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An Evidence-based Approach for the Development of a Sexual Health and Wellness Program for University Students

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AN EVIDENCE-BASED APPROACH FOR THE DEVELOPMENT OF A SEXUAL
HEALTH AND WELLNESS PROGRAM FOR UNIVERSITY STUDENTS

Kimberly Lynn Lanning

A Dissertation Submitted to the Graduate Faculty of
GRAND VALLEY STATE UNIVERSITY

In

Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF NURSING PRACTICE

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Dedication

I dedicate this dissertation to my God and my family. I would not have completed this program and project without them. “God is able to make all grace abound to you, so that in all things at all times, having all you need, you will abound in every good work.” 2 Corinthians 9:8. My life verse is Philippians 4:13 “I can do everything through God who gives me strength.” Thank you Dan, Julianne, Peter, Hannah, Andrew, Bethany, Moriah, Sarah, Lydia, and Noah. I love you all very much.

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Abstract

The transition from adolescence to adulthood involves important developmental challenges. Events during this key developmental phase can profoundly shape and influence academic and occupational achievement as well as affect health outcomes. College students are particularly vulnerable to a number of health threats during this time of transition from a high school student within the protective barriers of the home environment to an independent college freshman. These health threats include depression, anxiety, intimate partner coercion, violence, and sexually transmitted infections. Sexual health education can help provide adolescents with decision making information and skills. The dissertation project is focused on the utilization of *Making A Difference!* curriculum. It is based on cognitive positive attitudes and beliefs regarding abstinence, abstinence negotiation skills, and confidence in their ability to abstain from sex or make the decision to participate in sexual activity when ready (Jemmott, Jemmott & Fong, 2010). The project was facilitated with the GVSU Women's Center, adapting the curriculum for a college based audience. The project included a pre and posttest evaluating the knowledge, attitudes, and behaviors of the 61 participants. Although there was not a significant difference in overall knowledge, attitudes and behaviors of the participants, selected responses of primary interest were analyzed separately to look for any change in response between the pretest and posttests. Six participants changed their answers to two questions addressing attitudes from the pretest to the posttest. Participants with married biological parents demonstrated a significantly higher mean score than those participants with non-married parents. There was a significant positive linear relationship between each student's attitude and behavior scores.

Evaluation feedback expressed participants' desire for more learning opportunities involving curriculum such as this project. The recommendation is to continue with sexual health and wellness programming among college age participants.

Table of Contents

Dedication	3
Acknowledgments	4
Abstract	5
List of Figures	9
List of Appendices	10
Chapter	
I. INTRODUCTION	11
Significance of Risk Taking Activities	12
Sexual Activity and Outcomes	12
Drugs and Alcohol Usage	13
National Goals	14
Grand Valley State University	15
II. LITERATURE REVIEW	18
Support for Sexual Health Based Interventions	19
Early Adolescent Sexual Health-Based Interventions	22
Late Adolescent Sexual Health-Based Interventions	27
Comparison of Evidence-Based Curricula	28
Moral Development and Decision Making	30
III. CONCEPTUAL FRAMEWORK	35
Overview	35
Theoretical Concepts	36
Theoretical Application	36
Sexual Health Education Wellness	37
IV. METHODS	39
Setting	39
Program Development	40
Design of Project	40
Implementation of the Project	42
Evaluation of the Project	43
Ethical Considerations	47

V.	RESULTS	48
	Demographics	48
	Sexual Activity	53
	Data Interpretation	56
	Program Evaluation	61
VI.	DISCUSSION	64
	Literature Review	64
	Conceptual Framework	66
	Feasibility/Sustainability	67
	Policy	67
	DNP Roles	69
	DNP Essentials	70
	Limitations	73
	Recommendations	74
	APPENDICES	76
	REFERENCES	92

List of Figures

FIGURE

1	Participants Attendance per Session	49
2	Distribution of Participants Based on College Grade Level (pretest data)	50
3	Distribution of Participants Based on College Grade Level (program eval)	51
4	Current Living Situation	52
5	Ethnicity of Participants	53
6	Sexual Activity of Participants	54
7	Reported Number of Sexual Partners Over Last 3 Months	55
8	Participants engaging in high risk behaviors	56
9	Distribution of Attitude based on Biological Parents Marriage	60
10	Plot Graph for Attitude and Behaviors	61

List of Appendices

APPENDIX

A	Evaluation Table of Literature Review of Sexual Health Education	76
B	Literature Review Table	83
C	Evaluation Table of Evidence-Based Sexual Health Curricula	84
D	Teaching Plan for <i>Healthy Sexuality: Knowledge, Action, Behavior</i>	86
E	Student Services Program Evaluations	90
F	IRB Approval Letter	91

CHAPTER 1

INTRODUCTION

Adolescence is a transitional phase from dependent child to independent adult. The World Health Organization (WHO) (2011) defines adolescents as people ages 10 to 19 years of age. This population of maturing young adults is experiencing some of the greatest changes in physical, emotional, and social health. In addition, the population of adolescents is culturally unlike previous generations. The National Adolescent Health Information Center noted in 2006 that the population of adolescents and young adults, ages 10 to 24, is more racially and ethnically diverse than the population of adults, ages 25 and over (NAHIC, 2008). The adolescent and young adult population will continue to become more diverse in the next decade. By 2020, it is projected that it will include 6.3 percent Asians/Pacific Islanders, 14.1 percent Blacks, and 22.2 percent Hispanics. The overall number of adolescents and young adults is expected to increase from 63.3 million in 2006 to 64.1 million in 2020 (NAHIC, 2008).

The transition from adolescence to adulthood involves important developmental challenges. This phase of life is characterized by much growth and transformation. It is a time of unparalleled curiosity about life, independence, and autonomy. Events during this key developmental phase can profoundly shape and influence academic and occupational achievement as well as affect health outcomes. During this developmental period, many young people experiment with drugs and alcohol. Many adolescents will initiate relationships and sexual activity. Experimentation with risky behaviors jeopardizes adolescents' health.

Significance of Risk Taking Activities

Adolescents who experiment with sexual activity are at an increased risk for negative outcomes including infections, pregnancy, substance abuse, and harm related to injury and abuse. Fantasia and Fontenot (2011) review issues that affect the sexual safety of adolescents. These issues include risks for unintended pregnancy and sexually transmitted infections (STI). Clinicians need to understand other critical issues that affect sexual safety including adolescent dating patterns, decision making, communication and negotiation skills, social and environmental influences, and risks related to violence.

Sexual Activity and Outcomes

A negative outcome of sexual activity is acquiring a sexually transmitted disease (STD). Sexually transmitted diseases are hidden epidemics of tremendous health and economic consequence in the United States. Of the top ten most frequently reported diseases in 1995 in the United States, five were STDs (Eng & Butler, 1997). According to the *STD Quarterly*, within two years of becoming sexually active, half of urban teenage girls may acquire at least one of three common sexually transmitted diseases, chlamydia, gonorrhea, or trichomoniasis, (Bowers, 2010).

A second outcome of sexual activity is unplanned pregnancy. According to the Centers for Disease Control (CDC), teen pregnancy rates for 2009 were 41.5 live births per 1000 for 15-19 year olds (2009 Sexually Transmitted Disease Surveillance, 2010). Pierre and Cox (1997) describe teen pregnancy as a multifaceted problem closely connected to economic, educational, social, cultural, and political factors. Teen parenthood is associated with discontinued or delayed education, reduced employment

opportunities, low wages, unstable marriages, and prolonged welfare dependency.

