that women who use vibrators are more likely to visit their gynecologist, take care of their health, and have an overall increase in desire, lubrication, and orgasms (Berman, 2010, p.1). Women who use vibrators experience more positive sexual functioning in areas of desire, satisfaction, pleasure, arousal, lubrication, orgasms. Using a vibrator can assist in orgasms, arousal, and ultimately aid more comfortable, pleasurable sexual experience (Herbenick et al., 2009). The use of sex toys can enhance one's relationship by opening positive dialogue on a physical and emotional level, sex toys can help with guidance of ones needs, wants, and desires, they also can help break down barriers and taboos about the use of sex toys (Berman, 2010).

### **College Students and Sexuality Courses**

Sexuality education courses and sexual health programs have been prevalent as part of collegiate education for many decades (Cornblatt, 2009); yet, there is limited research available assessing the influence of such initiatives on the attitudes and behaviors of college students taking them (Zuckerman, Tushup, & Finner, 1976). Most colleges and universities offer human



sexuality classes as electives within a variety of departments such as psychology, sociology, and health (Pettijohn II & Dunlap, 2010), and do not require sexuality education courses to graduate. Like high school sexuality education, college sexuality courses primarily concentrate on risk-focused aspects of sexuality such as preventing unintended pregnancy, STIs, and HIV (Hightow et al., 2005). Other topics discussed within such courses, include the history of sex research, sex and the media, sexual anatomy, gender roles, and love and relationships (Pettijohn II & Dunlap, 2010). As such, most contemporary collegiate sexuality education initiatives overlook the current cultural and generational differences in sexuality concerning sexual function, domains of desire, arousal, lubrication, orgasms, and the use of sexual enhancement products (Peterson & Hyde, 2010).

Colleges and universities also vary in regard to the types of sexual health promotion programs, activities and initiatives implemented on campuses. There is a lack of data examining the extent to which colleges and universities offer these programs to their students and the effectiveness of such programs in terms of decreasing unintended pregnancy and STI transmission (Brener & Gowda, 2010).

College health centers, ideally, use a variety of integrated services such as primary care services, reproductive and sexual health care, STI/HIV testing and treatment, mental health care, education, and counseling (Alford, 2009). In a recent study, college students reported receiving information only on STIs, pregnancy, and HIV/AIDS through pamphlets and brochures from their local college health center or residence halls (Brener & Gowda, 2010). According to Brener and Gowda (2010) “most students reported receiving prevention information on at least one of the following topics: tobacco use, alcohol, drug use, suicide, pregnancy, STDs, and HIV/AIDS” (p. 225).

Like high school sexuality education, college human sexuality courses and sexual health programs and initiatives rarely provide information and education on sexual pleasure and satisfaction. As such, there is a need to identify new and innovative venues that may be appropriate for the delivery of sexual health education, specifically education focused on positive aspects of sexuality such as sexual pleasure and enhancement (Reece, Herbenick, & Sherwood-Puzzello, 2004; Jozkowski, Schick, Herbenick, & Reece, 2012).

### **Sexual Pleasure and Enhancement on College Campuses**

In the last decade, college students have begun to call attention to the need for sex-positive sexuality information on campuses by instituting events known generally as “Sex Week.” Not surprisingly, such events have been met with much controversy. Most critics argue that Sex Weeks glamorize and promote casual sex on college campuses. However, it is important to note that often students, not administrators, are the driving force behind organizing these events, thus suggesting that students are interested in increasing conversations and information about sexual satisfaction, pleasure, and desire (Brooks, 2010; Quenqua, 2012).

Sex Week has been held at noteworthy institutions across the country, including, but not limited to: Northwestern University, Indiana University, Yale University, Harvard University, Brown University, and the University of Kentucky (Brooks, 2012). The educational events typically include financial support from the sex-industry (e.g. sexual enhancement companies such as Babeland Inc. and Pure Romance Inc.) and contributions from nonprofit groups such as the Kinsey Institute for Research in Sex, Gender, and Reproduction and Planned Parenthood. As a part of Sex Week programming, entertainment is often provided along with the promotion of pleasure and sexual enhancement, and discussion regarding a wide variety of topics, often left un- or under-addressed by other sexual health initiatives traditionally implemented on college

campuses (Brooks, 2010; Quenqua, 2012). Unlike typical college health promotion programs, Sex Week events extend beyond instruction on safe sex, rape prevention, and STI prevention by providing advice and education on how to increase pleasure and sexual fulfillment (Quenqua, 2012).

### **Rationale for Current Study**

College campuses are characterized by sexual permissiveness and a hook-up culture in which individuals engage in sexual activity with multiple partners (Chng & Moore, 1994; Bogle, 2008). College, as a transition into adulthood, is looked at as a time to explore and experiment with sexual behaviors (Grello, Welsh, & Harper, 2006); yet, current curriculum lacks education on sexual health benefits and the current generational trends that are arising in the college culture, such as, individuals seeking out behaviors that enhance pleasure and satisfaction. The American College Health Association's National College Health Assessment reported that 44.9% of college students engaged in oral sex, 49.7% in vaginal-penile sex, and 5% in anal sex during the past 30 days (ACHA, 2011). Jozkowski and Satinsky (under review) found that 86.9% of college students had ever performed oral sex on a partner, 88.5% had ever received oral sex from a partner, and 88.4% had ever engaged in vaginal-penile sex. Additionally, 19.1% of college students had ever been the receptive partner during anal sex and 9.5% had ever been the insertive partner during anal sex. Lastly, almost one-third of college students (28.4%) reported ever using a vibrator or dildo (Jozkowski & Satinsky, under review). Given the rates with which college students are engaging in sexual activity, it is likely that most college students are engaging in sexual activity for reasons such as sexual pleasure, satisfaction, intimacy, enjoyment, or other reasons associated with sexual gratification. However, little research has examined

college students' motivation for engaging in sexual activity except to identify sexual exploration as another theme of experimentation experienced by college students.

Previous research and anecdotal experiences suggests that students want to learn and explore much broader and diverse sexuality topics instead of focusing primarily on treatment, prevention, and education on STI and HIV/AIDS. There is a lack of opportunities for young adults to receive education on the physical, sexual, reproductive, psychological, emotional, and social health benefits in regard to sexual behaviors and activities outside of risk-focused lens (Jozkowski, Schick, Herbenick, & Reece, 2012).

### **Research Questions**

Positive aspects of sexuality such as desire, arousal, lubrication, orgasms, and the use of sex toys and their health benefits remain under-studied among college students. As such, the current study aims to answer the following research questions:

1. What are student's motivations for engaging in sexual activity?
2. Do college students use sexual enhancement products?
  - a. If so, what products do students use?
  - b. If so, how often do students use sexual enhancement products?
3. What are college student's beliefs about sexual enhancement products?
4. Why do college students use sexual enhancement products or chose not to use such products?

The information gained from the current study will help inform college sexuality education initiatives regarding positive aspects of sexuality, such as pleasure, satisfaction, enhancement, and the health benefits incorporated with engaging in product use vs. non-product use during solo and partnered sexual activities.

## **II. LITERATURE REVIEW**

### **Sexual Enhancement Products**

Adult retail stores, which sell a range of sexual enhancement and novelty products, have been in existence for several decades, yet the research addressing sexual enhancement and sexual enhancement products is limited. In addition to novelty products and products geared at sexual enhancement, products sold at adult retail stores also include many that are traditionally related to public health, and the prevention of STIs (e.g., condoms, latex dams, and lubricants), as well as products associated with education (e.g., informational books, DVDs, and magazines) and the relief of sexual problems or dysfunction (e.g., vibrators, dildos, and cock rings) (Reece, Herbenick, & Sherwood-Puzzello, 2004). Herbenick and Reece (2006) suggested that adult retail stores could serve as venues for the delivery of sexuality education and as an informal sexuality education resource for individuals who may be looking for sexuality information.

Herbenick and Reece (2006) found that many Americans turn to the adult retail industry for alternative ways to explore their sexual interests. For example, in the United States approximately 23% of men and 11% of women purchased an X-rated movie, 16% of men and 4% of women purchased sexually explicated magazines, 2% of both men and women purchased a vibrator or dildo, and 1% of men and 2% of women purchased other sex toys (Michael, Gagnon, Laumann, & Kolata, 1994).

Sexual enhancement products are often conceptualized as a form of entertainment or pleasure, however they also “raise awareness about sexual diversity and expression” (Fisher & Barak, 2000, p. 575), and can be used therapeutically. During the purchase of enhancement products at adult retail stores, “teachable moments” may arise in which discussions about sexual health or opportunities to relay sexual health education may occur (Herbenick & Reece, 2006).

**Vibrators.** The electric vibrator is more than 100 years old (Maines, 1999), but has transformed over time in terms of size, power, and design (Herbenick et al., 2009; Venning & Cavanah, 2003). Vibrators are typically associated with sexual enhancement and sexual arousal, and help some women and men achieve orgasm. Vibrators have been designed for specific uses including: G-spot stimulation, clitoral stimulation, to secure the base of a condom, couples play, anal play, and stimulation during cunnilingus (Herbenick et al., 2009; Venning & Cavanah, 2003). Vibrators are primarily advertised to women, and are promoted through a variety of venues such as: women's magazines, online sex-shops, boutiques, in-home sex toy parties, drugstores, and adult retail stores. Clinically, vibrators can be used to treat sexual dysfunctions (e.g., anorgasmia, female sexual arousal disorder, persistent sexual arousal syndrome, and sexual problems due to cancer treatments) (Herbenick et al., 2009). Vibrators are also commonly associated with many health-promoting behaviors such as, easing ability to orgasm, enhancing sexual relationships, increasing sexual independence, and improving sexual functioning (Herbenick et al., 2009; Herbenick et al., 2010b).

The prevalence of vibrator use has dramatically increased over the past 50 years, with an unpublished report in 2006 finding that 33.1 % of young adult women ages 18-39 have used a sexual enhancement product at least once during a 4-week period (Herbenick et al., 2009). Recently, a nationally representative survey conducted in the United States found that vibrator use is common among both women and men, with more than half of women and men ages 18-60 incorporating a vibrator into their solo or partnered sexual activities (Herbrnick et al., 2009; Reece et al., 2009). Data from this national study found that 37.3% of women were using a vibrator during intercourse with a partner and 40.9% were using a vibrator with a partner during foreplay (Herbrnick et al., 2009).

**Dildos and cock rings.** Dildos are often compared to vibrators and labeled as the same sexual aid; however, they are distinct products. There is a lack of empirical research on the prevalence and characteristics of dildos. Dildos are often solid, stationary objects that are used as an insertion toy, without direct clitoral stimulation (Tracanna, 2005). Products known as double-ended dildos are used for simultaneous use among multiple individuals. In addition to pleasure, dildos can be used for the enhancement of muscles, glands, and other organs surrounding the vagina or anus (Tracanna, 2005). However, vaginal dilators (i.e., silicon or rubber phallic shaped devices used for insertion to help treat women with dyspareunia or other reproductive health problems associated with the contraction of the vagina) are typically designed and used for clinical treatment or as a medical aide, whereas dildos are typically conceptualized as a novelty product and are used as a form of enhancement (Herbrnick et al., 2009 ;Tracanna, 2005).

Cock rings have also been overlooked in regard to the peer reviewed literature. Cock rings come in many forms, such as, metal rings, elastic stretch vibrators, and leather straps that are worn tightly around the penis (McMorrow & Vrablic, 2009). Cock rings are used to increase the length of time a man can maintain an erection as well as the hardness of his erection. Cock rings are also associated with ease of experiencing and maintaining an erection, increased enjoyment during the erection, delaying orgasms, and intensified orgasmic sensations during intercourse (McMorrow & Vrablic, 2009). Cock rings may also be worn as jewelry to increase aesthetic appeal of men's genitals. Lastly, cock rings may be worn as a sex toy and can vibrate; increasing sexual enjoyment for both partners (McMorrow & Vrablic, 2009).

**Anal beads.** Anal beads consist of different shaped and sized spheres that are attached together in a series and inserted into the anus or rectum (Reed, 2010). Anal beads are used for enjoyment and pleasure, typically enhanced orgasms occur when the spheres pass through the

sphincter of the anus or are removed from the anus at various speeds (Reed, 2010). There are many nerve endings associated with the sphincter of the anus, resulting in sensations of arousal for both males and females upon insertion and removal of the beads. Often individuals use larger sized spheres to create feelings of pressure inside the anus (Reed, 2010).

**Lubricants.** The use of lubricants has increased within the past decade through increased visibility in adult retail stores, drugstores, and on television (Herbenick et al., 2010a). In the United States, lubricants are marketed with sexual enhancement as the explicit purpose, often to increase pleasure for both women and men participating in sexual activities (Severy & Newcomer, 2005). Lubricants also aid in the reduction of pain and tearing due to dryness experienced during vaginal intercourse (Sutton et al., 2011) or during anal intercourse. Although lubricants are commonly used, only a few studies have explicitly examined lubricant use or lubricants as sexual enhancers. For example, Herbenick et al. (2010a) found that utilizing a lubricant was associated with increased pleasure and satisfaction across a range of solo and partnered sexual activities. In fact, individuals who used lubricants in their sexual activities had higher ratings of pleasure and satisfaction compared to individuals who did not use lubricant (Herbenick et al., 2010a). Additionally, Jozkowski et al., (2013) found that, regardless of age, most women felt positively about using a lubricant and believed that lubrication increased the pleasure and comfort of their sexual interactions.

Utilizing data from a United States national survey on lubricants and sexual pleasure and satisfaction, Herbenick et al. (2010a) found that 62% of individuals 18-60 used lubricants during sexual intercourse (vaginal-penile sex). Of the 2,453 women who completed the survey, 63.67% reported that they applied lubricant to their fingers for solo masturbation, 42.3% of individuals applied lubricant to their partner for anal sex (penile-anal), 26.8% of individuals applied



lubricant on a sex toy used for penile-anal sex, and 8.8% reported lubricant use on sex toys for vaginal-penile sex (Herbenick et al., 2010a). Other studies have investigated common reasons for using lubricants during sex. For example Herbenick et al. (2010a) found that 70.9% of women commonly use lubricants to make sex more pleasurable, 53.9% used lubricant for extra “wetness” during sexual intercourse, and 37.0% of women reported using lubricants as a fun technique during sexual activity (Herbenick et al., 2010a).

