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Collegiate Women's Definitions of Responsible Sexual Behavior

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Abstract

Promoting responsible sexual behavior (RSB) is a public health strategy to decrease unplanned pregnancies and STI transmission. Current definitions of RSB in the literature have all been developed by providers and policy makers; little is known about adult women's perspectives. Interventions inconsistent with women's definitions of RSB may be less effective; therefore, the purpose of this study was to identify college women's definition of "sexual responsibility." Data came from interviews collected in a mixed methods study of college women and unintended pregnancy. Women described being sexually responsible as self-advocating through actions that are consistent with personal goals and values while being aware of consequences that could threaten those goals or values. Actions included mindful partner selection, communicating boundaries, and preventing pregnancy. Study findings were consistent with prior research that identified managing risk and purposeful decision making as critical to acting responsibly.

Keywords

responsible sexual behavior; qualitative; college women; unplanned pregnancy; secondary data analysis

Of all pregnancies in the United States (US), almost half are unplanned. Unplanned pregnancies, also known as unintended pregnancies, are reported by women to be either unwanted or mistimed (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2008). Unplanned pregnancies are associated with lower financial security and negative financial and health outcomes. Unintended pregnancies increase health care costs: in 2010 unintended pregnancies accounted for \$21.0 billion in public expenditures (Sonfield & Kost, 2015). Healthy People 2010 (2000) and then-Surgeon General David Satcher identified Responsible Sexual Behavior (RSB) as a means to prevent or reduce unplanned pregnancies and STIs. Specifically, in Healthy People 2010 (2000), RSB strategies included increasing condom use to manage risks for those who are sexually active. For Satcher (2001), responsible behaviors included avoiding STIs, HIV/AIDS, unintended pregnancies,

abortion, or sexual coercion. Although the semantics of RSB has moved away from the use of the word “responsible” since the release of Healthy People 2010 (2000), associated meanings and strategies have remained remarkably consistent (American College Health Association, n.d.; Bolin & Bellamy, n.d.; Trieu & Shenoy, 2010). Loew, Lehan Mackin, and Ayres (2017) conducted a concept analysis of RSB based on this literature and defined RSB as a “desirable and deliberative pattern of behaviors that promote sexual health, manage risk, and foster respect of sexual partners within the context of community influences.” Thus, the emphasis in RSB focuses on behavior that prevents or reduces risk for STIs and unintended pregnancies.

The need for interventions to prevent unintended pregnancy has been well supported. In 2011 nearly half (45%) of all pregnancies in the US were unintended, with women aged 20–24 experiencing the highest rates (Finer & Zolna, 2014). The CDC also has reported increasing rates of unplanned pregnancies in college-age women (18–25) (Centers for Disease Control and Prevention [CDC], 2013). Unplanned pregnancy poses economic risk for women and can prevent women from seeking or completing a college degree. College attendance has become a cultural norm in the US; in 2015, 72.6% of all female high school graduates enrolled in colleges or universities (Bureau of Labor Statistics, 2016). A college degree increases the likelihood of gainful employment, upward social mobility, and economic security (Logan, Holcombe, Manlove, & Ryan, 2007). Research findings from three studies found that unintended pregnancy during post-secondary education had direct negative socioeconomic impact on women (Bradburn & Dennis Carroll, 2002; Clery & Harmon, 2012; Prentice, Storin, & Robinson, 2012).

In addition to experiencing the negative long-term implications of an unintended pregnancy, young women are at greatest risk of future complications from STIs that include gonorrhea, chlamydia, and syphilis (CDC, 2016). The CDC estimates that undiagnosed STIs are the cause of infertility for more than 20,000 women annually (CDC, 2016). STIs continue to be a public health challenge, with 20 million new infections every year, with 15–24 year olds accounting for half of all new infections. STIs also have a heavy financial burden for the US, costing about \$16 billion. Not only do STIs act as a threat to immediate health, but they can also risk a person’s long term health by increasing the risk for acquiring and transmitting HIV.