Adolescents in the United States have the highest pregnancy rates in the Western world.

Drug and Alcohol Usage

Substance usage increases the risk of engaging in health-compromising behaviors.

Alcohol is one of the most widely used drug substances in the world. Alcohol use and binge drinking among the nation's youth is a major public health problem. In 2009, 24 percent of high school students reported episodic heavy or binge drinking. Excessive alcohol consumption is associated with approximately 75,000 deaths per year, with approximately 41 percent of all deaths involving motor vehicle crashes (CDC, 2011b).

Drug usage is common among adolescents. The Centers of Disease Control note that marijuana is the most commonly used illicit drug among youth in the United States with 21 percent of adolescents using it in 2009. Cocaine, methamphetamines, ecstasy, and heroin are used at lower rates ranging from 4 to 8 percent respectively (CDC, 2011b). While illicit drug use has declined among youth, rates of nonmedical use of prescription and over-the-counter (OTC) medication remain high. In 2009, 20 percent of United States high school students had taken a prescription drug, such as Oxycontin, Percocet, Vicodin, Adderall, Ritalin, or Xanax, without a doctor's prescription (CDC, 2011b). Increased usage of substances is related to the increased risk of engaging in health-compromising behaviors. De la Rosa, Dillon, Rojas, Schwartz, and Duan (2010) researched associations among mother-daughter attachment, mother and daughter substance abuse, and daughter's sexual behavior under the influence of drugs and alcohol among 158 adult United States Latina daughters. Substance abusing daughters with

substance abusing mothers, and daughters who were less strongly attached to their mothers, reported more sex under the influence of drugs.

National Goals

The National Initiative to Improve Adolescent Health (NIAAH, or the National Initiative) is a collaborative effort to improve the health, safety, and well-being of adolescents and young adults ages 10 to 24 years. NIAAH identifies five goals on which to focus. The first goal is to elevate national, state, and community focus on, and commitment to, the health, safety, positive development, and well-being of adolescents, young adults, and their families. The next focus area is to increase access to quality health and safety education and health care, including comprehensive general health, oral health, mental health, and substance abuse prevention and treatment services. The third goal is to address the influence of social determinants on health, safety, and well-being. The fourth NIAAH focus is to improve health and safety outcomes in such areas as mortality, unintentional injury, violence, oral and mental health, tobacco and substance use, reproductive health, nutrition, and physical activity. Finally, the NIAAH emphasizes the prevention of adult chronic diseases, and elimination of disparities in health, safety, and well-being among adolescents and young adults (CDC, 2011a). Implementation of health education would need to address these goals.

The role of education is significant to help increase the awareness in adolescents concerning the risk of sexually transmitted infections, unplanned pregnancy, and alcohol and drug related activities. Inman, van Bakergem, LaRosa and Garr (2011) conducted a comprehensive literature review to identify evidence-based, peer-reviewed programs, strategies, and resources in the areas of sexual health, mental and emotional health, injury

prevention, tobacco and substance abuse, exercise, and healthy eating. The review found that effective programs included knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy. These concepts were found to be effective in guiding behavioral change. House, Bates, Markham, and Lesesne (2010) examined the association between competence and adolescent sexual and reproductive health outcomes. They noted cognitive competence and social and behavioral competence could be protective factors in adolescent sexual and reproductive health outcomes. Education increases competence in self-health.

Grand Valley State University

The transition from high school to college is a time of change in an adolescent's life. For many students it is the first time of living away from their parents. It is a time of independent decision making. In 2011, a total of 3,927 students entered Grand Valley State University and enrolled in the fall semester as first-time-in-any-college (FTIAC) students. There were 2,416 female students within the FTIAC population (Dykstra, 2011). In the fall of 2012, there were 22,227 undergraduate students enrolled at GVSU (GVSU, 2012). Fifty-eight percent were women. Included in that number were 3966 FTIAC students totaling 18.7% of the GVSU student population (GVSU, 2012). This population is at risk for making life changing decisions. Education on available resources can help these vulnerable women make important choices.

Grand Valley State University (GVSU) has focused on ways to raise awareness of violence against women, providing prevention education, and improving reporting and documentation of violence. The GVSU Women's Center opened in 2001. The mission of the GVSU Women's Center is to create meaningful learning about women and gender

and to advocate for gender justice through the education, engagement, and empowerment of students and the greater GVSU community (GVSU Women's Center, 2011). The GVSU Women's Center seeks to raise awareness of and reduce sexual assault, domestic violence, dating violence, and stalking on campus. In 2010, the Women's Center was awarded a grant from the U.S. Department of Justice, Office of Violence Against Women, to raise awareness of violence against women. The focus of the grant is to transform the GVSU campus culture by developing and strengthening the educational outreach, prevention effort and resources (GVSU Women's Center, 2010). The proposal abstract stated seven initiatives focused on meeting the objective to increase campus awareness. Within these initiatives is ensuring all new students receive information about dating, violence, and sexual assault.

This dissertation project was focused on the utilization of the *Making A Difference!* curriculum. The curriculum is based on cognitive positive attitudes and beliefs regarding abstinence, abstinence negotiation skills, and confidence in ability to abstain from sex or make the decision to participate in sexual activity when ready (Jemmott, Jemmott & Fong, 2010). The project was facilitated with the GVSU Women's Center utilizing campus housing and undergraduate classes involving the college population. This project collaborates in providing prevention education to increase self-awareness and knowledge of sexual pressures and experiences during this transition into adulthood. This project was a pilot intervention for the GVSU Women's Center focusing on sexual health promotion at the college level. The projected implementation consisted of three interventional sessions within the first six weeks of the 2013 winter semester.

The aim of this project was to increase knowledge of sexual health, promote positive sexual health attitudes, and increase the promotion of healthy sexual behaviors.

CHAPTER 2

LITERATURE REVIEW

Sexual health education can help provide adolescents with informed decision making, risk behavior reduction, and health promotion across the lifespan. Adolescents are in need of comprehensive information and decision making skills. Data from the National Survey of Family Growth found that 96 percent of female teens and 97 percent of male teens received formal sex education before they were 18 (Currie, 2010). Bailey and Piercy (1997) advocate providing sexuality and AIDS education in a way that helps adolescents explore the ethical meaning of their sexual behavior. In a literature review of 83 studies that measured the impact of curriculum-based sex and HIV education programs on sexual behavior among youths under 25 years anywhere in the world, Kirby, Laris and Rolleri (2007) found that two thirds of the programs significantly improved one or more sexual behaviors. The behaviors included risk reduction behaviors such as appropriate condom usage and limiting the numbers of casual sexual partners. Building on previous knowledge and attitude allows college students to increase positive sexual health behaviors and decrease negative outcomes.

The evidence is strong that programs do not hasten or increase sexual behavior, but, instead, both delay or decrease sexual behaviors and increase condom or contraceptive use. House et al. (2010) examined the association between competence and adolescent sexual and reproductive health outcomes and noted cognitive competence and social and behavioral competence could be protective factors in adolescent sexual and reproductive health outcomes. Inman et al. (2011) conducted a comprehensive literature review to identify evidence-based, peer-reviewed programs, strategies, and resources to

identify areas of sexual health, mental and emotional health, injury prevention, tobacco and substance abuse, and exercise and healthy eating. They found that programs which included knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy were found to be effective in guiding behavioral change. Choosing a sexual health and wellness program that includes knowledge, attitude, and behaviors is important to the implementation of an appropriate curriculum.