Research seems to indicate that in addition to the increased frequency of lubricant use in the United States, there is growing general interest in lubricants and their usage (Herbenick et al., 2010a). Researchers found that when engaging in vaginal-penile sex, penile-anal sex, and solo sexual activities, most participants were interested in using lubricant to make sexual experiences more enjoyable (penile: 72.4%, anal sex: 72.5%, solo sex: 62.3%; Herbenick, et al., 2010a). Such findings suggest that lubrication is associated with pleasure and the enhancement of sexual satisfaction during both solo and partnered sexual activities (Sutton, 2011; Herbenick et al., 2010a).

### **Sexual Pleasure and Satisfaction**

Sexual pleasure consists of positive feelings of pleasure and satisfaction. Sexual pleasure results from sexual arousal, genital stimulation, (e.g., genital to genital, hands, mouth, sex-toys) and orgasms (Abramson & Pinkerton, 1995). The excitement of sexual activity or the anticipation of sexual activity can also be pleasurable for both women and men. Sexual arousal is often associated with increased vaginal lubrication and genital swelling in women, increased blood flow to the penis in men resulting in an erect penis, and nipples becoming erect in both women and men (Rellini et al., 2005). Additionally, when sufficient genital stimulation

transpires, an orgasm can be achieved (Rellini et al., 2005) which is often considered highly pleasurable.

Research suggests that individuals are engaging in a variety of activities that result in pleasurable sexual outcomes (Rye & Meaney, 2007). For example, individuals engage in genital touching or manual stimulation of the genitals (e.g., stimulation of the genitals using the hands or sex-toys), oral sex (e.g., stimulation of the genitals via licking or kissing the genitals), genital to genital contact, vaginal-penile intercourse, and anal intercourse (McKay, 2004). The college population commonly engages in the full range of these behaviors. For instance, 80-85% of both female and male students reported engaging in genital touching of their partner (Pinkerton et al., 2003). Additionally, two-thirds of United States college students reported that they have masturbated at least once (Pinkerton et al., 2002). Pinkerton (2003) found that approximately 80% of college students have participated in vaginal-penile intercourse. Although all of these behaviors were conceptualized as highly pleasurable, Pinkerton (2003) noted that vaginal-penile sex was ranked the most pleasurable sexual activity.

### **Sexual Behaviors among College Students**

College campuses are known as sexual arenas, characterized by sexual permissiveness and what is known as the “hook-up” culture (Chng & Moore, 1994; Bogle, 2008). The “hook-up” culture consists of college students engaging in casual sexual activities with multiple partners in uncommitted relationships or the perception that college students are engaging in casual sexual encounters with multiple partners (Chng & Moore, 1994; Bogle, 2008). Most college students look to sexual activity as a way to explore and experiment with their new found freedom. Students today look to their peers when making decisions in their own sexual lives and often conform to behaviors that they perceive as normative (Bogle, 2008).

College is a transition into adulthood where students are bombarded with ideas of sexual exploration and experimentation (Grello et al., 2006). Most women and men take part in positive sexual fantasies (i.e., daydreaming, masturbation, partnered sex, etc.). For example, when asked “how often do you think about sex,” 97% of men and 86% of women agreed with a few times a month or more (Laumann et al., 1994). New questions and concerns about sexuality and pleasure are constantly emerging, making it important for college students to develop a healthy understanding of sexuality (Ehrhardt, 1996).

The American College Health Association’s National College Health Assessment reported that 44.9% of college students engaged in oral sex, 49.7% in vaginal-penile sex, and 5% in anal sex during the past 30 days (ACHA, 2011). Such rates of sexual activity demonstrate that many college students are sexually active. However, little research has examined college students’ motivation for engaging in sexual activity except to identify sexual exploration, which is somewhat vague. Given that many college students have engaged in sexual behaviors, including vaginal-penile intercourse, one may presume that many college students are engaging in sexual activity for reasons such as sexual pleasure, satisfaction, intimacy, enjoyment, or other reasons associated with sexual gratification (Jozkowski & Satinsky, under review). Most research conducted with college students and sexuality primarily focuses on protective behaviors (e.g., condom and contraceptive method use) and diminishing risky sexual behavior. Experiences of pleasure, satisfaction, and orgasms are largely absent from research and education, unless discussed in the context of negative consequences that can occur as a result of engaging in sexual activity (e.g., pregnancy, STIs) (Fine, 1988).

Students want to explore and express themselves as sexual beings, particularly in regard to the pursuit of sexual pleasure (Rye & Meaney, 2007). Current college students engage in a

wider variety of sexual behaviors and activities compared to previous generations (Garcia & Reiver, 2008). There is limited research addressing college students' motives for engaging in sexual activity. Garcia and Reiver (2008) found that 90% of students reported that pleasure was their motivation for participating in sexual activities, and 54% of students said emotional reasons contributed to their motivation for engaging in sexual activity.

### **Summary**

It is important for college students to develop a healthy understanding of sexual pleasure. The World Association for Sexual Health (WAS) declares the importance of "sexual pleasure, including autoerotism, as a source of physical, psychological, intellectual, and spiritual well-being" and understand that pursuing a satisfying and pleasurable sexual life is part of our sexual bill of rights (WAS, 1994; WHO, 2002).

Most research is structured around the negative consequences of sexual activity and diminishing risks of sexual activity; the positive dimensions of sexual experiences are largely left un- or under-addressed (Ehrhardt, 1996). Previous research and anecdotal experiences demonstrate that students want to learn and explore much broader and diverse sexuality topics, yet there is a lack of opportunities for young adults to receive sexuality education, in general, and sexuality education outside of risk-focused lens (Jozkowski, Schick, Herbenick, & Reece, 2012; Schick, Herbenick, Jozkowski, Jawed-Wessel, & Reece, 2012). Sexual enhancement, pleasure, and satisfaction have been largely overlooked by educators and public health professionals, as important aspects of sexuality education

### **III. METHODOLOGY**

#### **Research Methodology and Analytical Procedures**

Although there are numerous education programs for college students on the risk-focused aspects of sexuality, such as unintended pregnancy, STI's, and HIV, colleges and universities rarely provide information and education on sexual pleasure and satisfaction. The current study is exploratory, to some extent, due to the lack of research assessing positive aspects of sexuality such as sexual pleasure and enhancement. In order to address this gap, the current study consists of a cross-sectional survey design utilizing both open and closed-ended questions assessing positive aspects of sexuality, such as sexual pleasure and use of sexual enhancement products. In addition to these elements, the questionnaire examines motivation for engaging in sexual activities, as well as students' overall attitudes and beliefs about sexual enhancement products. The questionnaire is included in Appendix 2.

#### **Participants and Recruitment**

The present study was concerned with examining implications for college sexuality education by understanding what motivates college students to engage in sexual activity and use, or refrain from using, sexual enhancement products. Participants were recruited from a large Southern university through in-person classes such as, elective health courses, family and consumer science, sports and recreation management, fitness activity courses, and nursing health-related topic courses. To be eligible for the study, students had to be enrolled in courses at the large Southern university and older than 18 years of age.

#### **Data Collection**

Data collection took place between December 2012 and April 2013; 956 college students completed the questionnaire. The cross-sectional survey was administered to participants through

paper- and- pencil surveys distributed in classrooms by the principal investigator. The principal investigator referred to recruitment and informative consent information to ensure participants that their involvement was voluntary and anonymous. Individuals who declined to participate in the study were informed of their rights, specifically, that their grade or relationship with the professor and university would not be negatively affected for opting out of the study. Surveys were distributed to a diverse sample of students, in regard to course majors and years in school, providing some variation in participant demographics. The current study was approved by the Institutional Review Board at the university.

**Procedure.** Surveys were administered face-to-face in campus classrooms by the principal investigator, ensuring anonymous responses, and convenient student participation. The closed-ended questions examined students current and past sexual behaviors, sexual satisfaction, sexual comfort, use of sexual enhancement products, motivation, and beliefs and attitudes associated with sexual enhancement products. These closed-ended questions aimed to provide insight into what college students' are thinking in regarding to a variety of sexual behaviors including product use, as well as what behaviors they are engaging in. The open-ended questions allowed participants to respond with their own opinions, attitudes, and beliefs regarding activities they are engaging in, products they may or may not be using, and their reasons for use or nonuse. The survey consisted of 46 questions; 12 of which were open-ended. The questionnaire took participants a range of 15 to 20 minutes to complete.

**Consent.** Participants were informed of the study's goals and procedures before the survey was administered. Each individual was given a consent form regarding information on the principal and co-researcher, the purpose of the study, confidentiality, and the participant's overall rights to opt out of the study. By completing the survey, students acknowledged implied

consent and were assured their answers would be anonymous. At no point were students' names placed on the survey to avoid the possibility that they could be identified. All information accumulated in this study is solely used to assist in informing students and educators on new opportunities for modern sexual education. Students who opted out of the survey were in no way penalized for their lack of involvement with the study.

### **Instrument**

The questionnaire included both closed-ended and open-ended questions. Closed-ended questions addressed: demographic information, sexual satisfaction, sexual comfort, comfort regarding sexual enhancement products in both solo and partnered sexual activity, pleasure and lubricant in solo and partnered sexual activity, sexual behaviors, use of sexual enhancement products in solo and partnered sexual activity, purchasing of sexual enhancement products, frequency of use with sexual enhancement products, and initiation of products. Most of the items used in the closed-ended questionnaire followed a likert-type scale developed through survey monkey. The questions related to sexual behaviors, sexual satisfaction, and pleasure and lubricants were derived from previous research (Jozkowski, Peterson et al., 2013; Jozkowski, Herbenick et al., 2013).

Open-ended questions addressed: motivation to engage in masturbation, motivation to engage in mutual masturbation, motivation to engage in performative and receptive oral sex, motivation to engage in penile-vaginal intercourse, motivation to engage in anal-penile intercourse, and motivation to engage in product use, such as vibrators, dildos, cock rings, anal beads, lubricant, and other products. These questions were to help prompt elaborated responses on why students participate or do not participate in certain sexual activities and use of products.

Closed-ended questions were influenced by previous research (Jozkowski et al., 2012) but were specifically written by the investigators for the purposes of the current study.

### **Data Analysis**

All data from the open and closed-ended questionnaire were entered into and analyzed using the Statistical Package for Social Sciences (SPSS) version 20. The closed-ended data was analyzed using frequency counts (descriptive statistics), chi square cross tabulations, independent samples T-test, correlations, Cronbach's alpha, and logistic regression (both bivariate and multivariate analysis). The open-ended data was analyzed using inductive coding procedures (Hesse-Biber, 2010).

The descriptive statistics provided a summary of the participants in order to gain insight into the target population. Basic frequency counts were used to examine demographic characteristics, sexual satisfaction, sexual comfort, participation in sexual behaviors, purchasing of products, and use of sexual enhancement products during both solo and partnered sexual activities, and frequency of use.

In order to compare participants who used products to those who have not used products, data was recoded such that two groups were created—those who have ever used a product during their lifetime and those who have never used a product during their lifetime, excluding lubricants. Due to the possible over influence of lubrication during male solo product use, lubrication was discarded as a product. Lubricant use was excluded from the recode assessing product use in order to prevent biasing the findings. Questions regarding solo product use and partnered product use were recoded into different variables to get one initial percentage of product users versus non-users. A Chi Square test was used on five of the demographic categorical variables to analyze whether or not sexual enhancement product users and non-



product users, for both solo and partnered activities, were statistically independent or associated with the certain demographics. The categorical variables that were examined consisted of gender, age, race/ethnicity, sexual relationship status, and class standing.

Independent sample T-tests were used to compare means of product users and non-product users and their sexual satisfaction, sexual comfort in communicating sexual needs, comfort regarding sexual enhancement products, and thoughts about lubricant and pleasure. Independent sample T-tests were conducted with products including lubricant and without lubricant to distinguish if there was a difference in users and non-users. Initially, lubricant was included as a sexual enhancement product when identifying product users versus non-product users; however, after running a Chi Square test and basic frequencies, it was found that lubricant use was biasing results. Results including lubricants included showed that males were significantly more likely to use a product during solo sexual activity than females. Results excluding lubricants showed that females were significantly more likely to use products during solo sexual activity than males. It was found that males' use of lubricant use during solo masturbation was over influencing results of "product use".

Correlations were created to identify if there was a statistical relationship between comfort and sexual enhancement products for both partnered and solo sexual activity, as well as pleasure and lubricant during both solo and partnered sexual activities.

An analysis of Cronbach's alpha was used to examine the internal consistency of questions regarding comfort and the use of sexual enhancement products during both solo and partnered sexual activity, and pleasure and lubricant use.

Logistic regression models were used to predict a dichotomous outcome, specifically looking at if gender, race, age, and comfort in communicating sexual needs would predict if a

participant were to use (or not use) products during both solo and partnered sexual activities. Both bivariate logistic regression and multivariate regression are explored in order to look at multiple predictors. Four different models were run, two bivariate logistic regression models for both sexual enhancement product use during solo sexual activity and partnered sexual activity. Bivariate logistic regression was used to predict the categorical variable of sexual comfort from other predictor variables, such as age, race, and gender. The hypothesis for running regression was that sexual comfort would predict demographic characteristics of the participants.

Two multivariate regression models were run, for both sexual enhancement product use during solo sexual activity and partnered sexual activity. The multivariate analysis was run in order to investigate different causes to a single outcome, simultaneously. This was done by using multiple independent variables such as age, gender, and race and the dependent variable of sexual comfort.

### **Dissemination of Findings**

The various findings from this study will be submitted as a valid and reliable report to academic peer reviewed journals in the area of human sexuality and sexual health. Specifically, findings from this study can better educate individuals on college campuses from a more modern and positive lens, closing the gap on the lack of research in the realm of pleasure/desire and sexual expression. Presenting findings at nationally known conferences such as the Society for the Scientific Study of Sexuality Annual National Meeting will help advocate for education on the current gap of positive aspects of sexuality to help better inform college students.

## **IV. RESULTS**

### **Descriptive Statistics**

Of the 956 students that participated in the current study, 694 (73%) participants identified as female and 253 (27%) identified as male. Nine of the participants did not fully complete the survey; therefore they were dropped from the study resulting in a final sample of 947 participants. All descriptive statistics are located in Appendix 1.

