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Perspectives of responsible sexual behavior

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PERSPECTIVES OF RESPONSIBLE SEXUAL BEHAVIOR

by

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PH.D. THESIS

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This research is dedicated to the rural women who inspired me at a young age to explore the intersection of sexual and reproductive health and social influences. May my life always be dedicated to improving your sexual and reproductive health.

Nevertheless, she persisted.

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ABSTRACT

The concept of responsible sexual behavior (RSB) gained popularity when it was introduced in Healthy People 2010 as a leading health indicator. The Healthy People initiatives organize the top health priorities and create guidelines for improving the health of Americans. Promoting RSB was intended to address problems such as unintended pregnancy and sexually transmitted infections (STIs), however the guidelines never conceptually define behavior that would be considered sexually responsible. Thus, the purpose of this dissertation research was to examine how responsible sexual behavior (RSB) was defined in the context of public health literature, collegiate women, and rural women with the intention to contribute to a clearer conceptual understanding of RSB.

First, an evolutionary concept analysis was conducted to define the attributes of RSB and develop a conceptual definition of *responsible sexual behavior* (RSB) as it applies to women 18 years and older who have sex with men from a synthesis of lay and public health literature. According to the literature, RSB is 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. This study also concludes that a purposeful redefinition maybe necessary to maintain a concept that is useful for guiding and evaluating sexual behavior.

Second, a secondary data analysis was completed to identify college women definition of "sexual responsibility." Data came from interviews collected as part of a mixed methods study of college women and unintended pregnancy. A total of 35 interviews were analyzed using within and across case methodology to derive a working definition of RSB for collegiate women. Women in this sample described being sexually

responsible as self-advocating through actions that were 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. Women's academic goals were closely linked to women's sexual health decision making.

Third, an exploratory descriptive study was completed to identify how rural women who have sex with men define RSB and to understand the role of the rural context on definitions and enactment of RSB. A total of ten rural Iowa women aged 18-29 participated in phone interviews. Within and across case analysis was used to describe the contextual influences of how rural dwelling women defined and enacted responsible sexual behavior. For rural women in this sample, RSB is understanding the consequences of sex and taking action to manage risks by preventing pregnancy and STIs, mindfully selecting of partners, and seeking appropriate resources. The social context of the rural environment acted as both a facilitator and barrier for women to acquire information enact RSB.

In conclusion, RSB was an accessible concept for college and rural women to define and understand. However, the collective research indicated that a new definition of RSB was necessary to maintain its purpose in improving sexual and reproductive health. Thus, *being sexually responsible* is having an awareness of consequences and managing risks in a way that is reflective of a woman's personal experiences, beliefs, values, and goals. How BSR is defined is fluid and subject to redefinition based on personal experiences and movement through the lifespan. Future research should focus on

understanding how other populations of women define and manage BSR and that public health interventions and policy support women's ability to be sexually responsible.

PUBLIC ABSTRACT

The concept of responsible sexual behavior (RSB) gained popularity when it was introduced in Healthy People 2010 as an indicator for sexual health. Promoting RSB was intended to address problems such as unintended pregnancy and sexually transmitted infections, however the guidelines never clearly defined what they meant by sexually responsible. Thus, the purpose of this dissertation research was to examine how RSB was defined in the collective context of public health literature, collegiate women, and rural women with the intention to contribute to a clearer conceptual understanding of RSB. RSB definitions included an awareness of consequences and managing risk as central attributes in all three studies. The familiarity of the term contributes to a shared understanding but is limited by the potential for judgement that can be extended to a person's character. Because of this, the collective research suggests that a new definition of RSB may be necessary to continue to be used to improve sexual and reproductive health. It is proposed that RSB be replaced by the concept *being sexually responsible* which is defined as having an awareness of consequences and managing risk in a way that is reflective of a woman's personal experiences, beliefs, values, and goals.

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CHAPTER 1

BACKGROUND

The concept of responsible sexual behavior (RSB) gained popularity when it was introduced in Healthy People 2010 as a leading health indicator. The Healthy People initiatives organize the top health priorities and create evidence-based objectives for Americans. Initiatives also measure, track, and create benchmarks for health. In conjunction with the release of *Healthy People 2010*, David Satcher, then Surgeon General, released the *Call to Action*, which stated that public health approaches were necessary to promote RSB (Satcher, 2001). Furthermore, the National Campaign to Prevent Teen and Unplanned Pregnancy, an organization who has contributed significantly to understanding unplanned pregnancy, also identified promoting RSB as a public health priority. However, despite its prevalent use a clear conceptual definition of RSB has not been presented.

Promotion of RSB was a response to contemporary sexual health challenges in the United States (US) including unplanned pregnancies and sexually transmitted infections (STIs). For example, of all pregnancies in the US, almost half (45%) are unplanned. Unplanned pregnancies are reported by women to be either unwanted or mistimed and are referred to as unintended pregnancies (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2008). Women aged 20-24 experience the highest rates of unintended pregnancies (Finer & Zolna, 2014) and in 2010 accounted for $21.0 billion in public expenditures (Sonfield & Kost, 2015). In the same year, for the state of Iowa, 43% of all pregnancies were unintended (Kost, 2015) and cost $48.3 million (Sonfield & Kost, 2015).

Unplanned pregnancies can result in negative outcomes for children. Unplanned pregnancies are associated with a delayed onset of prenatal care. Delayed prenatal care can result in prolonged exposure to alcohol and cigarette smoke, higher infant mortality rates, lower APGAR scores, lower birth rates, and premature delivery (Logan, Holcombe, Manlove, & Ryan, 2007; Peck & Alexander, 2003). In the long term, unplanned children are more likely to have poor physical health, poor mental health, poorer education outcomes, and an impaired mother-child relationship (Logan, Holcombe, Manlove, & Ryan, 2007).

STIs are also a public health challenge, with 20 million new STI infections every year. Currently, 15-24 year olds account for half all new STI infections (Centers for Disease Control and Prevention, 2016). STIs are a financial burden for the US, costing about $16 billion annually. Women are especially at an increased risk for future complications from STIs (Centers for Disease Control and Prevention, 2016). Current estimates suggest that undiagnosed STIs (such as gonorrhea, chlamydia, and syphilis) are the cause of infertility for more than 20,000 women annually (Centers for Disease Control and Prevention, 2016). In addition to the long-term threat of infertility, acquiring an STI also puts a person at an increased risk for acquiring HIV. Because of these economic and health consequences to women and children, unintended pregnancies and STIs are recognized as a public health problem.

It was the public health issues related to sexual and reproductive health that prompted RSB to become a leading health indicator. The purpose of leading health indicators are to establish goals for behavior change and provide a focus to track outcomes (Healthy People 2010). The purpose of RSB as a leading health indicator was

to measure and promote condom use and abstinence as a means to reduce negative sexual health outcomes. Progress for meeting Healthy People goals are tracked quantitatively. For RSB, quantitative assessment was limited to the frequency of condom use (Institute of Medicine, 2011). According to Fortenberry (2002), additional measures of assessing RSB include data regarding number of sexual partners, unplanned pregnancies, abortions, and occurrence of STIs are frequent proxies for RSB because these are variables that can be easily measured. Following the release of Healthy People 2010, goals to promote RSB such as promoting condom use, have continued to be included in *Healthy Rural People, Healthy People 2020 (Office of Disease Prevention and Health Promotion),* and *Healthy Campus 2020 (American College Health Association, n.d.).*

Other than these quantifiable outcomes, the literature does not provide a comprehensive understanding of what behaviors constitute RSB. To the contrary, the literature primarily describes behaviors that are not responsible, such as behaviors that result in negative outcomes such as an unplanned pregnancy (NCP, 2006; Wylie, 2001). In addition, the literature discussing avoiding "permissive" sexual behavior (Fabes & Strouse, 1987), not seeking pregnancy termination (Wylie, 2001), and not coercing sexual encounters (Fabes & Strouse, 1987; Satcher, 2001; NCP, 2006) as responsible behaviors. In response to the focus on promoting RSB. The National Consensus Process (NCP) formed a coalition to determine the definition of RSB. However, the coalition failed to meet their goal because members could not first agree on what behaviors constituted sexual intercourse (NCP, 2006). Thus, a clear conceptual definition of RSB is necessary to develop a consensus understanding of what is RSB to aid in health promotion and disease prevention.

RSB is a social construction created and informed by policy and laws, availability of sexual health resources and services, community values and norms, schools, parents, family, and peers (Levesque2002; Satcher, 2001). Thus, to understand and define RSB requires an understanding of the role of social context. Collegiate women's desire to reach educational goals while navigating the college environment and rural living in Iowa provided important setting in which to examine RSB.

An unplanned pregnancy poses economic risk for women and can prevent women from seeking or completing a college degree (Bradburn, 2002; Clery & Harmon, 2012; Prentice, Storin, & Robinson, 2012). This is problematic as attending college has become a cultural norm in the US with 72.6% of all female high school graduates enrolling in colleges or universities in 2015 (Bureau of Labor Statistics, 2016). The benefits of a college degree include: an increased likelihood of gainful employment, upward social mobility, and economic security (Logan, Holcombe, Manlove, & Ryan, 2007). According to Trieu & Schenoy (2010) of college women in their sample who experienced an unplanned pregnancy, 61% were more likely to never obtain their degree than college women who did not experience an unplanned pregnancy. Furthermore, college campus culture and norms promote casual sex (hook-ups) and alcohol, which combined can increase sexual health risks (Bogle, 2008). Therefore, understanding how collegiate women define RSB is important so that interventions can be designed to promote their health within the college context.

Additionally, the rural context can influence decisions and behaviors that impact women's sexual and reproductive health. Compared to urban areas, rural residents have lower levels of education, higher rates of unemployment or underemployment, lower

salaries, higher rates of uninsured or underinsured people higher rates of poverty, and longer travel distances to healthcare facilities (Hart, Larson, & Lishner, 2005; Kelly, 2011; van Dis, 2002). Furthermore, rural counties have 29% fewer doctors and 77% fewer public clinics that offer contraceptives. These factors strongly influence individual's control over their health and play a key role in increasing the risks associated with sexual behavior (i.e. unplanned pregnancy and STIs) (Adimora & Schoenbach, 2005). For example, compared to their metropolitan counterparts, teen birth rates are one-third higher in rural counties. In addition, the use of medical contraception is rural areas is lower (Kessler, Goldenberg, & Quezada, 2010). For rural women who do become pregnant, they are less likely to receive adequate prenatal care because of limited resource availability and access to obstetrical care (Peck & Alexander, 2003). As a result, preventing unintended pregnancy among rural women is one of the main goals of Rural Healthy People 2020 (Bolin & Bellamy, n.d.).

Although parallel in purpose, Rural Healthy People initiatives are not directly associated with Healthy People Initiatives. Rural Healthy People initiatives were created by the Southwest Rural Health Research Center to specifically address the health disparities associated with rural areas. Interestingly, since the inception of Healthy People in 1979, rural disparities have not been addressed by Healthy People initiatives even though "rural" America accounts for 75% of the nation's landmass and is home to 20% of Americans (Bellamy, Bolin, & Gamm, 2011; Hart, Larson, & Lishner, 2005). Instead, Healthy People initiatives and guidelines have been designed and tested for urban areas and generalized to rural areas. This is problematic because aggregating national level data to inform policies and programs can distort any unique contribution of

knowledge specific to the local level that would be pertinent to creating interventions, establishing healthcare needs assessments, and allocating funding. However, local level data is scarce and more difficult to attain because federal surveillance and funds for rural surveys are minimal (Hart, Larson, & Lishner, 2005). Thus, the need to collect local level data is imperative. Understanding how rural women define and manage RSB can help agencies conceptualize sexual health problems and inform the allocation of appropriate resources to promote the sexual and reproductive health of rural women.

According to Bandura (1977), behavior changes is dependent upon a shared understanding of meanings and goals. The goal of promoting RSB was to reduce negative sexual health outcomes such as unplanned pregnancy, yet a conceptual definition of RSB has not been provided. Furthermore, the goals of HP 2010 as they relate to RSB were not met. Given the multiplicity of how the concept of RSB is constructed, understanding how RSB is defined across various contexts can help elucidate personal and contextual nuances of how RSB is understood and interpreted. Thus, creating a conceptual understanding of RSB can help public health, providers, and policy makers create more effective strategies to promote the sexual and reproductive health of women by having a shared understanding of goals.

Summary of Chapters

Paper 1, Chapter 2: *A concept analysis of responsible sexual behavior in adult women*

This paper describes a project undertaken to develop a conceptual definition of *responsible sexual behavior* (RSB) as it applies to women 18 years and older who have sex with men from a synthesis of lay and public health literature. An evolutionary approach (Rodgers, 2000) was used to develop the defining attributes of *responsible*

sexual behavior, including antecedents, consequences, surrogate terms, and historical changes. Relevant literature was identified using electronic research databases. Twenty articles in total were included in the final analysis including both peer-reviewed and "gray" literature. Antecedents of RSB include forethought, cognition, competence, and access to resources. The derived definition of RSB is that it is 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. There are both advantages and limitations of using this concept to describe and characterize the sexual behaviors of women. A purposeful redefinition may be necessary to maintain a concept that is useful and effective for evaluating sexual behavior.

Paper 2, Chapter 3: *Collegiate women's definition of responsible sexual behavior*

The purpose of this secondary data analysis was to describe college women's definition of "sexual responsibility." Data came from completed interviews collected as part of a mixed methods study of college women and unintended pregnancy. A total of 35 interviews were analyzed using within and across case methodology. A working definition of RSB from the perspective of collegiate women in this sample described being sexually responsible as self-advocating through actions that were 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. Women's academic goals were linked to women's sexual health decision making.

Paper 3, Chapter 4: *Rural women's perspectives of responsible sexual behavior*

The purpose of this exploratory, descriptive study was to describe the role of the rural context on definitions and enactment of RSB from the perspective of rural women who have sex with men. A total of ten rural Iowa women aged 18-29 participated in phone interviews. Within and across case analysis was used to describe the contextual influences of how rural dwelling women defined and enacted responsible sexual behavior. For rural women in this sample, RSB is understanding the consequences of sex and taking action to manage risks by preventing pregnancy and STIs, mindfully selecting of partners, and seeking appropriate resources. Facilitators and barriers are discussed as they relate to acquiring information and enacting RSB. (The project described in this paper was an unfunded grant submitted to The University of Iowa Prevention Research Center Pilot Project Program which is included in Appendix A).

Chapter 5: *Responsible Sexual Behavior: A Synthesis of Three Perspectives*

The purpose of chapter 5 was to integrate interpretations of all RSB perspectives described in Chapters 2-4. The collective research has shown that although current definitions of RSB have some advantages, there are also critical limitations. The conclusions drawn about the limited usefulness of the literature definition of RSB and the lack of person-centered considerations for expected behavior, indicated a new definition of RSB was necessary to maintain utility of the concept as a guide for behavior that avoids negative sexual health risks. Thus, a new definition of RSB is proposed as it applies to women's sexual behavior: *Being sexually responsible (BSR) is having an*

awareness of consequences and managing risks in a way that is reflective of a woman's personal experiences, beliefs, values, and goals. This woman-centered definition allows for guidance of behavior that is reflective of women's personal philosophies and lives. Clinical and policy implications are discussed.

CHAPTER 2

A CONCEPT ANALYSIS OF RSPONSIBLE SEXUAL BEHAVIOR IN ADULT WOMEN

Student Contribution

Chapter 2 is composed of a manuscript that has been submitted most recently for publication to the Journal of Public Health Nursing. It was initially submitted in October of 2016, revised, and resubmitted in February 2017. It is currently in review and awaiting decision. The formatting of this paper is reflective of the formatting requirements set forth by the Journal of Public Health Nursing. This paper presents findings of a concept analysis that had the purpose of developing a conceptual definition of *responsible sexual behavior* (RSB) as it applies to women 18 and older from a synthesis of the literature. The student (N. Loew) is the first author on the submitted manuscript.

The history of this paper is that it was originally an assignment (graded final paper) in partial fulfillment of the objectives for the course Foundations of Nursing Science II 096:340 taught by Dr. Lioness Ayres in the spring of 2013. As one option for this assignment, a concept analysis could be completed using Rodgers' methodology (see Rodgers, 2000). The concept chosen by the student to examine was RSB. Rodgers' method entailed defining the attributes, antecedents, consequences, surrogate terms, and understanding the how the concept has changed over time for RSB. This course paper and all research required to fulfill the assignment criteria was completed independently by the student and is original work. When a decision was made to submit this paper for publication, the student invited two mentors as shared authors to contribute to editing of the paper, additional interpretations, and refinement of ideas.

Abstract

Objective: The purpose of this project was to develop a conceptual definition of *responsible sexual behavior* (RSB) as it applies to women 18 and older from a synthesis of the literature. RSB has been used in public health initiatives as a means to promote the sexual and reproductive health of women. However, a conceptual understanding of RSB is lacking.

Design: An evolutionary approach (Rodgers, 2000) was used to develop the defining attributes of *responsible sexual behavior*, including antecedents, consequences, surrogate terms, and historical changes. Relevant literature was identified using electronic research databases.

Sample: Twenty articles in total were included in the final analysis including both peer-reviewed and "gray" literature. Publication dates ranged from 1977 to 2013; the majority appearing shortly after the publication *Healthy People 2010* (2000).

Results: Forethought, cognition, competence, and access to resources must be present in order for responsible sexual behavior to take place. For adult women who have sex with men RSB is 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.

Conclusion: Analysis highlights the limitations of using this concept to describe and characterize the sexual behaviors of women and suggests that a purposeful redefinition maybe necessary to maintain a concept that is useful and effective for evaluating sexual behavior. Future research should focus on the conceptual use of RSB in various

populations of women to fully understand the role of context and social desirability in setting boundaries and enacting RSB.

