

CONTRACEPTION AND SEXUALITY IN HETEROSEXUAL EMERGING ADULT
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ABSTRACT

Our study aimed to gain a comprehensive look into heterosexual emerging adult women's preferred type of contraception, who women identify as primarily responsible for contraception, and how sexual self schemas, sexual attitudes, and sexual satisfaction were associated with contraceptive responsibility and preference. Online, self-report surveys were used to collect data from 264 sexually active women between the ages of 18-25. Results indicated that single women preferred dual contraception, whereas committed women preferred hormonal methods, yet both groups primarily viewed both partners as responsible for providing contraception. There was also a significant relationship between contraceptive preference and feelings of responsibility. Finally, we found a relationship between single women's sexual attitudes and preferred contraception, suggesting that women who preferred non-hormonal methods had more conservative attitudes than women who preferred hormonal methods. Our study has important implications for health providers, therapists, and educators to promote women's sexuality and well-being.

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INTRODUCTION

Nearly every heterosexual woman between the ages of 15-44 who has had sexual intercourse has used some form of contraception (Guttmacher, 2013a; Mosher & Jones, 2012). Of these women, 62% reported currently using a contraceptive method during sexual activity. Contraceptives can be used during sexual behaviors such as oral, anal, and vaginal intercourse to help protect users from sexually transmitted infections and unplanned and unintended pregnancies. Contraception can give women more freedom in the type of sexual activities that are safe to engage in, and therefore can influence a woman's overall experience of sexuality. Heterosexual couples are imperative to consider when examining sexuality, as the social construct of patriarchy presents an oppressive nature within the gender dynamic and strips women of power within the sexual relationship (Free et al., 2004; Hyde & DeLamater, 2007). This may negatively influence women's sense of freedom or expression surrounding their sexuality. For this reason, women who identify as heterosexual will be the focus of the current study.

Sexuality is a dynamic component of life, and encompasses many behaviors, experiences, and attitudes (Woertman & van den Brink, 2012). Traditional models of sexuality include a woman's sexual arousal, sexual desire, genital response, masturbation habits, and hormonal levels (Bancroft & Graham, 2011), but it can also be defined by experiences, expectations, social norms, and relationships, which affect sexual behaviors (Elwood & Greene, 2006). There is a need for space to honor unique meanings for individuals as some women attributed little meaning to their sexuality, whereas sexuality is seemingly "all-consuming" for others (Mollen & Stabb, 2010).

Feminist scholars propose a holistic model of sexuality, considering increased objectification of women in our society by popular culture (Chrisler, 2011). Women's bodies are

largely used to identify their worth (Chrisler, 2011), and women are encouraged to be sexy, but pure or chaste (Benagiano & Mori, 2009). This is an example of how women can be devalued by male-centered ideals in our society, and held up to a double standard that places worth on appearance. Women are often portrayed as passive participants in sexual behaviors, yet this is far from the case, and can devalue women's experiences. For this reason, women's sexuality should include factors of cultural/gender restrictions on sexuality and orgasm, patriarchy's involvement in women's orgasm being secondary to men's (Hyde, & DeLamater, 2007), contextual factors on women's sexual desire (Wood, Koch, & Mansfield, 2006), and suppressive social norms derived from family, peers, and media (Fahs, 2007). Thus, factors related to sexuality are important to examine because these relate to women's overall identity and emotional and mental well-being (Rosen & Bachmann, 2008; Woertman & van den Brink, 2012). Contraception has brought a way for women to gain control, empower, and promote their sexuality, despite continuing to be held to a complex double standard of being sexy, but not overly sexually active in a patriarchal society. Despite not being able to specifically determine how patriarchy oppresses women and how contraception can empower women in sexual relationships and health, it is imperative to consider how social messages impact how sexuality develops, what contributes to and influences it, and the complex role sexuality has in women's lives.

There is not significant research in how contraception is related to women's sexuality, or if feelings of responsibility or the type of contraception affect specific aspects of women's sexuality. Because of the number of women using contraception, more research is needed in order to examine if and how contraceptives influence a woman's sexual experiences and development of a sexual identity. Further understandings on women's sexual health, specifically

contraception and sexual development, can be used to gain insight into factors that could help women gain protection from unplanned pregnancies, sexually transmitted infections, and promote a positive, fulfilling sexual lifestyle.

This study specifically examines emerging adulthood (ages 18 to 25) because it represents a transitional time period in people's lives and a time of exploration and identity development (Arnett, 2007). Emerging adulthood is a period that represents a shift in expectations, less structure, and greater freedom than previous ages, and symbolizes a time to explore aspects, such as sexuality, that are part of adult life (Arnett, 2007). This balance of adolescent and adult roles may come with career or college onset and exploration of sexual orientation, sexual relationships, and types of serious relationships, making emerging adulthood an important period to consider for studying sexuality. More specifically, of the 19 million new STIs each year, half of them occur among emerging adult populations (Guttmacher Institute, 2009). Moreover, the rate of unintended or unplanned pregnancies among emerging adult populations is the highest of all age cohorts (Guttmacher Institute, 2013b). The rates of STIs and pregnancies reiterate the importance of studying contraception and sexuality in emerging adult populations that are in a developmental transition, and may not have knowledge to guide them in making healthy, informed decisions regarding sexual behaviors.

In the present study, we specifically sought to examine heterosexual emerging adult women's experience of responsibility in contraception and women's preference for method of birth control and how such contraceptive methods relate to a woman's sexuality, including sexual self schema, sexual attitudes (liberal or conservative), and sexual satisfaction. Therefore, this study allows for a comprehensive examination of how contraception is associated with

emerging adult women's sexuality because sexuality has complex ties into many aspects of women's lives, relationships, mental, and physical health.

Use of Contraception

Contraception has revolutionized women's health and freedoms surrounding sexuality. Free and Odgen (2005) found that 67% of women in their sample considered unplanned pregnancy to be a major problem, with many women reporting unplanned pregnancy to be "a disaster" and "the worst thing that could happen" (Free et al., 2005, pg 678). Not only does contraception offer women ways to control pregnancies and promote roles outside of or in addition to motherhood, but it allows women to have greater potential for postsecondary education, travelling, social exploration, employment, and earning potential (Benagiano et al., 2007; Free et al., 2005). This has helped to narrow the social gap between genders in society, and in the family by extending women's roles beyond reproduction (Benagiano et al., 2007). Historically, women were faced with health and economic consequences of child-bearing and rearing, which in turn consumed much of their defined sexual purpose. Unplanned pregnancies remain a tremendous cost for women, particularly when it occurs within college-aged women, but there has been significant progress in broadening women's sexuality, including being sexual beings outside of child-bearing. Benagiano and Mori (2009) posit that contraception is the biggest tool towards equality thus far between men and women.

There are many contraceptive methods that prevent pregnancy, STIs, and allow for women to have safe experiences during sexual activity. Eighty percent of heterosexual women in the U.S. use one of three methods to prevent pregnancy, two of which include contraceptive methods such as condoms, and birth control pills (Mosher & Jones, 2012). The third common method used during sexual activities is withdrawal, which is highly ineffective (Mosher & Jones,

2012). Currently 6.2 million women use male condoms for birth control, and 93% of women have used condoms at some point (Guttmacher Institute, 2013b; Mosher & Jones, 2012). The male condom, if used correctly, has a failure rate of less than 2 out of 100 pregnancies, and is also effective against STIs (Planned Parenthood, 2013). However, for emerging adult women, the pill is the most popular and highly used method; between 54% to 48% of teenage and emerging adult women rely on it, and overall, 82% of women have used the pill at some point (Guttmacher Institute, 2013a; Mosher & Jones, 2012; Planned Parenthood, 2013). It is also more effective than condoms, at less than 1 pregnancy per 100 if used correctly (Mosher & Jones, 2012; Planned Parenthood, 2013). However, there is no protection against STIs if the pill is used alone. Women may also choose to use more than one method of contraception. The CDC estimates that 8% of women use dual methods of contraception, meaning utilizing multiple methods of contraception at a time, most often condom and another method (Mosher & Jones, 2012). Lastly, 59% of women have used a non-contraceptive withdrawal method, but even if used correctly, 4 women out of 100 will still get pregnant, and 27 out of 100 if used incorrectly, and offers no protection against STIs (Mosher & Jones, 2012; Planned Parenthood, 2013). These data demonstrate what types of contraceptives are most frequently used, their effectiveness, and current trends for emerging adult women to select particular forms of contraception.

Other contraceptive methods that are increasing in use among emerging adult women include the use of intrauterine devices (IUDs) and vaginal rings. According to Hubacher, Finer, and Espey (2011), 6% of emerging adult women in 2006-2008 were using IUDs a primary contraceptive, which may be due to IUDs high effectiveness at less than 1 out of 100 pregnancies (Planned Parenthood, 2013). However, Mosher and Jones (2012) found in 2006-2008 that for women between the ages of 15 and 24, IUDs were used by only 2% of women. This discrepancy

in percentages suggests that women may begin utilizing IUDs as primary method of birth control later, during emerging adulthood. The low rates of use may also be because IUDs are not widely prescribed for this population of women, and condoms can be accessed without a prescription. A large portion of this age group is enrolled in universities, which may be linked with methods such as condoms and pills due to availability, affordability, or ability to obtain without a prescription, which in turn may explain lower IUD usage. Practitioner bias and prescribing habits may also relate to the lower utilization of IUDs. In addition, 2% of women reported using vaginal rings (Nuvaring), which could be on the rise for convenience purposes (Mosher & Jones, 2012). Both methods give women the convenience of not having to do or take anything before or after sexual encounters for pregnancy protection. However, neither protects against STIs, which is speculated as a reason why they are used at lower rates (Planned Parenthood, 2013).