Compounding levels of risk are behaviors consistent with the developmental stage of emerging adulthood (Arnett, 2000). Emerging adulthood covers the ages from 18–25 and is associated with developing self-identity, which includes exploration of sexual intimacy. For women in emerging adulthood, this is often the time when they leave home and attend college. While the college campus culture supports identity exploration in emerging adults, it also increases sexual health risks because of norms that promote casual sex (hook-ups) and alcohol use. College campuses and alcohol combine to increase the risk of sexual assault (Bogle, 2008). Successful public health initiatives can promote sexual behavior that minimizes negative economic and health risks in the context of campus culture and the developmental tasks of emerging adulthood.

Public health initiatives to promote RSB focus primarily on avoidance – avoidance of “irresponsible” behavior such as unprotected intercourse and multiple sexual partners, and avoidance of “irresponsible” outcomes such as STIs and unintended pregnancy (Loew et al., 2017). To date, little is known about how adult women themselves understand being sexually responsible. Furthermore, the college context provides an interesting backdrop to understanding sexual responsibility because collegiate women must navigate developmental norms and the college cultural environment while simultaneously trying to successfully gain higher education. For these reasons, the purpose of this study was to describe collegiate women’s understanding of “being sexually responsible” (BSR) Congruence between definitions used by women and definitions used by public health agencies will provide a foundation for more effective messaging and interventions.

Methods

Data for this study were abstracted from a larger mixed methods study of the social context of unintended pregnancy with emphasis on knowledge and use of emergency contraception (Lehan Mackin, 2011). Data collected in the larger study included quantitative survey data (See Lehan Mackin & Clark, 2011) and narrative interviews with 35 women. Participants in the study were all women who had had, or might have, sex with men; that is, women not in exclusively same-sex partnerships. All participants were 18–35 years old, English-speaking, and attended a large, public, Midwestern university. More than 2000 women completed Phase I of the study, a survey; of these, approximately 800 volunteered to participate in the Phase II interviews. Women were selected from this pool to be interviewed using a purposive, maximum variation sampling strategy (Ayres, 2000; Patton, 2002; Teddlie & Tashakkori, 2003). Based on survey data, women were sampled based variation in their knowledge and use of emergency contraception and on some aspects of sexual history. Specifically, sampling stratified women by sources of variation including: 1) Use/non-use of emergency contraception; 2) Levels of emergency contraception knowledge; 3) Experienced/did not experience a pregnancy; 4) Had/had never had sex; and 5) Reported a high/low frequency of unprotected sex. Theoretical sampling (Patton, 2002) was used to select potential participants based on the data as they were collected, including women who had experienced a pregnancy termination or “false alarm” pregnancy. Some participants represented more than one source of variation; for example, a woman might have experienced a “false alarm” pregnancy, report frequent unprotected sex, and have low knowledge of emergency contraception. Women who represented at least one of the sources of variation were randomly sampled and invited to participate in a face-to-face interview. This process yielded a sample of 35 women who represented a wide range of experiences. When saturation was reached, recruitment and data collection ended. All research procedures were approved by the institutional human subjects office.

Early in data collection for the main study, investigators noted that all participants used the words “responsible” or “irresponsible” in their interviews. For example, in response to a question about whether a participant’s views [about sex and marriage] had changed over time, she replied, “... I realized that I didn’t have to think that way [inflexibly about no sex before marriage] – you can still be responsible and not have to live by this traditional value that I was raised with.” After the first three participants all spontaneously discussed being

responsible, we added an interview question to explore the idea of “being responsible.” Data for this paper are limited to women’s discussions about being sexually responsible, primarily in response to that question. The deidentified data from audio-recorded transcripts were analyzed using within- and across-case qualitative analysis methods (Ayres, Kavanaugh, & Knafl, 2003). Data were managed with NVivo 9 qualitative data management software. Interviews were coded independently by two of the authors, who met regularly to compare data, reach agreement on codes, and identify commonalities and patterns.

Results

A total of 35 interviews were completed, each lasting 35–85 minutes. The ages of women completing the interviews ranged from 18–33 with the mean, median, and mode being 24.3, 20, and 21 years respectively (standard deviation 4.19). Students primarily identified themselves as undergraduate stats and white/Caucasian. The interview pool was purposefully diverse on experiences related to sexual health (see Table 1).