Terms: responsible sexual behavior; concept analysis; unplanned pregnancy; adult women

Background

The concept of *responsible sexual behavior* (RSB) has been used as a health indicator and proxy term for a set of desired behaviors. RSB has been identified in the public health literature as a strategy to address the rising sexual health challenges and concerns facing Americans. For example, unplanned pregnancies have socioeconomic implications for women and society. Although some progress has been made in reducing the number of unintended pregnancies, 45% of all pregnancies in the United States (US) are unplanned (Finer & Zolna, 2016). In 2010 alone, unintended pregnancies accounted for $21.0 billion in public expenditures, (Guttmacher Institute, 2015) aside from lost productivity. Unplanned pregnancies result in higher medical costs that can be attributed to negative outcomes for the newborn as a result of delayed onset of prenatal care, prolonged exposure to alcohol and cigarette smoke, and premature delivery. In the long term, children of unplanned pregnancies are more likely to have poor physical health, poor mental health, poorer education outcomes, an impaired mother-child relationship and increased reliance on public funding for health services and housing and food subsidies (Logan, Holcombe, Manlove, & Ryan, 2007). Although unintended pregnancies in all women account for less than half of all pregnancies the majority (66-81%) of unintended pregnancies occur in adult women between the ages of 18-29 (Finer & Zolna, 2016) when many women are seeking education and employment opportunities to

develop financial independence. Unintended pregnancy can threaten these goals leading to loss of economic security which is strongly linked to general health and subjective well-being (Belfield & Bailey, 2011).

RSB was first introduced in *Healthy People 2010* as a leading health indicator (LHI) in response to rising rates of unintended pregnancies and STIs (Healthy People 2010, n.d.). LHIs reflect public health issues affecting the health of individuals and communities, establish goals for behavior change, and provide a focus for which outcomes are tracked (Healthy People 2010, n.d.). RSB as a LHI reflected the measurement and promotion of condom use and abstinence to reduce negative sexual health outcomes. Progress towards achieving indicators such as RSB are tracked through objectives that indicate movement towards a quantitative target (e.g. age of first sex or percentage of consistent condom use) (Institute of Medicine, 2011). Following the release of Healthy People 2010, similar goals have been included in *Healthy Rural People, Healthy People 2020 (Office of Disease Prevention and Health Promotion)*, and *Healthy Campus 2020 (American College Health Association, n.d.)*.

However, the literature does not provide a comprehensive list of affirmative "responsible" behaviors, instead RSB is primarily described in the negative or what is considered "irresponsible" behavior, that is, experiencing an unplanned or unwanted pregnancy (The National Consensus Process on Sexual Health and Responsible Sexual Behavior [NCP], 2006; Wylie, 2001); having "permissive" sexual behavior (Fabes & Strouse, 1987), seeking pregnancy termination (Wylie, 2001); and coercion of sexual encounters (Fabes & Strouse, 1987; Satcher, 2001; NCP, 2006). Thus, there is no clear conceptual definition guiding the use of the concept of RSB in health programming and

initiatives. The NCP formed a coalition to determine the definition of RSB but failed to reach this goal because members could not first agree on what behaviors constituted sexual intercourse (NCP, 2006). Inability to develop a consensus definition of RSB has important implications for health promotion and disease prevention. Community interventions and individual health counseling require affirmative strategies to promote sexual health. A clear, conceptual definition of RSB is the first step to the development of such strategies. The lack of conceptual clarity of RSB may have impacted progress towards goals for leading health indicators such as those developed by Healthy People 2010.

Furthermore, "Responsible" in its everyday use is synonymous with "answerable", "accountable", "being to blame" and "reliable". In the RSB literature the emphasis is on negative behavior, that is avoiding or not engaging in behaviors that would increase risk. By default, the failure to abstain from risky behaviors is *irresponsible*. Synonyms for "irresponsible" include "thoughtless," "reckless," "immature," "untrustworthy," and "immoral" (Thesuarus.com, n.d.). The potential for association of judgments about behavior to judgments about persons is great; thus a chain of causation and judgment may arise, in which a woman who experiences a negative health outcome such as an STI or an unintended pregnancy is first assumed not to have practiced RSB, then not to be responsible, then to be irresponsible. Such judgments may increase the stigma, prejudice, marginalization, and heteronormative assumptions that alienate women from health services needed to promote optimal sexual health. Furthermore, labeling a woman as actually or potentially untrustworthy or immoral supports assumptions that women's sexual behavior needs at least to be sanctioned and at

best prevented or controlled. Thus, the concept of RSB is value laden and the appropriateness of using the concept RSB as a means to improve sexual and reproductive health is also called into question.

According to Healthy People 2010 (n.d.), definitions of RSB may differ for adult and adolescent women because of a demarcation of indicator goals by age. Additionally, the social and economic vulnerability of adult women combined with the public health impact of unintended pregnancy makes the development of a clear and consistent definition of RSB particularly important for adult women who have sex with men. Lastly, the concept of RSB may impose value judgements of women's behavior that calls into question the appropriateness of using the concept as a measure of health. Therefore, the purpose of this project was to use literature from psychology, education, sociology, nursing, and public health to develop a conceptual definition of responsible sexual behavior as it applies to adult women who have sex with men.

Methods

A concept analysis is a research synthesis strategy that seeks to resolve problems with the use and understanding of a particular concept. When a concept is clearly understood, it is then possible to appropriately characterize phenomena and communicate about the concept effectively. Concept analysis includes describing the disciplinary contexts in which the concept is used and examining changes in the concept over time. Because RSB is a socially constructed concept, we chose Rodgers' (2000) evolutionary approach to identify the defining attributes of the concept of *responsible sexual behavior*, to examine the influence of disciplinary context on its use, and to track any changes that have occurred in the concept overtime. The evolutionary approach includes systematic

sampling and rigorous inductive analysis to produce a synthesis that reflects both the development and current use of a concept.

The process of an evolutionary concept analysis involves selecting a concept of interest, selecting a setting and sample for data collection, collecting data, analyzing data and identifying implications of the concept for further development (Rodgers, 2000). Rodgers' approach to concept analysis also includes identification of antecedents (conditions that must be present for the concept to apply) and consequences (outcomes of the concept). Rodger's method assumes that concepts are not static over time and thus evolve and continue to evolve with time. In addition, Rodgers' recommends that the investigator identify other terms used in the literature that represent the concept under investigation, these are considered related terms or surrogate terms. The purpose of this method is not to create a finite definition, but to gain conceptual clarity and promote understanding (Montreuil & Carnevale, 2015). Appropriately understanding the concept in turn allows for the evaluation of the concept's strengths and limitations (Rodgers, 2000).

Sample Selection

The sample included published works from five disciplines: psychology, education, sociology, nursing, and public health printed in the English language. Literature was found using electronic research databases including ERIC, PubMed, Web of Knowledge, Web of Science, and PsychNet. Databases were searched using the key phrase "*responsible sexual behavior*," and additional terms used in various conjunctions were "college," "women," and "young adults" in an attempt to capture women 18 and older. To enable the identification of changes to the concept over time, the search was

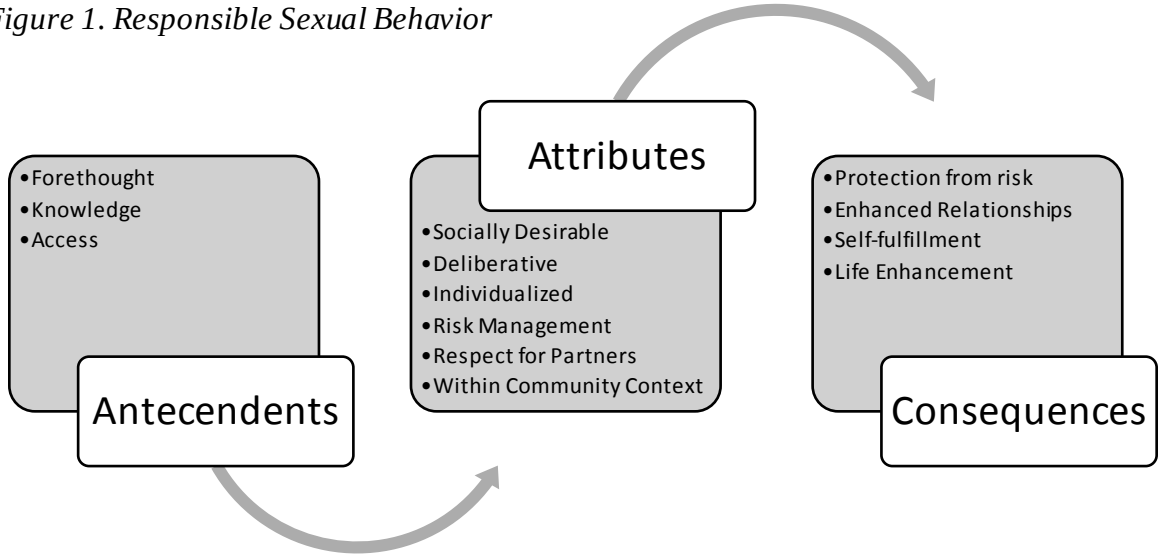
not restricted by date. Inclusion and exclusion criteria are described in Table 1. Because men and women are influenced differently by the evolutionary and historical context (e.g. value of virginity, availability of contraceptives, and acceptability of sexual activity before marriage) the focus of this analysis was on articles that concentrated on only women or where women composed at least 50% of the recognized sample. Due to the historical focus of RSB on pregnancy intention, sample selection was restricted to women have sex with men because of the greater risk of pregnancy. Works that did not target a particular gender and discussed RSB outside of the context of gender were also included in the study.

Cumulatively, database searching yielded 167 sources, 16 of which met inclusion criteria. In addition, articles were identified from citations of the original 16 articles yielding four additional articles, for a total sample of 20 articles that included both peer reviewed and "gray" literature. Publication dates for the sample articles ranged from 1977 to 2013; the majority appearing shortly after *Healthy People 2010* (Healthy People 2010, n.d.) identified RSB as a top 10 indicator of the nation's health and the *Call to Action* (Satcher, 2001) was released. Published in 2002, one complete issue of the *Journal of Sex Research* was dedicated to RSB and contributed to the volume of literature published during this time frame (n=4). Table 2 describes articles included in the final analysis.

Initially, abstracts were read to determine fit with inclusion criteria; those articles whose abstracts met the criteria were retrieved and the full text was read (by first author). Data from these articles were extracted and put into a working matrix (Garrard, 2011) that included identifying information such as title, journal, year, author, purpose, context

of the article, attributes, antecedents, consequences, and comments. The comments section served as place for reflection, additional points of interest, and identification of frequently cited articles to help identify classic literature. When necessary, direct quotes were pulled from the literature and put into the matrix with page numbers to facilitate later retrieval. Articles were read multiple times to identify relevant data needed to refine the matrix. Figure 1 summarizes findings of this analysis.

Figure 1. Responsible Sexual Behavior



Findings

Our analysis generated the following definition of RSB: For adult women who have sex with men *Responsible sexual behavior is 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 communities*.

Attributes of Responsible Sexual Behavior

The attributes of a concept are the building blocks that create a definition (Rodgers, 2000). Once attributes have been identified, the cohesive relationship among the attributes can build a working definition for the concept of interest.

Socially Desirable. The NCP's (2006) goal is to "improve sexual health and responsible sexual behavior in America" (p.6). According to the NCP (2006) and Satcher (2001) RSB can be improved, is fostered within communities by public health outreach, and serves to engage individuals to recognize the consequences of their sexual behavior at both the individual and community level. If some outcomes of sexual behavior, such as STIs and unintended pregnancies, are deemed socially undesirable, then RSB is the socially desirable alternative. Fabes and Strouse (1987) examined the influence of perceptions of social standards on sexual behavior among male and female college students and illustrated the potential effect of gender socialization on socially desirable behavior. Women identified the use of contraceptives within sexual relationships as "responsible" more frequently than men. When asked to identify models of sexually responsible behavior, women more often chose parents or peers in contrast to men who identified media personas. The researchers attributed differences in perceptions of RSB to gender differences in how males and females are socialized.

Deliberate. The idea of RSB as deliberative was suggested by the NCP (2006) "communication and deliberative decision-making are essential skills for assuring sound outcomes [to responsible sexual behavior]" (p.8). Similarly, Moore and Davidson (2006) analyzed the cognitive dimensions that differentiate risk-reduction within sexual decisions and concluded that there is a need to move towards purposeful responsible sexuality. Therefore, RSB requires deliberate and purposeful thoughts and actions.

Within Community Context. The Surgeon General's Call to Action and the NCP discussed community responsibility in terms of sexual behavior. A community demonstrates sexual responsibility if it assures access and education that is developmentally and culturally appropriate to its members (Coleman, 2002; Satcher, 2001; NCP, 2006). When a community also offers sexual and reproductive care and counseling that care should be free from stigmatization, violence, and accepting of its member's vast diversity (Rurangirwa, Braun, Schendel, & Yeargin-Allsopp, 2006). Community and social desirability intersect because the community also serves as an influence that determines "what responsible sexual behavior is, how it is practiced, and how it is enforced" (Satcher, 2001, p.7). Therefore, the context of community provides boundaries for RSB and socially desirable behavior and access to resources.

Individual. The NCP (2006) explicitly stated that RSB occurs at the individual level because it is about protecting one's own health. Fortenberry (2002) and Ross (2002) echoed these sentiments and stated that to address the raising concerns of public health, individual responsibility is a requisite. Engaging in RSB moves beyond protections of biological health but also considers social and psychological factors that impact individual health. Integration of sexuality into one's life is highly personal but is influenced by external forces in the social environment. The freedom to express sexuality in a way that is a reflection of cultural and religious beliefs is socially acceptable, so long as it is not in violation of the law or harming others (Coleman, 2002; Ross, 2002).

Managing Risk. Risk management includes both the avoidance and reduction of risks including STI's, HIV/AIDS, unintended pregnancy, abortion, and sexual violence (Fortenberry, 2002; Pereira, 1992; Ross, 2002; Satcher, 2001; Trieu & Shenoy, 2010;

Wylie, 2001). Healthy People 2010 directly states, "Responsible sexual behaviors reduce the risk of sexually transmitted diseases (STDs)—including HIV infection—and unintended pregnancies" (U.S. Department of Health and Human Services Office on Women's Health, 2009, p. 25). Abstinence and the delaying of sexual debut were the most commonly referenced methods to prevent unplanned pregnancy and STIs (Ross, 2002; NCP, 2006; Turner et al., 1994). The NCP also discussed that RSB can include alternative activities to prevent STIs and unintended pregnancies, including telephone sex and intimate activities that do not include intercourse.

The only 100% effective strategy for prevention of STIs and unintended pregnancy is abstinence; thus, most strategies address risk *reduction*. Pregnancy and STI risk-reductive techniques for adult women include condoms (Fennell, 1993; Fortenberry, 2002; Ross, 2002; Trieu & Shenoy, 2010; Turner et al., 1994; U.S. Department of Health and Human Services Office on Women's Health, 2009), dental dams (Fennell, 1993), diaphragm, sponge, oral contraceptives (Turner et al., 1994), mutual monogamy, and limiting partners (Brown, 2002; Fortenberry, 2002; Ross, 2002; NCP, 2006). In addition to biological techniques, Turner et al., (1994) recommended communication between sexual partners to reduce risk, including open conversations about condom use and other contraception options. Risk reduction behavior is assessed by collecting data regarding frequency of condom use (Healthy People 2010, n.d.), frequency of condom use during last sexual encounter, number of sexual partners over time, and methods of contraceptive use (Fortenberry, 2002; Trieu & Shenoy, 2010).

Respect for Partners. Respect for sexual partners included not committing harm to others and avoiding putting others at risk. Canfield (1974) attempted to redefine RSB

by noting the importance of a "concern for partners" among women seeking care after failed contraception. The NCP (2006) affirmed shared concern for partners and emphasized the need for communication and mutual consent as critical components of RSB. Regular STI testing to prevent the unintentional spread to others was one means to demonstrate respect for partners and reduction of harm to others; testing not only protects partners but also prevents against the negative consequences of the infection (Fortenberry, 2002; NCP, 2006). Another example of respect for sexual partners included foregoing sexual violence or coercion. Fennell (1993) had college students pledge to be responsible young adults by promising not to pressure others to do things against their will. Adepoju, Watkins, and Richardson (2009) also echoed the need for students to be taught that they needed to be respectful of partners' health and wellbeing.

Antecedents

Antecedents are derived from the context of the literature and are rarely explicitly stated (Rodgers, 2000). Antecedents are the components or conditions that must be in place for the concept to occur. *Forethought, cognition and competence, and access to resources must be present for responsible sexual behavior to take place.*

Forethought. Forethought implies that decisions are planned and made prior to the engaging in a behavior (Canfield, 1974; Moore & Davidson, 2006). Before persons can practice RSB, they must be able to weigh the risks associated with the behavior and its consequences (Brown, 2002; Satcher, 2001). In order to behave in a sexually responsible manner, individuals must have an awareness of the susceptibility to STIs (Turner et al., 1994) and pregnancy (Brown, 2002).

Cognition and Competence. Decisions must be informed (NCP, 2006). To act responsibly, persons must know how to reduce the risk of unplanned pregnancy, STIs, and HIV. Thus RSB requires available, accurate information regarding sexual health and methods for pregnancy and STI prevention including oral contraceptives, condoms, implantable devices, etc. (Fennell, 1993; Turner et al., 1994).

Access. According to Levesque (2002), national, state, and local laws and policies influence RSB through control over resource availability and access to services. Levesque (2002) and Satcher (2001) both concluded that to behave responsibly, adults needed to have access to contraception resources and service. Furthermore, because RSB is dependent on access to resources, women needed socioeconomic resources that supported pregnancy and STI prevention and reproductive health services. Access may be a particular obstacle to RSB for those who are economically disadvantaged, members of underrepresented racial, ethnic, or sexual identity groups, and persons with disabilities, all of whom may have more difficulty accessing resources and services (Satcher, 2001).