Support for Sexual Health Based Interventions

Most adolescents today are aware of sexual education, contraception, and STDs, yet the majority do not consistently practice sexual health promotion behaviors. Byers et al. (2003) assessed attitudes and experiences toward sexual health education (SHE) at school and at home. In a sample of 745 middle school students enrolled in grades 6 through 8 in New Brunswick, it was found that 93 percent of students were in favor of SHE implementation at school. Sixty-nine percent of the students agreed that schools and parents should share this responsibility. Longmore, Eng, Giordano, and Manning (2009) conducted a study using social control and social learning theories to examine the role of dating specific attitudes and practices as predictors of adolescents' sexual initiation. Using logistic regression, the longitudinal study, examining data from 697 non-sexually active adolescents at the time of the first interview, found that adolescents who perceive greater parental caring are less likely to initiate sexual intercourse. Overall, the adolescents agreed that education is important and should be a cooperative implementation between schools, communities, and parents.

Community based programs and institutions provide workshops and forums with adult mentors which offer information about sexuality and sexual health knowledge about

safer sex practices. Romeo and Kelley (2009) describe a conceptual link between the goals of the Sexuality Information and Education Council of the United States' (SIECUS) Guidelines for comprehensive sexuality education and those approaches to positive youth development (PYD). The SIECUS guidelines include six key concepts: human development, relationships, personal skills, sexual behavior, sexual health, and the aspect of the social and culture context. Outcomes are based on successful utilization of safe sex practices or abstinence from unprotected sexual behavior, which will produce overall healthier adults.

Health interventions need to involve students in the education process. Bayer, Cabrera, Gilman, Hindin, and Tsui (2010) held a brainstorming session with Peruvian adolescents to develop a concept map for sexually related factors, scoring the importance for sexuality-related outcomes. Out of 11 clusters, personal values, respect and confidence in partner relationships, future achievements, and parent-child communication were rated higher than pathway decision-making concerning sex. By involving the students in the designing and carrying out of curriculum, rates of participation with the implementation would be expected to be increased.

Culture and ethnicity of adolescents is an important consideration in sexual health education. In multiple regression models, Cooper and Guthrie (2007) associated positive family interactions and neighborhood factors with a decreased engagement in health-compromising behaviors such as early sexual initiation, decrease in condom usage with sexual behaviors, and increase in number of sexual partners among African American adolescents. Cox (2006) noted that parenting style may be a determinant in reducing adolescent risk behavior. She found that in situations when African American mothers

demanded condom usage of their sexually active adolescents, there was an increased likelihood of condoms being used among their children. She noted the opposite was true of white maternal influences. Culture and ethnic background influences sexual health outcomes.

Research studies document a decrease in sexual health risk taking behaviors associated with an implementation of sexual health education. Saewyc, Taylor, Homma, and Ogilvie (2008) indicated an overall decrease in numbers of youth reporting sexual health risks after a province-wide sexual health education implementation taking place within the school system. Milhausen et al. (2008) noted no increase in frequency of sexual intercourse in sexually active African-American adolescent females, but an overall increase of adolescent felt-support with an intervention of an education-based HIV-prevention program. However, it was noted that there is an increased need for appropriate education to assist in decision making.

Screening for those individuals at risk for increased sexual health-compromising behaviors is important. McLeod and Knight (2010) analyzed data from the children of the 1992, 1994, and 1996 National Longitudinal Survey of Youth in which measurements of socioemotional problems at ages 10 to 11 years and after allow for analysis of whether such problems are associated with sexual initiation before age 15. The comparative results indicated adolescents with socioemotional problems, such as depression, dependency, hyperactivity, and antisocial behaviors, had an increased risk for sexual initiation before age 15. By assessing the potential factors that are significantly connected with the increase in sexual initiation and risk for engagement in health-compromising behaviors, healthcare strategies can be developed and implemented.

Early Adolescent Sexual Health-Based Interventions

Literature suggests that adolescents receive sexual health education within school systems. Data from the National Survey of Family Growth found that 96% of female teens and 97% of male teens received formal sex education within the school context before they were 18 (Currie, 2010). Although most adolescents receive sexual health education, there are inconsistencies among programs. Bailey and Piercy (1997) advocate providing sexuality and AIDS education in a way that helps adolescents explore the ethical meaning of their sexual behavior.

Most adolescents today are aware of sexual education, contraception, and STDs, yet the majority do not consistently practice sexual health promotion behaviors. Students agree that schools share this responsibility with parents (Byers et al., 2003). This conjoint venture is especially important in higher risk adolescent populations. In a comparative analysis of 6,111 fifteen-year-olds, Madkour, Farhat, Halpern, Godeau, and Gabhainn (2010) noted a positive association of socioeconomic situations and earlier sexual initiation. Lower socioeconomic status was linked to earlier sexual initiation.

Regular monitoring of sexual health trends among adolescents provides strong evidence to guide intervention programs and health policies. Saewyc et al. (2008) evaluated statistics from cross-sectional cohort studies from 1992, 1998, and 2003 to evaluate trends in sexual health and risk behaviors among adolescent students in British Columbia. Using complex cluster-stratified sampling methods, it was noted that youths from British Columbia in grades 7 through 12 were taking fewer sexual health risks, waiting longer to have sex, and using contraception when engaging in sexual intercourse. The analyses also revealed that these encouraging results may be related to protective

factors such as feeling connected to family or school. These findings are supported by other studies.

Olsen and Weed (1992) examined attitudes of students who were enrolled in three different sex education programs emphasizing abstinence. The programs included *Values and Choices*, *Teen Aid*, and *Sex Respect*. The *Values and Choices* curriculum included discussions of self-esteem, self-respect, and the student's own sexuality while *Sex Respect* focused on sexuality and abstinence by focusing on issues of human sexuality, sexual freedom, and decision making. *Teen Aid* was developed as a health education including drugs, alcohol, exercise, nutrition and reproductive health. The majority of junior high students rated the programs as effective in the education of sexuality and risk taking behaviors (Olson & Weed, 1992). In a more recent randomized, controlled evaluation of school-based intervention in Washington DC using the *Postponing Sexual Involvement Curriculum*, Aarons et al. (2000) conducted a health risk screening, and a follow-up "booster" educational activities the following year. The researchers noted that after the sexual health interventions, females reported an 11.1% reduction in intention to become involved in a sexual relationship. The students were primarily of African American and Latino descent. The study reported no differences between the genders, no significant changes in male virginity, and no increase or decrease in use of birth control of presently sexually active participants. Gender differences in baseline sexual activity rates suggested a possible need to separate gender specific interventions to adequately address social and cognitive needs of both sexes related to knowledge and self efficacy to refuse sex.

In a quasi-experimental, pretest-posttest design, Denny, Young, Rausch, and Spear (2002) noted gains in knowledge and self-efficacy in participants of an upper elementary, junior and senior high school abstinence program as compared with the control group. The students were given a questionnaire at baseline, after a five-week intervention, and then at one-to-two months following the intervention. The *Sex Can Wait Curriculum* promotes life skills, knowledge base, and sexual abstinence with a positive approach to decision making, self-esteem, and life planning. The curriculum utilizes educational lectures, handouts, and parent and child homework activities. It received favorable reviews by parents and teachers for increasing sexual health knowledge among participants. In a quasi-experimental, nonequivalent control group design, Rye et al. (2008) noted girls in grades 7 and 8 in ten schools in the Waterloo region of Ontario showed significant longitudinal improvements in the areas of communication with parents and comfort with sexual issues. The *Girl Time Curriculum* was created and implemented with the goals of encouraging young girls to delay sexual intercourse and practice safer sex when they begin to engage in sexual activity (Rye et al., 2008). The curriculum utilized informational teaching and interactive activities. Delaying sexual intercourse can promote individual sexual health and decrease negative outcomes.