Emergency contraception (the morning after pill) and contraceptive patches are other hormonal methods of contraception available to women seeking contraception. Emergency contraception is most utilized by emerging adult women (Guttmacher Institute, 2013b). Emergency contraception has become increasingly available to women through over the counter prescriptions, but still remains largely underutilized (Free & Odgen, 2005). Emergency contraception was being used by 1 in 10 women at least once between 2006-2008 (Mosher & Jones, 2012). This usage rate seems low based on the length of time emergency contraception can be used after unprotected sex or failed primary method, as it can be taken anywhere between 3 and 5 days after intercourse to prevent pregnancy (Mosher & Jones, 2012). This may suggest that women have a lack of awareness of this method, or that there are misconceptions of emergency contraception, prescriber or pharmacist's value laden discretion in providing the method, or fears or discomfort related to the stigma connected to seeking out the method (Free et

al., 2005; Free & Odgen; 2005; Mosher & Jones, 2012). Nearly 6% of women in 2006 used the patch for primary birth control (Raine et al., 2009), which may be due to its high effectiveness of 1 pregnancy out of 100 if used correctly, and 9 out of 100 if used incorrectly (Planned Parenthood, 2013). However neither of these offer protection against STIs (Guttmacher 2013b; Planned Parenthood, 2013).

The emphasis on pregnancy prevention in contraceptive options seems to undermine the dangers of STI contraction, which may cause health risks as severe as cervical cancer, painful ulcers, organ damage, infertility, and more (Planned Parenthood, 2013). Despite the importance of pregnancy prevention, greater emphasis on STIs and public health is needed. Without this, STIs could cause health complications and infertility. The American College of Obstetricians and Gynecologists (ACOG) points out that hormonal contraceptives can be prescribed for conditions related to menstrual and uterine issues, dermatological problems, and as protective measure against health conditions (Sonfield, 2010). Because of this, the ACOG ultimately argues that contraceptive matters should be prioritized as highly as other medical conditions or illnesses.

Each type of contraception has advantages and disadvantages. As previously mentioned, some methods of contraception are intended for primarily pregnancy prevention but do not prevent STIs, whereas other methods such as the male condom can serve to prevent STIs as well as pregnancy. Additionally, there are side effects with contraceptives that may affect the type chosen. For the most popular type, the pill, women report experiencing symptoms from positive menstrual changes to weight gain and negative sexual side effects (Guttmacher Institute, 2013b; Higgins & Hirsch, 2008; Mosher & Jones, 2012). Ersek et al. (2011) concluded that emerging adult women prefer methods that do not require use immediately before or after the sexual experience. This disruption in the flow partners experience due to pausing to place a male

condom on may be why it is not a highly preferred method (Higgins & Hirsch, 2008). The multiple types, risks, and protection factors of each contraception are already complex, but only the beginning of what makes up the choice of contraceptives for women.

The pill may be the most popular method due to its accessibility to university women. In 2008, 7.2 million women used a publicly funded facility for sexual health and contraceptive access (Mosher & Jones, 2012); however, due to a lack of comprehensive insurance coverage, women often choose methods that are covered by insurance or available inexpensively, instead of a contraceptive method that would fit their needs best (Sonfield, 2010). This high endorsement of the pill may also be related to practitioners' habits to prescribe the pill to this population without extensive assessment, and, without sufficient knowledge on contraception, women may fail to ask questions about other options. Another factor that may impact emerging adult women's choice of contraception outside of availability and cost is advertising and promotion of lifestyle drug contraceptives that have become more prevalent on television, print, and radio.

As previously mentioned, emerging adulthood is a transitional time in women's lives balancing previously known adolescent roles with adult expectations (Arnett, 2007). These women are being exposed to experimentation with substance abuse, and an environment that does not promote conversations about sex, contraception, and risks involved in engaging in sex with multiple partners which are unique risk factors to this age group. This is also a time that there may be a variety of types of relationships that may include commitment, being single, and sexual exploration with new freedoms if living outside parents' home or in a university setting. One study of heterosexual emerging adult students found some themes in what methods of contraception were utilized based off of relationship status. For heterosexual couples that dated

before engaging in intercourse, there was greater likelihood of using hormonal only contraception, and they were less likely to use contraception in comparison to those who had intercourse before dating (Manlove et al., 2011). Single adults in the sample previously described were also more likely to use dual methods and condoms in comparison to committed individuals (Manlove et al., 2011). This suggests that there may be greater protection against STIs and pregnancy in sexual encounters where there is not commitment present. All of these factors make emerging adults a higher risk category than other age groups.

The CDC estimates that in 2008, contraceptives helped to prevent 188 million unplanned pregnancies (Sonfield, 2010). In North Dakota alone in 2008, publically funded contraceptives helped to prevent 3,900 pregnancies and, in turn, an estimated potential 1,700 births and 1,600 abortions (Frost, Henshaw, & Sonfield, 2010). These rates reiterate the importance of examining emerging adult women's sexuality and sexual health behaviors, especially contraceptive methods. Choice of contraceptives is important to consider when examining contraceptive responsibility and how emerging adult women feel responsible or share responsibility with their partners. This is particularly important because of study results that have supported the role that male partners have in the decision to use contraception and what type is chosen, and how this impact the female partners overall experience of acceptability surrounding the method (Beckman et al., 2006). Perhaps when women view themselves as responsible for contraception, they are more likely to choose female controlled methods of oral birth control or an IUD; in contrast, if they view their partner as responsible, they may be more likely to use condoms.

Responsibility for Contraception

Who takes responsibility, or who is viewed as responsible, for contraception is an aspect that all sexually active emerging adult women must consider, consciously or not. In a 2010

study, 45% of heterosexual women reported being solely responsible for contraception, and 55% jointly responsible (Cox, Posner, & Sangi-Haghpeykar, 2010). One study reinforced this with results indicating that choosing a contraceptive method was a complex decision that was influenced by male partners (Beaulieu, Kools, Kennedy, & Humphreys, 2011), and this study concluded that the majority of heterosexual couples agreed that contraceptive decisions should be shared equally. However, in reality this was rarely what happened, as women were the partners that upheld contraceptive use, demonstrating that women bear a greater level of responsibility for contraception in comparison to male partners (Beaulieu et al., 2011).

Other studies have shown that in comparison to general health care decisions, women want more autonomy in contraception decisions (Dehlendorf, Diedrich, Drey, Postone, & Steinauer, 2010). Part of this may be related to many women having higher levels of reproductive health knowledge, which increases the odds that women use contraception consistently (Ryan, Franzetta, & Manlove, 2007). On the contrary, Grady et al. (2010) found that in heterosexual couples, partners had equal influence over whether contraception was used and which method was used. This idea was challenged in Fennell's (2011) study that acknowledged that negotiation happens within the couple, but in the end the final decision is typically the woman's, or in some cases, male partners assumed that contraceptive decisions were women's responsibility (Merkh, Whittaker, Baker, Hock-Long, & Armstrong, 2009). This finding suggests that women have a significant role in decision-making about contraception, but that more research needs to be conducted to determine the dynamic of how contraceptive decisions are made.

With the role in contraceptive decisions comes not only a potential burden of responsibility, but also the empowerment to control contraception, particularly the type to utilize

(Beaulieu et al., 2011). Although men hold more power in relationships, women are empowered by the control they receive when it comes to fertility decisions (Fennell, 2011). These gender differences are apparent in preferences surrounding contraceptive choice (Higgins & Hirsch, 2008), as Fennell (2011) posited that each gender tends to have preferences for a method of contraception that is under her or his respective control. Simply put, men reportedly preferred condoms, whereas women preferred the pill (Fennell, 2011). This result came from a study of 30 heterosexual couples; therefore, further examination is needed to indicate if this is representative of the larger population. Another study replicated Fennell's findings such that the majority of women reported the desire to be autonomous in making contraceptive decisions or to make these decisions in conjunction with their medical provider as opposed to their partner (Dehlendorf et al., 2010). This indicates a sense of empowerment women get through having control over decision-making about contraception.

Granzow (2007) took the concept of control under further scrutiny by questioning how much choice is actually involved in deciding to use the pill. To her, this decision is more of a social construction of what is acceptable. The decision to use contraception exists in part to abide by female gender scripts and societal norms, and also to make a choice to control and be freed from reproductive-related occurrences, including menstruation and pregnancy. Moreover, she questions how much control women are actually getting as it is really another obligation to take responsibility, which does not necessarily mean choice. Fennell (2011) pointed out this unequal burden in pregnancy protection, a burden that typically leads to choosing the most popular method of birth control.

Although the most popular method of contraception for women is the pill, there seems to be variation in the early parts of sexual relationships (Guttmacher Institute, 2013b; Mosher &

Jones, 2012). Fennell's (2011) study recognized that condoms were more popular for a short span of time in the beginning of the relationship, leaving men as the "responsible" partner, despite the fact that either partner may provide the condom. Cox et al. (2010) inferred that this is logical as condoms allow for both partners to be protected against STIs and pregnancy. This may be because both men and women desire safe sexual practices where both partners feel protected. According to the Guttmacher Institute (2013b), there is a pattern for using condoms during first intercourse to protect against STIs, then a shift to using the pill to control or prevent pregnancies, then later a shift toward women's sterilization.

Other reasons condom use may decline later in heterosexual relationships is that it interferes with the natural feel of sexual experiences, may lower sensation and pleasure for both partners, or disrupt the experience to put the condom on (Mosher & Jones, 2012; Higgins & Hirsch, 2008; Free, Ogden, & Lee, 2005). Further, there is a correlation between pleasure and the types of contraceptive methods people seek out, such that partners prefer methods that provide greatest pleasure and sensation for both partners (Higgins & Hirsch, 2008; Free et al., 2005), making pleasure an important factor in contraception selection. Physical pleasure and lack of discomfort, spontaneity and sexual flow, closeness, pleasing one's partner, and eroticization of safety and responsibility all contribute to the sexual experience (Higgins & Hirsch, 2008). Women may be thinking about multiple components of their and their partners' experience during sexual activity, including concern both of their pleasure, (dis)comfort with the mode of contraception, and protecting oneself in order to enjoy the sexual experience. Similarly, Granzow (2007) and Free et al., (2005) state that the pill allows for the type of relationships people strive to have: spontaneous and romantic, which the condom does not. The way contraception affects the sexual experience impacts the method chosen, and this choice is

imperative to consider as women are experiencing responsibility for contraceptive decisions, which in turn impacts the way they experience their sexuality.