Consequences

Antecedents are the conditions that are in place before the concept can exist, thus consequences are the outcomes after the concept occurs. *The consequence of RSB is life enhancement, which is facilitated by protection from risk, enhanced relationships, and self-fulfillment.*

Protection from Risk. Protection from risk results from risk management via behaviors such as using contraceptives or abstaining from sex, thus reducing the risk of unplanned pregnancy and STIs. Acting responsibly not only protects physical sexual health, but also mental health (Satcher, 2001). The management of risk allows couples to

experience child bearing and rearing that is consistent with individual/partner goals (NCP, 2006).

Enhanced Relationships. When pregnancy is intended, child bearing and rearing are more likely to enhance the relationship between partners (NCP, 2006). Furthermore, RSB can achieve or increase intimacy and bonding between partners (Satcher, 2001), and enhance shared pleasure (NCP, 2006). Thus, managing the risks associated with sex such as an unplanned pregnancy can enhance interpersonal relationships.

Self-fulfillment. The NCP (2006) noted that RSB can enhance the development and attainment of personal values and goals. When all the attributes of RSB coalesce, the overarching consequence to RSB is life enhancement and improved mental, physical, and spiritual health.

Related Concepts

According to Rodgers (2000), a related concept has some relationship with the concept of interest but does not have the same attributes as the concept. Surrogate terms can also be used in the literature as a substitute for the concept. Within the literature, Fennell (1993) used the phrase "responsible decision making" as a synonym for RSB, in contrast to other authors who used responsible decision making as an antecedent to RSB (Canfield, 1974; NCP, 2006). Periera (1992) used the term "enhanced sexual responsibility;" however, this concept was restricted to risk reductive behaviors such as contraceptive use to slow the rising rates of unplanned pregnancies and abortions.

Historical Context

Understanding the historical context of a concept can elucidate defining attributes that have changed over time (Rodgers, 2000). Evolution of RSB over time has paralleled

to the availability of new methods to avoid biological risks through pregnancy and STI prevention. The *Call to Action* highlighted the need to promote RSB that is consistent with contemporary scientific evidence, meaning that what constitutes what is RSB can change with advancements in technology. For example, during the Association of Reproductive Health Professionals (ARHP) board meeting in 1992, birth control methods such as the Nuva Ring, implantable rods and capsules (Norplant), and long acting injectable hormones were not yet available in the United States and the female condom was considered new. Also in development at that time were contraceptive patches and polyurethane condoms (Pereira, 1992). In 1993, Fennel focused his discussion on the need to make condoms and dental dams more comfortable to use. Interestingly in both discussions Fennel repeatedly stressed that there was a lack of epidemiological evidence for the efficacy of condoms and dental dams in preventing STIs. In contrast, seventeen years later, Healthy People 2010 (Healthy People 2010, n.d.) identified condoms as an effective method for preventing many STIs. In 1994, Turner et al. (1994) published guidelines to promote RSB in a college seminar. The guidelines focused on desensitizing students to the stigma of purchasing condoms and using spermicides. Turner et al. (1994) also measured contraceptive utilization by assessing use of diaphragms, sponges, condoms, and spermicides; many of these methods are less common in contemporary times (Guttmacher Institute, 2015). Medical advances in the development and testing of various birth control methods have impacted use over time and has ultimately influenced what is considered RSB especially as it pertains to how to manage risks.

Discussion

RSB is defined 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 communities.*" This project contributes to the body of knowledge of sexual and reproductive health by providing a comprehensive definition of RSB according to published literature, including antecedents and consequences of RSB. However, despite garnering a clear conceptual understanding of RSB, this analysis highlights the limitations of using the concept RSB to demarcate or dichotomize sexual behaviors. Thus, the limitations of the concept RSB will be discussed.

Although there is a substantial literature on RSB in adolescents, literature on RSB for women older than 18 was sparse. The discrepancy is surprising, given that women between 18-24 experience the highest rates of unplanned pregnancies and that unplanned pregnancies are a common negative outcome indicator for RSB research and initiatives (Trieu & Shenoy, 2010). Underrepresentation of women aged 18-24 is a potential weakness of RSB if it is in fact aimed at all sexually active individuals. It is possible that RSB, with its list of prohibitions and avoidances, is aimed not at autonomous adults but at adolescents, whose behavior is at least partially controlled by others. Persons under 18 are understood to be developing their cognitive skills (Moore & Davidson, 2006) and may lack the antecedents necessary for RSB (e.g forethought and competence). Adolescents can be seen as unable or unlikely to make good decisions and therefore need external control on their sexual behavior. Emphasis on abstinence in programs directed at adolescents may reflect an acknowledgement of differing developmental abilities and an assumption of impaired capacity for independent decision making. It is also possible that

the focus of RSB initiatives for adolescents aim to draw clear decisional boundaries and promote abstinence as the only way to avoid risk absolutely (Healthy People 2010, n.d.). In contrast, the shift of emphasis from abstinence to increasing condom use for women over age 18 (Healthy People 2010, n.d.) reflects a view of adult women as competenet to make decisions that promote sexual health. If this is the case, the concept of RSB may need more than one definition depending on the perceived competence and decision-making ability of the individual.

In addition to understanding defining attributes of a concept, identifying antecedents and consequences of the concept can elucidate critical factors that influence RSB, such as the role of the community and social norms. The body of RSB literature suggests that the community and sociocontextual environment impacts sexual decision making, however, the designated RSB indicators do not account for situational influences on how RSB is defined and operationalized. For example, social influences and access to resources impact how RSB is defined and managed (Satcher, 2001) and "play a key [role] in shaping the delivery of services" (Levesque, 2002, p. 49). The capacity to act responsibly depends on an individual's agency and ability for forethought, cognition and competence, and access to resources. Furthermore, communities play a key role in the provision of services and access to information (Coleman, 2002; Satcher, 2001; NCP, 2006). The community itself behaves responsibly only if it provides information that is developmentally and culturally relevant and provides the resources necessary for women (and men) to practice RSB (Levesque, 2002 & Satcher, 2001). Research has demonstrated that states with more restrictions on access to resources and less public funding for reproductive health services have higher rates of unintended pregnancy. This

evidence supports the role of community resources in promoting sexual health (Guttmacher Institute, 2014). Furthermore, even if resources are available in a community, women must have the socioeconomic capacity to access and pay for services offered (Levesque, 2002). We suggest that some of the outcomes claimed to result from lack of responsible behavior may in fact result from lack of access and resources, thus increasing the potential for women who are poor, or who live in rural areas, or who are uneducated to be labeled as "irresponsible." Therefore, the role of communities should shift from setting boundaries and determining what behaviors are responsible to focusing on how they can support and promote the antecedents of RSB. Lastly, such labeling of responsible versus irresponsible further marginalizes women who have the greatest need for support to maintains sexual health. Thus, understanding how RSB is defined and managed in various contexts of marginalized or at risk populations is critical to understanding and promoting sexual health.

In this sample of literature, current use of the concept RSB assumes that women can retain the capacity to exercise deliberate behavior, or control during all sexual encounters, including choice of partners. However, this is not always the case. Obvious examples include cases of coerced sexual activity such as rape, incest, intimate partner violence. Although such acts are inconsistent with the attributes of RSB it could concurrently be viewed that women who fail to prevent or overcome coercion are vulnerable to being labeled irresponsible as well. An example of this are women who receive blame for their rape because of what they were wearing or how much alcohol they drank.

Finally, the use of the concept responsible sexual behavior may be limiting due to the tendency to place a dichotomous moral judgement on women's behavior. According to Juhasz and Sonnenshein (1987) the judgment of what is responsible is based on a personal value system that is established and serves as a guide for decision making for everyone, that is, one person's or a collective group of indivuduals with shared values is creating the boundaries for what is RSB for all others. Thus, the value and moral overtones associated with the concept RSB may be impossible to avoid without redefining the concept. According to Rodgers (2000) "the cluster of attributes that constitutes the definition of the concept may change over time, by convention or by purposeful redefinition, to maintain a useful, applicable, and effective concept" (p. 81). However, without further research it is beyond the scope of this project to propose a new definition of RSB, but, expanding beyond the dichotomy of RSB into an empowering framework may promote women's reproductive decision making and produce desirable sexual health outcomes.

Nursing Implications

The defining of RSB can have practice implications for health providers. Providers may need to be cautious of any labeling that might undermine women's attempt at responsible sexual behavior. While an RSB framework would be helpful in defining desirable behaviors, individual concerns, values, and preferences need to be considered. There may be significant challenges to promoting a definition of RSB that is reflective and sensitive to all values and diverse populations such as those with disabilities or sexual minorities. However, expanding beyond the dichotomy of RSB into an empowering framework that balances contextual variables and personal beliefs may

promote women's reproductive decision-making and produce desirable sexual health outcomes.

Limitations

The evolutionary process as outlined by Rodgers (2000) adds rigor and credibility to the development of a concept analysis. Nevertheless, for this study there are some limitations. For example, the present study only included works published in English, which could lead to an Anglophone bias. However, the focus was to define RSB in the context of society and life in the United States, so works published in English was a logical fit. Also of note, because RSB is heavily influenced by the contemporary social context, it is likely that evolution of the concept will continue. Additionally, it is possible that some works were missed during the analysis process, thus biasing the interpretation of the concept. To minimize bias, transparency of the process was kept by keeping an audit trail of all works. Lastly, this analysis of RSB may seem limited by the narrow population of focus (adult women who have sex with men) however, the methods and our analysis conclude that social norms, values, and historical context greatly impact what defines RSB, thus it is likely that what constitutes RSB for one population (e.g. adult women who have sex with me) is not the same for another population such as men or women who have sex with women. Therefore, future research should seek to understand the concept of RSB in disparate populations, men, and various age groups to aid in the development of a deeper understanding of RSB.

Conclusion

The purpose of this project was to develop a definition of RSB in the context of adult women who have sex with men. RSB was identified as "*Responsible sexual*

behavior is 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 communities." However, this analysis highlights the limitations of using this concept to describe and characterize the sexual behaviors of women and suggests that a purposeful redefinition maybe necessary to maintain a concept that is useful and effective for evaluating sexual behavior (Rogers, 2000). Before it can be definitively concluded that RSB should be abandoned in favor of more value-neutral terminology, future research should focus on the conceptual use of RSB in various populations of women to fully understand the role of context and social desirability in setting boundaries for managing RSB.

Table 1: Article Inclusion and Exclusion Criteria

Inclusion	
Criteria	Rationale
Population age 18+	Age 18 demarcates adulthood
Female based, studies with both men and women required >50% female participation	Women are the population of interest for this concept analysis
Based in the United States	RSB in the context of US for purposes of future analysis and policy implications; RSB appears in US health policy literature
Heterosexual women	The analysis focuses on heterosexual women because they have the greatest biological risk of experiencing an unplanned pregnancy
Exclusion	
Criteria	Rationale
Phrase "responsible sexual behavior" was not used in the body of the literature	Assure context related to conceptual analysis

Table 2: Articles Included in Analysis

Title	Author	Publication Year	Journal	Target Population
Pregnancy and birth control counseling	Canfield, E.	1974	Journal of Social Issues	Women attending the Los Angeles Free clinic
Perceptions of responsible and irresponsible models of sexuality: A correlational study by:	Fabes, R. A., & Strouse, J.	1987	Journal of Sex Research	College students: 248 male, 286 female
ARHP launches national campaign to prevent unintended pregnancy	Pereira, A.	1992	Health and Sexuality	Public health
Using humor to reach responsible sexual health decision making and condom comfort	Fennel, R.	1993	Journal of American College Health	College classroom/college age students

Table 2-continued

Title	Author	Publication Year	Journal	Target Population
Promoting responsible sexual-behavior through a college freshman seminar	Turner, J.C., Garrison, C.Z., Korpita, E., et al.	1994	AIDS Education and Prevention	College Freshman: 786 enrolled in an English 101 course
Is normal sexual function desirable when promoting sexual health?	Wylie, K. R.	2001	Sexual and Relationship Therapy	Public health
The Surgeon General's Call to action to promote sexual health and responsible sexual behavior	Satcher, D.	2001	Gray Literature	Public health
Clinic-based service programs for increasing responsible sexual behavior	Fortenberry, J.D.	2002	Journal of Sex Research	Public health

Table 2-continued

Title	Author	Publication Year	Journal	Target Population
Sexuality and health challenges: Responding to a public health imperative	Ross, M. W.	2002	Journal of Sex Research	Public health
The roles and rules of law in sexual development	Levesque, R. J. R.	2002	Journal of Sex Research	Public health
Promoting sexual health and responsible sexual behavior: An introduction	Coleman, E.	2002	Journal of Sex Research	Public health
Mass media influences on sexuality	Brown, J.D.	2005	Journal of Sex Research	Television consumers

Table 2-continued

Title	Author	Publication Year	Journal	Target Population
College women and personal goals: Cognitive dimensions that differentiate risk-reduction sexual decisions	Moore, N.B., & Davidson, J.K.	2006	Journal of Youth and Adolescence	College women at a mid-western residential university
Interim report of the National Consensus Process on sexual health and responsible sexual behavior	The National consensus process on sexual health and responsible sexual behavior	2006	Interim Report	Public health
Healthy behaviors and lifestyles in young adults with a history of developmental disabilities	Rurangirwa, J., Van Naarden Braun, K., Schendel, D., & Yeargin-Allsopp, M.	2006	Research in Developmental Disabilities	Metropolitan Atlanta young adults aged 21-25

Table 2-continued

Title	Author	Publication Year	Journal	Target Population
A survey of a HBCU's senior year nursing students' perception of the HIV/AIDS phenomenon: A follow-up study	Adepoiu, J.A., Watkins, M.P., Richardson, A.	2009	Journal of National Black Nurses Association	First semester college nursing students
Healthy people 2010 Women's and Men's Health: A comparison of select indicators	U.S. Department of Health and Human Services Office of Women's Health	2009	Gray Literature	Public health: Adults 18-44

Table 2-continued

Title	Author	Publication Year	Journal	Target Population
Science says #46: The sexual behavior of California community college students	Trieu, S. L., & Shenoy, D.	2010	The National Campaign to Prevent Teen and Unplanned Pregnancy	13 community college campuses in California: 54% females, 47 % males
Leading health indicators 2010	Healthy People 2010	n.d.	Gray Literature	Public Health

CHAPTER 3

COLLEGIATE WOMEN'S DEFINTIONS OF RESPONSIBLE SEXUAL BEHAVIOR

Student Contribution

Chapter 3 is composed of a manuscript that was submitted to the Western Journal of Nursing Research in October of 2016. It has since been revised, resubmitted, and accepted for publication in March 2017. The formatting of this paper is reflective of the formatting requirements set forth by the Western Journal of Nursing Research. This paper, presents findings from a secondary data analysis that aimed to identify college women's definition of "sexual responsibility." Data was collected from interviews collected as part of a mixed methods study of college women and unintended pregnancy. The student, (N. Loew) is the first author on the accepted manuscript. The complete citation is noted below.

The history and student contributions to this project are described as follows. After becoming familiar with the findings of the larger parent study as part of the student's research assistantship, the student conducted a review of the literature, proposed the research question and independently analyzed the related interview data under the guidance of the parent study PI (M. Lehan Mackin). The scholarly presentation of the resulting research findings was developed for dissemination at the Midwest Nursing Research Society annual conference in year 2013 and also submitted in fulfillment of the University Of Iowa College Of Nursing's requirement for a Master's project necessary for the degree. After successfully meeting this educational objective, the student invited

two mentors as shared authors to the manuscript that composes Chapter 3 contribute to editing, additional interpretations, and refinement of ideas.

The completed citation of the accepted manuscript is:

Loew, N. M., Lehan Mackin, M., & Ayres, L. (2017). Collegiate women's definitions of responsible sexual behavior. *Western Journal of Nursing Research*, In press.

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.

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

Background

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 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, RSB strategies included increasing condom use to manage risks for those who are sexually active. For Satcher (2000), responsible behaviors included avoiding STIs, HIV/AIDS, unintended pregnancies, abortions, 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, associated meanings and strategies have remained remarkably consistent (American College Health Association, n.d.; Bolin & Bellamy; Trieu & Shenoy, 2010). Loew, Lehan Mackin, and Ayres (in review) 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, 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, 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 (Centers for Disease Control and Prevention, 2016). The CDC estimates that undiagnosed STIs are the cause of infertility for more than 20,000 women annually (Centers for Disease Control and Prevention, 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). 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.

Findings

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 3).

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., 2016). 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 (Deci &

Ryan, 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 (e.g. 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 Centers for Disease Control and Prevention 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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Table 3. Demographics of Participants

Demographics	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)

CHAPTER 4

RURAL IOWA WOMEN'S PERSPECTIVES ON "RESPONSIBLE SEXUAL BEHAVIOR"

Abstract

Background: Rural women face unique contextual barriers increases their risk for unintended pregnancies and STIs. Public health initiatives such as Healthy People 2010 recommend promoting responsible sexual behavior (RSB) as a means to address the sexual health problems facing the US including unintended pregnancies and STIs. However, since Healthy People's inception, disparities related to living in rural areas have not been considered. Therefore, the purpose of this study was to understand how contextual variables influence how rural women define and manage their definition of responsible sexual behavior.

Methods: This qualitative descriptive study utilized telephone interviews with 10 rural women who have had or plan to have sex with men to collect data to describe the contextual influences of how rural women define and enact responsible sexual behavior. Data was analyzed using within and across case analysis procedures.

Results: For rural women in this sample RSB is understanding the consequences of sex and taking action to manage risks by preventing pregnancy and sexually transmitted infections (STSs), mindful selection of partners, and seeking appropriate resources. Rural contextual influenced how participants acquired information and enacted their definition of RSB.

Conclusions: The rural contextual factors had the capacity to function as both a facilitator and barrier to enacting RSB. Study findings highlight that how women define RSB may not be consistent with community values and norms.