The majority of the participants were white (82%); Blacks/African Americans accounted for 9% of the sample, Hispanics and Latinos made up 4% of the sample, American Indian or Alaska Natives comprised 3% of the sample, and Asians and multiracial individuals consisted of 2%. The majority of the participants were between the ages 18-20 (60%), while ages 21-24 made up 33% of the sample (n = 314), and participants 25 and older accounted for 7% of the total sample. Sophomores and juniors accounted for the majority of participants (n = 581; 61%), seniors comprised of 24%, and graduate students made up 0.4% of the sample. In regard to relationship status; 41% of participants identified their sexual relationship status as either in an exclusive monogamous relationship “only engaging in sexual activity with one other person”; those who are not engaging in any sexual behavior at this point in my life accounted for 37% of the sample; participants engaging in casual sexual encounters (i.e. hooking up) consisted of 15% of the sample; and those who were in a non-exclusive/non-monogamous relationship accounted for 6% of the sample. Table 1 provides frequencies for the demographic characteristics (i.e., gender, age, race/ethnicity, sexual relationship status, and class standing).

### **Frequencies**

Basic frequencies were run on all closed-ended questions in order to document what sexual behaviors and sexual enhancement product use behaviors college students were participating in.

**Sexual satisfaction.** As can be seen in Table 2, 78% of participants are satisfied or very satisfied with their level of interest in sex. In regard to masturbation, 36% of the sample indicated that they have orgasms easily when masturbating, and 49% of participants indicated that they do not masturbate. In regard to sexual activity, 60% of participants reported that they have orgasms easily or have some difficulty with orgasms. During partnered sexual activity, 33% of participants identified that they were satisfied or very satisfied with their ability to have orgasms, yet 18% of participants reported being dissatisfied or very dissatisfied with their ability to have orgasms during their partnered sexual activity.

**Sexual comfort.** Most participants reported being satisfied to very satisfied when it came to communicating sexual needs and comfort levels. For example, according to Table 3, 61% of participants felt very comfortable to comfortable in communicating their sexual needs to their partner, whereas 64% of participants felt very comfortable to comfortable receiving sexual guidance from their partner.

In regard to sexual comfort when engaging in sexual enhancement product use during solo sexual activity, 21.5 % of participants reported that they would be very comfortable to comfortable using vibrators. Results showed that 15.1% of the sample would be very comfortable to comfortable using dildos during their solo sexual activity, 8.7% of the sample indicated they would feel very comfortable to comfortable using cock rings, and only 4% of individuals reported being very comfortable to comfortable in using anal beads during their solo

sexual activities. Lastly, 28% of participants would feel very comfortable to comfortable incorporating lubricants during their solo sexual activity (see Table 4).

Table 5 shows results from participants' sexual comfort levels in using products during their partnered sexual activities. Findings indicate that 24.3% of the participants would be very comfortable to comfortable incorporating a vibrator during their partnered sexual activities.

Table 5 shows that 14.2% of the sample would be very comfortable to comfortable in incorporating a dildo during partnered sexual activities, whereas 16.3% of the sample would be very comfortable to comfortable incorporating a cock ring. A small percentage (8.4%) of individuals reported being very comfortable to comfortable incorporating anal beads, and 45.5% of the sample felt very comfortable to comfortable incorporating lubricant during their partnered sexual activities.

**Sexual behaviors.** According to Table 6, in the past 30 days: 52.2% of participants reported performing or receiving oral sex, 18% participated in vaginal-penile sex, and 4.2% of individuals put their penis in someone else's' anus or someone else put their penis in their anus. Results also show that 21.6% of individuals have kissed/made out with another person, 17.0% masturbated alone, and 43.8% of the sample either touched their partner's genitals or their partner touched their genitals in the past 30 days. Results from Table 6, show 50.1% of participants reported performing or receiving oral sex in the past week, 33.5% participated in vaginal-penile sex, and 3% of individuals put their penis in someone else's' anus or someone else put their penis in their anus in the past week.

**Use of products in solo sexual activity.** Referring to Table 7, 8% of participants reported using a vibrator in their lifetime during solo sexual activities, 6% used a dildo, and 7% reported using a cock ring. Anal bead usage was reported as the lowest with 2% of participants

identifying usage during their lifetime for solo sexual activities. Lastly, 18% of participants have engaged in lubricant use during solo sexual activities.

**Use of products in partnered sexual activity.** According to Table 8, 9% of participants have used a vibrator during partnered sexual activity. Approximately 5% of participants indicated using a dildo during partnered sexual activities, 8% used a cock ring and 3% used anal beads. Lastly, 20% of the sample indicated using lubricants during their partnered sexual activities.

**Purchase of products.** According to Table 9, participants are purchasing sexual enhancement products from “adult retail shops and sex shops”. For example, 7% of the sample indicated that they have purchased a vibrator from a “sex shop,” 5% of the sample indicated they purchased a dildo from a “sex shop,” 3% purchased a cock ring, and .08% of the sample indicated that they have purchased anal beads from a “sex shop.” Lubricants are becoming more accessible, resulting in 14% of the sample purchasing lubricants at both drug stores and grocery stores. According to Table 10, most participants identified that their partners were purchasing sexual enhancement products for them. For example, 14% of participant’s partners purchased vibrators from a sex shop, 11 % purchased a dildo, 11% purchased a cock ring, and 10% purchased anal beads all from an adult retail store or “sex shop”. Although, the majority of lubricants were purchased by partners at both the drug store and grocery store (15%), some individuals also continued to purchase products like lubricant at a “sex shop” (10%).

**Frequency of Use.** Tables 11 and 12 show 12% of female college students, ages 18-45, are engaging in vibrator use during their solo sexual activities, and 6% used vibrators more than 5 times during their partnered sexual activities. Small percentages of male college students identified using vibrators during both solo and partnered sexual activities; for example, 2%

engaged in vibrator use more than 5 times during solo sexual activities, and 7% of males participated in vibrator use more than 5 times during their partnered sexual activities. From these results it is clear that female college students are engaging in vibrator more frequently than male college students.

Tables 11 and 12 indicate that participants are using products “more than 5 times” during their sexual activities. Dildo usage was identified primarily by female college students. Female college students reported using dildos 6% of the time during their solo sexual activities. Male college students reported using dildos 4% of the time during their partnered sexual activities, whereas female college students reported using dildos 3% of the time during their partnered sexual activities. The use of cock rings as more prevalent during partnered sexual activities among both male and female college students. Male college students reported using cock rings 6% of the time, whereas, 3% of female college students reported using a cock during their partnered sexual activities. The use of lubricant was more popular with male college students during solo sexual activities. For example, 29% of male participants have used a lubricant during their solo sexual activities and 27% of male college students have used a lubricant during partnered sexual activity. Female college students reported using lubricants 16% of the time during their solo sexual activities and 18% of the time in their partnered sexual activities.

### **Chi Square**

**Solo product use and gender.** In Table 13, a Chi Square test was run to compare product users versus non-product users during solo sexual activity with participant’s demographic information (i.e. gender, age, race, sexual relationship status, and class standing). Findings showed that gender did significantly influence product use during solo sexual activities

( $X^2=60.859$  (df=3),  $p<.001$ ). Specifically, females (22%) were more likely to use a sexual enhancement product during their solo sexual activity than males (14%).

**Partnered product use and gender.** There were no differences based on gender across product users and non-users during partnered sexual activities ( $X^2= .237$  (df =2)  $p =.888$ ).

**Solo/Partnered Product use and Age.** Tables 15 and 16 show that age was associated with solo product use ( $X^2=78.977$ (df=912)=  $p<.001$ ) and partnered product use ( $X^2=55.02$ (df=902)= $p <.001$ ). Participants over the age of 25 are more likely to use products during their solo and partnered sexual activities than 18-24 years olds.

**Race/ethnicity and solo/partnered product use.** Table 13 and 14 show that there is no difference based on race and ethnicity in regard to sexual enhancement product use during both solo ( $X^2=6.476$ (df=5) $p=.263$ ) and partnered ( $X^2=3.699$ (df=5) $p=.594$ ) and partnered sexual activities.

**Sexual Relationship Status solo/partnered product use.** Tables 13 and 14 show that the majority of the sample (54%) reported being in a non-exclusive/non-monogamous relationship when engaging in product use during solo sexual activities, 33% of participants reported being in non-exclusive relationships engaging in sexual enhancement product use during partnered sexual activities, and 83% indicated that they were engaging in casual sexual encounters.

Results indicate that there is a significant relationship between sexual relationship status and sexual enhancement product users during solo( $X^2=93.640$ (df=4)= $p<.001$ ) and partnered ( $X^2=75.046$ (df=4)= $p<.001$ ) sexual activities.

**Solo/partnered product use and class standing.** A significant association was found with class standing and solo ( $X^2 = 94.860$ (df=5)= $p<.001$ ) and partnered



( $X^2=86.104(df=5)=p<.001$ ) product use. The older the participant in class standing the more likely they are to use a sexual enhancement product during solo or partnered sexual activities; this association is likely a function of age in years and is less likely attributed to class standing. An overwhelming majority (91%) of freshman had never used a product during partnered sexual activities compared to 38% of seniors who had used products during their partnered sexual activities.

### **Independent Sample T-tests**

**Solo product use and sexual satisfaction.** In Table 15, it is important to note that lower numbers indicate higher levels of satisfaction and comfort. Findings demonstrate that there was a significant mean difference between those who use sexual enhancement products and those who do not use products in regard to masturbation and sexual satisfaction.

Results show that individuals who have used a product during solo sexual activity are more sexually satisfied than non-product users in regard to masturbation ( $t(908)=3.28, p=.001$ ). Results suggest that individuals who use products are more sexually satisfied with their solo sexual activities than those who do not use products ( $t(908)=.292, p=.004$ ).

Individuals who used products during solo masturbation were more sexually satisfied with their ability have orgasms than those who did not use products ( $t(908)=.352, p<.001$ ). Findings also indicate that individuals who used products during their solo sexual behaviors and activities are more satisfied with their ability to have orgasms ( $t(908)=.269, p=.007$ ).

**Partnered product use and sexual satisfaction.** Similar findings were reported in regard to partnered sexual activities and sexual satisfaction. For example, there were significant mean differences between product users and non-product users in regard to masturbation. Individuals who used products were more sexually satisfied in regard to masturbation than those

who do not use products during partnered sexual activities ( $t(918)=3.07, p=.002$ ). In regard to overall partnered sexual activity, individuals who used products indicate being more sexually satisfied ( $t(918)=3.07, p=.002$ ). Results also indicate significant mean differences in product users versus non-users for questions about orgasms during masturbation, showing that those who use products were more satisfied with their orgasms during masturbation than those who do not use products ( $t(918)=3.27, p=.001$ ). Lastly, individuals who used products were more sexually satisfied with their ability to have orgasms during partnered sexual activities compared to those who do not use products ( $t(918)=3.03, p=.003$ ).

**Solo product use and sexual comfort.** Results from Table 16 show significant mean differences between product users and non-product users in regard to their comfort levels when receiving sexual guidance from their partner during solo sexual activity., Individuals who used sexual enhancement products are more comfortable in receiving guidance from their partner during solo sexual activity ( $t(681) = -4.02, p < .001$ ).

**Partnered product use and sexual comfort.** In Table 16, significant mean differences were found between product users and non-users. Individuals who used sexual enhancement products are more comfortable in giving sexual guidance to their partner ( $t(678) = -3.04, p = .002$ ) than those who did not use products. Results also showed that individuals who used sexual enhancement products are more comfortable in receiving guidance from their partner ( $t(688) = -3.34, p = .001$ ).

**Comfort and sexual enhancement products during solo/partnered sexual activity.** Participants who identified having used a product during their solo sexual activity reported being more comfortable incorporating a sexual enhancement product during their solo sexual activities than those who have not used a product ( $t(652) = 12.85, p < .001$ ; see Table 16). Table 17 also

shows individuals who have used a product are more likely to be comforting using a product during their partnered sexual activity than those who have not used a product  $t(676)= 17.22$ ,  $p<.001$ .

## **Correlations**

**Correlations and solo product use.** Correlations were run in order to see if there was a relationship between comfort and product use during solo sexual activities. Table 18 shows that there was a positive direct correlation between sexual comfort and the use of sexual enhancement products during solo sexual activities ( $r=.865$ ,  $p<.001$ ). As comfort in use of sexual enhancement products increases, the frequency with which individuals used sexual enhancement products increases as well.

**Correlations and partnered product use.** Similar to the findings regarding comfort and the use of sexual enhancement products during solo sexual activities, there was also a direct correlation found between comfort and partnered use of sexual enhancement products ( $r=.819$ ,  $p<.001$ ). Shown in Table 19, as comfort with the use of sexual enhancement products increases, the frequency with which individuals used products during partnered sexual activities increases.

**Correlations among pleasure and lubricant.** Table 20 shows a strong correlation between lubricant use and pleasure ( $r=.492$ ,  $p<.001$ ). Participants reported that the use of lubricant makes penile-vaginal intercourse more pleasurable and feel better.

## **Cronbach's Alpha**

Due to the many Likert items used to assess broader constructs' like comfort and sexual pleasure, a Cronbach's Alpha was run to see if participants' responses to comfort questions and their use of sexual enhancement products in both solo or partnered sexual activity were similar.

**Comfort and solo product use.** Table 21 shows consistency in the way participants responded to comfort regarding solo sexual enhancement products- Alpha = .886 indicating “good” consistency (George & Mallery, 2003).

**Comfort and partnered products.** Table 22 shows consistency in the way participants responded to comfort regarding partnered sexual enhancement products- Alpha=.891 indicating “good” consistency (George & Mallery, 2003).

**Pleasure and Lubricant.** Table 23 shows consistency in the way participants responded to pleasure and lubricant enhancing sexual functioning- Alpha=.940 indicating “excellent” consistency (George & Mallery, 2003).

### **Bivariate Logistic Regression**

For the current study, a series of bivariate logistic regressions were run in order to predict the categorical dichotomous outcome variables (i.e., use of sexual enhancement products during solo and partnered sexual activities).

**Solo sexual activity and products.** Results from the bivariate logistic regression for the use of sexual enhancement products during solo sexual activity indicated that participants who are  $\geq 22$  years of age were 6.54 times more likely to be comfortable in using sexual enhancement products, during solo sexual activity than ages 18-21.

Gender also influenced use of products with females being 1.80 times more likely to be more comfortable in using sexual enhancement products during solo sexual activity than males (1.00). Findings indicated that sexual comfort is not a significant predictor of sexual enhancement product use. (See Table 24).