In general, men and women are drawn to types of contraception that they can control themselves. However, previous studies' findings of women highly endorsing the pill suggest that, in the end, women may have a greater sense of responsibility for the contraceptive method used, as this is a female controlled method. For the purposes of the current study, contraceptive responsibility is an important consideration among emerging adult heterosexual women in that it may have an impact on their preferred type of contraception as well as components of their overall sexuality, including their sexual self schemas, sexual attitudes, and sexual satisfaction.

Sexuality

Contraceptive use is an important component of what contributes to emerging adult women's sexuality, but as previously discussed, there are many dimensions to what makes up sexuality. Contraception has been positively associated with women's sense of their sexuality (Free & Odgen, 2005). The three aspects utilized to examine sexuality in this paper are women's sexual self schemas, sexual attitudes, and sexual satisfaction. Sexual self schemas are women's beliefs about what being "sexual" is, considering each person's unique experience and cognitions with societal norms and expectations and personality dispositions (Cyranski & Andersen, 1998). In essence, a sexual self schema is how a woman views herself as a sexual person. Secondly, sexual attitudes can be categorized on a continuum from conservative or liberal, or resistance/rigidity or openness to sexual acts, which then influence the types of activities and situations a woman enters into. Lastly, sexual satisfaction is the level of satisfaction experienced based on the quality of sexual experiences, the level of pleasure that sexual experiences have

brought about, or how satisfied women are with the way their body responds during sexual activity (Dove & Wiederman, 2000).

A woman's sexual self schema can be viewed on a continuum from positive to negative. Women with a more positive sexual self schema tend to be more open to sexual experiences, be more experienced in sexual behaviors, and experience positive emotions or thoughts (Andersen & Cyranowski, 1994). In contrast, women with a negative sexual self schema may be less experienced, skilled, or comfortable in sexual acts, less likely to engage in sexual behaviors, and experience fewer positive feelings and potentially negative affect (Andersen & Cyranowski, 1994). The sexual self schema is positively influenced by the use of contraception because it allows a woman to control pregnancy and feel aligned with descriptions of "adult, responsible, and sensible" (Free & Odgen, 2005). This may be connected to women being able to have more freedom in sexual decisions and be able to engage in sexual situations more freely. Higgins and Hirsch (2008) found that contraceptive use makes women feel protected, and therefore more able to enjoy themselves sexually by being able to "let go" during sexual activity. So, despite contraception not directly affecting the experience of sex, it is suggested that feeling protected during sexual activity creates a worry-free, more enjoyable experience and potentially a more positive sexual self schema.

As far as sexual health, sexual self schemas should be considered because women with positive sexual self schemas are more likely to have positive experiences, more sexual partners (which could be high risk without contraception), more sexual experiences, and a wider range of experiences and openness in comparison to people with lower or negative sexual self schemas. However, women's sexual self schemas gain complexity in the stigmas that they are put through with social expectations (Lindgren et al., 2011). Women are raised with cultural and societal

ideals that they should not have sex because it is “wrong” (Lindgren et al., 2011). Therefore, if a woman is not sexually active, she is aligned with external expectations, and thus experiences a positive self evaluation for conforming to expectations and ultimately less turmoil (Lindgren et al., 2011), but stunted sexual exploration and liberty. There is a societal pressure to be both sexy and maintain a virgin status, and this leaves little space for exploration without societal labels and pressure (Tolman, 2002). However, when a woman decides to become sexual, an imbalance occurs, and she either has to adjust her schema to thinking negatively about herself or shift to view sexual activities as positive. This connects sexual self schemas to debut of sexual experiences, and therefore safety or contraception, in that a woman’s view of sexual behaviors may delay a debut, or it may be that she engages earlier in sexual behaviors if she rebels against expectations and adjusts her schema accordingly (Lindgren et al., 2011). Sexual self schemas are necessary to consider in relation to contraception because of the messages women are presented with regarding what is acceptable behavior and because sexual self schemas have been linked with women’s sexual experiences.

The second sexuality variable considered in this study is sexual attitudes. Sexual attitudes are a significant component of what makes up sexuality in that they influence the types of activities and situations a woman enters into. Liberally-oriented women tend to experience more openness, comfort, and frequency in a wide range of sexual ideas, situations, and activities (Derogatis, 1975; Faith & Schare, 1993), including higher rates of oral and anal sex (Lemer, Blodgett Salafia, & Benson, 2013). The higher frequency of sexual behavior could relate to women’s sexual health if contraception is not used, or if frequency relates to more partners. In contrast, women with conservative sexual attitudes, may be more resistant and rigid in sexual activities. This may include social beliefs that men are superior to women or that women should

remain virgins until marriage (Nobre, Pinto-Gouveia, & Gomes, 2003), which could impact the behaviors associated with being acceptable, the need for contraception, and stigmatize masturbation and behaviors outside of intercourse as immoral. Conservative attitudes have been associated with women's sexual difficulties, including lower satisfaction, desire, and frequency of orgasm (Nobre & Pinto-Gouveia, 2006). Thus, sexual attitudes may affect women's decision to use contraception and what type is chosen based on attitudes surrounding sex, pregnancy, protection, and necessity.

Sexual experience is impacted by women's sexual attitudes as women with liberal sexual attitudes may be more able to embrace their sexuality, view sexual behaviors in a positive way, stand up to societal messages about body image and women's sexuality, and grow within their sexuality to include prioritizing personal satisfaction such as orgasm and contraceptive use (Ackard et al., 2000; Lemer, et al., 2013), including trying new types of contraception (Gillen et al., 2006). Women with more liberal sexual attitudes who have more positive self-perceptions are less likely to engage in risky sexual behaviors, more likely to use contraception, and have decreased rates of sexual difficulties (Gillen, et al., 2006). Whereas women with lower body image and more conservative attitudes may be more apt to be dissuaded to use condoms, leaving them less protected during a sexual encounter due to less sexual assertiveness (Gillen, et al., 2006; Weideman, 2000). Sexual attitudes are necessary to consider in relation to contraception because these attitudes may dictate what contraception women chose to use or view as acceptable whether women are more open or conservative, therefore impacting their sexual health and sexual experiences.

The last sexuality variable considered in the current study is sexual satisfaction. Sexual satisfaction is imperative to consider because there is a pressure to please one's partner first for

many heterosexual women, which may leave personal sexual satisfaction at less of a priority (Fahs & Swank, 2011; Free et al., 2005). Orgasm frequency, sexual self comfort, premeditation in sexual intercourse, having a committed partner, greater partner communication, and higher levels of self respect were all found to contribute to heterosexual women's sexual satisfaction (Higgins et al., 2011; Gabalci & Terzioglu, 2010). Additionally, sexual satisfaction is an important variable to examine as pleasure is not a concept that all women are educated on due to social discomfort (Fahs & Swank 2011) and lack of comprehensive sex education, particularly on topics of pleasure, female functionality, and orgasm. Fahs and Swank (2011) make an important distinction in questioning what constitutes sexual satisfaction for women as they found the majority of women (67.7%) did not experience congruence between sexual activity and satisfaction, meaning that they were engaging in sexual behaviors, but not experiencing sexual satisfaction (Fahs & Swank, 2011). It is possible that the type of contraception used could promote or take away from sexual satisfaction. In fact, the withdrawal method took away from women's sexual satisfaction, but oral birth controls did not impact sexual satisfaction for the majority of women, and even increased sexual satisfaction for others (Gabalci & Terzioglu, 2010). Sexual satisfaction for both partners remains a factor for women in their sexual relationships; therefore, if contraception interferes with satisfaction or the natural-like feeling during sexual acts, the contraceptive method may be changed or not used at all (Free & Odgen, 2005).

A woman may strive to make sure that her partner is enjoying sexual activity because that contributes to her own satisfaction (Free & Odgen, 2005). Therefore, if a male condom was inhibiting the man's experience, a woman would be more apt to remove it. Fahs and Swank (2011) further examined this partner interaction and considered how it may demonstrate a power

imbalance that couples inherently experience in a patriarchal larger society. Women in this case would have less privilege due to the power imbalance that positions men superior to women. This leaves the male partner more social power and privilege to decide on the method of contraception used (Fahs & Swank, 2011). This inherently leaves the male partner the power to influence women's satisfaction (positively or negatively) by the chosen method (Fahs & Swank, 2011). Moreover, women with more autonomy are found to engage in sexual acts to gain pleasure, and not for their partner's pleasure alone, which could explain why these women are more likely to engage in safe sex practices in that these women may feel less pressure from partners and more integrity and independence in making their own safe sex practice decisions leading to a greater experience of sexual satisfaction. Previous research has suggested that sexual satisfaction is important to consider because of the rates of low sexual satisfaction that many women suffer surrounding frequency and overall sexual experience, particularly surrounding pleasure and how a woman prioritizes her own in balance with her partners'.

Present Study

Considering the large number of emerging adult women on contraception, it is imperative to examine the link that exists between contraception and heterosexual women's experiences sexually, not only physically, but holistically, considering emotions and cognitions. Therefore, the objective of this study was to get a comprehensive, current understanding of (1) who women identify as primarily responsible for contraception, (2), what method of contraception is preferred, (3) if women differ in the type of contraception they choose according to their responsibility for birth control, (4) if women differ in their sexual schemas according to their responsibility for or type of birth control preferred, (5) if women differ in the sexual attitudes

according to their responsibility for or type of birth control preferred, and (6) if women differ in their sexual satisfaction according to their responsibility for or type of birth control preferred.