Background

Almost half of all pregnancies in the United States (US) are unplanned and cost the public $21 billion annually (Guttmacher Institute, 2015). Public health objectives, initiatives, and goals recommend *responsible sexual behavior* (RSB) as a way to reduce rates of unplanned pregnancies and sexually transmitted infections (STIs). The concept of RSB originated as a leading health indicator in Healthy People 2010, and is reflected in similar initiatives such as Healthy Campus. However, since Healthy People's inception in 1979 the disparities associated with living in rural areas, including lower access to access to care and lower rates of insurance have never been accounted for (Bellamy, Bolin, & Gamm, 2011). In an attempt to address the needs of rural people, Rural Healthy People 2010 (RHP 2010) similar to the Healthy People initiatives, was created by the Southwest Rural Health Research Center, to address the gaps related to rural people in HP 2010. However, due to a lack of reliable local baseline data for rural areas, the scope of RHP was limited to collecting preliminary data, conducting literature searches, and creating evidence-based practice guidelines for prevalent chronic illnesses in rural areas. Thus, creating local level data is imperative to improving rural people's health.

Rural health disparities need to be addressed by Healthy People because access to sexual and reproductive services are influenced by laws and policies (Levesque, 2002). Often, policies and programs, such as the Healthy People, are designed and tested to fit urban areas and then generalized to rural environments. Aggregating data at national

level blurs any contribution of local level data that could identify differences found in rural environments and would need to be considered for conducting community health assessments, identification of health needs, funding allocations, and interventions (Hart, Larson, & Lishner, 2005). Consequently, public health initiatives and policies that are based on urban or metropolitan data can undermine the capacity for rural women to engage in RSB, by misallocating funding and types of services offered. Failure to consider the context in which rural women live can create or exacerbate sexual and reproductive health disparities.

Understanding local level including contextual influences of rural areas is imperative to addressing health needs of rural women. Socio-contextual influences refers to socioeconomic, demographic, sociopolitical, and macroeconomic features of an individual's environment (O'Reilly & Piot, 1996). Important contextual factors for women in rural areas include: lower education, higher rates of unemployment or underemployment, lower salaries, higher rates of poverty, longer travel distances to healthcare facilities, higher rates of uninsured or underinsured people, and fear of stigmatization and lack of confidentiality (Hart et al., 2005; Kelly, 2011; van Dis, 2002). Additionally, rural women are more likely that their urban counterparts to marry and have children at younger age. These factors strongly influence individual's control and play a key role in increasing the risks associated with sexual behavior (e.g. unplanned pregnancy and STIs) (Adimora & Schoenbach, 2005).

The use of medical contraception is lower (Kessler, Goldenberg, & Quezada, 2010) and teen birth rates are one-third higher in rural counties as compared to metropolitan counties (Finley & Stewart, 2013). Rural women are less likely to receive

adequate prenatal care due to limited resource availability and access to obstetrical care (Peck & Alexander, 2003). Poor birth outcomes associated with delayed prenatal care include higher infant mortality rates, more infants born with low birth weights, shorter gestations, lower APGAR scores, and longer hospital stays following delivery. All outcomes have consequently higher costs associated with birth (Peck & Alexander, 2003). Concurrently, having the economic capacity to pay for services, as well as having access to care are critical antecedents to RSB (Loew, Lehan Mackin, & Ayres, 2016). Therefore, lack of financial resources or having to travel long distances to see health providers has the potential to greatly impact enactment of RSB.

In addition to the creating equity in rural environments, the need for local knowledge development is imperative to promoting rural health. Understanding how rural women define and enact RSB can help agencies conceptualize sexual health problems, allocate the appropriate resources, and tailor interventions and policies to optimally enhance the community's capacity to promote the sexual health for rural women. The purpose of this study was to describe the role of the rural context in rural women's definitions and enactment of RSB.

Methods

A qualitative descriptive design was used to describe the contextual influences of how rural women who have had sex or plan to have sex with men aged 18-29 define and enact responsible sexual behavior. English speaking women who have sex with men age 18-29 that live in rural Iowa counties were invited to participate. This sample was restricted to women who had sex with men, or plan to have sex with men because of a focus on pregnancy prevention. Rural counties were defined by the National Center for

Health Statistics (NCHS) as noncore counties because they are considered the most rural areas based on total county population and population density (Ingram & J., 2014). In the state of Iowa there are 61 counties (out of 99 counties total) that are classified as noncore.

Women were recruited via collaborations with providers, word of mouth, Facebook, and through community postings in gas stations, stores, laundromats, and libraries. Data were collected via semi-structured phone interviews that lasted 45-90 minutes. Women were asked multiple questions about the intersection of rural living and responsible sexual behavior (see appendix C for Semi-Structured Interview Guide). Questions covered topics such as how women define RSB, how women perceive their parents and school system define RSB, what they wish they could change about their rural upbringing to make issues related to sexual health easier, how participants accessed sexual and reproductive health care, and how their current priorities or goal influenced their sexual health. Question development was informed by the literature, input from mentors with qualitative expertise, and were modeled after a study that highlighted the social context of pregnancy intention that included a discussion of RSB with college aged women (Lehan Mackin, 2011). Demographic data was collected via a short questionnaire at the beginning of each interview.

Data Management and Analysis

Following transcription and removal of identifying information, interviews were assigned a pseudonym and entered into NVivo 10, a qualitative data management software package. Data was analyzed using within-case and across-case approaches, which allowed for an understanding of the individual's context while capturing variation across individuals (Ayres, Kavanaugh, & Knafl, 2003). Concepts identified in the

literature and structure provided by the analysis method established the framework for the coding scheme. Then, women's definitions or important aspects of RSB (defining themes) and contextual factors that influenced the enactment of RSB (enactment themes) were identified within cases and then compared to other women across cases. Across case analysis contributed to the establishment of commonalities and relationships among the themes that characterized the defining and enactment of RSB. The themes identified were then returned to individual cases for refinement and to search for competing or conflicting interpretations, to aid in establishing theoretical validity (Maxwell, 1992). Lastly, to enhance rigor, a peer review process with colleagues with expertise in qualitative research was utilized to ensure an accurate portrayal of the findings (Whittemore, Chase, & Mandle, 2001).

Findings

A total of ten women from eight different rural counties who had lived there for a mean of 17.4 years completed the phone interviews. Women's ages ranged from 18-28 years with a mean age of 22.5 years (SD=3.35). All participants reported having insurance, however, only two reported having benefits through their employer. All participants reported religion as having some importance in their lives, with two reporting religion as extremely important (see table 4).

Analysis of the participants' definition of responsible sexual behavior produced five defining attributes: two central themes (awareness of consequences and risk management) and three subthemes that discuss how risk was managed (preventing pregnancy and STIs, mindful partner selection, and seeking knowledge and resources.) Across case analysis of these attributes generated a comprehensive definition of

responsible sexual behavior: *responsible sexual behavior is understanding the consequences of sex and taking action to manage risks by preventing pregnancy and STIs, being mindful of partner selection, and seeking knowledge and resources.* Having an awareness of the consequences to sex and managing those risks were the foundation for participants' definitions. All participants could articulate their definition of responsible sexual behavior and reflected on their personal behavior in relation to their definition. Facilitators and barriers are discussed as they related to acquiring information and enacting RSB.

Central Theme 1: Awareness of Consequences

Awareness of consequences was evident in all participants' definitions of responsible sexual behavior; one could not possibly exercise responsibility without having an awareness of the consequences of sexual behavior. The most identified consequence to sex was experiencing a pregnancy. Elizabeth pointedly stated that one should *"at least have a little forethought about what could potentially happen. Not that it will, just that it could potentially happen*." Additionally, Sarah stated that regardless of what you are doing you need to be cognizant of the consequences, *"no matter how good it feels or what you want intimately with this other person, [make sure it] isn't going to affect you in a really terrifying way in nine months, you know, where you're going to find out you're pregnant and then you have to deal with all these different effects*."

Central Theme 2: Risk Management

Participants also discussed knowing how to mitigate the risks associated with the consequences of having sex as critical to RSB. Parallel to having an awareness of consequences, one could not be responsible without managing the risks associated with

sex that included both biological (pregnancy or STI) and emotional risk (lowered self-esteem). *"I'd say responsible sexual behavior is actually taking those steps in preventing STIs and pregnancies if it's not the right time for you to be pregnant" (Molly).* One woman felt that she managed all negative risks associated with sex by remaining abstinent, "*being responsible sexually is not having sex until you're married*" (Sarah).

Subtheme 1: Preventing pregnancy and STIs

For women in this sample, preventing pregnancy and STIs meant using some sort of birth control such as oral contraceptives or condoms. "*I feel like taking preventive measures are very important*" (Elizabeth). Most commonly, preventive measures were discussed as a means to prevent pregnancy, that is, using birth control, condoms, withdrawal, or not having sex until marriage. For Ali, responsible sexual behavior was, "*Definitely tak[ing] your pill on time the same every day, [and] still use[ing] the pull-out method."* For Carrie it was, *"Definitely using a condom. If a guy doesn't want to use a condom, then he needs to back off."* In addition, Jackie discussed mutual responsibility, "*I guess we're both being responsible together, like I'm making sure they're using protection, [and] they're making sure I'm on protection."* She also went to discuss that she also keeps up with regular STI testing because of her experience in the military.

Subtheme 2: Mindful Partner Selection

Participants frequently discussed the idea of mindful partner selection as "knowing" your partner or managing risk if you don't "know" them. For Sarah, knowing your partner included, *"know[ing] the other person's sexual behaviors and if you're a girl and the guy you're planning on having sex with, is he really sexually active? Is there a chance he carries an STD, or STI?*" For other participants, knowing the person required

a period of time, Carrie suggested that, *"I would say date the person a while before being sexually active with that person, because sometimes men just want that one thing*." Like Carrie, Lexi stated that part of knowing your partner was communication and, *"have[ing] feelings for someone that you can communicate with and have a healthy relationship both physically and emotionally*." Some participants discussed how to avoid situations with unfamiliar partners and to manage risk if sex happens, *"I would say don't do it with just everyone. Like I wouldn't get drunk and have sex with someone…I would make sure you know them and you trust them…And just, if you're going to maybe have sex with someone you don't really know, just make sure you're really safe about it*" (Alexis).

Subtheme 3: Seeking Knowledge and Resources

Another component to managing risk was knowing how to seek and access resources that could help prevent an unplanned pregnancy or STI. Molly stated that, *"If it's not the right time for you to be pregnant, going out and actually seeking help if you need it in supplying either birth control or contraception or some sort."* Concomitantly, Annie discussed seeking knowledge in the event of a pregnancy, *"I guess if you do become pregnant, then you should know what your options are and how to access services. And I don't know if you'd ask around or go online to look up what those are."* Interestingly all but one sexually active woman (n=8) in this sample stated that they have previously or currently sought sexual health resources at Planned Parenthood to obtain birth control, STI testing, or abortion services.

Facilitators of Acquiring Information

In order for women in this sample, to be aware of the consequences of sex and consequently manage risk, information acquisition was a necessary precursor to RSB.

Thus, having information acquisition was imperative for participants to define the central attributes of RSB. Acquiring information about the consequences of sex and how to manage risk was facilitated by formal learning in school or the military and informal avenues such as peers or family.

Most participants stated that sex education in school was the first time they remembered learning about their bodies or learning about sex. Around 5th grade, participants learned about menstruation and basic pubertal changes. For some, sex education beyond 5th grade was limited, but included basics of sex education including how pregnancy occurs, STIs, remaining abstinent, or using condoms or birth control to managing risk during school. However one participant described how her school's education program included role playing. Alexis said, "*Yeah, I think it was sophomore year, we had health class and we would act out different parts [roles]… what we did at a party or just someone that's drunk, or got pregnant. [The exercise demonstrated] all the consequences and [the class] talked about all the STDs you can get.*" Alexis went on to state that a woman from the local reproductive health clinic came once a year to her high school to talk about sex and this is also how she learned about accessing low cost birth control at her local clinic.

The US Military was another avenue of formal learning for two women in this sample. Both participants discussed sex education they received as informative and the information gained influenced their sexual practices. Carrie stated, "*We took a STD course. I remember doing that, and it talked about all the different kinds. There's so many different kinds—it's really gross, but—from here on out, I will be sure to use a condom.*" Jackie discussed how she now gets regular testing and advocates for her friends

to also get tested for STIs because of the education she received during her military service.

More frequently, participants acquired information through informal avenues. Peers served as an important resource in women's lives, especially how to manage risk. In this sample, women commonly sought the opinion of their peers in making decisions about birth control methods. *"I was on the birth control pill for—I don't know, seven years, and that was fine because then I could have regular periods. But my friend was the first one who got the implant that had just come out, and she told me about [the implant] and said that she hadn't had her period in like the six months that she had [the implant]. So I thought that that was appealing, and I was hoping that I could have the same experience. So I got the implant soon after that, and it's been working. I don't have any issues or side effects or anything that I can tell*" (Annie). In addition to learning about types of birth control from peers, women including Ali, Jackie, and Lexi also discussed how they learned about how to access services, like Planned Parenthood, to get free or reduced cost birth control and confidential services. For rural women, peers were a critical way to acquire information to assist in managing RSB.

Sarah's parents and her sister had an open dialogue about their values regarding sex, which was to remain abstinent until marriage. *"I would ask [my sister] questions that any high school, early college girl would ask. Like, "Does it hurt? What happens? Was it weird? She definitely talked to me about [sex] in a positive way. She had waited until she was married as well, so she was like, 'Hey, this is the benefits I have received waiting till I was married and choosing to show respect in that way and then having [sex] be such a good thing in your marriage.' But [my sister] also talked about how her friends, who*

were getting married at the same time, didn't wait and how once they were married it was kind of more of a negative thing because [sex]was more mundane to them. Whereas, [my sisters] first time was really special because it was with her husband. So, she talked about kind of both [having sex as a positive and negative thing before marriage]—the same way my parents did." Although participants identified family members as a rare source of information, it was a powerful influence.

Barriers to Acquisition of Information

In contrast, women in this sample experienced more barriers than facilitators in acquiring information regarding the consequences of sex and how to manage risk. Participants described their community's as having traditional values of sex (e.g. no sex until marriage). Jenna, felt that these values created an environment where information was withheld, *"I think there's no talking about sex, period, and it can make it difficult for people to go seek the right help that they need to prevent [negative outcomes] from happening…I think [living in a rural area] inhibited me from having full knowledge that people deserve to have about it [sex] (Jenna)."* Coincidentally, Jenna experienced an unplanned pregnancy.

All participants who attended public school (n=8) discussed learning about their bodies between 5th and 8th grade, however, of these eight women, three stated that they did not remember receiving sex education in high school. Molly, Annie, and Sarah discussed how health courses were electives in their high school, not a requirement. *"In high school, I did take a parent education class, it was a semester that they taught you about the different terms of pregnancy. But that was an elective, so not very many people took that class"* (Annie). Molly had this to say about her school's sex education, *"We had*

just one course in eighth grade. They had just a few weeks to touch base on everything, so obviously it didn't go too in depth on some things. But we hit [on] STDs. I guess it wasn't as in depth as it probably should have been." She went on to discuss that they only form of birth control discussed was condoms and that the main message was to "just say no." Most participants tated that aside from condoms, they did not learn about different types of birth control. When Ali reflected on her education she stated, *"I wish we would have talked about [sex] in school more, [for example] contraceptives and how much it would cost if a girl was to get pregnant now. All the things that would change about their life if someone were to get pregnant in high school."* Participants also didn't learn about how to access care in school, instead, they learned this information from friends. For some rural participants who attended public school, the sex education that they received around 5th grade was the only formal education they received.

Parents as source of sexual health information also lacked. If parents did talk about sex or how to prevent pregnancy the conversation took place between the mother and daughter. Additionally, the conversation between a mother and daughter was often initiated due to an unplanned pregnancy or discovered sexual activity of a younger family member or friend. For Jackie, her parents had not previously talked about sex until, *"I think we had a friend at 14 was already going through all this [having sex]. I think they thought we were getting ideas from her."* Women, like Ali, discussed that their parents may have withheld or didn't want to talk about sex and birth control out of fear of encouraging them to have sex. Ali stated, "*[my parents didn't talk about sex] probably because they didn't want me to do it, they didn't want me to have sex or experiment. I don't think they wanted to give me any ideas*." She also added that when they did talk to

her about sex that it was too late because *"I [already] knew everything*." Elizabeth had a similar experience, *"it was right around the time in the '90s, there were a lot of kids getting pregnant horribly young on the news, someone who was nine or ten had gotten pregnant. After that point, my mother got very concerned about my brother and I's sexual activity. And, so, even though I was only eight, she gave us the talk. She covered pretty much how it works. It was a very basic conversation.*" Interestingly, later in life it was suggested by a doctor that Elizabeth take hormonal birth control for health reasons. Although practicing abstinence at that time, Elizabeth felt that her mother refused to get the prescription for birth control filled because her mother feared that if she allowed her daughter to go on birth control that she would start having sex. Subsequently, the messaging that most participants received from their parents was that sex was a negative thing to do until they were married. *"[Sex] was [talked about]in a negative light,[my parents stated], 'We don't believe having sex before marriage is a positive thing.' Definitely not. But after marriage [sex] was spoken of as a positive. 'If you just wait till your married you'll get to experience this with one person and that'll be your special gift to them'" (Sarah).* Thus, discussions of sex by parents stemmed from a place of fear of their daughters having sex, not being virgins when they wed, or becoming pregnant.

Only three participants stated that their mothers discussed having sex as "normal" before marriage, but one mother said that her daughter should be "older" when she does begin to have sex. Interestingly, many of the parents who discussed not having sex before marriage, had children out of wedlock or were single parents. Elizabeth stated, "*Me and one of my aunts are the only two who have had a baby in wedlock, for our first child."* Alexis stated that her mom, who believed in remaining abstinent until marriage, *"[has]*

never been married, so obviously that didn't work out for her. That was just her like picture-perfect type thing." Lexi discussed how her boyfriend's mom talked about ideals of when to have kids based on her personal experience, she urged Lexi and her boyfriend to wait to get married and to delay having children because they got pregnant young.