Sexual health interventions can also decrease the frequency of sexual intercourse of those adolescents engaging in sexual risk-taking behaviors. In a randomized controlled trial of 522 sexually active African-American females between the ages of 14 and 18 years, Milhausen et al. (2008) conclude, from data collected from a self-administered questionnaire and face-to-face interviews, that the HIV intervention strengthened gender

and ethnic pride while increasing knowledge and use of condoms. Using a linear regression model, no significant difference was observed in the frequency of sex between the intervention and control group at any of the three follow-up assessments. The comprehensive sexual health education included general health promotion and risk reduction instruction with an emphasis on gender and ethnic pride. Overall, however, sexual health education interventions that included reproductive health education resulted in a decrease in high-risk-taking sexual behaviors such as unprotected sexual intercourse and multiple casual partners while there was an increase in condom usage.

Overall, major findings support sexual health education in the intermediate/junior high age groups of 12 to 15 year-olds. Madkour et al. (2010) found correlations among social economic status, relationship with parents, and sexual initiation. Improvement in the stated quality of relationship with parents correlated with an increased age at time of initiation of sexual relationship. Additionally, lower social economic status was related to an earlier age of intent to initiate sex. Sexual health education can increase knowledge concerning sexual intercourse and risk taking behaviors. Specific interventions such as *Girl Time* and *Sex Can Wait* encourage self-efficacy and knowledge related to sexual health and abstinence. In addition, findings of a study by Longmore et al. (2009) suggest that social control and social learning theories relate to specific dating attitudes and practices that are predictors of adolescents' sexual initiation. Their longitudinal study, examining data from 697 non-sexually active adolescents at the time of the first interview, utilized logistic regression in predicting that adolescents who perceive greater parental caring were less likely to initiate sexual intercourse. Additionally, Kohler, Manhart and Lafferty (2008) found that teaching about contraception was not associated

with increased risk of adolescent sexual activity or STD. Adolescents who received comprehensive sex education have a decreased risk for negative outcomes.

Adolescents agree that education is important and should be a cooperative implementation between schools, communities, and parents. In a cluster-randomized controlled trial, Jemmott, Jemmott, Fong, and Morales (2010) found community-based interventions effective in the implementation of HIV/STD interventions whose efficacy had been established. The *Making A Difference!* curriculum covers a comprehensive education of topics such as HIV, AIDS, and STD information, personal behavioral beliefs, attainment of future goals, and skills to negotiate abstinence and resist sexual pressure. The curriculum utilized educational instruction, activities, and role playing. In a randomized controlled trial, Jemmott, Jemmott and Fong (2010) noted that concluding the *Making A Difference!* curriculum, previously sexually active participants reported few incidences of sexual relationships. The 8 and 12 hour comprehensive interventions reduced report of having multiple partners as compared with the control group. Community-based interventions promote positive health choices such as abstinence and negotiation skills.

Sexual health interventions begin in early adolescence with the home and school environments. A comprehensive curriculum covers the anatomy and physiology of the reproductive systems and initiates the decision making capabilities of the adolescent. Utilizing decision making techniques enables the participant to engage in sexually healthy choices, abstinence and positive safe sex. The literature review demonstrates the support of participants and parents for a comprehensive sexual health intervention.

Late Adolescent Sexual Health-Based Interventions

Sexual health interventions continue to be important through late adolescence. As one transitions through the high school years and embarks into early adulthood, the need for sexual health interventions continues. Young college students are at risk for STDs and unplanned pregnancy related to developmental issues such as a sense of invincibility, low perceived risk, and substance use. This was evidenced in an exploratory study investigating factors related to contraceptive use among sexually active women attending a university. Huber and Ersek (2009) found that 77.1% of the respondents reported just an occasional use of any contraception. Further, in a study to examine variables that impacted sexual risk taking, Roberts and Kennedy (2006) found that women who reported low perceived risk, lower use of drugs and alcohol, and who had parental involvement within the context of social relationships, had lower sexual behavior risk. In this study, 64% of the women interviewed were inconsistent condom users, and 52% used drugs and alcohol during sex. Women who were sexually assertive, had intentions to use condoms, did not use substances, and used condoms more often. It was noted, however, that if women experienced partner resistance to condoms, it negated any reduced risk. Risk taking behaviors such as combining substance and unprotected sex lead to negative outcomes.

Adolescents transitioning into adulthood can be challenged by social norms and misconceptions. Social norms theory states that behavior is often influenced by how individuals perceive how other members of a social group behave (Berkowitz, 2002). In a survey of high-risk sexual behavior among undergraduate students at four college campuses, Scholly, Katz, Gascoigne, and Holck (2005) found that students overestimated

their peers' levels of sexual activity, number of partners, incidence of sexually transmitted infections, and rates of unintended pregnancies, but underestimated rates of condom use. A second predominant normative message comes from the media, which portrays women as sexual objects controlled by men's sexual desires (Murnen & Smolak, 2011). The cultural portrayal of giving men more sexual control socializes women to expect to be a sexual object. Misconceptions among women can lead to risk-taking behaviors such as unprotected sexual activity and partner dominant decisions.

Young college students express a desire for someone to teach them real information on sexuality. In a later study employing a focus group discussion, Kennedy and Roberts (2009) found that young multicultural college women reported the belief that they were not in control of their sexual behavior, and they did not remember what happened in a sexual experience because of alcohol use. The women reported a frustration over vague noncomprehensive sex information and a lack of ability to advocate for themselves. The need for better information about sex is echoed in a survey of university students in the United States. Higgins, Mullinax, Trussell, Davidson, and Moore (2011) found that although many respondents reported satisfaction with their current sexual lives, they would like to enhance their sexual well-being with information to improve sexual self-comfort, alleviate sexual guilt, and promote longer term relationships. This literature supports the concept of sexual health promotion at the college level.

Comparison of Evidence-Based Curricula

There are different options for sexual health education. Literature supporting different options is described in tables in Appendix A. Options reviewed include seven

curriculums. Programs such as *Making A Difference!*, *Sex Can Wait*, *Values and Choices*, *Teen Aid*, *Sex Respect*, *Girl Time*, and *Sexual Involvement Curriculum* promote abstinence and making appropriate healthy choices when the participant feels ready. An analysis of participants' needs is necessary for a successful match between curriculum, participants and individual site needs. Needs may be based on ethnicity, gender, and community intervention capabilities. Health interventions need to involve students in the education process. The sexual health intervention is based on the most appropriate match of participant needs with the content of the curriculum.

A review of the literature on available curricula for sexual health education demonstrated a varying intervention time frame. Appendix C describes the length of intervention, topics covered, and activities utilized. The range of intervention sessions was from 3 sessions of 1-hour increments (*Postponing Sexual Involvement*), 4 sessions of 4-hour (HIV intervention), or 5 weeks of 23 lessons (*Sex Can Wait*). The curriculum entitled *Girl Time* included two follow up sessions. All of the curriculums included knowledge of reproductive health and sexually transmitted diseases. Other topics included in the programs were self esteem and communication skills especially related to sex refusal and safe sex negotiation. All of the curricula involved health professionals or others who had been given training concerning the curriculum instruction.