METHOD

Participants

As part of larger study investigating women's sexuality and body image, data for the present study were collected from 264 English-speaking, emerging adult, heterosexual women at a public university in a Midwestern city. During the time of the study, these women were all currently or had been sexually active in the past 6 months. Of the 264 participants, 23 were graduate students, 240 were undergraduates, and one participant chose to not disclose her education level. Participants ranged in age from 18 to 25 ($M = 20.77$, $SD = 1.785$). The majority of the sample identified themselves as White (95.8%); 2.3% identified as Asian/Asian American; less than 1% identified as Latina, Chicano, or Hispanic; and 1.1% identified as other. The majority of the participants identified as single (59.8%); and 40.2% were committed as exhibited by relationship reports of: married (6.1%), were engaged (9.1%), partnered (12.9%), and cohabitating (9.9%). Participants were to choose one of the described options that best described the relationship they were in. When asked about dating status, if the participant was not married, engaged, or partnered, the majority of the sample (55.2%) reported dating one person, 18.3% reported not dating anyone, and 3.7% reported dating more than one person. Participants were grouped by single or committed relationship statuses for analyses. Upon summing these, 59.8% ($N=158$) of the sample was single, and 40.2% ($N= 106$) was committed.

Procedure

Recruitment of interested individuals for the study was done through in-class advertisements and electronic invitations that described the study as a research project to obtain information on body image, disordered eating, sexual activity, and sexual attitudes. The participants completed an online consent form and surveys about these constructs. Once the

surveys were completed, participants had the option to follow an internet link (to maintain confidentiality with the survey) to enter to win a drawing for a chance to win one of the following: flatscreen LCD TV, \$50 gift card to the NDSU bookstore, \$50 gift card to Target, and \$50 gift card to local restaurants.

Measures

Two measures were used to assess components of emerging adult women's contraceptive use, and three measures were used to assess components of women's sexuality in the present study.

Preferred contraception type. Contraceptive preference was measured by using an item created for this study. Participants were presented with a question that read "What type(s) of birth control/contraception do you prefer to use?" Participants had the option to check all that applied to them. The options were as follows: birth control pill, shot (e.g., Depo Provera), condom, vaginal ring (e.g., NuvaRing), IUD, patch, diaphragm, morning after pill (e.g., Plan B), other (with a specification space), or none. For analyses, these preference items were coded as: hormonal, non-hormonal, dual pill and condom, multiple methods, and no method.

Responsibility for contraception. To assess who the women in the study viewed as responsible for contraception, a single item created for this study was used. Participants were presented with a question that read "who is usually responsible for birth control/contraception?" The choices were presented with space to check an answer, and were as follows: me, my partner, both my partner and me, or neither my partner nor me.

Sexual self schema. Sexual self schemas were measured by Anderson and Cyranowski's (1994) Sexual Self-Schema Scale (see appendix A). This 26-item scale is described as an unobtrusive measure of sexual cognition, or sexual self views and thoughts (Cyranowski &

Anderson, 1998). Participants rated themselves on a Likert-type 7 point scale ranging from 0 (not at all descriptive of me) to 6 (very much descriptive of me) (Anderson & Cyranowski, 1994). This scale has three factors represented within it, Factors 1 and 2 being positive self-view dimensions and 3 being negative tendency toward sexual expression; Factor 1 is Passionate-Romantic, Factor 2 represents Open-Direct, and Factor 3 is Embarrassed-Conservative. Examples of the items include “loving,” “self-conscious,” “outspoken,” “revealing,” and “inexperienced.” These three scores from each factor were summed together, with Factor 3 being reverse-scored. In previous work, the scale had an overall Cronbach’s alpha of .82 among a sample of mostly undergraduate women at a Midwestern University, making the internal consistency high (Anderson & Cyranowski, 1994). The test-retest reliability on a 2 and 9 week re-test period was also high ($r = .91$ and $r = .88$) (Anderson & Cyranowski, 1994). In a similar study of 107 women between the ages of 18 and 29 (57% between 21 and 25 years of age), this scale was found to have high internal consistency with Cronbach’s alpha of .80 for the full scale and .80, .75, and .70 for each factor (Reissing, Laliberte, & Davis, 2005). In the current study, Cronbach’s alpha was .78 for the full scale.

Sexual attitudes. Sexual attitudes were measured with the 18-item Sexual Attitudes Scale (see appendix B) (Lemer, Blodgett Salafia, & Benson, 2013). This scale was originally created from a combination and revision of the Derogatis Sexual Functioning Inventory Sexual Attitudes subscale (DSFI; Derogatis, 1975), the revised Sexual Opinion Survey (SOS; Fisher, Byrne, White, & Kelley, 1988), and the female version of the Sexual Dysfunction Beliefs Questionnaire (SDBQ; Nobre, Pinto-Gouveia, & Gomes, 2003). The reliability and validity of these previous measures have been demonstrated in works by Andersen and Cyranowski (1994), Derogatis and Melisaratos (1979), Fisher et al. (1988), and Nobre et al. (2003).

The Sexual Attitudes scale was composed of nine items that were sexually conservative statements, and nine sexually liberal statements. In order to assess sexual attitudes, participants rated their agreement with each statement on a 5-point Likert scale that ranged from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Liberal statements on the survey were reverse coded, so higher agreement meant a more conservative response. Examples of liberal statements includes “Engaging in group sex is an entertaining idea” (SOS, 1988) and “Masturbation is a perfectly normal, healthy behavior” (DSFI, 1975);(Lemer et al., 2013). Examples of conservative statements included, “Group sex is a bizarre and disgusting idea” (DSGI, 1975) and “Masturbation is wrong” (SDBG, 2003) (Lemer et al., 2013). Each statement, conservative or liberal, had a corresponding opposite statement. The current study found this measure to have a Cronbach’s alpha of .84.

Sexual satisfaction. The final measure used for the present study was the 3-item Sexual Satisfaction Scale (Dove & Wiederman, 2000). The items consisted of: “In general, how satisfied are you with the quality of the sexual experiences you have had with a partner,” “Overall, how pleasurable have your sexual experiences with a partner been for you,” and “All things considered, how satisfied are you with the way your body has responded during sexual activity with a partner?” Participants were asked to rate their agreement with each statement on a 5-point Likert-type scale from 1 (not at all) to 5 (very much). The scores were then generated by combining each of the item scores together. In a previous study of 120 college women, the Sexual Satisfaction scale demonstrated a high internal consistency of .91 (Dove & Wiederman, 2000). This scale was also used in a study of 101 college women and was found to have a Cronbach’s alpha of .83, further supporting the reliability of this measure (Calogero & Thompson, 2009). The current study found a Cronbach’s alpha of .86.

Data Analysis

First, frequency data was examined to determine who is primarily responsible for contraception and the preferred method of contraception coded as hormonal, non-hormonal, dual pill and condom, multiple methods, and no method. Secondly, independent t-tests were run to determine if there were significant differences between committed individuals and single individuals on the sexuality variables, in order to determine whether we should group all participants together or run analyses separately for committed and single women. Next, a chi square test was used to examine the relationship between the preferred type of birth control and responsibility for birth control. Lastly, analysis of variance tests (ANOVAs) were conducted to determine how women differed on any of the sexuality variables of sexual self schemas, sexual attitudes, and sexual satisfaction according to responsibility for birth control. The same was then done to examine differences on the sexuality variables according to type of birth control preferred for separately. Each ANOVA was conducted separately for single and committed participants. For all analyses, the alpha level was set at .05 to determine if relationships or differences were statistically significant. All analyses were conducted using SPSS 20.0.

RESULTS

Descriptive Statistics

Descriptive statistics for the sexuality variables for single, committed, and total sample are presented in Table 1. Frequency data for preferred contraception and who was reported as responsible are available in Table 2 and Table 3. For committed participants and who was responsible for contraception, 33.0% stated that they were responsible, 63.2% said both partners were, 3.8% said their partner was responsible, and no one said neither. The committed participants also indicated that the top three preferred contraception were hormone only at 46.2%, dual pill and condom at 31.1%, and non-hormonal methods at 11.3%. For the participants that reported being single, regarding responsibility for contraception: 32.3% indicated they were responsible alone, 63.3% stated that both partners responsible, 3.2% said their partner was responsible, and 1.3% said that neither partner were responsible. The single participants indicated their top three preferred methods of contraception to be dual pill and condom at 44.3%, hormone only at 30.4%, and non-hormonal methods at 14.6%. Only 3.4% of our sample identify their partner to be responsible, and less than 1.0% of the population reported neither partner to be responsible.

Table 1

Descriptive Statistics of Sexuality Variables

Variable	<i>M</i>	<i>SD</i>	<i>Actual Range</i>	<i>Possible Range</i>
Total Sample				
Sexual Attitudes	49.60	9.21	20-74	18-90
Sexual Satisfaction	11.95	2.57	3-15	3-15
Sexual Self Schema	62.30	14.55	9-108	0-156
Single				
Sexual Attitudes	48.68	9.76	20-74	18-90
Sexual Satisfaction	11.59	2.65	3-15	3-15
Sexual Self Schema	62.31	16.33	9-108	0-156
Committed				
Sexual Attitudes	50.98	8.17	31-68	18-90
Sexual Satisfaction	12.49	2.34	5-15	3-15
Sexual Self Schema	62.29	11.47	34-89	0-156

Table 2

Frequency Data for Who was Viewed as Responsible for Contraception

Variable	Total Sample		Single Only		Committed Only	
	N	(%)	N	(%)	N	(%)
Me	86	32.6	51	32.3	35	33.0
Both My Partner & Me	167	63.3	100	63.3	67	63.2
My Partner	9	3.4	5	3.2	4	3.8
Neither of us	2	0.8	2	1.3	0	0

Table 3

Frequency Data for Preferred Contraception

Variable	Total Sample		Single Only		Committed Only	
	N	(%)	N	(%)	N	(%)
Hormone	97	36.7	48	30.4	49	46.2
Non-Hormone	35	13.3	23	14.6	12	11.3
Dual Pill & Condom	103	39.0	70	44.3	33	31.1
Multiple Methods	23	8.7	15	9.5	8	7.5
No Method	6	2.3	2	1.3	4	3.8

Model Testing

To determine if there were significant differences between individuals that were committed and single, an independent t-test was conducted on relationship status (committed or

single) and the sexuality variables (sexual self schemas, sexual attitudes, and sexual satisfaction). Results indicated that both sexual attitudes and sexual satisfaction had significant differences according to relationship status, $t(262) = 2.00, p < .05, 95\% \text{ CI } [.04, .46]$ ($d = .26$) and $t(262) = 2.83, p < .05, 95\% \text{ CI } [.26, 1.53]$ ($d = .36$). Results did not support a significant difference between single and committed individuals on sexual self schemas. However, because we found some significant findings between committed and single participants, we therefore continued all further analyses separately for single and committed participants.