For some women, the process of developing their definition of RSB was coined as "learning as you go." *"I think when you're younger, you learn things. You hear things, and you say, "Oh, that's not going to happen to me," or you just have to experience things in life to learn. It's like getting your driver's license, you speed, [and] you get three speeding tickets. Once you learned that, "Hey, you shouldn't speed because you're going to get speeding tickets. Your insurance is going to go up." It's just knowledge and experiences. That's why they say, the older, the wiser, kind of thing. [I] definitely believe in that, even with sex, too, [you] have to really experience things to learn. And I'm just very thankful that I have not gotten pregnant" (Carrie).* Often, negative experiences motivated women in this sample to adopt what they felt were more responsible behaviors. Carrie stated that, "*I was never really a stickler on using the condoms 100 percent of the time, because I wanted to please the guy. I feel like it [has]changed 100 percent now, because I don't care about impressing a man anymore. You know why? Because that has gotten me nowhere in life."* Carrie discussed that after her partner was sexually unfaithful and experiencing some personal health issues, that she will never forego condom use due to partner preferences. However, "learning as you go" can have serious consequences for women, although as Carrie stated that she was lucky to not have gotten pregnant, other participants in this sample were not as fortunate. When asked how Jenna defined RSB she stated that after experiencing an unplanned pregnancy that, "*now I*

would say even if I was on the pill, I probably still use a condom. Just because lesson burns really hard there." For Jackie, after experiencing an unplanned pregnancy and subsequently seeking termination, she now believes in using two forms of birth control. For these women, life experiences, including negative life experiences, informed their definition of RSB.

Facilitators to Enacting RSB

In addition to understanding what factors impacted how women acquired information to know what the consequences of sex were and how to manage risks, this study also sought to understand what factors impacted women's ability to enact their definition of RSB. These factors included personal goals, relationships and access to care.

For the women in this sample who were starting college, currently in college, or recently graduated college, there was an awareness of how getting pregnant would interfere with their educational and personal goals. Ali explained why a pregnancy would not be a welcomed event in her life right now, *"I'm going to college in the fall and education is really important to me. I want to be able to provide for my future children and have a good career."* Lexi discussed her reasoning for starting birth control, *"one of the big things for me was I was getting my education, and I knew that if I got pregnant, that would be jeopardized, so I was encouraged to get on [birth control] because of that*." The awareness that experiencing an unplanned pregnancy would negatively impact educational goals was a motivation for participants to seek knowledge and resources to actively manage risk.

Partners also played a key role in facilitating RSB. Elizabeth talked about how her partner initiated the conversation of her using a hormonal birth control method, *"after*

about a week, he was like, 'you know, we should get you on birth control.' So, that help[ed], because I was very-very nervous about it. I have anxiety and depression problems, and he is very good at handling me when I'm a nervous wreck. So yeah, he suggested [getting on birth control] and he went with me to get on [birth control] again." Annie discussed how her partner was also instrumental to her accessing birth control. At 15 Annie was unable to drive and her nearest women's health clinic that offered free and reduced services was 40 minutes away. *"My boyfriend at the time was older and could drive. So he dropped me off, and then I let him know when I was done with my appointment."*

Sarah, who defines RSB as remaining abstinent until marriage, talked about how she and her now fiancé communicated about her wishes, *"We're Christian and he actually has had sex in the past with his previous girlfriend so he just saw the damage he went through emotionally and mentally after doing that before he had come to know Christ. He just asked, "Okay, I don't want to have sex until I'm married. How do you feel about that?" And I was still a virgin, so I [said], "Okay, I would prefer not to have sex either because that's what we believe and it was kind of unspoken when we started dating. I never intended on having sex with him, and then once we became more serious and got to that point where you would start having sex, socially right now, [we] both sat down and talked about it over dinner. And we were like, 'Hey, this is how I think and this is how I feel about it. Do your beliefs align with that?' and I [said], "Yeah, I do. I don't want to have sex until we're married." So that's where we're at right now."*

Lastly, access to confidential, free, or reduced cost care was critical to participants enacting RSB by managing risk. Almost every woman in this sample had accessed free or

reduced cost birth control services (n=8), even if they had to drive 40-90 minutes to get there; the most commonly accessed clinic was Planned Parenthood. Participants stated that they most often learned about Planned Parenthood through their peers as a means to get birth control confidentially and without their parents knowing. *"I went from a friend of a friend. We all heard about Planned Parenthood and then one of us would go and then the other girls would go and they would get free birth control. They wouldn't have to tell their parents which was nice" (Ali).* Lexi didn't know that there were family planning resources in her community until a friend suggested it. In addition to confidentiality, participants liked that Planned Parenthood would dispense a three-month supply and gave the option of having birth control mailed to them, especially if they were in college and living away from home. Elizabeth discussed that Planned Parenthood having free or reduced cost care was especially important to her because she described herself as low-income. Like other women, Elizabeth also appreciated their confidentiality. Thus, confidential clinics like Planned Parenthoods were critical access points for participants to be able to enact their definition of RSB.

Barriers to Enacting RSB

Goals, partners, access to care, and rural values and norms created barriers to enacting RSB. In contrast to college-oriented women, women in this sample who had dropped out of college, did not attend college, or felt ambivalent about becoming pregnant had a harder time explaining how their personal goals (other than reproductive goals) influenced their sexual behavior. *"I don't think about those [personal goals and sexual behavior] at the same time, I guess. I don't know. I think about that in like a separate part of my life."* (Annie). Annie went on to state that, *"I'm more responsible*

when it comes to things like my goals, but not as responsible when it comes to things like preventing pregnancy or, STIs or anything." When other participants were asked how their current priorities or goals influenced their sexual health it required additional prompting or reframing the question. If participants were unable to articulate how their own personal goals and sexual behavior currently intersected, they did eventually project how becoming pregnant could influence their goals. However, for these participants, barriers to goals included finances, time, and health, not pregnancy. In response to being asked, in what ways do you think your current priorities or goals influence your sexual behavior, Alexis' initial response was, "*Mmm. What does that mean*?" She went on to state, "*I wouldn't say I think about it too much. Unless I'm in a relationship, I think about it more I guess. But when I'm single, it's that I don't really think about it.*" Jenna stated that during her previous long term relationship she regularly used pills, but when she thought their relationship was over she stopped taking pills. However, despite perceiving that their relationship was over, they continued to have sex, and she subsequently became pregnant with his child. For participants like Jenna, Annie, and Alexis unless they were in a relationship and having sex, their sexual selves were separate from their everyday selves. Their motivation to be on birth control was being in sexually active relationship and wanting to prevent pregnancy. Not, preventing pregnancy to protect personal goals such as education goals like the college-oriented women.

Also of important note were the types of goals participants who dropped out of college, didn't attend college, or were ambivalent about becoming pregnant set versus college oriented women. For participants with college goals, graduating created a finite end or a clear timeline. For participants without goals to attend college, their personal

goals did not have a clearly stated timeline. For these participants, goals included paying off their debt, buying a house, traveling more, being in better health, or going back to school someday. No participant articulated an endpoint or timeframe for these goals such as wanting to pay off their debt by next year.

Partners' resistance to birth control undermined women's ability to enact RSB. In response to wearing a condom, Carrie stated, *"Yeah. I've had a couple [of guys] where they didn't want to wear them, and then some [guys] where they just automatically put it on…One of them was one that had a vasectomy, so he's like, 'Well, you can't get pregnant,' and I'm like, 'Yeah, but there's still STDs.'"* She went on discuss that in that situation and others she did not use a condom. Jackie's partner refused to use condoms yet "*he always told me that if I ever got pregnant he would shove me down his stairs, just because, that's what he would always tell me*." Jackie did become pregnant and sought a termination to avoid partner violence. For participants who discussed experiencing partner resistance to condom use, they conceded and went without using a condom, despite acknowledging the risks of having unprotected sex.

Not knowing how to access care prevented women in this sample from managing risk. Ali shared that after asking her mom to go on birth control her mother took her to clinic that was an hour away, but when the prescription expired she couldn't go back because the clinic had closed. *"Yeah. Then at that point I didn't know where to go because I was 17 so I didn't know if I needed my parent's consent. I didn't want to have to go through all the paperwork of having to get birth control without [my parent's] consent and how much would it cost me. I decided just to wait till I was 18*." As a result, Ali went without birth control (yet remained sexually active using the withdrawal

method) for one year because she didn't know where to go. She waited until she was 18 so she could access care on her own. Sarah, a previously home-schooled student also discussed how she didn't know how or where to access care, *"Actually, I didn't [learn how to access care], and I think people often assume that we know that because [sex] is talked about a lot, but if you're that one person who misses those [conversations]…I still don't really know how to make a birth control appointment. But sometimes I'm like, 'Okay, where do you do this at?' I don't even know [how to access care] because people don't really talk."*

However, even if participants knew where to access care such as Planned Parenthood, accessibility was a barrier. *"There weren't any healthcare services where I was, [access to care was] 30 minutes, either south or north, to get to the hospital, and then the Planned Parenthood was the next closest [place] that I knew about that I felt like would be a more private way of being able to get birth control, being under 18 and not wanting my parents to find out" (Annie).* Ali also discussed access in her community, *"Since my town was really small, there wasn't a clinic or anywhere to get birth control. I think [getting birth control] would've been easier for girls who are 14 and 15 and can't drive, if there could be services available to them or education about how to be responsible about birth control and about condoms and [how to] access to those…"* She went on to say, *"It's been a lot harder [living in a rural area. I feel like it's a lot harder to get your hands on birth control here, because like you have to drive so far just to even get it, and then you don't know if you're even going to get it that day."* Although living in New Jersey at the time, Jackie discussed how she didn't use birth control despite being sexually active because she couldn't afford it and she couldn't afford transportation to get

there. Thus, difficulty with navigating the health care system and access to care were critical barriers to enacting RSB.

Relatedly, other participants stated cost as a barrier to accessing care or as a reason for seeking care. Carrie stated that she avoided seeking care when she didn't have insurance and couldn't afford the out of pocket expenses. "*I wish that free birth control was more accessible and that there were more options rather than just the pill. I wish I didn't have to drive so far just to get it."* Jackie stated, *"I wanted to be on birth control and like I said my mom wasn't willing or I mean couldn't really help me because financial problems*."

Physicians heavily influenced how women in this sample managed risk. Women, including Annie and Jenna, stated that their physicians didn't discuss different types of birth control beyond oral contraceptives. *"I think if people were to talk about different options, girls would be better off"* (Jenna). Some providers, persuaded participants like Ali's to be on certain types of birth control. Ali, initially started using the NuvaRing because, *"They talked to me about options but they pushed the NuvaRing a lot more."* But after her prescription expired and finding a new provider she started on the pill, *"I wanted to do the Mirena® or something [that lasts] seven years or something like that. The doctor made [the Mirena®] seem like it wasn't very good. I didn't think I was going to get on the pill when I walked in there but somehow I ended up on the pill."*

Rural values and norms also negatively impacted women's ability to enact RSB. "*Parents are really conservative here, [and] all over the whole town. There is no sex before marriage, no you can't get on birth control. They're old fashioned"* (Ali). When women in this sample discussed people in their communities and their community's

values towards sex, most women characterized them like Ali, as "old fashioned," "conservative," and having tradition values and life scripts that people, especially women, were expected to follow. Traditional scripts meant no sex until marriage, relatedly, no pregnancies out of wedlock. *"It was kind of an unspoken standard of like, 'Hey, if you're having sex before marriage you're not doing this right,'"* (Sarah). There were also assumptions made if these milestones were out of order. For example, Ali discussed *"if they find out someone's pregnant the first thing they'll ask is are they going to have the wedding before or after the baby*?" Jackie stated that in her rural community to be successful is, *"you're married, have children, and do the family thing. It's like [if you] don't fall into that category, you're not a successful person because you're not following their planned-out path for everybody."* Jackie went on to state that she felt judged and stigmatized because of public knowledge that she had more than one sexual partner, *"I guess my only problem is people here don't understand that I don't believe in their strict sexual [beliefs], if you have multiple—more than like five partners you're a whore…I think judgment is a hard thing to deal with here."*

Participants also felt pressure and judgement about their sexual behavior even if they did follow "traditional" scripts. Elizabeth, the only married woman in the sample, felt pressure because she wasn't having kids soon enough, *"since we'd been married for so long, people were kind of starting to wonder why we weren't having children."* To the contrary, she felt that she and her spouse were being responsible by waiting until they were in a better financial position to have children.

Women in this sample also described their communities as "everyone knows everyone." *"It's just a small town where really everyone knows everything about*

everyone. There's a lot of chatting and rumors can be spread, but I would say it's a pretty tight-knit community" (Molly). The social ramification of this widespread familiarity is that information was shared quickly whether true or false and was often accompanied by social judgement. Consequentially, this exacerbates stigma surrounding sex and promotes secrecy. For example, Molly had this to say about buying condoms in her community, *"because of the small town everyone would know you. And then you could get judged, and then word could get back to my parents pretty easily, and I don't want that."* So to avoid judgment and word traveling back to her parents, Molly went to another community to purchase condoms. Annie confirmed Molly's fear of judgement, "*because it's such a small town, everyone knows everything. So, if there were condoms at the gas station and you wanted to buy them, then everyone would know [you were having sex].*" Judgement also included purchasing pregnancy tests, "*If you buy condoms or a pregnancy test in this town, I'm pretty sure everyone might know… No one wants to be known for going to [the local store] and asking for the condoms."* In addition, some participants like Annie avoided having their birth control mailed to their home out of fear of their parents finding it. For these women, it wasn't just about embarrassment of purchasing condoms or a pregnancy test, it was about someone, especially parents, finding out that they were sexually active.

The tendency towards secrecy also extends to STIs. *"No one talks about [STIs]. If someone were to have an STI and somebody found out about it the whole town would know and you'd be considered dirty. People would probably come up to you, old people and [say], 'I'm praying for you.' I didn't think that anyone in my community ever got STIs."* Ali went to say that to admit to having an STI or if anyone found out someone had

an STI it would be "social suicide," or that their social lives would end. Carrie felt that STIs were more of a "big city problem," and Alexis stated that you "*don't hear about [STIs] too often*" and would be surprised if someone had an STI because of how fast news would travel. "*That'd be a pretty negative thing [having an STI] in my community and I think because of what it shows how it was transmitted and how you got it" (Sarah).* Alexis went on to discuss the impact of knowing if someone had an STI, "*I would be kind of be shocked and I would probably look at them differently…I'd be surprised [if someone had an STI] because it's a small town and you don't hear [about STIs] that often...I like to think that people don't have [STIs], because I went to this small high school, [and] to think that someone has [an STI] and could spread it that easily is scary…But I just think maybe people don't talk about [STIs] a lot, [so if someone has an STI] I'm sure they're too scared to tell anyone, because anyone could figure [it] o*ut." Because of the idea of having an STI would be public knowledge, Jenna stated that this makes rural people more cautious about STIs, "*I think that smaller towns, there's lots of gossip, and everybody knows everybody. I think if you were to have [an STI], and spread [the STI] to people, the whole town would know. I think people are cautious about [STIs] in rural areas than in big cities*." In contrast, Jackie, who received regular STI testing in the military and continued to be tested after discharge, felt frustrated that her peers perceived such a low risk of STIs and did not get tested for STIs. Jackie felt that the risk for contracting an STI was the same or more in a rural area, "*[In my community] [people] pretty much [have] shared the same sexual partners and I feel like it's just crazy. That's where it gets dangerous, because [everyone is] sharing the same t sexual partners…I think the misconception here is like that there's not STDs in a small town*." For

purchasing condoms or talking about STIs, both were indicators that sexual activity was occurring despite the social rules that prohibited it. The end result was not that participants didn't have sex but rather they retreated to secrecy to avoid judgement and related social consequences.

Participants also cited benefits to everyone knowing everyone. According to Jackie, "*[If] there's someone that has an STI and isn't being careful and is just willingly transmitting it to people you would probably know about it right away. When you meet this person and someone's like hey, this person has this, this and this.*" Additionally, "*everyone knows everyone, everyone talks about everyone, so the news travels fast…I mean, cheating and all that happens all the time, but it just travels so fast in our town. I guess you're more aware of that happening" (Lexi).* Thus, the close-knit nature of everyone knowing everyone fostered a sense of accountability albeit a false sense of security that participants "knew" their partners. Consequentially, participants perceived more trust in their partners and lower risk of contracting an STI because they perceived someone would have let them know if their partner had an STI or was not monogamous.

Although most women in this sample stated that knowing the sexual histories of partners was a benefit to everyone knowing everyone, women didn't like the lack of anonymity on their own behalf. Elizabeth discussed how she didn't like the community knowing about her sexual activity because she felt she was being judged. Lexi reiterated this fear of judgment when she discussed how this can also lead to the spreading of false rumors thus increasing the opportunities to have specific behavior or character judged. Alexis added that "*just because someone says something, and it spreads around, you never know what's true or not…you [just] don't know what to believe*." For Alexis and

other rural women, the fear of judgement impacted sexual decision making, *"I think growing up in a smaller town, I definitely wanted to know who I was having sex with, because I know they could go and tell their friends, and everyone could figure out in a second. So I made sure [if I had sex] it was someone I wanted to be with before doing it [having sex], just because I know everyone could figure it out fairly fast."*

The lack of anonymity and stigma surrounding sex and STIs intensified the need to keep sex a secret. Sarah reflected about an occasion in high school, *"I remember there was a time when [a girl] had sex with someone else and it went around school and that girl was automatically a whore. [Students] calling her a skank and a slut. Even though I wasn't necessarily having sex, the people who made fun of other people having sex I was pretty sure were having sex. But they just were better at keeping it secret."* Sarah went on to state, *"I wish that everyone was more honest about [sex] instead of saying one thing and doing the other because I think it gave me a mistrust for a lot of people…even parents would like call girls skanks and sluts [when] their own daughters would be doing the same thing (having sex). So it was this dishonesty and the trying to hide [sex] all the time, but I think whenever kids and students try to hide sexual things that's [when] they get in trouble with STDs and things like that…So, I wish there would've been more honesty [about sex] so that if someone was honest with what they were doing, then they could get birth control or some other sort of protection."* Jackie went to state that she wished that people in her community *"were more talkative about [sex] and not so hushed and keep [sex] behind closed doors."* Thus, women in this sample perceived that the stigma surrounding sex was so profound that it limited their access to the information they felt they needed to be responsible and made women feel that they had to enact their

definition of RSB in secret which may have contributed to having insufficient information or resources to best advocate for their sexual health.