Theory-based interventions have an important role in preventing adolescent risk-taking behaviors involving sexual intercourse. *Making A Difference!* curriculum created by Jemmott, Jemmott, and McCaffree (2011) utilizes both an 8 and 12 hour comprehensive intervention including a comprehensive education of topics such as HIV, AIDS, and STD information, personal behavioral beliefs, attainment of future goals, and

skills to negotiate abstinence and resist sexual pressure. Included in the curriculum are interactive activities such as role plays, personal reflection, and informational discussions. This curriculum matches the desired needs of the late adolescent population based on the focus on knowledge in combination with negotiation skills.

Moral Development and Decision Making

Life presents opportunities and with those opportunities comes the possibility of choosing unwisely. In a survey of sexually active college women, Eshbaugh and Gute (2008) found that sexual regret occurred when these students engaged in a relationship defined as “hooking up”. This act of “hooking up” is defined as engaging in sexual intercourse with someone who they have just met, or engaging in sexual intercourse with someone once. In a regression equation, Eshbaugh and Gute (2008) found that “hook ups” emerged as a predictor of sexual regret. These regrets have implications for health and happiness.

Adolescents seek to develop their own identity, decisions, and values. In an exploration of factors influencing decision making, Rolison and Scherman (2003) found that risk taking behaviors, including personality towards sensation-seeking, locus of control, and decision making techniques, correlated with an increase in risk taking events. In relation to adolescent sexual decision-making, Hulton (2001) found that virgin adolescents demonstrated a significant greater ability to make balanced decisions, using pros and con variables, in the precontemplation, contemplation, preparation, and action stage of the transtheoretical model of change (DiClemente et al., 1991) as compared to non virgins. Identifying decision making skills assists adolescents in determining their identity.

Decision-making processes can assist older adolescents in making appropriate choices. Gordon (1996) describes the factors of adolescent decision-making theory as cognitive development, social and psychological factors, and cultural and societal influences. Cognitive factors include concrete versus formal reasoning; concrete versus abstract thinking; knowledge level; and the ability to consider various options. Social and psychological factors include personality characteristics; decision making based on identity; intimacy; risk taking; and internal versus external locus of control. Cultural and societal factors the person's reflect religious/spiritual/moral basis; ethnic diversity; political and educational system; and socio-economical environmental influences. Appropriate sexual health choices lead to sexually healthy adolescents.

Ethical and moral influences can assist older adolescents in making appropriate choices. Principles from Rest's model of moral development (1979) are described as moral sensitivity, moral judgment, moral motivation, and moral character. These would allow the person to be able to recognize the issues at hand, make correct and intelligent judgments, and to have the motivation to take action and the character to maintain good morality throughout the person's life. Improving moral characteristics can assist adolescents in choosing healthier sexual lifestyles.

By using models of moral development as well as decision making processes, practioners and health educators can assist adolescents to make optimal decisions. Paradise, Cote, Minsky, Lourenco, and Howland (2001) found in a survey related to sexual decision-making that virginal and sexually experienced adolescent girls viewed their sexual behavior as being based on personal values. Rew, Wong, Torres and Howell (2007) found that university students made major decisions based on a belief system

similar to their parents. They noted that when parents valued abstinence as an important value, so did their children. By using decision making process, adolescents can be assisted in making sexual health decisions.

Women bear disproportionate burdens from sexually-related health compromising outcomes. Imbalanced societal gender and power positions contribute to increases in negative outcomes for women such as forced sexual engagement and abuse. In an exploratory study using the theory of reasoned action and the theory of gender and power, Teitelman, Tennille, Bobinski, Jemmott and Jemmott (2011) found that 54% of adolescent girls living in poor urban settings with high rates of HIV and partner abuse experienced unwanted, unprotected vaginal intercourse. In addition, 25% of the women reported the inability to discuss condom use with a partner. In a review of literature of women- controlled safe sex, Alexander, Coleman, Deatruck, and Jemmott (2011) found five attributes related to increasing women's control over safe sex: technology; access to choices; women at-risk; 'condom migration' panic (as decreased use of condoms as a result of increased use of another product), and communication. Three antecedents included: male partner influence, body awareness, and self-efficacy. Empowering women to advocate for their own health and safety gives females control over personal decisions.

Sexual health education can help provide adolescents with decision-making information and skills. Inman et al. (2011) whose literature review was discussed previously, identified evidence-based, peer-reviewed programs, strategies, and resources for sexual health, mental and emotional health, injury prevention, tobacco and substance abuse, and exercise and healthy eating. They found that programs which included

knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy were found to be effective in guiding behavioral change.

In a systematic review of research published from 1985 to 2007, House et al. (2010) examined the association between competence and adolescent sexual and reproductive health outcomes, noting that cognitive competence and social and behavioral competence could be protective factors in adolescent sexual and reproductive health outcomes. Findings were coded as protective, risk, or no association, as well as longitudinal or cross-sectional. The evidence corroborated their premises that these areas of competence can be protective factors for adolescent sexual and reproductive health outcomes. Helping adolescents to achieve competence through education may reduce the likelihood of sexual activity and negative outcomes and increase the use of healthy sexual choices including abstinence and contraceptive use.

Adolescence is a time for exploration and development of competence in self-health. Positive sexual health education implementation, combined with appropriate screening of potential risk factors, can influence adolescents to make positive decisions related to their self-health. A sexual health curriculum should include anatomy and physiology of reproductive health and sexually transmitted diseases, support in personal behavioral beliefs and attainment of future goals, and skills training in communication and negotiation in sexual refusal and consent. The curriculum needs to be time sensitive and interactive during the session.

After reviewing the different sexual health curriculums available, it was determined that *Making A Difference!* designed by Jemmott (2011) aligns with the needs of the older adolescent. The developers, Jemmott, Jemmott, and McCaffree (2011), have

a commitment to ensure that inner-city youth have long, healthy, and productive lives by reducing health risks. Being in late adolescence and adapting to a new phase of personal responsibility as well as freedom, college-age students are of a population that is likely to engage in sexual health risks unless they have the knowledge and skill required to avoid social pressure for unwanted sexual activity or to engage in unsafe sex practices. *Making a Difference!* was developed, pilot-tested, implemented and evaluated in a National Institutes of Health grant-funded study. The purpose of the curriculum is to educate and increase personal knowledge and perception of personal vulnerability of the participants. Included in the curriculum are tools to assist the participants in developing positive attitudes regarding sexual health including negotiation skills and self-confidence necessary to abstain from risk taking behaviors. The adaptability of the curriculum material allows for condensing the materials into three sessions lasting two hours in length. The activities were developed with the older adolescent's knowledge and negotiation skill in perspective. The implementation was viewed through a conceptual framework to provide the best practice with the setting of the older adolescent environment.

CHAPTER 3

CONCEPTUAL FRAMEWORK

Evidence-based practice (EBP) is an explicit process that enables clinicians to seek out the best practices and make determinations regarding how to incorporate these practices into a particular setting. Clinicians who practice EBP seek out the best available evidence to inform decisions to provide the highest quality and effective care for clients (Wolff & Desch, 2005). In a literature review of EBP, Wolf and Greenhouse (2007) identified five trends that reinforce the need to use an evidence-based approach to practice in developing effective care delivery systems for the future. One of these trends is changing clients' level of knowledge. Utilizing the conceptual framework of the Johns Hopkins nursing evidence-based practice model (JHNEBP) provides a useful clinical perspective for this scholarly project.