Analysis yielded an overarching theme of acting as a self-advocate based on personal goals and values. Self-advocacy was explained by knowledge of consequences of sexual activity and enacted through strategies to avoid risks. Women identified three equally important strategies: mindful selection of partners, communication with partners about boundaries and the limits of acceptable behaviors, and pregnancy prevention. Across case analysis of these attributes yielded a comprehensive definition of a sexually responsible woman: *a responsible woman self-advocates by taking action that is consistent with her personal goals and values while being aware of consequences that threaten those goals or values. Actions to avoid those consequences include being mindful about the selection of sexual partners, communicating boundaries and acceptable behavior, and preventing pregnancy.* All the women in the study were able to discuss attributes of responsible sexual behavior, whether or not they believed that those attributes were consistent with their own actions. The components of sexual responsibility including goals and values, awareness of consequences, and managing risk are discussed below.

Taking Action via Self-Advocacy

Women justified being self-advocates based on their personal values and life goals as well as sexual and reproductive health goals. Women described personal values and life goals as the basis of their decisions about sexual activity; that is, women chose to be sexually responsible because the consequences of being “irresponsible” could prevent them from achieving important life goals such as finishing college or staying healthy. “[A sexually responsible person is] someone that also has goals; and has direction in life or something; I think that is someone being responsible they have this view of how they want their life to be. And then they kind of structure their decisions around that.” Women explained the actions of a sexually responsible woman as autonomously chosen and proactively employed based on personal values and in service of larger goals for the future. Women explained that personal goals and values led a sexually responsible woman to think about the costs and benefits of potential actions such as risky behaviors. Goals and values then led to actions. For some women, educational goals were so powerful that they said they would choose to terminate an

unintended pregnancy rather than forfeit their educational goals. Thus, abortions were sometimes described as a responsible choice when proactive strategies failed.

Having an awareness of the potential for sexual activities to influence fidelity to personal goals and values provided the justification for self-advocacy, and self-advocacy justified actions to protect those goals. For example, Gretchen described a responsible woman as someone who “takes care of herself and just knows what her goals are and goes for them.” For women, taking action meant being pro-active, not passive: “...if you are not ready to have a child, I think you need to take steps to not have a child. That’s the responsible thing to do. You need to change your behavior [and] take action in some way. I don’t think that you should just kind of let what happens, happen” (Annie). Phoebe also felt that being responsible meant not being passive, “I think it’s just like making decisions instead of letting things fall into place.” For Kat, self-advocacy looked like this, “being responsible is being able to stand up for yourself and know what you need to take care of yourself.” Paige reinforced the proactive role of goals when she stated that “you know where your boundaries are and you are prepared.” Similarly, Gretchen also discussed that part of self-advocacy includes having a pre-thought out plan of how to avoid barriers, she stated, “If there are any obstacles think about how you want to get around them.” Thus, having an awareness of how personal and reproductive goals intersect created a framework to guide personal behavior and more importantly, to empower women to take a pro-active role in advocating for themselves.

Awareness of Consequences

Awareness of the consequences of sexual activity played an important role in definitions of responsible sexual behavior. The most common consequence identified was unintended pregnancy. As Jesse noted, “Responsible sexual behavior is....the knowledge that the result [of sex] may be a child. If you have sex you need to be willing to be a parent, and that’s kind of the bottom line with that.” Meg stated “I’ve been working towards my career for the past 18 years of school so [an unplanned pregnancy] would be a huge inconvenience and something I hope I don’t ever have to deal with until I’m ready”. Lilly said, “It’s not fair to bring a child into the world that you can’t raise and can’t take care of the way it needs to be taken care of”. Thus, consequences of an unintended pregnancy included unexpected parenting, financial strain, and produced a barrier to goal attainment. In addition, women considered social consequences of pregnancy, such as being seen or valued by others as irresponsible. Kat worried about what family members might think, “My sister just had a baby and she wasn’t married, and it wasn’t planned. I remember her being like really nervous to tell my Grandma. [My grandma] was like; well geez, what are you doing? You’re a smart girl ... that is what I feel the reaction would have been like for me too with my family”. Kara stated “I think just that stereotype of a pregnant college student; or a pregnant High School student; I just don’t want to be part of that.”

Managing Risk

Akin to awareness, knowing how to manage the risks or consequences of sexual activity was central to women’s definition of sexual responsibility. Experiencing an unplanned pregnancy was the most frequently stated concern in this sample of women. Often pregnancy

prevention required forethought (an awareness of a consequence) and preparedness (having methods on hand to mitigate risk). Women used two main strategies to reduce pregnancy risk a: Pregnancy prevention, and mindful partner selection.