Discussion

Previous research has identified how living in a rural area can negatively influence women's health; however, this is the first study that sought to understand the intersection of RSB and living in a rural area. Every woman in this sample articulated how they defined RSB; understanding the consequences of sex and taking action to manage risks by preventing pregnancy and STIs, mindful selection of partners, and seeking appropriate resources. How women in this sample enacted RSB was influenced by the rural context.

For the women in this sample who had college goals, degree seeking was a motivation to obtain and steadily maintain the use of contraceptives. Like college-enrolled women in a study conducted by Loew et al. (2017), participants articulated how experiencing an unplanned pregnancy would impact their educational goals; there was a direct connection between goal attainment and sexual behavior. In contrast, for participants who did not have educational goals, participants did not discuss how getting pregnant would impact their personal goals. For these women, barriers to goals included finances, time, and health, not experiencing an unplanned pregnancy. Thus, highlighting a disconnect between their sexual and personal goals. This disconnect was demonstrated by a struggle to articulate the link of how their personal goals influence their sexual health, including some who expressed that they don't think of their personal goals and sexual health at the same time. According to a Moore & Davidson (2006) who analyzed the relationship between personal goals and RSB, it was found that setting goals

distinguished those who exhibited responsible sexual behavior versus those who didn't (e.g. drinking alcohol prior to sex, not inquiring STI status of partners). Interestingly, Ng & Kaye (2015) found that when comparing the disparity in teen birth rates between metropolitan and rural women (teen birth rate is 1/3 higher in rural areas) 20% of the disparity is attributed to lower rates of college enrollment among rural young adults. These findings demonstrate the positive role of personal goals such as education. However, it should be clarified that this is not to say that women who do not go to college are sexually irresponsible. Instead, achieving goals are a strong motivating force behavior. These findings suggest a direction for future research that could include development of an empowering framework that helps women integrate women's personal goals with their sexual health or reproductive goals.

According to Loew et al., RSB is not only a social construct, but the boundaries for what constitutes RSB are influenced by what is socially desirable and reflective of the community context in which women live. According to Bushy (2005) the demographic spread of ages in rural areas can be described as uneven and weighted on either end of the age continuum. That is, in rural areas the majority of residents are either under 17 years of age or over 65. Adults 65 and older, or "baby boomers" were born shortly after the end of World War II and the Depression. This was a time of new economic growth and safety. Women were encouraged to marry younger and embrace traditional female roles as wives and mothers (History.com Staff, 2010). Thus, it is likely that the norms and values of rural areas are being set or reinforced by older generations who are likely to have led more "traditional" lives. Bushy (2005) explains that gender roles are clearly defined in rural areas, especially small communities and that "the identity of a woman is

often based on her relationship to someone else—that is, a woman is considered the wife, sister, daughter, or mother of someone else." (p. 27). Compounding the issues associated with traditional gender roles and identity association are historically strong religious ideologies in rural areas (Bushy, 2005). In regards to sexual behavior, traditional religious beliefs value no sex until marriage and childbirth only within the confines of marriage. All women in this sample articulated these values as characterizing their community. This rhetoric was so dominant in this sample that parents passed down traditional values such as not having sex until marriage even if it conflicted with their own personal behaviors. Interestingly, only one woman in this sample adopted the dominant belief of no sex until marriage as her definition of RSB.

Access to free and confidential services such as those offered by Planned Parenthood allowed participants to enact their definition of RSB. Out of all sexually active women in this sample, only one woman had not accessed confidential and reduced cost services offered by Planned Parenthood sometime during her life, even if it meant driving 40 minutes or having a partner drive them. These findings are critical in light of the current political debate in the Iowa legislature to take away Medicaid funding to clinics that provide abortion services, specifically Planned Parenthood. Access to care is already a known barrier for women. Currently, rural counties have 29% fewer doctors and 77% fewer public clinics that offer contraceptives compared to urban areas (Ng & Kaye, 2015). Furthermore, this further reduction in healthcare access is concerning because greater access to publicly funded clinics that provide contraceptives are significantly associated with lower teen birth rates (Ng & Kaye, 2015). Thus, protecting clinics like Planned Parenthood that provide low cost or free services, are critical for rural

women because of lower rates of insurance and a greater reliance on accessing publicly funded clinics (Ng & Kaye, 2015). Without services offered by clinics like Planned Parenthood, almost all women in this sample would not have had access to confidential care and birth control, especially before the age of 18. The consequence to no access to care is to use less effective methods (e.g. withdrawal), contraceptives that are subject to partner refusal (condoms), or no contraceptives at all.

In addition to issues related to access to care, the close-knit community ties, or "everyone knows everyone" undermined women's capacity to exercise RSB because it cultivated an unfounded sense of trust and security in their partners. Most women in this sample perceived little to no risk of contracting an STI had an over-reliance on word of mouth. Behavior theorists theorize that the more ties people make to one another, the more trusting they become (Taylor, 2007), which could put women at more risk of STIs because they trust or assume that their partners and social networks are reliable sources of information. This is especially troubling since rates of STIs are highest among 15-24 year olds (Centers for Disease Control and Prevention) and 55% of 15-19 year old rural women have had sex (which is more than their urban counterparts (44% of 15-19 year olds) (Ng & Kaye, 2015).These statistics not only contrast with rural beliefs that no one should be having sex before marriage but they also highlight the importance of designing interventions to overcome the barriers associated with STIs and condom use in rural areas. However, the barriers to STI testing were numerable for women in this sample. To be tested for STIs it would first require women to admit to a care provider that they are sexually active and acknowledge a perceived risk of contracting an STI. However, acknowledging the risk of having an STI could undermine "knowing" their partners and

question their own judgment. Conversely, if they tested positive for an STI this would mean contemplating telling past and future partners which not only implicates that possible partner who gave them the STI but has dire social implications for themselves. It is likely, given these research findings and the secrecy of sex, that if a person does test positive for an STI that they likely keep it to themselves out of fear of everyone knowing that they have an STI. This is supported by Foster's (2007) research on HIV in rural areas that due to what she coins the "close knit nature of rural areas" that fosters secrecy and non-disclosure of sexual behaviors and STI status. According to Bushy (2005) secrecy is also fostered by the need to maintain family integrity, reinforcing a "rule of silence, that is, what happens in the family stays in the family" (p.27).

Limitations

This study may be limited by lack of ethnic and racial diversity of the sample that might have impacted the stories participants told about their communities. However, the demographic composition of Iowa is predominately White non-Hispanic (91.8%). In the rural counties where women were recruited, White Non-Hispanic individuals account for about 96.6% of the total population (United States Census Bureau, 2010). In contrast, participants were diverse in other ways including age, relationship status, employment status, years of education, military experience, and the number of years they had lived in their communities. These factors likely provided important divergences in perspectives. Efforts to improve participant diversity included recruitment strategies such as having multiple clinic sites where providers handed out flyers to patients and hung flyers in waiting rooms, contacting local community pages on Facebook, posting flyers in businesses such as gas stations, libraries, and grocery stores, and reaching out through

personal social networks. The most effective recruitment strategy was personal social networks and having a trusted member of the community reach out to women.

Conclusion

For rural women in this sample RSB is understanding the consequences of sex and taking action to manage risks by preventing pregnancy and STIs, mindful selection of partners, and seeking appropriate resources. Every participant was able to define what they thought was RSB. How participants defined and managed their idea of RSB was greatly influenced by rural contextual factors. The women in this study expressed a desire for normalizing conversations about sex, more comprehensive education, and better access to care that affordable and reliable. It was also important to these women that given the strong familiarity of persons in rural settings to each other's live events, having access to confidential resources is necessary. Lastly, some of the women in this sample experienced an unplanned pregnancy, contracted an STI, agreed to partners' wishes to forgo condom use, and faced abuse as a consequence to getting pregnant. These examples reflect real life circumstances that would be positively impacted by better access, support, and education.

Table 4: Demographics of Participants

Demographics	Mean N (%)
Religion	
Christianity	10 (100)
Ethnicity	
White/Non-Hispanic	10 (100)
Marital Status	
Not married	8 (80)
Engaged	1(10)
Married	1 (10)
Employment Status	
Unemployed/Volunteer	1 (10)
Part-time	7 (70)
Full-time	2 (20)
Insurance	
Medicaid	2 (20)
Private	8 (80)
Level of Education	
Some High school (currently enrolled)	2 (20)
Some College	4 (40)
Bachelor's Degree	3 (30)
Master's Degree	1 (10)
Last Reproductive Health Visit	
Within last 6 months	8 (80)
Past 1-2 years	2 (20)
Sexual Health History	
Never had sex	1 (10)
Prior/current pregnancy	3 (30)
Prior pregnancy termination	1 (10)

CHAPTER 5

RESPONSIBLE SEXUAL BEHAVIOR: A SYNTHESIS OF THREE PERSPECTIVES

The purpose of this dissertation research composed of three distinct, but related projects, was to examine how responsible sexual behavior (RSB) was defined in the context of public health literature, collegiate women, and rural women 18 and older who have sex with men with the intention to contribute to a clearer conceptual understanding of RSB. This dissertation research created working definitions of RSB based on these three perspectives and examined the unique contextual influences regarding understanding of the concept and on the enactment of RSB in rural communities. This final chapter presents a synthesis of all three perspectives, a contrasting of RSB definitions and concepts and also discusses clinical and policy implications for using the concept of RSB to promote sexual health. (For a review of chapter highlights, see table 6)

According to Rodgers (2000) "the cluster of attributes that constitutes the definition of the concept may change over time, by convention or by purposeful redefinition, to maintain a useful, applicable, and effective concept" (p. 81). The collective research has shown that although current definitions of RSB have some advantages, there are also critical limitations.

An advantage of using the concept of RSB was that this research demonstrated its familiarity and that it had shared meaning. For example, there were two attributes that occurred concurrently in all three definitions, 1) awareness of consequences and 2) management of risks. That is, one cannot manage risk without first knowing that there are consequences. Although there were some differences as to how risk was managed, both

collegiate and rural women in this sample mentioned mindfully selecting partners, or "knowing" their partner, and using some sort of birth control such as condoms or hormonal contraceptives to manage the risk an unplanned pregnancy or STI. In addition, for collegiate women, RSB was a concept that was organically brought up during initial interviews and was later incorporated into all interviews due to the observation that use of the term appeared to be generally understood for all participants. Similarly, RSB was an accessible concept for rural women in this sample to both understand and define, even for rural women who struggled to articulate the link of how their personal goals influence their sexual health. Having a concept, like RSB, that has shared attributes across three distinct samples suggests that this concept may be accessible and relatable to other populations of women.

Shared meanings of concepts can also create a behavioral ideal that is accessible and lead people to seek positive behavioral changes. The collective research indicated that enacting RSB had desirable outcome such as avoiding an unplanned pregnancy. According to the literature, RSB is desirable because it prevents women from experiencing unplanned pregnancies and contracting STIs. Literature sources also suggest other positive outcomes to RSB which include enhanced relationships, increased intimacy and bonding between partners, and self-fulfillment via attainment of personal values and goals as positive outcomes to being responsible (Satcher, 2001). Likewise, rural participants discussed that RSB created desirable sexual boundaries to avoid an unplanned pregnancy. For college women in this sample, desirable outcomes of RSB not only included avoiding an unplanned pregnancy, but also achieving educational goals.

Despite potential advantages, this research demonstrates a divergence between contextual and women's definition of RSB. The concept of RSB is defined and given meaning by forces in the social context. According to the literature, the community context plays a role in creating boundaries for defining RSB (Loew et al.). For rural participants, women perceived their communities as having traditional values that defined RSB such as waiting until marriage before having sex. Although women acknowledged these values, women's definitions and enactment of RSB were not reflective of their perceived community's values. In support of this divergence between women's definitions their perceived community's definition of RSB, 90% of women (n=9) in the rural sample had had sex before marriage. This finding was not surprising given that 55% of rural teenage girls aged 15-19 are known to have ever had sex (Ng & Kaye, 2015).

Another limitation of restricting RSB to literature definitions or using the concept as a behavioral boundary created by social norms is that it leaves little room for application of the concept to the realities of women's lives and disallows the role of personal values and goals in guiding behavior. According to Juhasz and Sonnenshein (1987) the judgment of what is responsible is based on a personal value system that is established and serves as a guide for decision making for everyone. The usefulness of a behavioral guide that is not based on shared values is called into question and may have the potential to do more harm than good. For example, rural women in this sample risked being labeled irresponsible based on their perceived community's definition of RSB. Jackie felt that she enacted RSB by using two forms of birth control and receiving regular STI testing despite having a history of multiple sexual partners. Despite

consistency in Jackie's definition and enactment of RSB, she went on to discuss how people in her community judged her character because of public knowledge about the number of sexual partners she had had. For Jackie, her behavior (e.g. having multiple sexual partners) was seen as the actionable form or visible evidence of her values and morals. Her story demonstrated that when people are defined by their behavior, there are moral judgements placed on her personhood and suggests that she might be deficient in some way. This deficiency must then be remedied by requiring control and policing of her behavior and sexual decisions. Fear of stigmatization by one's social community as a reason for making sexual decisions can be particularly troublesome. According to Bushy (2005), "Attempting to adhere to established family and community standards can be a source of tremendous stress for individuals who are struggling to develop their own sense of identity, especially adolescents and others with low self-esteem" (p. 27). Therefore, the role of the community context should transition from setting boundaries and determining what is RSB to focusing on ensuring that women, like Jackie, have the capacity to enact their definition of RSB.

Boundaries for defining RSB should be reflective of the individual woman. This includes not only a woman's personal values and goals, but personal experiences. In this sample, women's definitions of RSB changed as women acquired new experiences, or as Carrie stated, it is "learning as you go." Collegiate and rural women alike had negative sexual experiences or had surrogate negative experiences via peers that informed their definition of RSB. For example, experiencing an unplanned pregnancy or a friend contracting an STI. Furthermore, as women moved through the lifespan, such as graduating college, they articulated how motivations for RSB changed. For example,

being in college created a motivation to avoid an unplanned pregnancy, however, as women neared graduation or graduated they became ambivalent or discussed a decrease in severity of how an unplanned pregnancy would affect their life. Thus, the definition of RSB to reflect rigid boundaries does not allow for change that is inherent in women's lives as they mature and reach developmental milestones.

Triangulating the findings of this collective research identifies one other important limitation of use of the concept of RSB. This research demonstrates that one concept has been defining at least two phenomena; that is, using the concept of RSB has been used to define what *are* responsible sexual behaviors and what *is being* sexually responsible. Literature focused predominately on measureable outcomes that would be the result of responsible behaviors, such as number of sexual partners, rates of unplanned pregnancy, or rates of STIs. In contrast, the definition of RSB provided by collegiate women suggested that responsible sexual behaviors were internalized and embodied. RSB was more than just a set of behaviors, instead it was a way of life and contributed to personhood. That is, women were *being* sexually responsible woman to achieve personal goals. The definitions provided by rural women further underscore this conclusion. Women in this sample articulated a difference between socially desirable behaviors (e.g. abstinence) and being sexually responsible (e.g. having sex but using birth control). This may be an important finding if the concept of RSB is continued to be use to promote positive sexual health outcomes as behavior change is dependent on a shared understanding of meanings and goals (Bandura, 1977).

The conclusions drawn about the limited usefulness of the literature definition of RSB and the lack of person-centered considerations for expected behavior, indicate a new

definition of RSB is necessary to maintain utility of the concept as a guide for behavior that avoids negative sexual health risks. However, attributes of a new definition should maintain familiarity and accessibility so that a common meaning is shared. Thus, a new definition of RSB is proposed as it applies to women's sexual behavior: *Being sexually responsible (BSR) is having an awareness of consequences and managing risks in a way that is reflective of a woman's personal experiences, beliefs, values, and goals.* This woman-centered definition allows for guidance of behavior that is reflective of women's personal philosophies and lives. It is also important to note that although the new definition may be universal, women's ability to enact their definition of BSR will likely depend on the context in which women are navigating.

Clinical Implications

Moving from an RSB definition to a definition closer to BSR may be of benefit to providers. Promoting BSR allows for a more person-centered or a woman-centered approach to care regarding reproductive and sexual health goals. Understanding how women define what BSR means can give providers insight into women's personal boundaries, values, and goals which could help make clinical decisions. Furthermore, encouraging women to think about how they define BSR can be a reflective way to encourage women to connect how their sexual decision making impacts their lives and personal goals and to identify what motivates them to be sexually responsible. The result may be more intrinsic motivators towards optimal sexual health that are more effective for behavior change than extrinsic boundaries for acceptable behavior (Ryan & Deci, 2000).

Additionally, beyond situating sexual health goals within personal goals, it may be important to establish a time from for goal attainment as well. For example, rural participants who struggled to articulate the intersections of their goals (e.g. paying off debt, buying a house, traveling more, or going back to school) and sexual decisions, did not articulate a timeline for goal attainment, rather it was just "some day." This contrasts with collegiate women in this sample who situated sexual decision making in relation to meeting educational goals and graduation time frames. Thus, this may indicate that it may be useful for providers to encourage women to articulate life goals with an associated timeline and then use this context to support sexual health actions and decisions that assist women to achieve both personal and sexual health goals.