**Partnered sexual activity and products.** Results from the bivariate logistic regression for the use of sexual enhancement products during partnered sexual activity showed similar

patterns. From Table 25, it is clear that product use in partnered sexual activities increases with age. For example, participants who are  $\geq 22$  were 8.48 times more likely to be comfortable in using sexual enhancement products during solo sexual activity than ages 18-21. Gender was also influenced partnered product use, but the relationship is not as strong. Females are 1.01 times more likely to be more comfortable in using sexual enhancement products during solo sexual activity than males (1.00).

### **Multivariate Logistic Regression**

**Solo sexual activity and products.** A multivariate logistic regression was run to see if sexual enhancement product use during solo sexual activities would be illuminated by a participant's sexual comfort.

In Table 26, not surprisingly, we see a similar pattern as was found at the bivariate level. Table 26 shows all predictors are significant, signifying that gender, age, and race can all predict an individuals' comfort level for product use during their solo sexual activity. For example, participants that are  $\geq 22$  years of age are 6.54 more likely than the referent group (ages 18-19) to use sexual enhancement products during their solo sexual activities.

Table 26 shows that females are 2.89 times more likely than males to engage in sexual enhancement product use during solo sexual activity. Similar to the bivariate analysis, ages  $\geq 22$  are 6.05 times more likely than ages 18-19 to use sexual enhancement products during solo sexual activities. Results confirmed that the older participants are, the more likely they are to use sexual enhancement products during their solo sexual activities.

**Partnered sexual activity and products.** Table 27 shows that older participants ( $\geq 22$ ) are 6.66 times more likely than ages 18-19 to use sexual enhancement products during their partnered sexual activities. In regard to gender, females are 1.53 times more likely to use a

## V. DISCUSSION

The purpose of this study was to identify innovative venues that may be appropriate for the delivery of sexual health education, specifically education focused on positive aspects of sexuality such as sexual pleasure and enhancement. Positive aspects of sexuality such as desire, arousal, lubrication, orgasms, and the use of sexual enhancement products remain under-studied and largely absent from high school and college sexuality education. There is a lack of opportunities for young adults to receive sexuality education outside of a risk-focus lens (e.g., STI/HIV prevention, unintended pregnancy, sexual assault prevention). Yet, based on the findings from the current study, college students are engaging in sexual activities with pleasure as the main focus. Such activities include the use of sexual enhancement products, but positive aspects of sexuality are still dismissed at the high school and college health curriculum. Thus, college sexuality education could benefit from including such topics in sexuality education. Discussions of sexual enhancement product use and its overall link to a variety of physical, emotional, mental, and social health benefits that improve one's overall well-being and quality of life could also be included as part of college sexuality education (Trudel et al., 2000).

The major findings of this study indicate that college students are using sexual enhancement products during solo and partnered sexual activity. Findings indicate that the older the individual is, in terms of age in years and class standing the more likely they are to participate in sexual enhancement product use during solo and partnered sexual activities. Although, these results may be a function of age, relationship status, experience with sex, and the duration of the relationship. These factors may contribute to why older individuals had higher rates of sexual enhancement use in both solo and partnered sexual activities. Results also indicate that female college students are more likely than males to use enhancement products during solo

and partnered sexual activities. Yet, the higher rates of use among women may be a result of gender specific advertisement of sexual enhancement products. For example, vibrators and dildos are primarily advertised to women and are promoted through a variety of venues such as: women's magazines, online sex-shops, boutiques, in-home sex toy parties, drugstores, and adult retail stores (Herbenick et al., 2009).

The current study also aimed to identify college students' thoughts and beliefs regarding sexual enhancement products and their motivation for engaging in certain sexual behaviors, including product use. Specifically, major findings from the qualitative results suggests that college students' motivation for engaging in sexual activities and product use was for the positive aspects of sexual gratification and pleasure. Yet, information on this topic of pleasure and sexual enhancement products are never adequately implemented in college sexuality curricula. Again, participants that indicated their motivation for engaging in sexual activities and use of products may be a function of age, relationship status, experience with sex, and the duration of the relationship. Due to a large portion of college students reporting, in the qualitative findings, that they are engaging in sexual activity for the aspects of sexual pleasure, satisfaction, intimacy, and enjoyment, it is important to reevaluate current sexuality education programs to better suit the current sample and college students, in general.

### **Sexual behaviors**

Based on previous research conducted by The American College Health Association (ACHA), we know that college students are engaging in sexual activities. This study provided additional specific details regarding college students lifetime and recent engagement in sexual activities including exactly what types of behaviors college students engage in as well as the use of sexual enhancement products.

Research conducted by The ACHA's found that 50% of college students were engaging in oral sex, 50% in vaginal-penile sex, and 5% in anal sex during the past 30 days (ACHA, 2011). The current study found that 26% of participants reportedly engaged in oral sex, 18% participated in vaginal-penile sex, and 2% of individuals engaged in penile-anal sex in the past 30 days. Rates of sexual activity in the current sample are somewhat lower than those reported by the ACHA. The lower rates of engagement could possibly be due to the region in which data was collected, function of age, relationship status, experience with sex, or the duration of participants relationships. Findings from the open-ended responses indicated that students' religious views seemed to play a major role in why individuals were not motivated to engage in certain sexual behaviors including sexual enhancement product use. Conversely, those students who did report engaging in a range of sexual activities including oral-genital sex, vaginal-penile intercourse, and anal-penile intercourse, reported doing so for "pleasure," "orgasms," or to "experiment." Given such responses to the open-ended questions, it is likely that college students are participating in sexual activity for reasons such as sexual pleasure and satisfaction. Even though results from the current study lacked the same statistical gain as the study done by the ACHA, it still indicates that there are college students engaging in sexual activities and product use without the proper education.

The current study found that participants engaging in oral sex, vaginal-penile intercourse, and anal sex reported being satisfied and comfortable with their engagement in these activities. For example, 78% of the college participants identified that they are satisfied or very satisfied with their level of interest in sex, 61% of participants felt comfortable communicating their sexual needs to their partner, and 64% of participants felt comfortable in receiving sexual guidance from their partner. Results show that college students are comfortable and satisfied



with their sexual activities. Such findings may be somewhat inconsistent with previous research. For example, according to Bogle (2008) the college “hook-up” culture consists of college students engaging in casual sexual activities with multiple partners in uncommitted relationships, portraying females as the individuals who protect their reputation and males as sexual prowess’s (Worth & Fisher, 2010; Bogle, 2008). Bogle (2008) addresses the sexual double-standards that exist for men and women on college campuses, positing that men seek an attractive female for “hook-ups” and females are desperate to find long-term partners. Previous research done by Bogle (2008) suggests that females are unhappy with their casual uncommitted sexual encounters and that males are only seeking “hook-up” partners; yet the current study found that 78% of the sample are satisfied with their sexual activities and 64% comfortable with their sexual activities, and that 41% of the sample were in exclusive monogamous relationships. This study disputes Bogle’s (2008) previous statements that college females are frantic to find partners, suggesting that they are unhappy in their sexual encounters (Worth & Fisher, 2010).

Results from the current study imply that students are comfortable and satisfied within their own sex lives and experimentation, breaking down some of the gender stereotypes that previous research has suggested. This makes it more important to provide students with information and education on pleasure and satisfaction.

**Sexual behaviors and products.** Due to the gap in literature pertaining to college students and sexual enhancement product use, it was important to identify trends among college students in regard to the use of sexual enhancement products during solo or partnered sexual activities.

The current study found that 57% (n=135) of males identified that they have used a sexual enhancement product during solo sexual activities whereas 29% (n=193) of females had

used a sexual enhancement product during their solo sexual activities. For partnered sexual activity, 19% (n=45) of males reported that they had used a sexual enhancement product during their partnered sexual activities whereas 19% (n=128) of females reported that they have used sexual enhancement products during their partnered sexual activities (not including lubricant). Indicating that participants are engaging in the use of sexual enhancement products, and this might be due to participants experiencing more pleasure when engaging in use of sexual enhancement products. For example, previous research is consistent with the use of products and their enhancement of pleasure for individuals. Herbenick et al. (2009), suggested that women who use vibrators experience more positive sexual functioning in areas of desire, satisfaction, pleasure, arousal, lubrication, and orgasms. Herbenick et al. (2009) state that sexual enhancement products, such as vibrators, facilitate orgasms and arousal, this enhancing women's sexual experiences.

Information such as this is important when comparing today's college sexuality curriculum to current sexual trends. New questions and concerns about sexuality and pleasure are constantly emerging, making it important for college students to develop a healthy understanding of sexuality (Ehrhardt, 1996). Results from this study identify that college students are engaging in sexual enhancement product use, which makes it crucial to educate students on the positive sexual health benefits of products and provide "teachable moments" to keep them informed.

Results from the current study suggest that 8% of participants reported using a vibrator in their lifetime during solo sexual activities and 9% of participants reported using a vibrator in their partnered sexual activities. Yet, 83% of individuals had not used a vibrator in their sexual activities. This could be due to lack of education on products and their benefits to sexual health, and to the moral stigma that tends to cloud individuals' judgment on such products. Additionally,

vibrators maybe considered “taboo,” as many participants indicate within the open-ended questions, stating that vibrators are attached to a moral stigma and are weird, making it uncomfortable for an individual to want to experiment with the product. However, previous research reports that women who are more comfortable with their sexual behaviors and activities have more positive sexual functioning, and are more comfortable using and incorporating the use of vibrators during their solo and partnered sexual activities (Herbenick et al., 2009).

Findings from the open-ended questions indicate that participants who engaged in vibrator use during their sexual activities were motivated to do so in order to “enhance pleasure,” have “orgasms,” “feel good,” and “for the enjoyment.” Results are consistent with previous findings from Herbenick et al. (2010) that the majority of males and females ages 18-60, in the United States feel positively about vibrator use, solidifying the importance of educating individuals on sexual experiences. Vibrators are associated with many health-promoting behaviors, such as easing ability to orgasm, enhancing sexual relationships, increasing sexual independence, and improving sexual functioning (Herbenick et al., 2009; Herbenick et al., 2010 b).

Dildos are often compared to vibrators and labeled as the same sexual aid, which often leads to confusion among consumers (Tracanna, 2005). Due to the lack of research on dildos and college students’ the sexual health benefits of dildos are not addressed in current college curricula and sexual health programming. Dildos are used for pleasure, but can be used for the enhancement of muscles, glands, and other organs surrounding the vagina or anus (Tracanna, 2005). From the current sample, 6% of individuals used dildos during their solo sexual activities and 5% during their partnered sexual activities. Previous research by Herbenick et al. (2010b), also found a small percentage of individuals reporting dildo use (9%) from their nationally

representative survey on vibrator use. Results from the current study's open-ended questions indicate that participants who have engaged in dildo use during solo and partnered sexual activities did so in order to "spice things up," for "pleasure," for "orgasms," and "to do the job." These findings are consistent with previous research that suggests participants are engaging in dildo use for sexual stimulation (Herbenick et al., 2010b). College students might not be participating in dildo usage due to the lack of education on the product and its benefits, because dildos are currently not addressed in today's sexual health curricula and on-campus programming.

Qualitative findings from this study reveal participants who do not use dildo during solo or partnered sexual activities found dildos to be "gross and weird," or "did not see the benefit." The lack of knowledge on the benefits or the actual use of the product differentiated from a vibrator, could be the reason for low percentages of use. It seems that students do not know that dildos can be used for enhancement of muscles, glands, and other organs surrounding the vagina or anus (Tracanna, 2005), and can result in a fulfilled sex life (Berman, 2010).

Cock rings have also been overlooked in regard to the peer reviewed literature, and typically are not discussed in sexuality education. From the current study only 7% of participants reported using cock rings during their solo sexual activities and 8% of participants reported using cock rings in their partnered sexual activities. This could be due to the fact that during data collection participants of the study were not familiar with cock rings, and often would ask for an explanation of the product and its benefits. This situation posed an opportunity for a "teachable moment" in sexual health education as students were generally unaware of the use of cock rings. Due to the fact that the majority of the current study's sample was heterosexual (96%), findings from this study were inconsistent with previous research done by Rosenberger et al. (2012), that

found 52% of gay and bisexual males used a vibrating cock ring during their sexual interactions. Clearly, there is a need for more research on cock rings and heterosexual male individuals, due to most previous research being conducted on gay and bisexual males.

Major themes from qualitative findings indicated that participants who have used cock rings during their solo and partnered sexual activities found them to “enhance clitoral stimulation,” and “make sex more enjoyable.” Additionally, participants noted that using a cock ring created a “new experience.” Due to cock rings becoming more mainstream (i.e., available at local grocery stores and drug stores), it is important for college students to be educated on the product and its sexual health benefits. As such, there is a need to identify new and innovative venues that may be appropriate for the delivery of sexual health education, specifically education focused on positive aspects of sexuality such as sexual pleasure and enhancement (Reece et al., 2004; Jozkowski et al., 2012).

Anal beads are another “taboo” product that is often not discussed in a positive light or even discussed at all when speaking about sexual health. The current study found that only 2% of participants identified using anal beads during their solo sexual activities and only 3% of the sample used anal beads during their partnered sexual activities. The reasons for such low engagement of anal beads during solo and partnered sexual activities could be due to many participants identifying that they are “gross and uncomfortable,” and that “the anus is for things to come out, not in.” Research suggests that anal beads have sexual benefits that allow sensation of arousal for both males and females during insertion and removal, and can create feelings of pleasurable pressure in the rectum (Reed, 2010).

Individuals that did report using anal beads during their solo and partnered sexual activities stated, in the qualitative findings, that their motivation was “experimentation” and that

they “just wanted to try it.” This is consistent with previous research that states college is a transition into adulthood, and looked at as a time to explore and experiment with sexual behaviors (Grello, Welsh, & Harper, 2006).

Results from the current study indicated that 18% of participants have engaged in lubricant use during solo sexual activities and 20% reported using lubricants during their partnered sexual activities. Rate of lubricant use was much higher than other sexual enhancement products; this could be because lubricants make sexual experiences for women feel more comfortable, more pleasurable, and generally make sex feel better (Jozkowski et al., 2013). Also, lubricant use has increased within the past decade through amplified visibility in adult retail stores, drugstores, and on television (Herbenick et al., 2010a), making it a more mainstream and easily accessible product.

Results from qualitative findings are consistent with previous research from Jozkowski et al. (2013) that participants are motivated to use lubricants during sexual activities to “feel better,” “enhance pleasure,” “get wet,” and “heighten stimulation.” For example, participants from the current study strongly agree that “wet sex” is more pleasurable and enhances sexual functioning, consistent with previous research and findings stating that individuals perceive themselves to be more orgasmic when sex is “wet” rather than “dry,” due to the use of lubricants (Jozkowski et al., 2013).