Pregnancy Prevention

Being sexually responsible included preventing unintended pregnancy by contraceptive use or abstinence. Several women suggested that multiple methods of birth control were required to fully minimize the risk of pregnancy, such as using both birth control pills and condoms. According to Erin, “I just think it’s, not going into a situation unprepared...just avoiding unprotected sex at any means [and] always having protected sex.” Lisa defined a responsible woman as one who “makes sure that there is birth control present, even if she’s not the one that has to be responsible for it. She should make sure that the guy has it if she doesn’t.” Pregnancy prevention was sometimes combined with safety and self-protection and consideration of external influences. For example, Ashley stated, “About being safe...I think you need to be on some form of birth control...the pill or using the condoms... I think that you shouldn’t be intoxicated, or under the influence.” Fadri, like Lisa, believed that taking action to prevent pregnancy was largely a woman’s responsibility: “I believe [birth control] to be a heavy role of the woman, to be preventative and take every measure possible for [pregnancy] not to happen. Because [pregnancy] is occurring in their own body and not someone else’s.” Lisa added that maybe the responsibility would be different if men’s bodies were changed by pregnancy.

Mindful Partner Selection

Being sexually responsible involved careful consideration of sexual partners, including limiting the number of partners in general and considering whether to have a sexual relationship with a particular partner. Women used relationship characteristics such as mutual exclusivity, monogamy, marriage, trust and caring, or mutual commitment in selecting particular partners. The goal of mindful partner selection was risk reduction and risk mitigation. For example, Ianna said, “Be careful of who you have sex with, make sure you know them well enough that if something were to happen; that you could deal with the outcome together.” Similarly, Ashley stated, “I don’t think having intercourse with just anyone is okay because there is a risk of getting pregnant or getting an STI. So I feel, [sex] should be with someone that you know and care about and that you can trust.” Erin underscored the importance of “knowing” the other person, “I’m really against hooking up with random people. I just think that’s really wrong because you don’t know their sexual background, you don’t know their character.” In contrast, Kara discussed how to manage a situation if you do have sex with someone who is not ideal, “I think a responsible woman doesn’t jump into some sexual relationship with anyone. Or if you do, do it with protection or say something goes wrong then you buy emergency contraception the next day.” Renee also expressed her value of a committed relationship over casual sexual relationships: “I personally think responsible sexual behavior is being in a committed relationship with one person, and not doing the bar thing where people go from person to person to person.” Some women also referenced goals and values that influenced decisions about sexual relationships. Olivia said, “I’m waiting for the right person [for] when I choose to have [sex]. I am also a

big believer in no sex before marriage so I would hope that I could keep that moral...And I prefer to have one partner.”

Communication

In order to be sexually responsible, women recommended having pro-active conversations with a potential sexual partner about methods of pregnancy prevention. These conversations also addressed personal sexual boundaries. Jade described such conversations this way: “It’s important to talk, communication is key; you need to see what the other person’s comfortable with and maybe let them know what you’re comfortable with.” Renee underscored the need for important discussions to take place before having sex,

It’s a two person thing to prevent pregnancy and it is also a two-person thing to decide to have a baby. It is not a decision that should be made by the woman or the man alone...men have an obligation to use condoms and prevent pregnancy, or ask about their partners’ birth control status... [Women] have a responsibility to ask their partners to use condoms or inquire about birth control. Then, when a woman becomes pregnant, I think it is also a two-person decision that you need to find out where the other person is in life, and what their beliefs are... I think the key thing for me about responsible [sexual behavior] is open communication because you should never assume that the other person is thinking a certain way, or willing to act a certain way, or taking a certain action.

Discussion

Women in this study shifted the focus from *responsible sexual behavior* to a *responsible sexual being*, so that being sexually responsible (BSR) was not something they did but rather part of who they were. Women’s definitions of a sexually responsible woman have some important overlap with constructions of RSB in the literature, specifically regarding behaviors that would protect women from biological risks. In a concept analysis examining “responsible sexual behavior” as it is used in published health literature, Loew et al. defined RSB as “*a socially desirable and deliberative pattern of behaviors that protects an individual’s sexual health by managing risk and respecting sexual partners in the context of their community.*” The emphasis on managing risk is also observed in definitions provided by college women. Women in this sample discussed needing to be aware of consequences of sexual activity, pregnancy prevention techniques, and the importance of communication to mitigate risk. Similarly, *deliberate behavior* was demonstrated in women’s discussions of personal advocacy, taking action, implementing strategies to prevent pregnancy, and actively communicating with partners. Not only did women see deliberate behavior as, but they also saw it as a means to overcoming barriers that would prevent them from BSR. Women in this study were also clearly aware that “responsible” sexual behavior was socially desirable, as consistent with the definition of RSB (Loew et al.). Even before we added a question to the interview schedule, women used ideas about being responsible to describe their actions and choices.