The JHNEBP model facilitates the translation of evidence to clinical, administration, and educational nursing practice (Melnik & Fineout-Overholt, 2011). In 2002, the Johns Hopkins Hospital recognized the gap in implementing research to clinical nursing practice and developed the model to assist organizations with the implementation process.

Overview

The JHNEBP model was initially designed as a clinical decision-making model for bedside clinical nurses (Poe & White, 2008). The model has proven to be effective not only for clinical practice questions but also for administrative, operational, and educational questions. The JHNEBP model illustrates the concept that a core of

evidence, both research and non-research, supports and is at the center of professional nursing. The model depicts the organization as an open system and recognizes the many influences, internal and external, that affect the need for, and the organization's ability to implement EBP (Poe & White, 2008).

Theoretical Concepts

The JHNEBP process was designed in three phases to provide the clinician with a step-by-step guide. The first step is developing a practice question of importance. Next the evidence is located and reviewed. The final step is translating the evidence into practice. Steps one and two have been discussed thus far, with the discussion of final step of translation to follow. Translating evidence requires project management.

Project management is described as a process by which projects are defined, planned, monitored, controlled, and delivered (Poe & White, 2008). Projects require a focused effort to execute. Poe and White (2008) describe the importance of procuring sufficient resources to accomplish the aim of the project. Project attributes and constraints must be considered.

Theoretical Application to Addressing Sexual Health Wellness Outcomes

The transtheoretical model (DiClemente et al., 1991) demonstrates how people engaging in a new healthful behavior (acquisition) or stopping old unhealthy behaviors (cessation) move through a series of change. These stages are precontemplation, contemplation, preparation, action, and maintenance. Stage movement is usually cyclical, rather than linear, because most individuals make several attempts at change before reaching maintenance. One important variable is self-efficacy, which has been operationalized within the transtheoretical model as confidence in the ability to perform

the new, healthful behavior and resist temptation to engage in the problem behavior across a variety of problematic situations (Redding & Rossi, 1999). In a model of self-efficacy for safer sex among college students, Redding and Rossi (1999) found that participants rated their confidence in practicing safer sex within five situations: negative affect, sexual arousal, perceived low risk, partner pressure, and substance abuse. Stages of readiness help identify young adults' self-efficacy in decision making.

The sexual health curriculum assists young adults as they progress through the stages of change while making healthy decisions regarding sexual relationships. Using the stages of change, the facilitator assists participants to engage in safe sex practices.

Sexual Health Education Wellness

The concept of self-efficacy is utilized as the basis for the implementation process of this project in framing an educational intervention that addresses sexual health and wellness education among participants (see Appendices). This concept is based on Albert Bandura's social cognitive learning theory and is defined as a cognitive process of individuals' confidence in their perceived ability to regulate their motivation, thought processes, emotional states, and social environment in performing a specific behavior (Bandura, 1997). The theory directs attention to the specific beliefs that underlie attitude, subjective norm, and perceived behavioral control. These beliefs can be targeted by behavior change interventions such as education regarding risks and the practicing of decision making and negotiation skills.

Self-efficacy has been shown to predict the initiation and duration of various health promoting behaviors (Bandura, 1997). In a study focused on interpersonal and intrapersonal factors thought to be associated with condom use, Gutierrez, Oh, and

Gillmore (2000) noted the self-efficacy model was useful in predicting condom use among women ages 14–19 years. The study noted that the higher the women's belief that she was knowledgeable regarding condom use and willing to initiate use, the more frequent the use of condoms. A similar concept, the Ajzen and Fishbein theory of reasoned action, suggests that a person's behavior is determined by one's intention to perform the behavior and that this intention is, in turn, a function of one's attitude toward the behavior and the subjective norm (Ajzen, 1991). The best predictor of behavior is intention. Intention is the cognitive representation of a person's readiness to perform a given behavior. In a sample population of South African adolescents, Jemmott et al. (2007) noted that the theory of planned behavior identified predictors such as attitudes and perceived control that were related to an increased intention of use of condoms. Byno, Mullis and Mullis (2009) noted that perceived attitudes of parents directly related to participant sexual permissiveness and to sexual practices of college-age women and their perceptions of self-efficacy. Increases in self-efficacy of college-age participants in turn increases health and wellness promotion.

Following the JHNEBP model, a problem of the need for an increase in sexual health and wellness of college students was identified. A review of literatures demonstrated EBP programs available for use. An EBP was selected. Implementation included an overall evaluation of the sexual health and wellness intervention. Evaluation included the overall change in self-efficacy reported by each participant in the program.

CHAPTER 4

METHODS

Translating the evidence into practice is the final step of the JHNEBP process. Translation process began with the selection of a curriculum, adapting the curriculum for use within the selected population, and continued with the implementation of the program. The purpose of the project was to develop a program from an evidence-based program that give participants the sexual health and wellness knowledge to facilitate individual attitude and behaviors which promote a sexual lifestyle in which the participant is empowered to make decisions based on personal beliefs. The program facilitates skills in negotiation of consent, social pressures, and the recognition of comprising behaviors such as multiple partners, unprotected sexual relations, combining alcohol and drug use with sex, and domestic sexual violence. The program facilitates clarification of gender socialization and perceptions about the majority of college sexual behaviors. Individual outcomes are sexual health and wellness goals.

Setting

The purpose of the DNP project was to implement the selected curriculum within the setting of college students on Grand Valley State University (GVSU) campus. GVSU is a public liberal arts university located in Allendale, Michigan, United States. The university was established in 1960, and its main campus is situated on 1,270 acres approximately 12 miles west of Grand Rapids (GVSU, 2013). The enrollment for the 2012-2013 academic year was 24,654 total students with 21,317 being undergraduate students. The population of focus was the undergraduate student.

Program Development

Making a Difference! is an evidence-based, abstinence approach to teen pregnancy, STD, and HIV prevention. The developers, Jemmott, Jemmott, and McCaffree (2011), envision adolescents having long, healthy, and productive lives by reducing health risks. Being in late adolescence and adapting to a new phase of personal responsibility as well as freedom, college-age students are of a population that is likely to engage in sexual health risks unless they have the knowledge and skill required to avoid social pressure for unwanted sexual activity or to engage in safe sex practices. The purpose of the curriculum is to educate and increase personal knowledge and perception of personal vulnerability of the participants. Included in the curriculum are tools to assist the participants in developing positive attitudes regarding sexual health including negotiation skills and self-confidence necessary to abstain from risk taking behaviors.

Design of the Project

The design of the curriculum includes 8 modules that meet the objective of giving the participants information to understand the issues; cognitive skills to examine their own personal beliefs about personal risks and consequences; intrapersonal skills to understand and manage personal thoughts and feelings, and the sense of self-efficacy to apply gained knowledge to their sexual choices (Jemmott, Jemmott, & McCaffree, 2002). The *Making A Difference!* curriculum includes interactive learning experiences designed to increase participation and assist participants to understand the kind of faulty reasoning and decision-making that can lead to negative outcomes such as unplanned pregnancy, STD, and other risk taking behaviors. The activities include games, brainstorming, role-playing, and engaging in skill-building exercises. Overall group discussions are designed

to build group cohesion to enhance the learning experience. The entire curriculum is designed to encourage participants to make a difference in their lives and communities by making healthy sexual choices, being proud of themselves, their families and their communities, and behaving responsibly for everyone's sake.