Next, two chi-square tests for independence (separated by relationship status) were conducted to determine if there was a relationship between type of contraception preferred and responsibility for contraception. Results from the first chi-square analysis for committed participants indicated that there was a significant relationship between preference and responsibility, $X^2(12, N=106) = 34.98, p < .001, \phi = .57$. The majority of committed women who identified themselves as primarily responsible for contraception preferred hormonal methods, while the majority of committed women who identified both themselves and their partners as responsible preferred dual condom and hormonal contraception. Next, results from the second chi-square analysis on single participants also indicated a significant relationship between preference and responsibility, $X^2(21, N=158) = 206.38, p = .001, \phi = 1.14$. The same pattern of results held for single women, such that the majority of single women who identified themselves as primarily responsible for contraception preferred hormonal methods, while the majority of single women who identified both themselves and their partners as responsible preferred dual condom and hormonal contraception.

Lastly, one-way ANOVAs were conducted on each of the sexuality variables (e.g., sexual self schemas, sexual attitudes, and sexual satisfaction) to determine if women differed according

to their responsibility or preferred type of birth control. First, for single participants, ANOVA results indicated there were no significant differences found for responsibility of contraception (e.g. me, my partner, both my partner and me, or neither my partner nor me) on the sexuality variables (see Table 4). However, when ANOVAs were used to analyze the difference for single women according to preferred contraception (e.g., hormone preferred, non-hormone preferred, dual pill/condom preferred, multiple methods preferred, and none preferred) on the sexuality variables, there was one significant finding (see Table 5). Specifically, sexual attitudes differed according to type of contraception preferred, $F(4, 153) = 3.58, p < .05, \eta^2 = .11$. Tukey's post-hoc analysis revealed one significant difference between groups, such that single women who preferred non-hormonal methods of contraception had more conservative sexual attitudes than women who preferred hormonal methods ($M = 54.30$ and $M = 45.90$, respectively).

Table 4

ANOVA Results of Relationally Single Participants for Who is Responsible by Sexuality Variables

Source	Sum of squares	df	MS	F
Sexual Attitudes				
Between groups	502.96	3	167.65	1.79
Within groups	14457.58	154	93.88	
Total	14960.54	157		
Sexual Satisfaction				
Between groups	26.29	3	8.76	1.25
Within groups	1079.97	154	7.01	
Total	1106.26	157		
Sexual Self Schema				
Between groups	1420.34	3	473.45	1.80
Within groups	40461.47	154	262.74	
Total	41881.80	157		

Note. * $p < .05$.

Table 5

ANOVA Results of Relationally Single Participants for Preferred Contraception by Sexuality Variables

Source	Sum of squares	df	MS	F
Sexual Attitudes				
Between groups	1279.10	4	319.85	3.58*
Within groups	13681.13	153	89.42	
Total	14960.54	157		
Sexual Satisfaction				
Between groups	55.78	4	13.95	2.03
Within groups	1050.48	153	6.87	
Total	1106.26	157		
Sexual Self Schema				
Between groups	1480.24	4	372.56	1.41
Within groups	40391.57	153	264.0	
Total	41881.80	157		

Note. * $p < .05$.

Second, for committed women ANOVA results regarding responsibility for providing contraception indicated non-significant findings for sexual attitudes, sexual satisfaction, and sexual self schemas (see Table 6). Similarly, ANOVA results for committed participants regarding preferred contraception type were not significant for any of the sexuality variables (see Table 7).

Table 6

ANOVA Results of Relationally Committed Participants for Who is Responsible by Sexuality Variables

Source	Sum of squares	df	MS	F
Sexual Attitudes				
Between groups	125.06	2	62.53	.94
Within groups	6882.91	103	66.84	
Total	7001.96	105		
Sexual Satisfaction				
Between groups	5.01	2	2.50	.45
Within groups	573.48	103	5.57	
Total	578.49	105		
Sexual Self Schema				
Between groups	121.49	2	60.74	.46
Within groups	13700.45	103	133.01	
Total	13821.94	105		

Note. * $p < .05$.

Table 7

ANOVA Results of Relationally Committed Participants for Preferred Contraception by Sexuality Variables

Source	Sum of squares	df	MS	F
Sexual Attitudes				
Between groups	168.64	4	42.16	.65
Within groups	6839.32	101	67.72	
Total	7007.96	105		
Sexual Satisfaction				
Between groups	11.67	4	2.92	.52
Within groups	566.82	101	5.61	
Total	578.49	105		
Sexual Self Schema				
Between groups	552.52	4	138.13	1.05
Within groups	13269.42	101	131.38	
Total	13821.93	105		

Note. * $p < .05$.

DISCUSSION

Our study examined who emerging adult women primarily identified as responsible for contraception and which contraceptive method they preferred. Additionally, we assessed how responsibility and preferred type of contraception related to women's self schemas, sexual attitudes, and sexual satisfaction. Previous research has examined individual components of women's sexuality, but this is the only known study to examine multiple constructs simultaneously and how they impact emerging adult women's sexuality more comprehensively. This is particularly unique because, as previous work has suggested (e.g., Elwood & Greene, 2006; Hyde & DeLamater, 2007; Rosen & Bachmann, 2008; Woertman & van den Brink, 2012), we went beyond physiological, behavioral, or narrow operational definitions of sexuality, and broadened it to encompass variables that account for experiences, attitudes, emotions, physical and mental well-being, and sense of self. At the same time, we were able to consider how societal messages and gender may have implications in women's sexuality.

Our study considered contraception as a multi-influential component of women's lives in that it impacts health (including disease prevention, reproduction and menstruation/cycle control) (Granzow, 2007; Guttmacher Institute 2013b; Higgins & Hirsch, 2008; Mosher & Jones, 2012; Planned Parenthood, 2013) and lifestyle choices (including education, career, and partnering/relationship status) (Benagiano et al., 2007; Free et al., 2005). We also recognized the complexity involved in making contraceptive decisions in emerging adulthood (Ersek et al., 2011; Higgins & Hirsch, 2008). Connected to this complexity was our consideration of responsibility in contraceptive decisions. We not only considered how women responded regarding responsibility, but also what methods were preferred, to see if women's reports of responsibility aligned with methods preferred. For example, a preference for female-controlled

methods would suggest great female partner responsibility. It is also likely that gender messages as instilled by patriarchy (Hyde & DeLamater, 2007) may result in women endorsing more partner responsibility than is the reality.

Ultimately, our multi-variable focus on women's sexuality and contraceptive preferences permits for closer examination of women's overall experience of contraception in relation to their sexuality. We were able to examine such connections with a holistic lens that allowed us to examine multiple aspects of sexuality, an approach that is recommended by scholars (e.g., Chrisler, 2011; Rosen & Bachman, 2008; Woertman & van den Brink, 2012). In doing so, we were able to gain a sense of how multiple sexuality variables, including sexual self schemas, sexual attitudes, and sexual satisfaction, relate to women's contraceptive preferences and experience of responsibility. This comprehensive consideration of emerging adult women's sexuality serves to promote women's health and empower individuals through providing medical providers, therapists, and educators with a sense of how contraceptive preferences and responsibility for contraception impacts emerging adult women's sexuality.

Relationship Status and Sexuality

We separated participants based on relationship status (committed or single) in our analyses regarding sexuality because significant differences were found for committed and single women in the way they compared on sexual attitudes and sexual satisfaction. For sexual attitudes, single women had less conservative attitudes as compared to committed participants. This suggests that single participants are more open to experiences, engage in a wider range of activities, and are more comfortable in sexual situations, such as oral and anal sex (Derogotis, 1975, Faith & Schare, 1993; Lemer et al., 2013) in comparison to committed participants. These more liberally associated traits would be logical for single women as they have more options for

multiple partners which would promote sexual exploration and increased sexual activity, as Faith and Schare (1993) posited. We also found that committed women reported higher levels of sexual satisfaction than single women. This significant difference between single and committed participants on sexual satisfaction is also logical, based on previous research indicating that premeditation of intercourse (such that might typically occur in a committed relationship), simply being in a relationship, and having greater communication with one's partner all increase the likelihood of sexual satisfaction (Higgins et al., 2011; Gabalci & Terzioglu, 2010).

Method of Contraception Preferred

Previous literature has indicated that the pill is the most popular method of contraception for emerging adult women (Guttmacher Institute 2013a; Mosher & Jones, 2012), which was found to be partly true in our study. The two most highly endorsed methods of contraception preferred were hormonal only and dual hormone and condom. First, high endorsement of hormonal contraception is not surprising, as previous research found that emerging adult women state that an unplanned pregnancy is “the worst thing that could happen” (Free et al., 2005, pg 678). Hormonal methods of contraception provide for higher levels of protection against pregnancy than condoms (Mosher & Jones, 2012; Planned Parenthood, 2013), which makes this a sensible primary method for this population for protection. Second, the high endorsement of hormonal methods aligns with previous literature that found that women tend to prefer methods that are within their control, like pills, IUDs, or rings (Fennell, 2011). Furthermore, previous studies have suggested that women opt to not use condoms due to the sense that a condom may interfere with the natural feel of experiences and disrupt the experience for application (Guttmacher Institute, 2013b; Higgins & Hirsch, 2008; Free et al., 2005). Thus, they may be

more likely to choose a method that promotes the greatest sexual pleasure for both partners, which a condom may take away from, experientially and physically.