In contrast, women in this sample diverged from the literature’s conception of RSB when they discussed specific behaviors and respect. According to the RSB literature, abortion is

not considered among “responsible” behaviors and is instead a negative indicator for RSB (Fortenberry, 2002; Ross, 2002; Satcher, 2001). However, some women mentioned that terminating an unintended pregnancy would be a responsible action in the context of protecting their life goals. This contrast may suggest that behavior considered “responsible” is context dependent and interventions promoting RSB may need to maintain flexibility to be relevant across several contextual settings or purposefully specific to settings that may have the biggest influence on risk.

Additionally, both the literature-based definition and definition derived from the findings of this study, “respect” was noted as a key concept; however, it was used differently in the two discourses. RSB in the literature promotes behaviors that demonstrate a *respect for sexual partners* and connotes actions such as using a condom to protect an individual and their sexual partner from STI risk or avoiding circumstances that increase the risk of violence (Loew et al., 2017). In contrast, women in this sample described strategies to receive respect, for example by careful selection of partners and communicating boundaries. These two perspectives influenced the boundaries of RSB/BSR.

The sexual mores associated with the college hook-up culture (Bogle, 2008) also provide a unique opportunity to examine RSB/SRB, because women in this study were negotiating sexual responsibility in the context of both the hook-up culture and their own goals. Whether or not women participated in hookups, they shared an understanding of the hook-up culture, acknowledged the existence of rules (e.g. no expected long-term commitment and the purpose of a hookup is casual sexual activity) and recognized the risk hook-ups implied. Women understood that safety and sexual risk was increased with alcohol use and articulated a need to know personal drinking limits and have trusted bystanders who would guard against behavior and decisions that would place a woman at risk. Women also recognized that this environment produced a need for advanced preparation in case “things just happened” and sexual intercourse occurred. This included having condoms readily available or using other forms of birth control to prevent pregnancy. Interestingly, in this sample condoms were described as a “doubly sure” way to protect against pregnancy when combined with hormonal contraception or an alternate method, and were not explicitly associated an ability to reduce the risk of STI’s. This contrasts with public health messaging for RSB, which widely supports condom use as a primary means of STI prevention (e.g., Healthy People 2010, Healthy People 2020, and Healthy Campus). It may be that women in the college environment perceived unplanned pregnancy as more of a threat to their educational goals than contracting an STI. Although interview questions were open-ended, it is also likely that the heavy focus of the parent study on unintended pregnancy may have influenced how women prioritized the threat of unintended pregnancy over the threat of STI’s and this was reflected in their responses.

We cannot overemphasize the importance of personal, financial, and educational goals for the women in this study. Being “true” to one’s goals of protecting current and future educational and economic interests were common motivators to engage in responsible sexual behavior. Personal goal attainment necessitated self-advocacy and assisted women to define their own boundaries for BSR, thus, BSR provided the rationale for boundaries that would facilitate achievement of personal goals, particularly finishing their degrees. The goal of

completing their degrees was an intrinsic motivator (Ryan & Deci, 2000) for the women in this study. Additionally, mindfully selecting partners, deciding which birth control method was the best fit, and assessing the consequences of risk were all done in the context of goal evaluation. Although this study is unable to confirm Moore and Davidson's (2006) conclusion that goal-setting behaviors differentiated the sexually responsible from those less responsible (i.e. more likely to consume alcohol prior to sex, drink more, not inquire about STI status of partners), these reported indicators make sense given the findings of this study. However, this study does confirm the importance of integrating one's personal goals with reproductive goals to promote sexual and reproductive health, which is akin to reproductive life planning (RLP), a standard set forth by the CDC to improve birth outcomes. According to Edmonds (2017) a person's RLP is centered on reproductive goals, personal goals (including educational goals), is personalized to reflect an individual's values and beliefs, and is focused on improving health. Thus, the attributes of RLP are similar to college women's conception of BSR.