### **Age and products**

Results from the current study’s bivariate and multivariate logistic regressions suggest that participants who are older ( $\geq 22$ ) and of higher class standing (juniors/seniors) are more likely to feel comfortable in using products during solo or partnered sexual activities than younger participant and those of older class standings. From these results it can be concluded

that age and increased sexual experience among college students may be the reason participants were more likely to try different things, such as sexual enhancement products and feeling more comfortable with their sexuality. An unpublished report from 2006 also found that that specifically 33% of young adult women ages 18-39 had used a sexual enhancement product at least once during a 4-week period (Herbenick et al., 2009). Even though these results have a wider age range than the current study, the results still identify with the prime age group of college students that are more likely to use and feel comfortable with sexual enhancement products.

Previous research was inconsistent with the current study suggesting that a younger age was related to a lower likelihood of solo and partnered sexual behaviors (Shick et al., 2010). In comparison to the current study's findings that age actually is a significant predictor of individuals comfort levels for product use during their solo and partnered sexual activities. The older age and product use might be due to the fact that college is a new transition into adulthood for some, and with independence comes experimentation (Grello, Welsh, & Harper, 2006).

### **Limitations**

There are important limitations to note in regard to the current study. Data was conducted at one large conservative Southern university, and therefore results may not be generalizable to all college students in the United States or across a period of time.

Additionally, due to self-reported questionnaires, there is the possibility of bias. However, due to the anonymous questionnaires, this was intended to be minimized. Some possibility for bias might include moral stigmas about the topic or even bias due to their religious beliefs. Participants often associated their religious beliefs and values as a reason to not participate in the study or leave many questions blank without responses. Additionally, due to

the in-class data collection procedure, participants who felt pressured to finish during the remaining class time may have skipped information in order to finish the questionnaire or provided false information in order to complete the survey.

Research questions about religious status were not influential to the current study. Further research asking questions about religiosity may be more helpful to future research.

Lastly, questions about class standing may have been flawed due to an error in construction of the survey. Participants were not provided a “senior” option to check on the survey. Instead they were advised to fill in the super-senior portion of the questionnaire if they were a “senior.” These limitations point to the need for additional research that will further examine implications for college sexuality courses in the realm of sexual pleasure and sexual enhancement products.

### **Implications for Sexuality Education**

Based on the current findings, college students are engaging in sexual behaviors and activities involving sexual enhancement products. Results show that the prime age group of the sample participating in the use of sexual enhancement products are participants 22 years or older. Currently sexuality curricula primarily focus on the risk-focused aspects of sexuality, such as, preventing unintended pregnancy, STIs, and HIV (Hightow et al., 2005), overlooking the importance of sexual pleasure and satisfaction. This may result in many individuals not being aware of the psychological and psychosocial health benefits of sexual expression (Davey Smith et al., 1997; Reiss, 1990). Furthermore, the current risk-focused curriculum may be creating the (not so) implicit message to students that engagement in sexually desired activities that may feel good will result in very bad outcomes that students should fear (Fine, 1988).



The present findings demonstrate that college students are participating in sexual behaviors and activities involving sexual enhancement products, perhaps another approach to sexuality education may help raise awareness and educate students on topics that are of pertinence to them and the college “hook-up” culture.

### **Conclusion**

Based on the sample ( $n=956$ ) of male and female college students and the percentages of individuals using sexual enhancement products during their solo and partnered sexual activities it can be suggested that an evaluation of current sexuality curriculum should be done in order to incorporate new educational techniques for college students. Specifically, on the benefits of sexual activities and how they can enhance individuals physically, sexually, reproductively, psychologically, emotionally, and socially.

From previous research, we know that college is looked at as a time of transition and experimentation, yet sexuality education focuses almost exclusively on the risks that can arise from such behaviors and rarely addresses sexual enhancement and pleasure. It is important to provide new venues for sexuality education, whether it is in the classroom or through on-campus programming. There need to be opportunities for young adults to receive education that goes beyond instruction on safe sex, rape prevention, and STI prevention by providing advice and education on how to increase pleasure and sexual fulfillment (Quenqua, 2012).

The information from this study will help better inform college sexuality initiatives regarding positive aspects of sexuality, such as pleasure, satisfaction, sexual enhancement products, and the health benefits incorporated with engaging in product use and non-product use during solo and partnered sexual activities.

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**Appendix I.**  
**Quantitative Findings**

Table I

## Frequency Counts of Participants Demographics

<b>Demographic Characteristic Solo Products</b>	<b>n (%)</b>
<b>Gender</b>	
Female	694 (72.6)
Male	253 (26.5)
<b>Age</b>	
18-20	571 (59.7)
21-24	314 (32.8)
Over 25	63 (6.6)
<b>Race/Ethnicity</b>	
American Indian or Alaska Native	23 (2.4)
Asian	21 (2.2)
Black or African American	83 (8.8)
Hispanic or Latino	32 (3.4)
White	769 (81.4)
Multi-racial	17 (1.8)
<b>Sexual Relationship Status</b>	
In an exclusive monogamous relationship (we only engage in sexual activity with each other)	389 (40.8)
In a non-exclusive/non-monogamous relationship	53 (5.6)
Engaging in casual sexual encounters(i.e. hooking up)	141 (14.8)
Not engaging in any sexual behavior at this point in my life	354 (37.1)
<b>Class Standing</b>	
Freshman	143 (15.0)
Sophomore	307 (32.2)
Junior	274 (28.8)
Senior	223 (23.4)
Graduate Student	4 (.4)



Table II

## Frequency Counts of Sexual Satisfaction Questions

Sexual Satisfaction	n	%	Overall Mean	Overall SD
<b>At this point in time, are you satisfied with your level of interest in sex?</b>			1.99	.923
Very satisfied	302	32.1		
Satisfied	426	45.3		
Indifferent	156	16.6		
Dissatisfied	34	3.6		
Very Dissatisfied	23	2.4		
<b>At this point in time, in regard to masturbation:</b>			3.17	1.87
I have orgasms easily	335			
I have some difficulty with having orgasms	108			
I have a lot of difficulty with having orgasms	14			
I have never had an orgasm	26			
I do not masturbate	456			
<b>At this point in time, in regard to partnered sexual activity:</b>			2.71	1.76
I have orgasms easily	364	39.0		
I have some difficulty with having orgasms	195	20.9		
I have a lot of difficulty with having orgasms	36	3.9		
I have never had an orgasm	50	5.4		
I do not engaged in partnered sexual activity at this point in my life	264	28.3		
<b>At this point in time, are you satisfied with your ability to have orgasms during masturbation?</b>			3.74	2.13
Very satisfied	178	19.0		
Satisfied	230	24.6		
Indifferent	90	9.6		
Dissatisfied	12	1.3		
Very Dissatisfied	7	.7		
I do not masturbate	418	44.7		
<b>At this point in time, are you satisfied with your ability to have orgasms during partnered sexual activity?</b>			3.22	1.99

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Very satisfied	225	23.9
Satisfied	271	28.8
Indifferent	93	9.9
Dissatisfied	55	5.9
Very Dissatisfied	19	2.0
I do not engaged in partnered sexual activity at this point	277	29.5

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Table III

## Frequency Counts of Sexual Comfort Questions

<b>Sexual Comfort</b>	<b>n</b>	<b>%</b>	<b>Overall Mean</b>	<b>Overall Standard Deviation</b>
<b>How comfortable are you communicating your sexual needs to your partner?</b>			2.93	1.99
Very comfortable	288	30.4%		
Comfortable	281	29.6%		
Indifferent	89	9.4%		
Uncomfortable	30	3.2%		
Very Uncomfortable	12	1.3%		
I do not engage in partnered sexual activity	246	25.9%		
<b>How comfortable are you in giving sexual guidance?</b>			3.02	1.96
Very comfortable	254	26.8%		
Comfortable	287	30.3%		
Indifferent	96	10.1%		
Uncomfortable	52	5.5%		
Very Uncomfortable	13	1.4%		
I do not engage in partnered sexual activity	244	25.7%		
<b>How comfortable are you in receiving sexual guidance?</b>			2.89	1.98
Very comfortable	296	31.2%		
Comfortable	299	31.5%		
Indifferent	66	7.0%		
Uncomfortable	25	2.6%		
Very Uncomfortable	26	2.7%		
I do not engage in partnered sexual activity	235	24.8%		

Table IV

## Sexual Comfort and Product Use in Solo Sexual Activity

<b>Sexual Comfort and Solo Product Use</b>		
	<b>n</b>	<b>%</b>
<b>How comfortable are you or would you be using vibrators during solo sexual activity?</b>		
Very comfortable	78	8.8%
Comfortable	113	12.7%
Indifferent	183	20.6%
Uncomfortable	169	19.0%
Very Uncomfortable	340	38.2%
<b>How comfortable are you or would you be using dildos during solo sexual activity?</b>		
Very comfortable	64	7.2%
Comfortable	70	7.9%
Indifferent	150	16.9%
Uncomfortable	197	22.2%
Very Uncomfortable	403	45.3%
<b>How comfortable are you or would you be using cock rings during solo sexual activity?</b>		
Very comfortable	31	3.5%
Comfortable	46	5.2%
Indifferent	192	21.6%
Uncomfortable	201	22.6%
Very Uncomfortable	414	46.6%
<b>How comfortable are you or would you be using anal beads during solo sexual activity?</b>		
Very comfortable	11	1.2%
Comfortable	25	2.8%
Indifferent	96	10.8%
Uncomfortable	157	17.7%
Very Uncomfortable	594	66.8%
<b>How comfortable are you or would you be using lubricants during solo sexual activity?</b>		

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**activity?**

Very comfortable	103	11.6%
Comfortable	148	16.6%
Indifferent	225	25.3%
Uncomfortable	121	13.6%
Very Uncomfortable	288	32.4%

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Table V

## Sexual Comfort and Product Use in Partnered Sexual Activity

<b>Sexual Comfort and Partnered Product Use</b>		
	<b>n</b>	<b>%</b>
<b>How comfortable are you or would you be using vibrators during partnered sexual activity?</b>		
Very comfortable	79	8.9%
Comfortable	137	15.4%
Indifferent	204	22.9%
Uncomfortable	178	20.0%
Very Uncomfortable	288	32.4%
<b>How comfortable are you or would you be using dildos during partnered sexual activity?</b>		
Very comfortable	49	5.5%
Comfortable	77	8.7%
Indifferent	174	19.6%
Uncomfortable	227	25.5%
Very Uncomfortable	359	40.4%
<b>How comfortable are you or would you be using cock rings during partnered sexual activity?</b>		
Very comfortable	66	7.4%
Comfortable	79	8.9%
Indifferent	184	20.7%
Uncomfortable	182	20.5%
Very Uncomfortable	375	42.2%
<b>How comfortable are you or would you be using anal beads during partnered sexual activity?</b>		
Very comfortable	26	2.9%
Comfortable	49	5.5%
Indifferent	109	12.3%
Uncomfortable	156	17.5%

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Very Uncomfortable	546	61.4%
<b>How comfortable are you or would you be using lubricants during partnered sexual activity?</b>		
Very comfortable	172	19.3%
Comfortable	233	26.2%
Indifferent	194	21.8%
Uncomfortable	63	7.1%
Very Uncomfortable	227	25.5%

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Table VI

## Recent Sexual Behaviors

<b>Sexual Behaviors</b>	<b>Total (n) %</b>	<b>Male n (%)</b>	<b>Female n (%)</b>
<b><u>Kissed/Made out with another person</u></b>			
Past week	523 (56.4%)	140 (57.4%)	379 (56.0%)
Past Month	200 (21.6%)	58 (23.8%)	141 (20.8%)
Lifetime	156 (16.8%)	41(16.8%)	113 (16.7%)
Never	49 (5.3%)	5 (2.0%)	44 (6.5%)
<b><u>I masturbated alone</u></b>			
Past week	248 (27.0%)	125 (51.2%)	123 (18.4%)
Past Month	156 (17.0%)	66 (27.0%)	90 (13.5%)
Lifetime	148 (16.1%)	39 (16.0%)	108 (16.2%)
Never	366 (39.9%)	14 (5.7%)	346 (51.9%)
<b><u>I touched my partners genitals</u></b>			
Past week	390 (42.3 %)	108 (44.4%)	279 (41.5%)
Past Month	197 (21.4%)	57 (23.5%)	140 (20.8%)
Lifetime	166 (18.0%)	46 (18.9%)	120 (17.9%)
Never	169 (18.3%)	32 (13.2%)	133 (19.8%)
<b><u>My partner touched my genitals</u></b>			
Past week	380 (41.3%)	111 (45.7%)	266 (39.7%)
Past Month	206 (22.4%)	58 (23.9%)	148 (22.1%)
Lifetime	173 (18.8%)	45 (18.5%)	128 (19.1%)
Never	160 (17.4%)	29 (11.9%)	128 (19.1%)
<b><u>I gave my partner oral sex</u></b>			
Past week	233 (25.4%)	61 (25.2%)	171 (25.6%)
Past Month	240 (26.1%)	56 (23.1%)	182 (27.2%)



Lifetime	191 (20.8%)	62 (25.6%)	129 (19.3%)
Never	254 (27.7%)	63 (26.0%)	187 (28.0%)
<u>My partner gave me oral sex</u>			
Past week	255 (24.7%)	81 (33.6%)	143 (21.5%)
Past Month	238 (26.1%)	66 (27.4%)	170 (25.6%)
Lifetime	212 (23.2%)	49 (20.3%)	163 (24.5%)
Never	237 (26.0%)	45 (18.7%)	188 (28.3%)
<u>I had vaginal intercourse</u>			
Past week	310 (33.5%)	94 (38.4%)	213 (31.7%)
Past Month	165 (17.9%)	52 (21.2%)	113 (16.8%)
Lifetime	153 (16.6%)	37 (15.1%)	116 (17.3%)
Never	296 (32.0%)	62 (25.3%)	230 (34.2%)
<u>Someone put their penis into my</u>			
<u>anus</u>			
Past week	16 (1.7%)	4 (1.7%)	12 (1.8%)
Past Month	26 (2.8%)	5 (2.1%)	21 (3.1%)
Lifetime	103 (11.2%)	10 (4.1%)	92 (13.7%)
Never	774 (84.2%)	223 (92.1%)	545 (81.3%)
<u>I put my penis into someone else's</u>			
<u>anus</u>			
Past week	14 (1.6%)	9 (3.8%)	5 (.8%)
Past Month	12 (1.4%)	8 (3.4%)	4 (.6%)
Lifetime	45 (5.1%)	37 (15.7%)	8 (1.2%)
Never	817 (92.0%)	182 (77.1%)	628 (97.4%)