Although articulation of goals and understanding of sexual concepts is important, clinicians also need to assess women's ability to enact their definition of sexual responsibility. Findings from the rural woman study identified barriers such as partner resistance to contraceptives, long travel distances to clinics, and a lack of access to comprehensive sex education. Understanding the barriers women experience and the source of barriers can help providers create strategies to overcome or minimize barriers. Removal of barriers and having necessary skills and resources is a critical antecedent for any woman to be able to be sexually responsible.

The concept of BSR is closely related to reproductive life planning (RLP), a mandated policy for Title X clinics that was initiated by the Centers for Disease Control and Prevention (Edmonds & Ayres, 2017). The impetus of RLP is to structure sexual and reproductive decision making around personal values and goals as a means to decrease the rate of unintended pregnancies and promote the health of women and children. RLP

and BSR are similar in many ways, they are both individualized because they reflect women's personal values and goals, are fluid in nature, meaning goals may change especially as women collect experience and knowledge and seek to promote health. There are also additional positive consequences beyond protection from biological risk for both RLP and BSR such as empowerment, self-fulfillment, and life satisfaction (Edmonds & Ayres, 2017; Loew et al, n.d.). Integrating the principles of RLP and BSR may create a new, woman-centered approach, that encourages women to be advocates for their own sexual health which could improve sexual and reproductive health outcomes.

Policy Implications

In additional to clinical application, the antecedents of RSB are relevant for informing policy. Examined literature identifies antecedents to RSB that include knowledge, forethought, and access to resources (Loew et al, n.d.). For rural participants, their ability to enact their definition of RSB was hampered by a lack of access to information. This was supported by women's statements that they lacked information needed to make informed sexual health decisions. Women expressed that they wished that their schools would have talked about the implications of getting pregnant before achieving developmental milestones (e.g. graduating high school) and presented more comprehensive sexual health information, such as various about options for birth control, beyond condoms and abstinence. Interestingly, current code for the state of Iowa requires sex education specifically that each school board provides age-appropriate and research based information in human growth and development. Current code 279.50 outlines the required topics: human sexuality, self-esteem, stress management, domestic abuse, interpersonal relationships, HPV and the HPV vaccine, and AIDS. However, the code

does require education topics such as contraceptives including condoms, negative outcomes of teen sex, or healthy sexual decision making. In addition, the last section of the states that code 279.50 does not prohibit schools or school districts from developing and making abstinence-based or abstinence-only education materials and curriculums available to satisfy the required human sexuality component. Despite, current research has found that abstinence only messaging and education is ineffective and increases the risk of pregnancy and STIs (Kohler, Manhart, & Lafferty, 2008; Santelli et al., 2006; Sather & Zinn, 2002; Stanger-Hall & Hall, 2011). Thus, it is unsurprising that women in this sample perceived their high school sex education programs to lack the breadth and depth necessary to be sexually responsible. Therefore, sexual health education policy reformation is necessary and should to include additional areas of required topics such contraceptives, how to navigate the healthcare system, and healthy decision making.

Access to resources is a critical antecedent to enacting RSB. Rural participants discussed issues related to accessing care which was a barrier to enacting RSB (Loew et al). In this sample, of all rural women who were sexually active (n=9), all but one had ever accessed Planned Parenthood. For some women, Planned Parenthood was the only place they could get information and resources to prevent pregnancy. Women chose Planned Parenthood because of the confidentiality that the clinic provides and they might escape the consequences of anyone knowing they were sexual active (e.g women are not required to submit parents' insurance information). Due to the free or reduced cost services are subsidized by state and federal funding, policies that maintain this support are crucial. Many rural women in this sample would not have had the necessary financial

resources to pay for the care they desired without the low-cost services available from Planned Parenthood, especially before the age of 18.

For collegiate and rural women in this sample, Planned Parenthood played an important role in enactment of RSB by offering free or reduced cost birth control to manage risks such as unplanned pregnancies. However, the future ability of Planned Parenthood to serve women under 18 and low income women is currently uncertain. Proposed legislation in Iowa, specifically SF2, seeks to withdraw Medicaid funding from clinics who provide pregnancy terminations (e.g. Planned Parenthood) (Legiscan, 2017). This could disproportionately affect rural counties that already have 29% fewer doctors and 77% fewer public clinics that offer contraceptives when compared to urban areas. For rural women, this may mean more difficulty enacting RSB as publicly funded clinics, like Planned Parenthood that provide contraceptive services, are associated with lower teen birth rates which is 1/3 higher in rural areas as compared to their urban counterparts (Ng & Kaye, 2015). Thus, policies need to focus on helping women *be* responsible by ensuring access to the care and resources they need.

Conclusion

This dissertation took an in-depth approach to understanding the concept of RSB and proposes a new definition to maintain the concept's use as a guide to improve women's sexual and reproductive health. *Being sexually responsible* is having an awareness of consequences and managing risks in a way that is reflective of a woman's personal experiences, beliefs, values, and goals. Future research should focus on understanding how other populations of women define and manage BSR so that public

health interventions and policies can work to support women's ability to be sexually responsible.

Table 5. Chapter Highlights

Chapter	Definition	Highlights
Chapter 2: Concept Analysis	*RSB is 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.*	• Awareness of consequences and managing risk as central to RSB • social desirability and community context as creating boundaries for what is responsible sexual behavior • RSB is a social construct • Access to information and resources such as birth control are critical to RSB • Assumes that women have the capacity to always exercise deliberate behavior • When RSB is used in an application to judge other's behavior, it is a value laden term that can further marginalize women
Chapter 3: Collegiate RSB	*Someone who self-advocates by taking action that is consistent with her personal goals, values, and beliefs while being aware of consequences that threaten or are inconsistent with these personal attributes. Actions include being mindful about the selection of sexual partners, communicating boundaries and acceptable behavior, and preventing pregnancy.*	• RSB as something every woman could articulate; organic beginnings • Awareness of consequences and risk management as central to RSB • College goals/setting created a framework that guided sexual decision making and definitions of RSB • Awareness of of how personal goals interest with reproductive goals created a space to self-advocate from • Personal experience is important in shaping women's definition of RSB, thus what is RSB for women is fluid and evolves over time

Table 5-continued

Chapter	Definition	• Highlights
Chapter 4: Rural RSB	*RSB is understanding the consequences of sex and taking action to manage risks by preventing pregnancy and STIs, mindful selection of partners, and seeking appropriate resources.*	• Awareness of consequences and risk management as central to defining RSB • Personal experience as central to defining RSB, "learning as you go" • Dominant messaging of no sex until marriage • A contextual division between perceived rural values and women's definitions and enactment • Accessing free and confidential services such as Planned Parenthood as integral to all but one sexual active participant • Everyone knowing everyone or having a tight knit community undermined women's capacity to be responsible by fostering a false security in "knowing" their partners and consequently a low perceived risk of contracting an STI • Rural context oppresses women by limiting access to information, resources, and making autonomous decisions

APPENDIX A: THE UNIVERISTY OF IOWA PREVENTION RESEARCH CENTER PIOLOT PROJECT PROGRAM GRANT

Half of all pregnancies in the United States (US) are unplanned and cost the public $21 billion annually (Guttmacher Institute, 2015). In addition, 20 million new sexually transmitted infections (STI) are diagnosed annually in the US and cost almost $16 billion (Center for Disease Control and Prevention, 2014). Public health objectives, initiatives, and goals recommend *responsible sexual behavior* (RSB) as a way to reduce rates of unplanned pregnancies and sexually transmitted infections (STIs). The concept of RSB originated as a leading health indicator in Healthy People (HP) 2010. Leading health indicators emphasize behaviors that affect the health of individuals and communities, motivate behavior change, and provide a focus for outcomes tracking (Healthy People 2010). Healthy People 2010 objectives for RSB indicate that progress goals were not met(Healthy People 2010), and RSB remains a leading health indicator for Healthy People 2020(Institute of Medicine, 2011).

RSB as a health indicator lacks a clear conceptual definition (Loew, Ayres, & Lehan Mackin, 2015). Since behavior change is dependent on a shared understand of meaning and goals (Bandura, 1977), lack of conceptual clarity may have important implications for health promotion and disease prevention and may have contributed to shortfalls in meeting HP set goals. Preliminary studies conducted by the PI attempted to create conceptual clarity and define RSB from the perspective of college-aged women. Findings from these studies suggest that there is a gap between college-aged women and public health's definition of the concept RSB and although both definitions include

measureable outcomes such as condom and birth control use to manage risk, this work went beyond that to identify factors women considered as important contextual influences on their reproductive health(Loew, Lehan Mackin, & Ayres, 2015). These studies concluded that context may have important implications for reproductive health promotion and should be explored in other populations.

Current research suggests that rural contextual factors such as issues of access, socioeconomic status, and rural values, norms, and beliefs surrounding sexual health are associated with creating reproductive and sexual health disparities among rural women (Adimora & Schoenbach, 2005; van Dis, 2002) and may impact how women perceive RSB. However, little research has explored the influence of contextual variables on reproductive health and decision making among rural dwelling women. In addition, Healthy People initiatives have not adequately taken the unique contextual needs of rural dwelling people into consideration, despite the fact the an overarching goal of the Healthy People initiatives is to reduce or eliminate health disparities (Bellamy, Bolin, & Gamm, 2011). The absence of inclusion and consideration of rural needs in HP may be attributable to the lack of reliable baseline data for local areas (Bellamy et al., 2011).

Therefore, the need for local knowledge development is imperative to promoting rural health. Understanding how rural women define and enact RSB ads to the paucity of literature about rural dwelling communities and can help sexual health agencies conceptualize reproductive health problems and allocate the appropriate resources to tailor interventions and policies. This may also enhance the community's capacity to promote the reproductive health for rural dwelling women.

The **purpose** of this descriptive qualitative pilot study was to describe the contextual influences of how rural dwelling women define and enact responsible sexual behavior. Thus I proposed the following specific aims:

Aim 1: Describe how rural women define responsible sexual behavior.

Aim 2: Identify contextual factors that are barriers and facilitators to enacting RSB.

Understanding the context variation in a rural setting has built on my previous work and has constituted my dissertation research. This research had independent value for contributing to knowledge about reproductive health for rural dwelling women and created a foundation for my future program of research that seeks to engage with women to help design health interventions that are reflective of women's personal philosophies and the context in which women live. The findings of this research project can help interventionists, policy makers, and educators address the unique sexual health needs of rural women to address sexual and reproductive health disparities.

Background

Half of all pregnancies in the United States (US) are unplanned and cost the public $21 billion annually (Guttmacher Institute, 2015). In addition, 20 million new sexually transmitted infections (STI) are diagnosed annually in the US and cost almost $16 billion (Center for Disease Control and Prevention, 2014). Public health objectives, initiatives, and goals recommend *responsible sexual behavior* (RSB) as a way to reduce rates of unplanned pregnancies and sexually transmitted infections (STIs). In Iowa alone, unintended pregnancies cost the state $51 million with an additional $82 million in federal costs (Guttmacher Institute). The concept of RSB originated as a leading health

indicator in Healthy People 2010, with similar goals in other Healthy People initiatives, such as Healthy Campus. Leading health indicators are intended to illuminate behaviors that are affecting the health of individuals and communities, motivate behavior change, and provide a basis for which outcomes are tracked (Healthy People 2010) to focus health promotion efforts. Healthy People 2010 objectives for RSB indicate that progress goals were not met(Healthy People 2010), and RSB remains a leading health indicator for Healthy People 2020 (Institute of Medicine, 2011).

Preliminary work regarding RSB suggests that there is a gap between college-aged women and public health's conception of RSB. Given that 75% of unplanned pregnancies are to women aged 18-29 and 15-24 year olds account for highest rates of STIs (Center for Disease Control and Prevention, 2014; Guttmacher Institute, 2015), college aged women are an important sub-group in the discussion of RSB. Preliminary findings suggest that although both definitions include measureable outcomes such as condom and birth control use to manage risk, this work went beyond that to identify factors women considered as important contextual influences on their reproductive health(Loew, Lehan Mackin, et al., 2015). This has implications for disparate populations such as rural women because little research has explored the influence of contextual variables on reproductive health among rural areas (Adimora et al., 2001). Furthermore, these findings are important because unless there is conceptual agreement as to what RSB is, the goals of promoting RSB cannot be met because behavior change is dependent on a shared understand of meaning and goals (Bandura, 1977).

The unique culture and context of rural living negatively impacts women's reproductive health and autonomy. Social context refers to socioeconomic, demographic,

sociopolitical, and macroeconomic features of an individual's environment (O'Reilly & Piot, 1996). Important contextual factors for women in rural areas include: lower education, higher rates of unemployment or underemployment, lower salaries, higher rates of poverty, longer travel distances to healthcare facilities with consequently higher costs associated with health care services, higher rates of uninsured or underinsured people, and fear of stigmatization and lack of confidentiality (Hart, Larson, & Lishner, 2005; Kelly, 2011; van Dis, 2002). Additionally, rural women are more likely to marry at a younger age and as a result have children at younger ages. These factors lie primarily outside of the individual's control but play a key role in increasing the risks associated with sexual behavior (e.g. unplanned pregnancy and STIs) (Adimora & Schoenbach, 2005).

As examples, the use of medical contraception is lower (Kessler, Goldenberg, & Quezada, 2010) and teen birth rates are one-third higher in rural counties as compared to metropolitan counties (Finley & Stewart, 2013). Rural women are prone to poor prenatal care due to limited resource availability and access to obstetrical care (Peck & Alexander, 2003). Poor birth outcomes associated with delayed prenatal care include higher infant mortality rates, more infants born with low birth weights, shorter gestations, lower Apgar scores, and longer hospital stays following delivery. All outcomes have consequently higher costs associated with birth (Peck & Alexander, 2003). Additionally, rural women with HIV/AIDS report feelings of more social stigma, fear of stigmatization, and shame than men with HIV/AIDS, these fears are exacerbated by a perceived lack of anonymity when seeking care (Bennet, Lopes, Spencer, & van Hecke, 2013).

As additional contextual factors, socioeconomic status and access to care are critical barriers for STI treatment and prevention [16] as well as preventing unplanned pregnancies and improving birth outcomes among rural women. Concurrently, socioeconomic status and access to care are critical antecedents to RSB [11]. Therefore, lack of financial resources or having to travel long distances to see health providers has the potential to greatly impact enactment of RSB.

At a systemic level, access to and types of sexual and reproductive services are influenced by laws and policies [21]. Aggregating data at national level blurs any contribution of local level data that would highlight key differences found in rural environments that would need to be considered for accurate healthcare need assessments, funding allocations, and interventions [14]. Often, policies and programs such as HP are generalized to rural environments that have been designed, tested, and fit urban areas. Therefore, current laws and policies that determine funding allocations or types of services offered can impact the capacity for women to engage in RSB, and failure to consider the context in which rural women live can create or exacerbating sexual and reproductive health disparities.

Since Healthy People's inception in 1979 the disparities associated with rural dwelling has not yet been addressed, despite the fact the an overarching goal of the Healthy People initiatives for the last 20 years has focused on reducing or eliminating health disparities (Bellamy et al., 2011). In an attempt to address the needs of rural people, Rural Healthy People 2010 (RHP 2010), akin to the Healthy People initiatives, was created by an outside organization, the Southwest Rural Health Research Center, to address the gaps related to rural people in HP 2010. To address the gaps related to rural

populations in Healthy People 2010, RHP 2010 sought to identify rural health priorities, document what is known about rural areas, identify best practice interventions/programs, and to promote rural health research (Bellamy et al., 2011). However, due to a lack of reliable baseline data and deficient presence of public health partnerships, the scope of RHP was limited to collecting preliminary data, literature searches, and creating evidence-based practice guidelines for prevalent chronic illnesses. Despite the increased attention on rural health, attention to rural health and rural disparities is not reflected in Healthy People 2020.

Therefore the need for local knowledge development is imperative to promoting rural health. Furthermore, knowledge development and health promotion need to occur through community partnerships so that there is a stronger presence of public health in rural communities. To assist rural community providers and sexual health agencies in promoting the health of rural women, collaborations have been made and results from this study will be shared regarding the contextual influences of defining and enacting RSB. Understanding how rural women define and enact RSB can help agencies conceptualize sexual health problems and allocate the appropriate resources and tailor interventions and policies to optimally enhance the community's capacity to promote the sexual health for rural dwelling women.

Preliminary Studies

Two preliminary projects have established a strong foundation for this research project, a concept analysis and a secondary data analysis. The purpose of the concept analysis was to understand the concept of RSB in the context of college-aged women in

order to create a conceptual definition that can aid in the advancement and refinement of policy and health interventions for this population. The findings from this research concluded that the literature defines RSB as, *RSB is 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 (Loew, Lehan Mackin, Ayres).* The aims of the secondary data analysis sought to describe how women from a Midwestern university define RSB. College women defined RSB as *Someone who self-advocates by taking action that is consistent with her personal goals, values, and beliefs while being aware of consequences that threaten or are inconsistent with these personal attributes. Actions include being mindful about the selection of sexual partners, communicating boundaries and acceptable behavior, and preventing pregnancy (Loew, Lehan Mackin,& Ayres, 2017).* Both definitions emphasize risk avoidance behavior, but for college women, the risk avoidance and discussion of RSB was a product of their personally, mostly academic, context. This evidence supports the importance of context, which has been demonstrated to be unique to rural dwelling women. Therefore this project will build off of prior work to allow for comparisons between groups and further determine contextual differences as to how women define and enact RSB. The cumulative knowledge gained will provide progress towards future goals of addressing sexual health disparities to promote health that are informed by the unique context in which women live.

Design and Methods, Human Subjects issues

Design: This study proposed a qualitative descriptive design to describe the contextual influences of how rural dwelling women aged 18-29 define and enact

responsible sexual behavior. A qualitative descriptive design was appropriate for addressing rural health disparities by creating findings that easily translated into practice, informed policy, and intervention design (Sullivan-Bolyai, Bova, & Harper, 2005).