The prominent role of goal setting and influence of the social context are consistent with the framework proposed by Juhasz and Sonnenshein-Schneider (1979) for sexual decision making that may assist in identifying practical applications of these study findings. This sexual decision making framework highlights the influence of cognition, socialization, and situational factors on the decision-making process and suggests points where provider intervention may assist women to make decisions that best promote their sexual health. The first dimension, cognition, includes planning, obtaining, understanding, evaluating, and assigning priority or value to information. Through assessment a provider can determine what knowledge is possessed or skills have been mastered and how they might assist acquisition of information or skills that are absent. Safeguarding goals was an important cognitive skill for the college women in this sample. Using personal goals as a foundation for motivating behavior may be a useful tool for other populations. The second dimension, socialization, includes understanding that people are a product of their environment (Juhasz & Sonnenshein-Schneider, 1979). Understanding a woman's social environment can allow understanding of the norms and influences on her sexual behavior. Furthermore, this understanding can assist to identify those forces that can support women's sexual decision making but also provide some idea about specific situations where planning can fail and allow for discussion of managing risk in those instances. For some women in this study, the norms of the college hookup culture produced special consideration for times when "things just happen".

In contrast to what is known about the college cultural norm of casual sex and alcohol consumption, the majority of women in this study tended to want monogamy and committed relationships. This perspective likely impacted conceptions of RSB. This data was based on interviews from only 35 women, however the goal of qualitative research is not meant to be generalized. Furthermore, the sampling procedures allowed for a very diverse sample which increased the variance in perspectives of RSB within a specific population.

In conclusion, college women in this study shifted the focus from *responsible sexual behavior* to a *responsible sexual being*. *A responsible woman self-advocates by taking action that is consistent with her personal goals and values while being aware of consequences*

that threaten those goals or values. Actions to avoid those consequences include being mindful about the selection of sexual partners, communicating boundaries and acceptable behavior, and preventing pregnancy. Future research will need to further examine the utility of using concepts such as “responsible” as boundaries for sexual behavior given that experiences, values, and settings impact a shared understanding. Next steps for inquiry should also examine if personal goal-setting and goal safeguarding is a useful foundation for behavioral or decision making interventions and if this strategy is useful for populations of women who do not attend college.

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References

- American College Health Association. Student objectives. Healthy Campus 2020. n.d. Retrieved from https://www.acha.org/HealthyCampus/HealthyCampus/Student_Objectives.aspx
- Arnett JJ. Emerging adulthood. A theory of development from the late teens through the twenties. *American Psychologist*. 2000; 55:469–480. DOI: 10.1037/0003-066X.55.5.469 [PubMed: 10842426]
- Ayres L. Narratives of family caregiving: The process of making meaning. *Research in Nursing and Health*. 2000; 23(6)
- Ayres L, Kavanaugh K, Knafl KA. Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research*. 2003; 13:871–883. DOI: 10.1177/1049732303013006008 [PubMed: 12891720]
- Bogle, KA. *Hooking up: Sex, dating, and relationships on campus*. New York, NY: New York University Press; 2008.
- Bolin, JN., Bellamy, GR. *Rural Healthy People 2020*. n.d. Retrieved from <https://sph.tamhsc.edu/srhrc/docs/rhp2020.pdf>
- Bradburn, EM., Dennis Carroll, C. Short-term enrollment in postsecondary education: Student background and institutional differences in reasons for early departure, 1996–98 (Postsecondary Education Descriptive Analysis Reports). Washington, DC: U.S. Department of Education, National Center for Education Statistics; 2002.
- Bureau of Labor Statistics. College enrollment and work activity of 2015 high school graduates. 2016. [Press release]. Retrieved from <https://www.bls.gov/news.release/pdf/hsgec.pdf>
- Centers for Disease Control and Prevention. Unintended pregnancy prevention. 2013. Retrieved from <http://www.cdc.gov/reproductivehealth/unintendedpregnancy/>
- Centers for Disease Control and Prevention. Reported STDs in the United States: 2015 national data for chlamydia, gonorrhea, and syphilis. 2016. Retrieved from <https://www.cdc.gov/nchhstp/newsroom/docs/factsheets/std-trends-508.pdf>
- Clery, S., Harmon, T. *Data notes: Student parents and academic outcomes*. Silver Springs, MD: Achieving the Dream, Inc; 2012.
- Edmonds SW. Evolutionary concept analysis of reproductive life planning. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2017; 46(1):78–90. DOI: 10.1016/j.jogn.2016.07.012
- Finer LB, Zolna MR. Shifts in intended and unintended pregnancies in the United States, 2001–2008. *American Journal of Public Health*. 2014; 104:S44–S48. DOI: 10.2105/AJPH.2013.301416
- Fortenberry JD. Clinic-based service programs for increasing responsible sexual behavior. *Journal of Sex Research*. 2002; 39:63–66. DOI: 10.1080/00224490209552122 [PubMed: 12476259]
- Healthy People 2010. Leading health indicators. 2000. Retrieved from http://www.healthypeople.gov/2010/document/html/uih/uih_4.htm?visit=1