Table VII

## Use of Sexual Enhancement Products in Solo Sexual Activity

<b>Use of Sexual Enhancement Products in Solo Sexual Activity</b>	<b>Total (n) %</b>	<b>Male n (%)</b>	<b>Female n (%)</b>
<b>Vibrator use</b>			
Past week	43 (4.7%)	3 (1.3%)	39 (5.8%)
Past Month	37 (4.0%)	3 (1.3%)	34 (5.1%)
Lifetime	76 (8.3%)	10 (4.2%)	65 (9.7%)
I have never used this product during solo sexual activity	762 (83.0%)	222 (93.3%)	535 (79.5%)
<b>Dildo use</b>			
Past week	16 (1.7%)	3 (1.2%)	15 (2.2%)
Past Month	18 (1.9%)	3 (1.2%)	15 (2.2%)
Lifetime	54 (5.8%)	9 (3.7%)	45 (6.7%)
I have never used this product during solo sexual activity	836 (90.5%)	229 (95.0%)	601 (88.9%)
<b>Cock ring use</b>			
Past week	5 (.5%)	2 (.8%)	2 (.3%)
Past Month	10 (1.1%)	2 (.8%)	8 (1.2%)
Lifetime	59 (6.4%)	18 (7.5%)	41 (6.1%)
I have never used this product during solo sexual activity	850 (92.0%)	218 (90.8%)	626 (92.5%)
<b>Anal Beads</b>			
Past week	3 (.3%)	1 (.4%)	1 (.1%)
Past Month	4 (.4%)	2 (.8%)	2 (.3%)
Lifetime	19 (2.1%)	4 (1.7%)	15 (2.2%)
I have never used this product during solo sexual activity	896 (97.2%)	234 (97.1%)	656 (97.3%)
<b>Lubricant use</b>			
Past week	51 (5.5%)	21 (8.7%)	29 (4.3%)
Past Month	75 (8.1%)	38 (15.8%)	37 (5.4%)
Lifetime	162 (17.5%)	71 (29.5%)	91 (13.4%)
I have never used this product during solo sexual activity	639 (68.9%)	111 (46.1%)	522 (76.9%)

Table VIII

## Use of Sexual Enhancement Products in Partnered Sexual Activity

<b>Use of Sexual Enhancement Products in Partnered Sexual Activity</b>	<b>Total (n) %</b>	<b>Male n (%)</b>	<b>Female n (%)</b>
<b>Vibrator use</b>			
Past week	28 (3.0%)	6 (2.5%)	21 (3.1%)
Past Month	37 (4.0%)	6 (2.5%)	31 (4.6%)
Lifetime	80 (8.6%)	19 (7.9%)	60 (8.8%)
I have never used this product during partnered sexual activity	783 (84.4%)	209 (87.1%)	569 (83.6%)
<b>Dildo use</b>			
Past week	11 (1.2%)	1 (.4%)	9 (1.3%)
Past Month	18 (1.9%)	6 (2.5%)	12 (1.8%)
Lifetime	48 (5.2%)	13 (5.4%)	35 (5.2%)
I have never used this product during partnered sexual activity	850 (91.7%)	221 (91.7%)	623 (91.8%)
<b>Cock ring use</b>			
Past week	9 (1.0%)	5 (2.1%)	3 (.4%)
Past Month	18 (1.9%)	5 (2.1%)	13 (1.9%)
Lifetime	74 (8.0%)	20 (8.3%)	54 (8.0%)
I have never used this product during partnered sexual activity	824 (89.1%)	210 (87.5%)	608 (89.7%)
<b>Anal Beads</b>			
Past week	2 (.2%)	3 (1.3%)	1 (.1%)
Past Month	5 (.5%)	3 (1.3%)	2 (.3%)
Lifetime	27 (2.9%)	8 (3.3%)	19 (2.8%)
I have never used this product during partnered sexual activity	887 (96.3%)	229 (95.4%)	652 (96.7%)
<b>Lubricant use</b>			
Past week	65 (7.2%)	19 (8.1%)	45 (6.8%)
Past Month	101 (11.1%)	39 (16.7%)	61 (9.2%)
Lifetime	184 (20.3%)	57 (24.4%)	126 (18.9%)
I have never used this product during partnered	557 (61.4%)	119 (50.9%)	434 (65.2%)

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sexual activity

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Table IX

## Purchase of Sexual Enhancement Products

<b>Purchase of Products</b>	<b>Total (n) %</b>
<b>Where have you purchased certain types of sexual enhancement products?</b>	
<b>Vibrators</b>	
Drug Store	1 (.2%)
Drug Store/ Novelty Store	7 (1.1%)
Drug store/novelty store/sex shop	1(.2%)
Grocery Store	1 (.2%)
Adult website	7 (1.1%)
Adult website/other/sex toy party/ novelty store/ sex shop	1(.2%)
Adult website/novelty store	2 (.3%)
Adult website/novelty store/ sex shop	1(.2%)
Adult website/sex shop	1(.2%)
Other website	7 (1.1%)
In home sex-toy party	9 (1.4%)
Sex toy party/ novelty store	3 (.5%)
Sex toy party/ novelty store/ sex shop/ partner purchased	1 (.2%)
Sex toy party/ sex shop	9 (1.4%)
Novelty store	14 (2.1%)
Novelty store/sex shop	5 (.8%)
Novelty store/partner purchased	1 (.2%)
Sex shop	48 (7.2%)
Sex shop/ partner purchased	1 (.2%)
I did not purchased my partner did for me	184 (27.7%)
<b>Dildos</b>	
Drug Store	5 (.8%)
Grocery store/ sex shop	1 (.2%)
Adult Website	1 (.2%)
Adult website/ sex toy party/ sex shop	3 (.5%)
Adult website/sex shop	2 (.3%)
Other website	1 (.2%)

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In home sex-toy party	1(.2%)
Sex toy party/sex shop	5 (.8%)
Novelty store	5 (.8%)
Novelty Store/ sex shop	1 (.2%)
Sex shop	32 (4.8%)
I did not purchase my partner did for me	192 (28.9%)
<b>Cock Ring</b>	
Drug Store	8 (1.2%)
Drug store/ grocery store/novelty store/ sex shop	1 (.2%)
Drug store/novelty store	1 (.2%)
Grocery store	7 (1.1%)
Adult website	3 (.5%)
Adult website/sex shop	1 (.2%)
Novelty store	9 (1.4%)
Sex shop	21 (3.2%)
Sex shop/partner purchased	1 (.2%)
I did not purchase my partner did for me	189 (28.5%)
<b>Anal Beads</b>	
Drug store	3 (.5%)
Drug store/ grocery store	1 (.2%)
Drug store/ other website	1 (.2%)
Grocery store	3 (.5%)
Grocery store/ novelty store	1 (.2%)
Grocery store/ sex shop	1 (.2%)
Adult website	4 (.6%)
Adult website/sex shop	1 (.2%)
Other website	1 (.2%)
Novelty store	4 (.6%)
Sex shop	5 (.8%)
I did not purchase my partner did for me	196 (29.5%)
<b>Lubricants</b>	
Drug Store	44 (6.6%)
Drug store/ grocery store	7 (1.1%)
Drug store/grocery store/ sex toy party	1 (.2%)
Drug store/grocery store/ sex toy party/novelty store/ sex shop	2 (.3%)
Drug store/grocery store/ sex toy party/ sex shop/ I did not purchase	1 (.2%)

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Drug store/grocery store/novelty store/sex shop	4 (.6%)
Drug store/grocery store/sex shop	3 (.5%)
Drug store/ grocery store/partnered purchased	1(.2%)
drug store/ sex toy party/sex shop	1(.2%)
Drug store/novelty store	1(.2%)
drug store/novelty store/sex shop	1(.2%)
drug store/sex shop	4 (.6%)
drug store/sex shop/partner purchased	1(.2%)
drug store/partner purchased	3 (.5%)
Grocery Store	48 (7.2%)
grocery store/sex toy party	1(.2%)
grocery store/sex toy party/sex shop	1(.2%)
grocery store/novelty store/sex shop	1(.2%)
grocery store/ sex shop	1(.2%)
grocery store/ partner purchased	1(.2%)
Adult Website	1(.2%)
Adult website/sex toy party/ sex shop	1(.2%)
Other Website	4 (.6%)
Sex toy party/novelty store	1(.2%)
sex toy party/ novelty store/sex shop	1(.2%)
sex toy party/sex shop	2 (.3%)
Novelty Store	8 (1.2%)
Novelty store/sex shop	1(.2%)
Sex Shop	24 (3.6%)
sex shop/partner purchased	1(.2%)
I did not purchase my partner did	164 (24.7%)

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Table X

## Partner Purchase of Sexual Enhancement Products

<b>Purchase of Products</b>	<b>Total (n) %</b>
<b>Where has your partner purchased certain types of sexual enhancement products?</b>	
<b>Vibrators</b>	
Drug Store	8 (1.2%)
Drug Store/ Grocery Store	1(.2%)
Grocery Store	1(.2%)
Adult website	7 (1.1%)
Adult website/novelty store	1(.2%)
Adult website/novelty store	1(.2%)
Adult website / sex shop	1(.2%)
Other website	9 (1.4%)
In home sex-toy party	2 (.3%)
Sex toy party/ novelty store	2 (.3%)
Novelty store	19 (2.9%)
Novelty store/sex shop	3 (.5%)
Sex shop	95 (14.3%)
<b>Dildos</b>	
Drug Store	8 (1.2%)
Grocery store	1 (.2%)
Adult Website	5 (.8%)
Adult website/ sex toy party/ sex shop	1(.2%)
Adult website/sex shop	1(.2%)
Other website	7 (1.1%)
In home sex-toy party	2 (.3%)
Sex toy party/novelty store	1(.2%)
Novelty store	15 (2.3%)
Novelty Store/ sex shop	2 (.3%)
Sex shop	74 (11.1%)
<b>Cock Ring</b>	
Drug Store	11 (1.7%)
Drug store/ grocery store	1(.2%)
Drug store/other website	1(.2%)
Drug Store/ sex shop	1(.2%)
Grocery Store	9 (1.4%)
Adult website	3 (.5%)
Adult website/sex shop	1(.2%)
Other website	6 (.9%)
In home sex toy party	1(.2%)



Novelty store	19 (2.9%)
Novelty store/ sex shop	2 (.3%)
Sex Shop	75 (11.3%)
<b>Anal Beads</b>	
Drug store	7 (1.1%)
Drug store/ grocery store	1(.2%)
Grocery store	4 (.6%)
Adult website	6 (.9%)
Adult website/sex shop	1(.2%)
Other website	5 (.8%)
In home sex toy party	1(.2%)
Novelty store	10 (1.55)
Sex shop	68 (10.2%)
<b>Lubricant</b>	
Drug store	53 (8.0%)
Drug store/ grocery store	11(1.7%)
Drug store/ grocery store/ other website/ sex toy party/ novelty store/	1 (.2%)
Drug store/ grocery store/ other website/ sex toy party/ novelty store/ sex shop	2 (.3%)
Drug store/grocery store/ sex shop	1 (.2%)
Drug store/sex shop	3 (.5%)
Grocery store	47 (7.1%)
Grocery store/ novelty store	1 (.2%)
Grocery Store/ sex shop	4 (.6%)
Adult website	3 (.5%)
Adult website/ sex shop	1 (.2%)
Other website	5 (.8%)
In home sex toy party	5 (.8%)
Novelty store	22 (3.3%)
Novelty store/ sex shop	3(.5%)
Sex Shop	64 (9.6%)

Table XI

## Frequency of Use with Sexual Enhancement Products in Solo Sexual Activity

<b>Use of Sexual Enhancement Products in Solo Sexual Activity</b>	<b>Total (n) %</b>	<b>Male n (%)</b>	<b>Female n (%)</b>
<b>Vibrator use</b>			
0 times	245 (82.2%)	121 (53.3%)	121 (18.4%)
1 time	11 (3.7%)	1 (.4%)	10 (1.5%)
2 or 3 times	27 (9.1%)	3 (1.3%)	24 (3.6%)
4 or 5 times	15 (5.0%)	4 (1.8%)	15 (2.3%)
More than 5 times	84 (9.4%)	4 (1.8%)	80 (12.1%)
I have never engaged in solo sexual activity	510 (57.1%)	98 (43.2%)	408 (61.9%)
<b>Dildo use</b>			
0 times	270 (90.3%)	118 (51.8%)	149 (22.6%)
1 time	7 (2.3%)	3 (1.3%)	4 (.6%)
2 or 3 times	11 (3.7%)	3 (1.3%)	11 (1.7%)
4 or 5 times	11 (3.7%)	2 (.9%)	9 (1.4%)
More than 5 times	40 (4.5%)	2 (.9%)	38 (5.8%)
I have never engaged in solo sexual activity	553 (61.9%)	103 (45.2%)	446 (67.7%)
<b>Cock ring use</b>			
0 times	283 (31.8%)	115 (50.2%)	165 (25.3%)
1 time	3 (.3%)	2 (.9%)	1 (.2%)
2 or 3 times	14 (1.6%)	4 (1.7%)	10 (1.5%)
4 or 5 times	4 (.4%)	3 (1.3%)	1 (.2%)
More than 5 times	10 (1.1%)	5 (2.2%)	5 (.8%)
I have never engaged in solo sexual activity	575 (64.7%)	100 (43.7%)	471 (72.1%)
<b>Anal Beads</b>			
0 times	294 (33.0%)	120 (52.6%)	171 (26.1%)
1 time	1 (.1%)	2 (.9%)	1 (.2%)
2 or 3 times	4 (.4%)	2 (.9%)	2 (.3%)
4 or 5 times	4 (.4%)	1 (.4%)	3 (.5%)
More than 5 times	2 (.2%)	1 (.4%)	2 (.3%)
I have never engaged in solo sexual activity	585 (65.7%)	105 (46.1%)	476 (72.7%)
<b>Lubricant use</b>			
0 times	193 (21.4%)	56 (24.1%)	134 (20.3%)