Participants: English speaking heterosexual women age 18-29 that live in noncore Iowa counties were invited to participate. Women aged 18-29 were selected because 75% of unplanned pregnancies occur in this age group (Guttmacher Institute, 2015). According to the NCHS noncore counties are considered the most rural areas (Ingram & J., 2014). In the state of Iowa there are 61 counties that are classified as noncore (see table 1). Single and married women were included as married women also experience unplanned pregnancies and STIs.

Table 1. Noncore Iowa Counties

Adair	Cherokee	Franklin	Iowa	Monroe	Shelby
Adams	Chickasaw	Fremont	Jackson	Montgomery	Sioux
Allamakee	Clarke	Greene	Keokuk	O'Brien	Tama
Appanoose	Clayton	Hamilton	Kossuth	Osceola	Taylor
Audubon	Crawford	Hancock	Luisa	Page	Union
Buchanan	Decatur	Hardin	Lucas	Palo Alto	Van Buren
Butler	Delaware	Henry	Lyon	Pocahontas	Wayne
Calhoun	Emmet	Howard	Marion	Poweshiek	Winnebago
Carroll	Fayette	Humboldt	Mitchell	Ringgold	Winneshiek
Cass	Floyd	Ida	Monona	Sac	Wright
Cedar					

Sample Size: Sampling and data collection ended when data saturation and redundancy occurred (Polit & Beck, 2006).

Recruitment: Recruitment will occurred through five strategies (1) directly through provider recommendations in four Iowa health clinics, (2) via postings in the health clinic waiting rooms, (3) postings in community settings such as laundromats, gas stations, libraries, stores, and restaurants, (4) word of mouth, and (5) via a Facebook page created

just for the study that also reached out to rural area community and buy/sell pages. Four clinics in different regional areas were selected to ensure sufficient recruitment of women living in noncore counties: the Henry County Health Clinic in Winfield, Iowa (southeast Iowa), the Burgess Family Clinic of Dunlap, Iowa (Southwestern Iowa), The Crawford County Home Health and Hospice in Denison Iowa (Western Iowa), and the Northeast Iowa Community Action Corporation Health Services Family Planning Program located in Decorah, Iowa (Northeastern Iowa). Providers in these clinics agreed to aid with recruitment and letters of collaboration have been completed.

Instruments: A short questionnaire was completed prior to the interview (see appendix B). In addition to basic demographic questions, questions regarding relationship status, religious beliefs, insurance, employment, education, and access to care were included as these had been identified as important factors for rural women's reproductive health (Adimora et al., 2001; Hart et al., 2005; van Dis, 2002). Additional questions specific to reproductive health are included to gain foundational knowledge and to inform follow up questions for the interview (Lehan Mackin, 2011).

A semi-structured interview (SSI) guide was created to guide the phone interviews (see appendix C). The purpose of the design and content of the SSI was to elicit stories and perceptions of contextual factors that influence how women define and enact RSB. Interview questions were informed by the literature, preliminary studies completed by the PI, were modeled after a study that highlighted the social context of pregnancy intention and also discussed RSB with college aged women (Lehan Mackin, 2011), and themes that were generated during the interview process. Questions inquired about how their sexual behavior intersects with their current life priorities and goals, what responsible

sexual behavior means to them, and how their sexual behavior has been shaped by influences throughout their lifespan. Questions included in the SSI were guided by input from mentors with qualitative research expertise.

Procedures: Recruitment of rural dwelling women occurred at four clinics (see recruitment). Potential participants identified by the care providers received a handout that included a lay description of the study, inclusion criteria, length of interview, compensation, a confidentiality statement, elements of consent, and how to contact the PI. This handout was also posted in the clinic waiting room. Once participants contacted the PI, eligibility for inclusion was determined. Once eligibility was confirmed, a mutual interview time was scheduled.

Data was collected via phone interviews throughout the study. Establishing a relationship with the participant was imperative to this research as the questions and discussion were on sensitive subject matter; therefore, interviews were conducted at a time most convenient for the participants and participants were encouraged to complete the interview alone. Interviews lasted 45-90 minutes and participants were compensated for their participation. Participants were instructed that they could stop the interview at any time or skip any questions that the did not feel comfortable answering. Contact information to local sexual health and emotional health counselors or primary care providers in the participant's area would have been provided to participants in the case of distress.

During the meeting consent documents were reviewed and the short questionnaire was completed by the PI. Interviews were audio recorded with two audio recorders in the event that one system fails. Audio recordings were professionally transcribed by

Landmark Associates, an approved contractor by the University of Iowa. After receiving the transcribed interviews the audio files were then compared to the transcription report and checked for accuracy two times to ensure descriptive validity (Maxwell, 1992). Interpretative validity was enhanced by taking notes that documented observations, impressions, or anything noteworthy that contributed to the full understanding of the participant.

Data Management and Analysis: Descriptive statistics were used to examine sample characteristics collected from the demographic questionnaire. Interview data was transcribed verbatim and entered into NVivo 10, a qualitative data management software package. Data was analyzed using within-case and across-case approaches, which allowed for an understanding of the individual's context while capturing variation across individuals (Ayres, Kavanaugh, & Knafl, 2003). The analysis method and literature provided the structure for the coding scheme. Then, women's definitions or important aspects of RSB (defining themes) and contextual factors that influenced the enactment of RSB (enactment themes) were identified within cases and then compared to other women across cases. Across case analysis contributed to the establishment of commonalities and relationships among the themes that characterize the defining and enactment of RSB. Themes that have explanatory capabilities for both individual cases and across the cases will likely apply beyond the current sample and increase the findings generalizability (Ayres et al., 2003; Miles, Huberman, & Saldana, 2014). The themes identified were then returned to individual cases for refinement and to search for competing or conflicting interpretations, this step will establish theoretical validity (Maxwell, 1992). Lastly, to enhance rigor, a peer review process with colleagues with expertise in

qualitative research was utilized to ensure an accurate portrayal of the findings (Whittemore, Chase, & Mandle, 2001).

Human Subjects Concerns: Due to the personal and sensitive nature of discussing reproductive health issues, participants may have experienced discomfort. To mitigate discomfort participants were reminded that they could skip questions or stop the interview at any time. In addition, if participants had become distressed a list of care providers in their area would have been provided, however, no participants indicated that they were distressed and in need of follow up care. If a participant would have disclosed violence or abuse, they would have been encouraged to seek care from a provider. Confidentiality was protected by secure storage of all research documents and any identifying information was kept separate from research data. In addition, only the PI had access to identifying information (e.g. phone numbers and names) and following the interviews pseudonyms were assigned and identifying information was destroyed. All interview data was stored on a secured University of Iowa server that is password protected.

Potential for Future Grant: This study and its methodology has important implications for future studies and grant funding. The findings of qualitative description address rural health disparities by creating findings that have potential to translate directly into practice, informing policy, and intervention design (Sullivan-Bolyai et al., 2005). In order to reduce health disparities interventions must (1) focus on promoting access and use, (2) the intervention must be accepted and understood by the population experiencing the disparity, and (3) interventions need to continually analyzed and critiqued in light of the cultural milieu of the population experiencing the disparity

(Sullivan-Bolyai et al., 2005). This study serves as an important first step to understanding the unique needs of vulnerable populations that can ultimately lead to targeted interventions that help disparate populations achieve optimal reproductive health.

This proposal was not only my dissertation research but is the foundation for a program of research that will continue post-graduation. I would like to expand my program of research by conducting studies of disparate women and developing, examining existing interventions, or testing interventions to ensure that reproductive health interventions reflect the context in which disparate women live. In the future, I will seek funding opportunities with agencies whose research missions are parallel with my research goals involving the improvement of women's reproductive health. Such as the Society of Family Planning Research Fund, the National Institute of Health Office of Research on Women's Health, or through the Patient-Centered Outcomes Research Institute (PCORI).

APPENDIX B: DEMOGRAPHIC QUESTIONNAIRE

1. What is your age?

2. What is ethnicity?
    a. Hispanic or Latino
    b. Non-Hispanic or Latino

3. What is your race? Select all that apply
    a. American Indian or Alaskan Native
    b. Asian
    c. Black or African American
    d. Native Hawaiian or other Pacific Islander
    e. White
    f. Other, please specify

4. What county do you currently reside in?

5. How long have you resided in that county?

6. Have you lived in any other counties in Iowa?
    a. If yes: Where?
    b. For how long?

7. Do you practice a specific Religion?
    a. yes, if yes please specify
    b. no

8. How important is religion in your life?
    a. extremely important
    b. important
    c. somewhat important
    d. not at all important

9. Do you have a woman's health provider or a place you routinely receive care? (e.g.) where you receive your prescription for contraceptives, have pap/pelvic exams, or receive STI testing)
    a. yes
    b. no

10. If yes, how long does it take you to travel to your women's health provider? (e.g.) where you receive your prescription for contraceptives, have pap/pelvic exams, or receive STI testing)
    a. less than 15 minutes
    b. 15-30 minutes
    c. 30-60 minutes

d. more than one hour

11. If yes, how long ago was your most recent women's health appointment? (e.g.) received your prescription for contraceptives, had pap/pelvic exams, or received STI testing)

a. Have never been seen for reproductive health services
b. seen in last
c. seen in last 1-2 years
d. seen more than 2 years ago
e. unsure

12. What is your current work status?

a. Part-time
b. Full-time
c. Less than part-time
d. Working more than 40 hours per week
e. Currently unemployed

13. Do you receive health insurance from your employer provide health benefits?

a. yes
b. no
c. unsure

14. What is your current insurance coverage?

a. through the state (Medicaid)
b. private
c. I don't have health insurance
d. other

15. What is the highest level of education achieved?

a. some high school
b. High school diploma or GED equivalent
c. Certificate
d. Associates degree
e. Bachelor's degree
f. some college
g. Graduate degree
h. other, please specify

18. How many times have you been pregnant? (Include pregnancies that resulted in miscarriage, terminations, and live births)

17. If you have been pregnant, have you ever electively terminated a pregnancy?

a. yes
b. no

APPENDIX C: SEMI STRUCTURED INTERVIEW GUIDE

My name is Nicole Loew and I am the principal investigator for this project. As you know from the consent information, I am interested in how women such as yourself define and enact responsible sexual behavior. I have several questions here to guide our conversation but I mostly want to hear your story and may ask you to elaborate on specific points that you mention. We will talk for about an hour and I want to remind you that you may skip any question that you do want to answer or stop the interview at any time.

INTRODUCTION: Tell me a little about yourself, where are you from? What is your community like?

SEX EDUCATION

1. When do you first remember being talked to about sex?

-Did your parents talk to you about sex or your body?

IF NO: why do you think they didn't?

IF YES: How were ideas about sex communicated to you (e.g.) positively or negatively such as sex is a normal part of body functioning?

-What did they discuss?

2. If I were to say you should be sexually responsible, does that make sense? Growing up, how would you say responsible sexual behavior was defined for you by your parents?

3. How do you plan on talking to your children about sex? How will you define what responsible sexual behavior should be for them?

-IF define RSB differently for kids than parents did for participant, why?

4. Can you tell me about your experience with sex education with school? (Follow with prompts as necessary)

-Did you receive comprehensive sex education in school? (Such as learning about human development, contraception, relationships, decision making, abstinence, and disease prevention)

-Did they discuss various methods of birth control?

-Did you learn about what reproductive services are available to you (as far as title X, reduced cost) (Follow with prompts as necessary)

-IF NOT: do you know what services are available to you?

-IF NOT: How would you go about learning about your options?

-IF NO: how did you learn about them?

-When you think about how sex was communicated to you during school, How was ideas about sex communicated to you by: (e.g. positively or negatively such as sex is a normal part of body functioning)

-In regards to your school sex education, how do you think responsible sexual behavior was defined?

5. Are there any other ways you learned about sex? (e.g. friends, siblings, extended family, care providers, church?)

-How was ideas about sex communicated to you by them?: (e.g. positively or negatively such as sex is a normal part of body functioning)

USING BIRTH CONTROL

1. Please tell me about your current romantic relationship status

2. Are you currently sexually active or have been sexually active in the last month?

-IF NO: have you ever been sexually active?

3. Do you currently use birth control or have you?

-IF YES: Would you want to share your thoughts about your experiences with birth control? (Follow with prompts as necessary):

-IF NOT USE: Could you share why you do not use birth control?
-Are you aware of other options?

-IF USE: How did you learn about birth control or from who?
What method seems to work best for you?
-Have you had any difficulties getting the birth control you want to use?

-What is the primary reason that you use birth control for? (e.g. Pregnancy prevention or STI prevention)

4. Think about when you first learned about using birth control, what things influenced your ideas about getting birth control? (Follow with prompts as necessary.)

a. family
b. friends
c. partner
d. access/provider
e. religion
f. insurance
g. cost
h. fear of stigma or lack of confidentiality

-Do you use or consider condoms as a method of pregnancy prevention, STI prevention, or both?

IF YES: what has your experience been with using them?

-Troubles purchasing? (stigma, cost)
-Partner issues?

IF NO: why not?

5. If applicable, tell me where do you get your reproductive health care? And how long it takes to get there?

6. Is there anything that makes it difficult to get reproductive health care? Or birth control? (Follow with prompts as necessary)

a. distance
b. confidentiality
c. cost
d. stigmatization
e. other

PREGNANCY

1. IF EVER PREGNANT: can you share your story with me?

-How did you feel about the timing of your pregnancy? (Prompts: did you want to be pregnant?)

-Did you do anything to improve your health before you got pregnant? (e.g. see a doctor, stop smoking, stop drinking, or start folic acid)

-When you became pregnant were you using contraception? Consistently?

-Before you got pregnant did you and your partner discuss having a baby? Were you in agreement?

-What was your experience of finding out that you were pregnant?

-What was your experience of telling friends/family that you were pregnant?

-What factors did you consider when you made the decision to: (have the baby, terminate the pregnancy, or put the baby up for adoption)?

-What was the strongest influence in making that decision?

-What are your thoughts on future pregnancies?

2. IF NEVER PREGNANT: Would a pregnancy be a welcomed event for you right now? (Follow with prompts as necessary)

-IF YES: So you feel a getting pregnant might be a good thing for you, can you tell me more about that?

-IF NO: So getting pregnant wouldn't necessarily be a good thing for you right now. Can you tell me more about that?

-What do you perceive that your likelihood of getting pregnant at this time is?

-IF UNSURE: So there might be both good and bad things associated with getting pregnant right now. Can you tell me about some of those things?
- Has this been what you have always felt or have your thoughts changed over time?

-IF CHANGED: why do you think that is?

3. If you became pregnant right now, can you tell me what some of the important people in your life might think? (Follow with prompts as necessary.)

a. your sexual partner
b. your sister
c. your brother
d. your best friend
e. your mother
f. your father
g. your minister or a fellow church member
h. your community
i. your grandparents
j. your healthcare provider

4. If you had to think about the outcome of your pregnancy, such as whether to keep, adopt or have an abortion, what factors would you consider? (Follow with prompts as necessary.)

a. family
b. friends
c. partner
d. religious beliefs
e. cultural beliefs
f. resources/cost/accessibility
g. rules or laws
h. insurance
i. community
k. cost
l. health care provider

-Which ones do you think have the strongest influence on making that decision? Why?

RESPONSIBLE SEXUAL BEHAVIOR

1. What would you say are your current and future priorities or goals? (education, work, family)
-What currently keeps you from achieving your goals?

2. You mentioned that your highest level of education is _____, can you share your experience with making that decision?

3. In what way do you think your current priorities or goals influences your sexual behavior?

4. So you previously told me how responsible sexual behavior was defined for your growing up, how do you define responsible sexual behavior now?
IF DIFFERENT THAN GROWIN UP: Why do you define it differently now?

5. What factors or experiences have shaped how you define responsible sexual behavior?

6. Would you say that you follow your definition of responsible sexual behavior? (Follow with prompts as necessary)
IF YES: have you always followed this definition?

7. What challenges do you experience that make it difficult to enact your idea of responsible sexual behavior?

-Do you think these challenges are or would be unique to living in a rural area?

8. Relatedly, when you think about over your lifespan, how do you think that living in a rural area has impacted your sexual behavior or thoughts on pregnancy? (such as getting birth control, condoms, perception of unplanned pregnancy)

-Do you feel this has been a positive or negative impact?

OTHER CONTEXTUAL FACTORS

1. So I have some other questions related to rural living, but more generally speaking. When you think about women getting pregnant out of wedlock, what do you think your community's values say about this?

-What do you think your community's values say about or If you experienced (see below) how would your community respond? How do you respond to these situations if someone in the community experienced (see below).

a. premarital sex
b. having a pregnancy outside of marriage
c. STI testing
d. having an STI

-IF HAVE LIVED IN OTHER COUNTIES: You mentioned that you lived in another county for _____amount of time, can you describe that community to me?

a. size
b. why you lived there
c. why you left
d. discuss any differences between that county and county you currently reside in regarding access to care or values surrounding sexual behavior

2. Research shows that teen birth rates are almost 1/3 higher among rural teens than teens who live in more populated areas why do you think that is? How do you suggest we change this?

3. Many women have described their communities as everyone knows everyone, do you feel this also describes your community?

IF YES: In what ways do you feel that the sense of everyone knowing everyone is a positive in terms of dating and having sexual relationships?

In what ways do you think it is a negative in terms of dating and having sexual relationships?

Are there things that people in the community don't know about you?

4. Some women have also discussed how some women stay in the community after high school and some women leave and go to bigger areas to work or go to college. Why do you think some women stay and some women leave? Or why do some women go to college and others don't?

4. In terms of issues related to sexual health how do you think rural areas compare to big cities? (e.g. rates of STI/HIV, teen preg)

5. Is there anything you would like to share about responsible sexual behavior that I haven't asked you?

6. Do you have anything else you would like to add about how living in a rural area has impacted your sexual health?

Closing question: Is there anything you wish you could change about your rural upbringing that would have made issues related to sexual health easier?

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