Regarding our findings on dual methods of contraception, our results seem to align with trends found in previous studies such that single women are more likely to be utilizing dual methods that allow for both partners to be in control of a method of contraception and promote safe sexual practices by protecting partners from STIs and pregnancy (Cox et al., 2010). Despite not having data on our committed participants prior to being in a relationship, our findings tentatively support what Mosher and Jones (2012) and Fennell (2011) suggested as a trend for single adults to utilize dual methods, then once in a committed relationship, shift to hormonal only. This difference in preference for single and committed may be in part because of a sense of safety or lower risk in having one sexual partner; however, we are unable to know what our sample of committed participants were utilizing early on in their relationships or before their committed relationships even started. Our sample, as previously mentioned, consisted of predominantly White, college aged women implies social advantages such that they are obtaining post-secondary education, and may have more access to healthcare.

Responsibility for Contraception

Our results indicated that most women, regardless of relationship status, reported that both partners were responsible for providing contraception. Next, over one third of our sample reported being solely responsible; only a few women reported their partners were solely responsible, and even fewer identified neither. This aligns with what was found by Cox et al. (2010) that 55% of heterosexual women reported joint responsibility in contraceptive decisions, and 45% reported being solely responsible. Research indicates that heterosexual couples tend to

agree that contraceptive decisions are complex and should be shared equally (Beaulieu et al., 2011), which is what the majority our participants reported experiencing.

Despite many couples agreeing that responsibility for contraception should be shared, this does not seem to be what actually occurs in contraceptive usage (Beaulieu et al., 2011; Fennell, 2011), as the majority of women in our study endorsed high rates of female-controlled methods of contraception. Beaulieu et al. (2011) question how contraception can be considered a “shared” responsibility if women are the ones actually obtaining and taking the contraception. Our study supports hormonal methods are preferred, yet that women perceive there is shared responsibility, which ultimately leads to questions about how women are defining responsibility and navigating this within their relationships. More factors need to be considered, such as payment, refilling prescriptions, appointment attendance and communication to determine actual responsibility. With more factors considered, it could be determined if women perceive equal responsibility due to contraception giving them autonomy to choose (Dehlendorf et al., 2010). This is important to assess for because Granzow (2007) questioned if there is choice involved in opting to utilize hormonal contraception, or if it is fulfilling a gender script or duty for women, which could negate the effects of the autonomy and privilege that could promote positive sexual experiences for women. Additionally, less than 4% of our sample stated that their partners were responsible for provided contraception, which indicates a potential for discussion and exploration of greater partner involvement.

Another factor to consider when examining responsibility for contraception, particularly when shared responsibility is endorsed, is if and how partners are talking about contraception. Previous research has found that there is minimal or no conversation surrounding contraception, and women report not knowing how to negotiate and ask about using contraception (Free et al.,

2005). In addition to this, Fennell (2011) posits that, through socialization and women having more reproductive knowledge, male partners in comparison may have limited contraceptive knowledge outside of condoms. Results in the previously noted study also suggest that in less committed relationships, sexual partners are more hesitant to ask about contraception, despite the risk of transmitting or contracting an STI in these sexual situations being potentially higher (Fennell, 2011). Furthermore, even within committed relationships, conversations about contraception were reported to be uncomfortable or anxiety provoking (Fennell, 2011). If and when conversations about contraception take place, there is also a stigma that women face, such that by insisting a partner wear a condom, they will be unfairly, negatively labeled (Free et al., 2005). However, in reality, women are personally advocating for their health in making contraceptive usage requests to their partners. This negotiation, or lack thereof, regarding contraception is an important consideration for emerging adults, as sexual acts may precede being part of a relationship, as opposed to the more traditional relationship formations prior to engaging in sexual behaviors.

Despite the idea of contraception being a gender expectation, having greater responsibility or the capacity to utilize a female-controlled method of contraception may come with a significant sense of empowerment. Previous studies show that women hold more control when it comes to fertility decisions (Fennell, 2011), which seems to be the case in our study as well. Women in our study endorsed preferences toward female-controlled methods of contraception, which may free them from unplanned pregnancies and allow them to have greater control and predictability in menstruation, but also permits for more freedoms in sexuality. Having the privilege of responsibility or control over contraception type provides women with greater opportunities for academic achievement, earning potential, and narrows the gap between

men and women hierarchically by shifting female gender roles from child-rearing to education and/or career (Benagiano et al., 2007; Free et al., 2005). Hormonal contraception allows women to be empowered and in control of their own fertility, as well as engage in behaviors that align with their desires in a safe manner that historically would not have been possible due to pregnancy or STI risks. For this reason, despite being responsible for contraception, women may not find this bothersome, but instead as a positive aspect of sexuality that they can control.

Sexuality and Contraception

We did not find significant differences in sexual self schemas according to responsibility for contraception or preference for contraception. One reason for nonsignificant findings may be due to limiting our sample to women who had been sexually active in the last six months in an effort to have a sample that had recently used or was currently using contraception. However, in doing this we may have eliminated women that live with more negative sexual self schemas because as Andersen and Cyranowski (1994) found, often women with negative sexual self schemas are less likely to engage in sexual behaviors. Secondly, the lack of significant findings may be in part due to our homogeneous sample of white, college-aged, heterosexual, emerging adult women.

We also did not find significant differences in sexual satisfaction according to responsibility for contraception or preference for contraception. The mean scores of our sample indicate that women in our study, on average, tended to experience sexual satisfaction, which is different than what previous research has suggested. For instance, Fahs and Swank (2011) noted that 67.7% of women do not experience sexual satisfaction. The lack of significant findings for sexual satisfaction and responsibility for contraception is logical, as the majority of our sample claimed shared responsibility with their partner, which could be associated with high satisfaction

due to the sense of equality this would give partners. Gabalci and Terzioglu (2010) posited that sexual satisfaction increases with feelings of greater partner communication. If sexual partners are communicating about contraceptive preferences, it would account for the high satisfaction levels our sample reported. Furthermore, Gabalci and Terzioglu (2010) found that women's sexual satisfaction was not impacted negatively by hormonal contraception, and actually increases satisfaction for some women. Similarly, in our study, the majority of both single and committed women reported utilizing some kind of hormonal contraception; thus, preferred method of contraception similarities may explain why single and committed women reported similar, and high, levels of sexual satisfaction.

Regarding sexual attitudes, there were no significant findings according to who is responsible for providing contraception. This could be in part related to the geographical location of our study, as the study was conducted at a Midwestern, predominantly White college. Perhaps with greater geographical and ethnic diversity, our sample would have had a greater range of sexual attitudes (e.g., more liberal attitudes) and experiences to compare to responsibility for and preferred contraception. However, we did find significant differences in sexual attitudes according to what type of contraception single women preferred. Specifically, single women who preferred non-hormonal methods of contraception had more conservative sexual attitudes than women who preferred hormonal methods. One explanation for the link between preference for non-hormonal methods such as condoms and conservative sexual attitudes may have to do with gender norms. More specifically, condoms are a male-controlled method which may align with a sexually conservative ideal that holds men in hierarchy above women in relationships, including sexual relationships. This could also be due to women with conservative attitudes engaging in lower frequencies of sexual acts (Derogatis, 1975; Faith & Schare, 1993), which

may result in condoms being the most logical and cost effective method of contraception. With that, women with conservative sexual attitudes are less open to sexual experiences, which may overlap with their openness to trying different types of contraception. Women with conservative attitudes also may be less comfortable with sexuality in comparison to more liberally oriented women which may result in discomfort applying or utilizing hormonal methods such as a ring, diaphragm, or IUD.

Furthermore, we found that women who preferred hormonal methods such as the morning after pill, shot, ring, pill, dual or triple methods had more liberal attitudes, perhaps due to an increase in openness and comfort in having new sexual experiences. Women with liberal attitudes have previously been found to be more apt to trying different types of contraception (Gillen et al., 2006), which may result in greater exploration with types tried. Additionally, liberally oriented women tend to prioritize their sexual pleasure and have more overall sexual experiences (Ackard et al., 2000; Lemer et al., 2013), and condoms have been found to take away from the natural progression or flow of the sexual act. This contrasts to hormonal contraception which are typically already in place or have been used to promote a spontaneous, more pleasurable encounter, including higher frequency of orgasm (Nobre & Pinto-Gouveia, 2006).

However, it is important to note that, due to the homogeneous nature of our sample, women's average scores on sexual attitudes tended to be conservative in nature. Thus, future studies would need to explore further to see if there is increased preference for hormonal methods or less used methods such as IUDs, vaginal rings, or Implanon as liberal attitudes increase, perhaps by broadening the geographical location for the sample.

Limitations of this Study

Limitations of the study include the sample used as well as the methodology. Our sample was predominantly white, and all attended a Midwestern university, which may be indicative of some economic privilege. Our sample also consisted of participants that tended to have more conservative than liberal sexual attitudes, which limits our ability to generalize findings across women of all viewpoints. Our study also excluded women that had not had a sexual experience in the last six months. This may have affected our results, and also wrongly placed these individuals in a “not sexual” category despite still having had sexual experiences, just not the relevant ones needed for inclusion in this study. Women that have not been sexually active in the past six months may still need contraception for other reasons outside of sexual activities. Additionally, women who are not currently sexually active may opt to continue taking hormonal contraception despite not currently having sex as many hormonal methods take time to be at effective in pregnancy protection (Planned Parenthood, 2013). We also only included women that identified as heterosexual. This is limiting as women that identify as lesbian or bisexual may have attitudes and experiences that could have made this a more comprehensive and inclusive study. Moreover, our study’s aim to examine the gender dynamic of responsibility under male privilege and contraception made focusing exclusively on heterosexual women practical. Additionally, our study did not target women who may be in a poly-relationship, or in a committed relationship with more than one person. Instead, with regard to relationship status, we assumed monogamous commitment, which may exclude some women’s relationship identification. Ultimately, with greater diversity in our sample, we would be able to examine sexuality across more women. This would have made our study more representative of the Western culture and inclusive to women that identify as bisexual or lesbian, and women that are

in more than one committed relationship, instead of limited to White, heterosexual, Midwest college women.