1 time	28 (3.1%)	14 (6.0)	14 (2.1%)
2 or 3 times	43 (4.8%)	21 (9.1%)	22 (3.3%)
4 or 5 times	29 (3.2%)	13 (5.6%)	16 (2.4%)
More than 5 times	114 (12.7%)	67 (28.9%)	47 (7.1%)
I have never engaged in solo sexual activity	493 (54.8%)	61 (26.3%)	428 (64.8%)

Table XII

## Frequency of Use with Sexual Enhancement Products in Partnered Sexual Activity

<b>Use of Sexual Enhancement Products in Partnered Sexual Activity</b>	<b>Total (n) %</b>	<b>Male n (%)</b>	<b>Female n (%)</b>
<b>Vibrator use</b>			
0 times	326 (36.3%)	109 (46.8%)	215 (32.7%)
1 time	18 (2.0%)	2 (.9%)	15 (2.3%)
2 or 3 times	37 (4.1%)	11 (4.7%)	26 (4.0%)
4 or 5 times	23 (2.6%)	6 (2.6%)	17 (2.6%)
More than 5 times	56 (6.2%)	16 (6.9%)	40 (6.1%)
I have never engaged in partnered sexual activity	436 (48.6%)	89 (38.2%)	343 (52.2%)
<b>Dildo use</b>			
0 times	361 (40.3%)	120 (51.5%)	238 (36.3%)
1 time	12 (1.3%)	6 (2.6%)	6 (.9%)
2 or 3 times	17 (1.9%)	2 (.9%)	15 (2.3%)
4 or 5 times	10 (1.1%)	1 (.4%)	9 (1.4%)
More than 5 times	31 (3.5%)	10 (4.3%)	21 (3.2%)
I have never engaged in partnered sexual activity	463 (51.7%)	94 (40.3%)	365 (55.7%)
<b>Cock ring use</b>			
0 times	343 (38.2%)	112 (48.1%)	228 (34.7%)
1 time	22 (2.4%)	6 (2.6%)	16 (2.4%)
2 or 3 times	32 (3.6%)	8 (3.4%)	24 (3.6%)
4 or 5 times	9 (1.0%)	2 (.9%)	7 (1.1%)
More than 5 times	35 (3.9%)	13 (5.6%)	22 (3.3%)
I have never engaged in partnered sexual activity	456 (50.8%)	92 (39.55)	360 (54.7%)
<b>Anal Beads</b>			
0 times	380 (42.5%)	126 (53.8%)	251 (38.4%)
1 time	8 (.9%)	2 (.9%)	6 (.9%)
2 or 3 times	8 (.9%)	1 (.4%)	7 (1.1%)
4 or 5 times	7 (.8%)	4 (1.7%)	3 (.5%)
More than 5 times	8 (.9%)	3 (1.3%)	5 (.8%)
I have never engaged in partnered sexual activity	484 (54.1%)	98 (41.9%)	382 (58.4%)
<b>Lubricant use</b>			
0 times	215	62	150 (22.6%)

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	(23.7%)	(26.4%)	
1 time	45 (5.0%)	14 (6.0%)	31 (4.7%)
2 or 3 times	59 (6.5%)	20 (8.5%)	39 (5.9%)
4 or 5 times	45 (5.0%)	12 (5.1%)	33 (5.0%)
More than 5 times	185	63	121(18.2%)
	(20.4%)	(26.8%)	
I have never engaged in partnered sexual activity	354	64	287 (43.2%)
	(39.1%)	(27.2%)	

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Table XIII

## Demographics of Solo Product Users

Demographics of Solo Product Users				Differences by product users and non-users
	n (%)	Never used product n(%)	Used product n(%)	Statistic (df)
<b>Gender</b>				60.859 (df=3) p<.001
Female	694 (72.6)	474 (71.1)	193 (28.9)	
Male	253 (26.5)	101 (42.8)	135 (57.2)	
<b>Age</b>				55.052 (df=902)p<.001
18-20	571 (59.7)	416 (76.2)	130 (23.8)	
21-24	314 (32.8)	146 (48.3)	156 (51.7)	
Over 25	63 (6.6)	14 (25.0)	42 (75.0)	
<b>Race/Ethnicity</b>				6.476 (df=5)=.263
American Indian or Alaska Native	23 (2.4)	14 (60.9)	9 (39.1)	
Asian	21 (2.2)	15 (71.4)	6 (28.6)	
Black or African American	83 (8.8)	48 (58.5)	34 (41.5)	
Hispanic or Latino	32 (3.4)	15 (51.7)	14 (48.3)	
White	769 (81.4)	476 (64.6)	257 (35.1)	
Multi-racial	17 (1.8)	6 (42.9)	8 (57.1)	
<b>Sexual Relationship Status</b>				93.640 (df=4) p<.001
In an exclusive monogamous relationship (we only engage in sexual activity with each other)	389 (40.8)	191 (51.5)	180 (48.5)	
In a non-exclusive/non-monogamous relationship	53 (5.6)	23 (46.0)	27 (54.0)	
Engaging in casual sexual encounters(i.e. hooking up)	141 (14.8)	74 (83.3)	56 (16.7)	
Not engaging in any sexual behavior at this point in my life	354 (37.1)	12 (80.0)	3 (20.0)	

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<b>Class Standing</b>				94.860 (df=5) p<.001
Freshman	143 (15.0)	110 (79.1)	29 (20.9)	
Sophomore	307 (32.2)	222 (77.1)	66 (22.9)	
Junior	274 (28.8)	161 (61.2)	102 (38.8)	
Senior	223 (23.4)	84 (39.6)	128 (60.4)	
Graduate Student	4 (.4)	1 (25.0)	3 (75.0)	

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Table XIV

## Demographics of Partnered Product Users

<b>Demographics of Partnered Product Users</b>				<b>Differences by product users and non-users</b>
	<b>n (%)</b>	<b>Never used product n(%)</b>	<b>Used product n(%)</b>	<b>Statistic (df)</b>
<b>Gender</b>				.237 (df=2) =.888
Female	694 (72.6)	546 (81.0)	128 (19.0)	
Male	253 (26.5)	194 (81.2)	45 (18.8)	
<b>Age</b>				78.977 (df=912)=p<.001
18-20	571 (59.7)	498 (90.4)	53 (9.6)	
21-24	314 (32.8)	222 (72.3)	85 (27.7)	
Over 25	63 (6.6)	21 (37.5)	35 (62.5)	
<b>Race/Ethnicity</b>				3.699 (df=5)=.594
American Indian or Alaska Native	23 (2.4)	17 (77.3)	5 (22.7)	
Asian	21 (2.2)	20 (95.2)	1 (4.8)	
Black or African American	83 (8.8)	66 (881.5)	15 (18.5)	
Hispanic or Latino	32 (3.4)	22 (75.9)	7 (24.1)	
White	769 (81.4)	602 (80.8)	143 (19.2)	
Multi-racial	17 (1.8)	12 (85.7)	2 (14.3)	
<b>Sexual Relationship Status</b>				75.046 (df=4)= p<.001
In an exclusive monogamous relationship (we only engage in sexual activity with each other)	389 (40.8)	261 (70.0)	112 (30.0)	
In a non-exclusive/non-monogamous relationship	53 (5.6)	34 (66.7)	17 (33.3)	
Engaging in casual sexual encounters(i.e. hooking up)	141 (14.8)	114 (82.6)	24 (17.4)	
Not engaging in any sexual behavior at this point in my life	354 (37.1)	321 (94.1)	20 (5.9)	
<b>Class Standing</b>				86.104 (df=5)= p<.001
Freshman	143 (15.0)	127 (91.4)	12 (8.6)	
Sophomore	307 (32.2)	263 (89.8)	30 (10.2)	



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Junior	274 (28.8)	219 (82.0)	48 (18.0)
Senior	223 (23.4)	133 (62.1)	81 (37.9)
Graduate Student	4 (.4)	1 (25.0)	3 (75.0)

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Table XV

## Sexual Satisfaction with the Use of Sexual Enhancement Products in both Solo and Partnered Sexual Activity

<b>Sexual Satisfaction with Solo Use of Products</b>	<b>Never used product</b>		<b>Used product</b>		<b>Statistic t (df)</b>	<b>P</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>		
At this point in time are you satisfied with your level of interest in sex?	3.19	10.76	1.89	1.02	1.62(908)	.105
At this point in time, in regard to masturbation:	4.89	11.79	2.01	1.52	3.28(908)	.001
At this point in time in regard to solo sexual activity:	5.12	14.62	1.94	1.24	2.92(908)	.004
At this point in time, are you satisfied with your ability to have orgasms during masturbation?	5.99	13.65	2.41	1.76	3.52(908)	<.001
At this point in time, are you satisfied with your ability to have orgasms during solo sexual activity?	4.71	11.31	2.44	1.54	2.69(908)	.007
<b>Sexual Satisfaction with Partnered Use of Products</b>			<b>Never used Product</b>	<b>Used Product</b>	<b>Statistic t(df)</b>	<b>P</b>
			<b>M</b>	<b>SD</b>		
At this point in time are you satisfied with your level of interest in sex?	3.19	10.64	1.81	.984	1.72(918)	0.86
At this point in time, in regard to masturbation:	4.69	11.16	2.10	1.59	3.07(918)	.002
At this point in time in regard to partnered sexual activity:	5.00	14.05	1.73	1.13	3.07 (918)	.002
At this point in time, are you satisfied with your ability to have orgasms during masturbation?	5.80	13.07	2.56	1.87	3.27(918)	.001
At this point in time, are you satisfied with your ability to have orgasms during partnered sexual activity?	4.26	10.63	2.19	1.42	3.03(918)	.003

Table XVI

## Sexual Comfort with the Use of Sexual Enhancement Products in both Solo and Partnered Sexual Activity

<b>Sexual Comfort with Solo Use of Products</b>	<b>Never used product</b>		<b>Used product</b>		<b>Statistic t (df)</b>	<b>P</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>		
How comfortable are you communicating your sexual needs to your partner?	2.74	.556	2.77	.544	-.594(671)	.553
How comfortable are you in giving sexual guidance to your partner?	2.66	.637	2.73	.616	-1.09(673)	.274
How comfortable are you receiving sexual guidance from your partner?	2.73	.605	2.92	.328	-4.02(681)	<.001
<b>Sexual Comfort with Partnered Use of Products</b>	<b>Never used Product</b>		<b>Used Product</b>		<b>Statistic t(df)</b>	<b>P</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>		
How comfortable are you communicating your sexual needs to your partner?	2.73	.573	2.82	.492	-1.90(676)	.057
How comfortable are you in giving sexual guidance to your partner?	2.63	.663	2.80	.526	-3.04(678)	.002
How comfortable are you receiving sexual guidance from your partner?	2.73	.603	2.89	.409	-3.34(688)	.001

Table XVII

Comfort regarding possible usage of sexual enhancement products in solo and partnered sexual activity

<b>Sexual Comfort with Solo Use of Products</b>	<b>Never used product</b>		<b>Used product</b>		<b>Statistic t (df)</b>	<b>P</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>		
How comfortable you are or would be using sexual enhancement products in your solo sexual activity?	20.87	4.04	16.38	4.89	12.85 (652)	.000
<b>Sexual Comfort with Partnered Use of Products</b>	<b>Never used Product</b>		<b>Used Product</b>		<b>Statistic t(df)</b>	<b>P</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>		
How comfortable you are or would be using sexual enhancement products in your partnered sexual activity?	19.28	4.43	12.50	4.42	17.222 (676)	.000

Table XVIII

## Correlations between Comfort and Solo use of Sexual Enhancement Products

	Vibrator	Dildo	Cockrings	Anal Beads	Lubricants
Vibrator Comfort	1				
Dildo Comfort	.865**	1			
Cock Ring Comfort	.665**	.714**	1		
Anal Bead Comfort	.458**	.556**	.589**	1	
Lubricant Comfort	.601**	.596**	.617**	.400**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table XIX

## Correlations between Comfort and Partnered use of Sexual Enhancement Products

	Vibrator	Dildo	Cockrings	Anal Beads	Lubricants
Vibrator Comfort	1				
Dildo Comfort	.819**	1			
Cock Ring Comfort	.761**	.725**	1		
Anal Bead Comfort	.488**	.607**	.543**	1	
Lubricant Comfort	.703**	.598**	.624**	.366**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table XX

Correlations between Pleasure and Lubricant Use

**Correlations**

Use of lubricant t makes	Use of Lubrica nt makes	Use of Lubrica nt makes	Use of Lubrica nt makes	Use of Lubrica nt makes	Use of Lubrica nt makes	I feel positiv ely about using lubrica nts	Lubri cants make penile - vagin al sex feel better	Lubrica nts make anal feel better	Lubrican ts make masturba tion feel better	Wet Sex	
Penile-	makes	makes	makes	makes	makes	about	penile	anal	sex	tion	feel
Vaginal	sex	masturb	vibrator	dildos	anal	using	-	feel	better		
Sex	more	ation	s more	more	beads	lubrica	vagin	better			
more	pleasuram	ore	pleasuram	ore	nts	al sex					
pleasura	ble	pleasura	ble	pleasura	ble	feel					
ble		ble		ble		better					

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Use of  
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pleasura  
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Use of  
Lubrica  
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makes  
vibrator .495\*\* .538\*\* .678\*\* 1  
s more  
pleasura  
ble

Use of  
Lubrica  
nt  
makes  
dildos .498\*\* .552\*\* .650\*\* .872\*\* 1  
more  
pleasura  
ble

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Use of Lubrica nt makes anal	.329**	.630**	.516**	.619**	.690**	1					
beads more pleasura ble											
I feel positivel y about using lubrican ts	.719**	.508**	.607**	.566**	.581**	.422**	1				
Lubrica nts make penile- vaginal sex feel better	.802**	.470**	.562**	.572**	.574**	.397**	.779**	1			
Lubrica nts make anal sex feel better	.395**	.746**	.620**	.522**	.575**	.695**	.494**	.473**	1		
Lubrica nts make masturb ation feel better	.494**	.560**	.858**	.633**	.639**	.519**	.618**	.577**	.636**	1	
Wet Sex	.593**	.403**	.503**	.438**	.447**	.291**	.633**	.605**	.368**	.509**	1

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Sexual function ing	.683**	.465**	.566**	.522**	.501**	.372**	.712**	.755**	.474**	.606**	.677**
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\*\* . Correlation is significant at the 0.01 level (2-tailed).