- Juhasz AM, Sonnenshein-Schneider MF. Responsibility and control: The basis of sexual decision making. *The Personnel and Guidance Journal*. 1979; 53:181–185.
- Lehan Mackin, M. Doctoral dissertation. The University of Iowa; Iowa City: 2011. The social context of pregnancy intention.
- Lehan Mackin M, Clark K. Emergency contraception in Iowa pharmacies before and after over-the-counter approval. *Public Health Nursing*. 2011; 28(4):317–324. DOI: 10.1177/0193945914551005 [PubMed: 21736610]
- Loew, NM., Lehan Mackin, M., Ayres, L. A concept analysis of responsible sexual behavior in emerging adult women. 2017. Paper submitted for publication
- Logan, C., Holcombe, E., Manlove, J., Ryan, S. The consequences of unintended childbearing: A white paper. Bethesda, MD: Child Trends, Inc; 2007.
- Moore N, Davidson JK Sr. College women and personal goals: Cognitive dimensions that differentiate risk-reduction sexual decisions. *Journal of Youth and Adolescence*. 2006; 35(4):574–586. DOI: 10.1007/s10964-006-9041-x
- Patton, MQ. *Qualitative research and evaluation methods*. 3. Thousand Oaks, CA: Sage; 2002.
- Prentice, M., Storin, C., Robinson, G. *Make it personal: How pregnancy planning and prevention help students complete college*. Washington, DC: American Association of Community Colleges; 2012.
- Ross MW. Sexuality and health challenges: responding to a public health imperative. *Journal of Sex Research*. 2002; 39(1):7–9. DOI: 10.1080/00224490209552112 [PubMed: 12476249]
- Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*. 2000; 55(1):68–78. [PubMed: 11392867]
- Satcher, D. The surgeon general's call to action to promote sexual health and responsible sexual behavior. 2001. Retrieved from <http://www.surgeongeneral.gov/library/calls/sexualhealth/call.pdf>
- Sonfield, A., Kost, K. Public costs from unintended pregnancies and the role of public insurance programs in paying for pregnancy-related care: National and state estimates for 2010. 2015. Retrieved from <https://www.guttmacher.org/report/public-costs-unintended-pregnancies-and-role-public-insurance-programs-paying-pregnancy>
- Teddlie, C., Tashakkori, A. *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage; 2003.
- The National Campaign to Prevent Teen and Unplanned Pregnancy. Unplanned pregnancy among 20-somethings: The full story. 2008. Retrieved from <http://depts.gpc.edu/engage/briefly-unplanned-pregnancy-among-20somethings-the-full-story.pdf>
- Trieu, SL., Shenoy, D. Science says 46: The sexual behavior of California community college students. 2010. Retrieved from http://www.thenationalcampaign.org/resources/pdf/SS/SS46_CACCommunityCollege.pdf

Table 1

Demographics of Participants

Demographics	Mean N (%)
Status in School	
Undergraduate	24 (69)
Graduate	11 (31)
Ethnicity	
White/Caucasian	20 (57)
African American	6 (17)
Asian	6 (17)
Latina/Hispanic	3 (9)
Sexual Health History	
Never had sex	6 (17)
Sexually active without contraception	3 (9)
Prior Pregnancy	9 (26)
Prior pregnancy termination	3 (9)