Adaptation of the curriculum was completed to reflect the development level and learning styles of the college student. The curriculum was developed into a college based curriculum and renamed *Healthy Sexuality: knowledge, action, behavior*. The curriculum was condensed, consisting of three sessions that build on knowledge, attitude, and behavior of the individual participants. Each session continues on foundations begun in earlier sessions. Although the intent is for participants to attend all three sessions, each of the three sessions of *Healthy Sexuality: knowledge, action, behavior* was designed to be a standalone session beneficial to the participant. These sessions would occur over consecutive weeks.

The focus of the first session is on sexual health knowledge (see appendix D). Given that the intervention was with students at an university level, with the likelihood that participants would recall having sexual health education at the junior and senior high level, it was assumed that a basic knowledge level of anatomy and physiology was present among participants. Session one included an introduction and overall explanation of the project and facilitator; a pretest; and a discussion of the importance of understanding oneself, personal goals, and sexual wellness and health including pregnancy and STDs. Session two also included information on personal attitudes and beliefs of participants and responding to social norming and partner pressure. Session two included a question and answer session concerning comments/questions from session

one. Session three included refusal and negotiation skills and addressing other risk taking behaviors such as alcohol and substance use, appropriate behavior guidelines, and using an accountability partner. Sessions two and three included role playing with the outcome of increasing self-efficacy skills. A final evaluation concluded session three.

The project coordinator was a healthcare professional with knowledge and experience in women's health. In a study to assess the impact of educational health instruction, Cordero, Israel, White, and Park (2010) found that students who perceived their instructors as more credible had healthier attitudes about risk taking behaviors such as substance abuse. The use of a health professional matches the *Making A Difference!* curriculum design.

Implementation of the Project

Bell et al. (2007) describe obtaining local support for a program as crucial to successful implementation. The project implementation occurred with the support of the Women's Center at the GVSU campus. Key individuals at the GVSU Women's Center met to share the project ideas of *Making A Difference!* with the program outcome entitled *Healthy Sexuality: knowledge, action, behavior*.

Recruitment of participants took place through advertisements on the GVSU activity web page and within both the living centers and Liberal Arts and Gender Studies classes at the GVSU Allendale Campus. In addition, participants were recruited by invitation flyers and personal word of mouth. Recruitment of resident directors and assistants as well as faculty and staff was necessary to promote the curriculum and implementation dates. The activity web page posted a one-line flyer that explained the *Healthy Sexuality: knowledge, action, behavior* curriculum and an invitation to

participate in the project. The *Healthy Sexuality: knowledge, action, behavior* flyer was added to the calendar of events, receiving approval for Liberal Arts education credit at the 100 and 200 level and endorsement of the GVSU Women's Center. Participants were not required to register, and attendance was recorded using the birth date of each participant's mother to assure anonymity in records kept by the facilitator. The total number of participants over the three program sessions was 61. Participant demographical information and program outcomes are discussed later.

The three sessions of the implementation of the *Making A Difference!* curriculum entitled *Healthy Sexuality: knowledge, action, behavior* were scheduled at the beginning of the winter 2013 semester. A meeting area was secured at the student activity center. The participants were welcomed and light snacks were provided. All sessions progressed as planned with the exception of not having a single participant attend more than one session. The question and answer time brought many questions related to personal sexual health and wellness. The 3 session program was implemented according to the developed plan (Appendix D).

Evaluation of the Project

Evaluation of an implementation project is an important element to determine the effects of the sessions. Evaluation included a written pretest and posttest to evaluate the participants' knowledge of risk taking behaviors. Jemmott, Jemmott, and Fong (1998) originally developed the tool to measure behavioral beliefs regarding abstinence and safe sex outcomes related to the effectiveness of *Making A Difference!*. Knowledge related to sexually transmitted disease transmission and consequences were measured using the tool. The questionnaire instruments were designed to evaluate the effectiveness of the

Making A Difference! curriculum utilizing measures of sexual behavior outcomes, theoretical mediators, moderator variables, and socio-demographic variables (Jemmott, 2011). The instruments were those originally described in the Jemmott, Jemmott, and Fong article published in 1998. The instruments have been used in several replication studies (Jemmott, 2011). The constructs were formulated based on the theoretical framework being applied and elicitation research from focus groups with the target population. The instruments conform to recommended case reports from development guidelines to ensure high data integrity (Jemmott, 2011). The questionnaires employ closed-ended questions as much as possible. The time frame for questions was kept in the same order to maximize reliability and validity of the data as well as make the responses more comparable. Pre intervention and follow-up questionnaires assess sexual behavior, demographic variables, and mediator variables. Post intervention questionnaires assess facilitator variables and evaluative ratings of the interventions.

The questionnaire contains several sections. Section A contains questions that allow for characterization of the kinds of participants in terms of demographic variables. Section B and Section C contain questions about theoretical mediators such as personal and significant other influences which should affect sexual decisions. The intervention attempted to promote the decrease in risk taking behaviors by changing intentions, attitudes, behavioral beliefs, perceived norms, normative beliefs, perceived self efficacy, control beliefs, and STD risk-reduction knowledge. Section D concerns sexual behaviors. A chief aim of the project was to reduce the risk of STDs and unintended pregnancy as well as increase decision making processes. Section E focuses on knowledge relevant to sexual risk behaviors reflecting STDs. Section F is the Marlowe-

Crowne Social Desirability Scale. It is a measure of the tendency of people to present themselves in a socially desirable manner rather, than an accurate manner. This was relevant to the project where the encouragement of participants to engage in sexual health and wellness behaviors and then later asking them if they engaged in such a matter, can produce biases. Section G included general information about the project included in the follow-up questionnaires. The evaluation, through the use of the questionnaires, provided valuable information about the implementation of the project. The tool was adapted to use gender neutral language and included the definition of sexual intercourse to refer to sexual acts between partners that include the stimulation of the genital area of at least one of the participants. For validating the internal consistency of some of the questions, four questions that all asked nearly the same thing about anticipated action concerning sexual activity were evaluated with the Cronbach's Alpha test resulting in a high value of 0.937.

Following the sessions, comparisons of the data were completed. Three concepts were tested for changes. The first concept was knowledge concerning sexual health and wellness. The focus of knowledge pertained to sexually transmitted diseases and prevention of adverse outcomes of being sexually active. The second concept measured was attitude towards sexual health and wellness. Attitude questions measured participant and participants' interpretation of significant others' (parents, friends, and sexual partners) feelings regarding participation in sexual intercourse and the potential ability and willingness to use condoms to prevent adverse outcomes. Behavior questions measured the decision to engage in sexual activity, the number of sexual partners both historical and past three months, and reports of actual condom usage. In addition,

questions were asked regarding engaging in sexual activities while under the influence of alcohol and drugs.

To compare the change in individual questions of interest, Wilcoxon Signed Rank Sum tests were performed. Paired *t*-tests were performed to analyze the change in score totals for each category for each student. This was a matched pair design where session three participants in the pretest are the same participants in the posttest ($n = 15$). A two-sample *t*-test was performed to determine if there was a difference in attitude score among students with married biological parents as compared to non married biological parents. It is to be noted that there was a short time frame between time of pretest and time of posttest. Pearson's correlation was calculated to explore an association between the overall attitude score and behavior score for each student. A discussion of the results is explained in Chapter 5.