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Table XXI

Cronbach's Alpha: Comfort Regarding Sexual Enhancement Products in Solo Sexual Activity

<b>Comfort Regarding Solo Sexual Enhancement Products</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Alpha=</b>
			<b>.886</b>
Vibrators	3.63	1.35	
Dildos	3.89	1.27	
Cock Rings	4.03	1.10	
Anal Beads	4.47	.891	
Lubricants	3.36	1.39	

Table XXII

Cronbach's Alpha: Comfort Regarding Sexual Enhancement Products in Partnered Sexual Activity

<b>Comfort Regarding Partnered Sexual Enhancement Products</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Alpha =</b>
			<b>.891</b>
Vibrators	3.49	1.33	
Dildos	3.85	1.21	
Cock Rings	3.79	1.29	
Anal Beads	4.29	1.06	
Lubricants	2.91	1.45	

Table XXIII

Cronbach's Alpha: Pleasure and Lubricant

<b>Pleasure and Lubricant</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Alpha = .940</b>
Use of lubricant makes Penile-Vaginal Sex more pleasurable	2.72	.963	
Use of Lubricant makes sex more pleasurable	3.08	1.07	
Use of Lubricant makes masturbation more pleasurable	2.99	.984	
Use of Lubricant makes vibrators more pleasurable	3.13	.931	
Use of Lubricant makes dildos more pleasurable	3.15	.945	
Use of Lubricant makes anal beads more pleasurable	3.33	.969	
I feel positively about using lubricants	2.71	1.04	
Lubricants make penile-vaginal sex feel better	2.78	.995	
Lubricants make anal sex feel better	3.14	1.04	
Lubricants make masturbation feel better	2.96	.989	
Wet sex is more pleasurable	2.32	1.11	
Using a lubricant enhances sexual functioning	2.69	1.04	

Table XXIV

Bivariate Logistic Regression with sexual enhancement products used in solo sexual activity

<b>Bivariate Predictor Variables</b>	<b>Crude OR (95% CI)</b>
<b>Gender</b>	
Male	1.00
Female	1.80(1.19-2.73)
<b>Race</b>	
White	1.00
Black	1.34(.785-2.29)
Other	1.01(.577-1.77)
<b>Age</b>	
18-19	1.00
20-21	1.97(1.25-3.10)
≥22	6.54 (4.02-10.64)
<b>Comfort communicating sexual needs to your partner</b>	
Uncomfortable	1.00
Indifferent	.783(.323-1.89)
Comfortable	1.03(.493-2.17)
<b>Comfort in giving sexual guidance to your partner</b>	
Uncomfortable	1.00
Indifferent	.629(2.85-1.39)
Comfortable	1.09(.593-2.03)
<b>Comfort in receiving sexual guidance from your partner</b>	
Uncomfortable	1.00
Indifferent	1.82(.445-7.47)
Comfortable	5.43(1.66-17.76)

Table XXV

Bivariate Logistic Regression with sexual enhancement products used in partnered sexual activity

<b>Bivariate Predictor Variables</b>	<b>Crude OR (95% CI)</b>
<b>Gender</b>	
Male	1.00
Female	1.01(.693-1.47)
<b>Race</b>	
White	1.00
Black	.957(.531-1.73)
Other	.889(.495-1.59)
<b>Age</b>	
18-19	1.00
20-21	2.31(1.42-3.75)
≥22	8.48 (5.08-14.16)
<b>Comfort communicating sexual needs to your partner</b>	
Uncomfortable	1.00
Indifferent	.802(.307-2.09)
Comfortable	1.50(.678-3.33)
<b>Comfort in giving sexual guidance to your partner</b>	
Uncomfortable	1.00
Indifferent	.851(.348-2.08)
Comfortable	2.05(1.01-4.14)
<b>Comfort in receiving sexual guidance from your partner</b>	
Uncomfortable	1.00
Indifferent	.768(.231-2.56)
Comfortable	.267(1.11-6.39)

Table XXVI

## Multivariate Logistic Regression Analysis on Product Use in Solo Sexual Activity

<b>Multivariate Predictor Variables</b>	<b>Crude OR (95% CI)</b>
<b>Gender</b>	
Male	1.00
Female	2.89(.1.80-4.63)
<b>Race</b>	
White	1.00
Black	1.74(.927-3.26)
Other	.980(.504-1.91)
<b>Age</b>	
18-19	1.00
20-21	1.48 (.897-2.43)
≥22	6.05 (3.49-10.51)
<b>Comfort communicating sexual needs to your partner</b>	
Uncomfortable	1.00
Indifferent	1.32(.392-4.43)
Comfortable	.975 (.291-3.27)
<b>Comfort in giving sexual guidance to your partner</b>	
Uncomfortable	1.00
Indifferent	.391 (.131-1.17)
Comfortable	.704 (.250-1.98)
<b>Comfort in receiving sexual guidance from your partner</b>	
Uncomfortable	1.00
Indifferent	1.77 (.389-8.10)
Comfortable	4.73 (1.32-17.06)

Table XXVII

## Multivariate Logistic Regression Analysis on Product Use in Partnered Sexual Activity

<b>Multivariate Predictor Variables</b>	<b>Crude OR (95% CI)</b>
<b>Gender</b>	
Male	1.00
Female	1.53 (.995-2.34)
<b>Race</b>	
White	1.00
Black	1.15(.602-2.21)
Other	.721(.365-1.42)
<b>Age</b>	
18-19	1.00
20-21	1.76 (1.05-2.94)
≥22	6.66 (3.79-11.66)
<b>Comfort communicating sexual needs to your partner</b>	
Uncomfortable	1.00
Indifferent	1.32(.392-4.43)
Comfortable	.975 (.291-3.27)
<b>Comfort in giving sexual guidance to your partner</b>	
Uncomfortable	1.00
Indifferent	.880(2.37-3.27)
Comfortable	.816 (.218-3.05)
<b>Comfort in receiving sexual guidance from your partner</b>	
Uncomfortable	1.00
Indifferent	.536 (.139-2.06)
Comfortable	1.21 (.448-3.26)

## **Appendix II**

### **Qualitative Findings**



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**Motivation**

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**Why have you masturbated?**

**If you have never masturbated indicated why not?**

**Why have you engaged in mutual masturbation?**

**If you have not engaged in mutual masturbation indicate why not?**

**Why have you engaged in performative oral sex?**

**If you have not engaged in performative oral sex indicate why not?**

**Why have you engaged in receptive oral sex?**

**If you have not engaged in receptive oral sex indicate why not?**

**Why have you engaged in penile-vaginal intercourse?**

**If you have not engaged in penile-vaginal intercourse indicate why not?**

**Why have you engaged in anal-penile intercourse?**

**If you have not engaged in anal-penile intercourse indicate why not?**

**Why have you used vibrators?**

**If you have not used vibrators indicate why not?**

**Why have you used dildos?**

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**Major Themes**

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orgasms, stress relief or relief of tension, enjoyable, pleasurable, and it feels good feel dirty or awkward, gross, or feel uncomfortable

good foreplay, sexual arousal, it's fun we both like it, activity before sex, and feels good it's gross, scary, never have had the opportunity, weird, and uncomfortable

he or she likes it, to return the favor, pleasure for partner, fun, feels good, and comfort not desirable, not interested, gross, and doesn't agree with religious beliefs

enjoyment, fun, orgasms, feels great, and overall pleasure it feels wrong, it's gross, never wanted to, and never desired that

pleasure, part of life, comfort, closer to partner, love, and enjoyment not ready or comfortable, feels wrong, religious beliefs, and saving themselves for marriage

curiosity, experimentation, and trying something new it is disgusting, it's nasty, nothing should go in only out, heard it is painful, and not pleasurable

enhance pleasure, orgasms, get off, change things up, feel good, and for enjoyment gross, weird, would rather have the "real" thing, not a homosexual, or never have purchased one

for pleasure, for orgasms, and to help do the job

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<b>If you have not used dildos indicate why not?</b>	not being interested, do not need to, gross and weird, never saw a need or benefit, or prefer the real thing
<b>Why have you used a cock ring?</b>	orgasm from clitoral stimulation, make sex more enjoyable, and to try a new experience
<b>If you have not used a cock ring indicate why not?</b>	it is gross, sounds uncomfortable, and the majority of the sample responded with "I don't know what that is"
<b>Why have you used anal beads?</b>	experimentation, just wanted to try it
<b>If you have not used anal beads indicate why not?</b>	they are gross, sounds uncomfortable, anus is for things to come out not in, and do not interested in engaging in this activity
<b>Why have you used lubricant?</b>	enhances pleasure, getting wet helps with sex, more enjoyable, and heightens stimulation
<b>If you have not used lubricant indicate why not?</b>	did not need it, or do not participate in any sexual activities due to religious reasons
<b>Other products</b>	peanut butter, heating lotion, butt plugs, handcuffs and blindfolds, vibrating bullets, flesh lights, porn, and edible products

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**Appendix III**  
**Sexual Pleasure and Enhancement Survey**

*This script is intended to be read to classes for recruitment to participate in the interview.*

*Classroom Recruitment Script:*

Hello, my name Jessica Harris and I am a Masters Student and Graduate Assistant in the department of Health, Human Performance and Recreation. I would like to invite you to participate in a study about sexual pleasure and enhancement.

I am interested in learning more about what college students' motivations are for engaging in sexual activity and what types of sexual enhancement products students' are using in their solo and partnered sexual activities.

If you are a college student, 18 years of age or older, you meet the criteria to participate in this study. Participation is voluntary. If you are not a college student, 18 years of age or older, you are not eligible to participate in this study.

If you agree to be in the study, you will be asked to fill out a survey that will take approximately 15 minutes. The survey will be anonymous meaning that it will not ask for any identifying information and in no way can your name or other identifying information be linked to your responses on the survey. I will ask you to read an information sheet which will provide you with more information about the study. If you have questions about the study information sheet or the survey, please ask me. After reading the information sheet, if you consent to participate in the survey, you may begin filling out the survey. You are welcome to keep the study information sheet for your records.

Participation is voluntary and you may choose not to take part, leave certain questions blank, or leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect

your current or future relations with the investigator or course instructor nor will it impact your grade for this course.

If you are interested in participating in this study, please read the study information sheet now and begin filling out the survey. If you do not wish to participate in the study, you are welcome to leave the classroom. If you have additional questions you can email me at [jmh045@uark.edu](mailto:jmh045@uark.edu) or by phone at 479-575-2976 (email address and phone number will be provided verbally and written on the board). You are welcome to keep the study information sheet which also has this information on it for your records.

Does anyone have any questions?

**Understanding college students attitudes and beliefs about sexual pleasure and the use of  
sexual enhancement products**

**Consent to Participate in a Research Study**

**Principal Researcher: Jessica Maureen Harris, B.S.**

**INVITATION TO PARTICIPATE**

You are invited to participate in a research study about sexual pleasure and enhancement. You are being asked to participate in this study because you are a college student, currently enrolled in courses.

**WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY**

*Who is the Principal Researcher?*

Jessica Maureen Harris, B.S.

219 HPER Building

University of Arkansas

Phone: 479-575-2976

Email: [jmh045@uark.edu](mailto:jmh045@uark.edu)

*Who is the co-Researcher*

Kristen N. Jozkowski

308-V HPER Building

University of Arkansas

Phone: 479-575-4111

Email: [kjozkows@uark.edu](mailto:kjozkows@uark.edu)

*What is the purpose of this research study?*

The purpose of this study is to learn about what college students are doing and thinking in terms of using sexual enhancement products.

*Who will participate in this study?*

Participants will consist of students who attend the University of Arkansas. You must be at least 18 years old to participate and need to be currently enrolled in classes.

*What am I being asked to do?*

Your participation will require the following:

Participate in an open and closed-ended survey.

*What are the possible risks or discomforts?*

There are no anticipated risks to participating in this study. If you feel uncomfortable at any time while completing the survey, you can omit an answer to a question or can terminate your involvement in the study. You will not be penalized for omitting answers or terminating the survey early.

*What are the possible benefits of this study?*

There are no anticipated benefits to the participant; however, you will be contributing to increasing the body of knowledge about sexual pleasure and enhancement among college students.

*How long will the study last?*

The survey should take approximately 15 minutes to complete.

*Will I have to pay for anything?*

No, there will be no cost associated with your participation.

*What are the options if I do not want to be in the study?*

Participation is completely voluntary. If you do not want to be in this study, you may refuse to participate; you can leave the classroom if you do not wish to participate. Also, you may refuse to participate at any time during the study. Your relationship with the investigator and course instructor will not be affected in any way if you refuse to participate.

*How will my confidentiality be protected?*

All information will be kept confidential to the extent allowed by applicable State and Federal law. Your survey response will be anonymous meaning that no identifying information will be asked during the survey. Your name or any other identifying information will, in no way, be connected to your responses on the survey.

*Will I know the results of the study?*

At the conclusion of the study you will have the right to request feedback about the results. You may contact the Principle Researcher, Jessica M. Harris at [jmh045@uark.edu](mailto:jmh045@uark.edu) or by phone at 479-575-2976. You can keep this form for your files.

*What do I do if I have questions about the research study?*

You have the right to contact the Principal Researcher as listed below for any concerns that you may have.



Jessica Maureen Harris, B.S.

219 HPER Building

University of Arkansas

Phone: 479-575-2976

Email: [jmh045@uark.edu](mailto:jmh045@uark.edu)

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP

Institutional Review Board Coordinator

Research Compliance

University of Arkansas

120 Ozark Hall

Fayetteville, AR 72701-1201

479-575-2208

[irb@uark.edu](mailto:irb@uark.edu)

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be

shared with the participant. I understand that no rights have been waived by consenting to participate in this study. I understand that I am allowed to keep this copy of the study information sheet. By filling out the attached survey, I am implying my consent to participate in this study.

November 5, 2012

## MEMORANDUM

TO: Jessica Harris  
Kristen Jozkowski

FROM: Ro Windwalker  
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 12-10-186

Protocol Title: *Sexual Pleasure and Enhancement: Implications for College Sexuality Education*

Review Type:  EXEMPT  EXPEDITED  FULL IRB

Approved Project Period: Start Date: 11/05/2012 Expiration Date: 11/04/2013

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<http://vpred.uark.edu/210.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

**This protocol has been approved for 1,000 participants.** If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).

210 Administration Building • 1 University of Arkansas • Fayetteville, AR 72701  
Voice (479) 575-2208 • Fax (479) 575-3846 • Email [irb@uark.edu](mailto:irb@uark.edu)

*The University of Arkansas is an equal opportunity/affirmative action institution.*