Regarding methodology, we asked participants to provide self-reports on sensitive topics; therefore, our study could contain underreporting, over-reporting, or reports based on social desirability. For example, there are societal constructs that may be acting on what women believe that they should answer, thereby altering potential responses based on what the “norm” is or what they view it to be and not wanting to deviate from this. Examples of this include questions surrounding masturbation, arousal detail, or group sex which carry heavy stigma. As a society and through media, women are exposed to what “sexy” is, or should be, and this could impact women’s honesty in responses. Moreover, we aimed to consider how larger social structures such as patriarchy and male privilege impact sexuality and contraception, as well as the dynamic of responsibility; however, we are unable to say for certain how these structures may directly or indirectly impact women’s sexuality. Next, this study does not employ a follow-up measure or have longitudinal data. This could have been valuable, particularly in monitoring the shifts that occur within emerging adulthood as there are likely significant changes that occur within this cohort of women. Specifically, it would be interesting to know if women’s preferred method of contraception and perception of contraceptive responsibility shifts as their relationship status changes from single to committed. Lastly, we asked only one question on responsibility, and more follow up questions would have been helpful in exploring women’s definitions of “responsibility.” Follow up questions could have included: “Who pays for contraception?”, “How the current method was decided on?”, “Who attends the appointments?”, “Who goes to pick up the contraception?”

Strengths of this Study

This study makes multiple contributions to current literature. First, we considered and operationalized sexuality from a holistic lens that considered emotional, social, behavioral, attitudes, psychological factors and subject experiences. Sexuality is often defined in studies using a traditional or medical model that reduces sexuality to arousal, functionality, and hormones that uses a biological or physiological lens (Bancroft & Graham, 2011). This is minimizing and does not give insight into the comprehensive nature of women's sexuality. Our study considered three sexuality variables and how sexuality relates to contraceptive preferences and responsibility for contraception to encompass experiences and relationships for each participant.

Our study also considered sexuality comprehensively, considering three dimensions of a sexuality, contraceptive preferences, and feelings of responsibility. This study was thorough in that previous literature was considered and each component of sexuality was evaluated for how it influenced women's well-being, contributed to their sense of being a sexual person, and impacted their overall sense of self and lifestyle. This multidimensional way of conceptualizing sexuality can be used for health promotion in women because it can encourage knowledge regarding pregnancy prevention and STI or other health-related concerns attributed to sex. Moreover, sexuality factors have been found to relate to women's self-identity (Rosen & Bachmann, 2008), making such factors that are often not overtly talked about or considered by women or professionals exceedingly important. Therefore, by considering multiple components of women's sexuality, we are able to increase ways to promote factors of positive self-identity such as emotional and mental well-being. Our study takes sexuality further than reproductive and safe health practices to promote overall well-being.

Lastly, by considering emerging adult women, we considered an age cohort in a transitional phase. Arnett (2007) described emerging adulthood to be a time of balancing adolescent roles and adult expectations, and a time of exploration and identity development. Sexuality is crucial to explore at this time point as many women in this cohort are gaining more freedoms and living in arrangements that are conducive to meeting more potential partners, as well as having space without supervision to freely act how they desire. This could be high risk, making proper contraception usage that more pertinent as unwanted STIs could cause significant health complications for women, such as infertility. In contrast, women who are not at high risk for contracting STIs and are using contraception for family planning may be attempting to find methods that promote natural or more intimate contact without barrier methods of contraception. This would promote freedom in their relationships, education, and careers without the risk of an unplanned pregnancy.

Suggestions of Future Research

Future research should examine the sexuality of women who are not currently engaging in sexual activity. For instance, it would be beneficial to examine sexuality among women that have not been sexual for the last 6 months. Emerging adult women, even when not sexually active in the recent past, have contraceptive needs and developing sexuality. A comparison of sexually active and not active women could provide insight into their similarities or differences, specifically regarding contraceptive and healthcare needs. Hormonal contraception needs to be utilized for a window of time before it becomes effective, which makes contraception important to plan for even if women are not currently engaging in sexual behaviors. Contraceptive pre-planning could ultimately help promote and ensure health behaviors in emerging adulthood.

Next, research should more closely examine the trend for contraception to shift with relationship status. Specifically, it may be likely that heterosexual single women who prefer dual contraception will switch to preferring hormonal only methods when in a committed relationship. Such research could examine if changes in preference is a cognizant process, how this decision is made, which partner pushes for this, and if there is proper testing done before condoms are removed. Future studies could also look at why partners choose to make this change, and if pleasure, ease, or cost have importance in this decision. Next it would also be important to determine if level of commitment, length of relationship, or frequency of sexual activity is part of this choice. Lastly, research needs to be done to examine the sense of “shared” responsibility between partners when women are still using predominantly female-controlled methods. This should include who is purchasing/paying for the products, who goes to appointments, and the types of conversations that are had around types of contraception that are utilized and preferred. Longitudinal data could determine whether there is a deliberate change in going from dual contraception to hormonal only with relationship status.

As previously stated, sexuality is a dynamic, complex, and unique dimension of women’s lives, and despite taking this into account, we only assessed three components of sexuality. Future studies should examine include additional sexuality variables to get a more comprehensive examination of the multidimensionality of sexuality within this age cohort and others. Potential areas variables could stem from sexual functioning, position or behavior preferences, age at sexual debut, number of partners, pacing of sexual behaviors within sexual relationship, body satisfaction, self esteem, and sexual knowledge.

Implications for Health Providers, Therapists, and Educators

It is important for practitioners, therapists, and educators to consider contraceptive planning when working with emerging adult women, due to its connection with sexuality. For health practitioners working with emerging adult women, there are some key findings in our study to consider before prescribing contraception. First, multiple studies (Guttmacher Institute 2013b; Mosher & Jones, 2012; Planned Parenthood, 2013) have found birth control pills to be most used by emerging adult women, which was supported in our results as hormonal contraception was most highly preferred, which would include pills. This may be helpful information for practitioners, as there appears to be a preference for hormonal methods such as the pill regardless of a woman's relationship status. However, just because birth control pills are the most used type of contraception for this age cohort (Mosher & Jones, 2012; Planned Parenthood, 2013) and highly endorsed as preferred in our results, it does not necessarily mean it is the best fit for all emerging adult women. The population of emerging adult women is facing more potentially high risk sexual situations and changes in freedom and responsibilities than in previous times in their lives due to less supervision and being able to live more autonomously. This includes balancing adult expectations such as careers, college, and living independently, while still living largely informed by adolescent knowledge bases (Arnett, 2007). For this reason, providers should consider their patient's age, sexual behavior frequency, financial situation, relational factors, and ability to comply with medication instructions in order to promote overall well-being and health and find a good contraceptive fit (Sonfield, 2010). Providers need to be prepared to ask questions and be responsible for finding out what the best contraception is for patients, before going with the majority of other women, because these women may not know

what to ask, what types of contraception is available, the positives and negatives of each type, or the most effective for their sexual needs.

Furthermore, health providers should ask patients about number of partners and current contraceptive use to assess if a dual condom and hormone method of contraception would be the best fit. Our study suggests that single women may prefer to use contraception that offers protection against STIs and pregnancy. The practitioner should assess for type of hormonal contraception to find out if patients in a relationship would find a vaginal ring or IUD a potentially easier hormonal method of contraception to abide by or take as prescribed as they do not require daily action for the woman, and they may not be at as high of risk for contracting an STI. Providers should also consider if pills are a better option due to accessibility and cost (Guttmacher Institute 2013a; Mosher & Jones, 2012; Sonfield, 2010). As women are transitioning into college, out of parents' homes, or finding careers, there may be financial barriers for contraceptive choices for emerging adult women. As our study showed, women have distinct contraceptive preferences depending on levels of relationship, and these needs must be considered for sexual health. If cost and accessibility are considered further, condoms, a method that women did not highly endorse for preferred method of contraception on its own in our study, are cost effective, widely available, and highly effective in protecting against both STIs and unplanned pregnancy (Planned Parenthood, 2013). This method may be particularly important for practitioners to promote for women that are experimenting sexually with multiple partners, which creates a high risk situation.

As previously mentioned, birth control pills are the most popular method of hormonal birth control used by this population (Guttmacher Institute 2013a; Mosher & Jones, 2012), but this could be related to prescriber habits instead of patient needs or preferences. This may also

require providers to be open to referring their emerging adult clients to other agencies, such as government funded or student health facilities that can provide more options at a more affordable rate. With more conversation and exploration, providers can offer the highest quality of care and promote medication compliance for women to allow them to be the healthiest, safest, and most comfortable they can be in their sexual experiences.

Specifically for therapists, sexuality and the double bind (of being both sexy while pure and chaste (Benagiano & Mori, 2009)) that women are exposed to by our society, through media and conflictual, value laden messages, should be broken down. This is particularly relevant for women during emerging adulthood, as this double bind is likely to have reached them through the media, which values and places women's worth by their appearance (Chrisler, 2011). Young women are taught to be sexy, but not be too sexy, yet be pure and chaste, but not be a prude. This is an impossible construct to fit within, yet women are exposed to this every day in the media. Moreover, within our society, a structure of gender hierarchy is in place such that men are encouraged to have more sexual partners while women, if they have the same amount of partners, are perceived negatively. Therapists should use interventions that can provide psychoeducation and raise awareness of these societal messages to help women explore how they have impacted their lives and sexuality. Potential ways therapists can administer an intervention like this could include interventions that address media's messages about women and sexuality, going through a magazine or current commercials and examining women's roles and body portrayals, or exploring with the client how her unique sexuality developed and what external factors impacted this development.

Next, for therapists, our results are important for promoting affirmative and feminist-informed conversations with clients. Such conversations could include discussions about

relationships, gender role imbalances, how sex is defined in the relationship, as well as contraceptive practices and sexual attitudes as these may have adverse effects outside of STIs and unplanned pregnancies (Wood, Koch, & Mansfield, 2006; Hyde, & DeLamater, 2007). Our study suggests that women are put in a place of high responsibility for providing contraception, and despite being empowering to have freedom to choose, it also reinforces a potentially oppressive hierarchical relationship (Fahs, 2007; Wood, Koch, & Mansfield, 2006) in which women may be expected to take on this role without due discussion surrounding contraception. Research supports that the most satisfied couple relationships are ones that experience a sense of equality and power between partners (Gottman & Notarius, 2002; Enns, 2004) in decision making and access to couple resources, such as household or child-related tasks, spending/financial, and sexual relationships (Parker & Almedia, 2001). This extends to contraception, such that if one partner feels he/she carries more than his/her share of responsibility, it could result in a potentially less satisfying relationship (Free & Odgen, 2005; Gabalci & Terzioglu, 2010).

Therapists should also talk with clients about the couple's sexual decision making. Specifically for contraception, this could include types of behaviors each partner prefers, ways each partner experiences satisfaction, and messages either partner could have internalized surrounding contraception and sexuality to promote an egalitarian balance in the relationship (Daniels, Zimmerman and Bowling, 2002). This type of therapy may be best suited for couple's therapy considering the relational aspect of sexuality in an attempt to not place pathology on one partner and to gain shared goals and experiences to promote couple well-being. However, sexuality could also be explored individually by exploring messages surrounding sexuality, how they impact the client, and creating an awareness and understanding to promote the client's

personal well-being (Daniels et al., 2002). In these therapy sessions, individually or with a couple, it would be important to discuss logistical questions such as how contraception is obtained, how it is paid for, and how the prescription requirements may impact a female more than her partner. Without addressing such issues, an unbalanced relationship could be perpetuated and couple satisfaction and women's emotional well-being would decrease (Gottman & Notarius, 2002; Fahs & Swank, 2011; Rosen & Bachmann, 2008; Woertman & van den Brink, 2012). By having feminist informed conversations around sexuality, sexual needs, pleasure, and roles surrounding contraception therapists can move toward ensuring clients are safe physically, emotionally, and mentally.

Lastly, our study has implications for prevention and education. First, prevention efforts should be executed before emerging adulthood to make young women aware of this unique period of development and the health risks that accompany this period. Emerging adulthood brings many potential changes such as attending college and living in dorms or living independently of parents, which results in the lack of monitoring and increased freedom (Arnett, 2007). This increase in freedom and decrease in previous structure could result in women engaging in high risk sexual behaviors that could leave them with an unplanned pregnancy or STI that, if left untreated, could result in infertility (Planned Parenthood, 2013). Additionally, many women may enter into emerging adulthood already utilizing some sort of contraception, which promotes prevention, which makes education about types contraception and the benefits and flaws of each essential for adolescents. However, many adolescents may not get this knowledge due the lack of comprehensive sex education and awareness of contraceptive options (Planned Parenthood, 2013), placing women in a position that they may be at increased risk for unsafe sexual practices. This practice of promoting education and increasing contraceptive

knowledge could prevent or promote lower STIs, healthier sexual behaviors, and more women experiencing the empowerment contraception can bring them, instead of stigmatized or burdened.

Education can also promote and equip women with knowledge to advocate for their sexual needs. As previously discussed, sexual satisfaction and overall well-being (including one's sexual self schema) can be positively impacted by a sense of shared power and decision making between partners, including in their sexual behaviors (Gottman & Notarius, 2002; Enns, 2004; Parker & Almedia, 2001). Educators can promote and raise awareness of these findings to promote healthy and egalitarian relationships, including equality in decision making. Planned Parenthood (2013) makes an important connection between sexual satisfaction and sexual activity in noting that sexual satisfaction increases when there is a sense of safety in a sexual act, and when the risk of contracting an STI is lowered. Educators can use this information to promote communication and women asserting themselves to partners to use contraception. This may be particularly important for women who live with sexually conservative attitudes as they may be more likely to be encouraged by partners to not use contraception, and less likely to be open and seek out conversations about sex (Gillen, et al., 2006; Weideman, 2000).

Educators should help promote and advocate for women to utilize safe contraceptive practices, raise awareness of types of contraception, help provide them with tools to assert themselves in conversations about sex and contraception, and raise awareness of about how contraception can impact their overall sexuality in order to meet their sexual health needs and promote sexual satisfaction. In supplying women with knowledge on topics related to their sexuality, we can better promote healthy development through a transitional period as women depart from adolescent homes and transition to college or careers (Arnett, 2007). This education

and awareness for emerging adult women surrounding contraception could impact their lifestyle and sexual decisions that could define their future, making prevention and education an imperative implication of this study and women's sexuality overall.

Conclusion

Our study examined a cohort of women that is not only going through a dramatic age transition, but also facing sexual situations that require contraception to promote safe health practices and decisions. We found that there are different preferences based on women's level of commitment in a relationship. Women that identify as single preferred to utilize dual contraception (hormonal and condoms), whereas committed women preferred hormonal alone. We also found that women view themselves as highly responsible in providing contraception in comparison to their sexual partners; thus, it makes sense that they may be more likely to choose female controlled contraceptives.

Our study also revealed that single women that preferred non-hormonal methods of contraception had more conservative sexual attitudes than women who preferred hormonal methods. The explanation for this may be within those with conservative ideas preferring to abide by gender norms and utilizing condoms, a male controlled method of contraception. It may also relate to conservatively oriented women having fewer sexual acts, making condoms an easier, potentially more practical option (Derogatis, 1975; Faith & Schare, 1993). Our study supports that sexual attitudes are an influential factor in women's comfort in sexual experiences and need to be considered in choosing a contraception that will promote congruence between the woman's personal desires and health needs.

Overall, our study took sexuality beyond physiological definitions that confine it to arousal and orgasm, and considered how experience, expectations, social norms, and

relationships influence women's well-being. We considered the multidimensionality of sexuality by examining how sexual self schemas, sexual attitudes, and sexual satisfaction related to women's contraceptive preferences and experiences of responsibility. Our study examined three variables of sexuality, but there is greater complexity that needs to be uncovered in future research. Our results contribute to existing literature on women's sexuality, and promote the need for more research in this area to enhance women's opportunities to live sexually healthy, make informed contraceptive decisions, and aid in making their desirable sexual lifestyle obtainable to them. This study served to promote women's health and empower individuals through providing medical providers, therapists, and educators with a comprehensive sense of how contraception impacts emerging adult women's sexuality.

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APPENDIX A. SEXUAL SELF-SCHEMA SCALE
Andersen & Cyranowski, 1994

Please circle the answer that best reflects to what extent each term describes you.

	Not at all	Rarely	A little	Somewhat	Often	Very	Extremely
	descriptive	descriptive	descriptive	descriptive	descriptive	descriptive	descriptive
	of me	of me	of me	of me	of me	of me	of me
1. uninhibited	0	1	2	3	4	5	6
2. cautious	0	1	2	3	4	5	6
3. loving	0	1	2	3	4	5	6
4. open-minded	0	1	2	3	4	5	6
5. timid	0	1	2	3	4	5	6
6. frank	0	1	2	3	4	5	6
7. stimulating	0	1	2	3	4	5	6
8. experienced	0	1	2	3	4	5	6
9. direct	0	1	2	3	4	5	6
10. broad-minded	0	1	2	3	4	5	6
11. arousable	0	1	2	3	4	5	6
12. self-conscious	0	1	2	3	4	5	6
13. straightforward	0	1	2	3	4	5	6
14. casual	0	1	2	3	4	5	6
15. prudent	0	1	2	3	4	5	6
16. embarrassed	0	1	2	3	4	5	6
17. outspoken	0	1	2	3	4	5	6
18. romantic	0	1	2	3	4	5	6
19. sympathetic	0	1	2	3	4	5	6
20. conservative	0	1	2	3	4	5	6

	Not at all descriptive of me	Rarely descriptive of me	A little descriptive of me	Somewhat descriptive of me	Often descriptive of me	Very descriptive of me	Extremely descriptive of me
21. passionate	0	1	2	3	4	5	6
22. inexperienced	0	1	2	3	4	5	6
23. warm	0	1	2	3	4	5	6
24. unromantic	0	1	2	3	4	5	6
25. revealing	0	1	2	3	4	5	6
26. feeling	0	1	2	3	4	5	6

APPENDIX B. SEXUAL ATTITUDES SCALE
Lemer, Blodgett Salafia, & Benson, 2012

Please circle the answer that best indicates to what extent you agree.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1) Sex prior to a committed relationship/marriage is beneficial to later committed relationships/marriage.	1	2	3	4	5
2) Oral or anal sex can be as pleasurable as intercourse.	1	2	3	4	5
3) Masturbation is a perfectly normal, healthy sexual behavior.	1	2	3	4	5
4) Sex outside of a committed relationship/marriage inevitably leads to serious problems and great difficulty in the relationship/marriage.	1	2	3	4	5
5) Couples that have sex before a committed relationship/marriage usually regret it later on.	1	2	3	4	5
6) Masturbation is wrong.	1	2	3	4	5
7) Group sex is a bizarre and disgusting idea.	1	2	3	4	5
8) Sexual affairs outside of a committed relationship/marriage can make people better partners.	1	2	3	4	5
9) Couples should experiment with various positions of intercourse to enhance their sexual experiences.	1	2	3	4	5
10) Oral and anal sex are not within the range of normal sexuality.	1	2	3	4	5

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
11) Any sexual behavior between two consenting adults should be viewed as normal.	1	2	3	4	5
12) Love and affection from a partner are necessary for good sex.	1	2	3	4	5
13) I personally find that thinking about engaging in sex is arousing.	1	2	3	4	5
14) There is just one acceptable way of having sexual intercourse (missionary position).	1	2	3	4	5
15) Sex in a committed/married couple is the only normal type of sexual behavior.	1	2	3	4	5
16) Engaging in group sex is an entertaining idea.	1	2	3	4	5
17) I do not enjoy daydreaming about sexual matters.	1	2	3	4	5
18) A person does not need love and affection to have good sex.	1	2	3	4	5