Descriptive statistics were used to note the demographics of the participants. Since the program was voluntary, the demographics demonstrate the acceptability of the program to students at Grand Valley State University. The demographics identify the living arrangements and education year of the participants. These data provide an assessment of needs for further expansion and future promotion of the available programs on sexual health and wellness.

The post evaluation included debriefing questions. These questions reflect the feedback of the participants and lead to development of a stronger program that matches the needs of the participants. They provided feedback for the facilitator as well as the GVSU Women's Center.

Ethical Considerations

Human subject considerations were adhered to for this program evaluation project. This program involved implementation of an evidence-based practice educational intervention for sexual health and wellness of college students. As such, there was minimal risk to participants who participated in the program and completed the pre and posttest evaluation tools. The protocol for the project was reviewed by the Human Research Review Committee of Grand Valley State University and it was determined that it did not represent human subject research (see Appendix F).

CHAPTER 5

RESULTS

The characteristics of the participants of the sexual health and wellness program, the results from the pretest and posttest, and the overall comments and response to the evidence-based practice intervention inform the Johns Hopkins nursing evidence-based practice model (JHNEBP). Chapter 3 discussed the JHNEBP model with the final step being the translation of the evidence into practice. Over the course of the project, the translation of the evidence-based approach program, *Making a Difference!* (Jemmott et al., 2002), entitled *Healthy Sexuality: knowledge, action, behavior*, was implemented within the setting of college participants on the Grand Valley State University campus. This action completed the JHNEBP model. The results of the implementation are discussed in the remainder of this chapter.

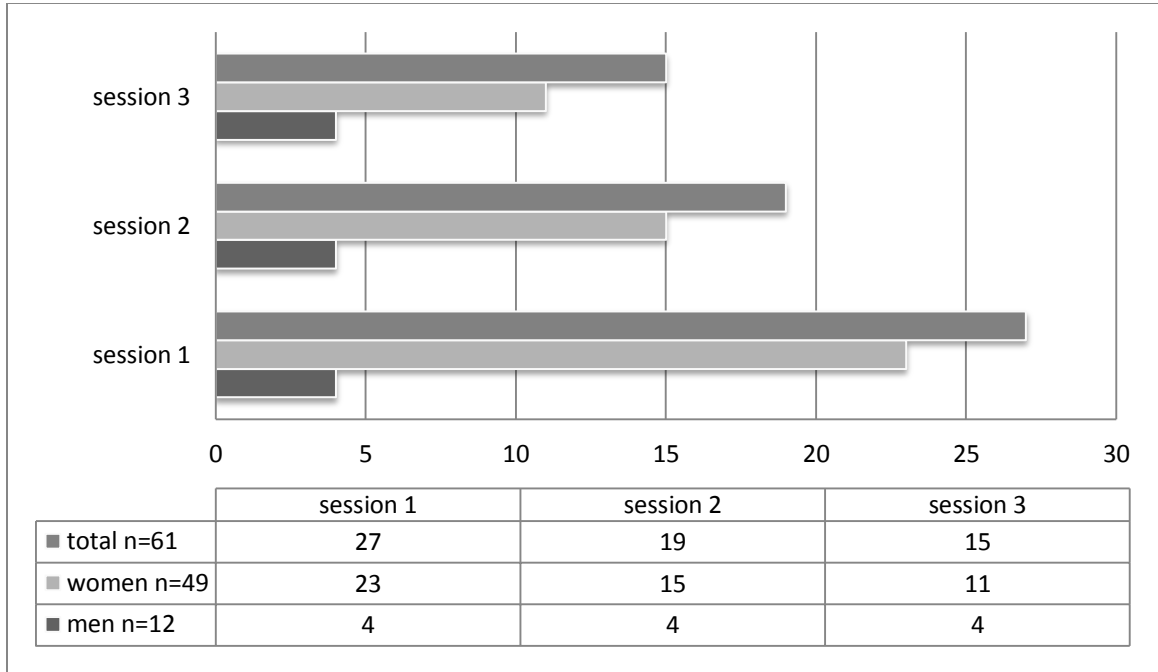
Data analyses were completed using the Statistical Package for Social Sciences (SPSS) software, version 17. Bivariate procedures were used to explore differences in sexual health and wellness knowledge, attitude, and behaviors before and after program participation. The level of significance was set at $p < .05$ for all statistical procedures.

Demographics

The participants of an evidence-based approach for the sexual health and wellness program for university students entitled *Healthy Sexuality: knowledge, action, behavior*, were recruited by invitation flyers and personal word of mouth. The *Healthy Sexuality: knowledge, action, behavior* flyer was added to the calendar of events, receiving approval for credit toward Liberal education requirements at the 100 and 200 level and endorsement of the GVSU Women's Center. Participants were not required to register

and attendance was recorded using each participant's mother's birth date to assure anonymity in records kept by the facilitator. The total number of participants over the three sessions was 61. Figure 1 illustrates the breakdown of participants per session. It should be noted that no single participant attended more than one session.

Figure 1. Participant attendance per session.

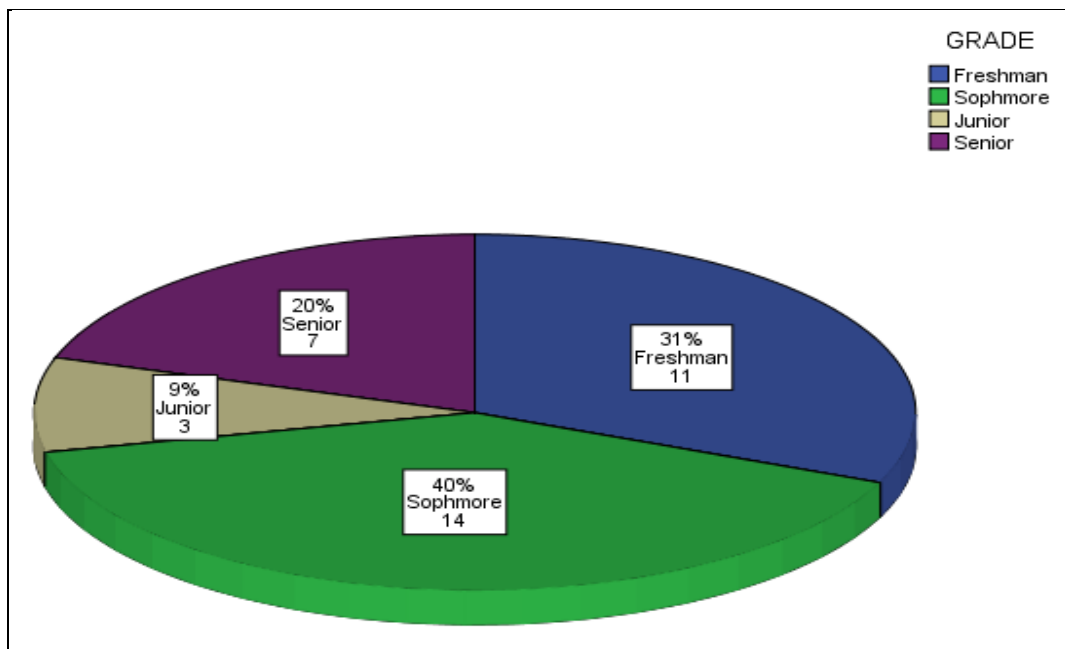


Pretest data were obtained on 44 participants and posttest data were obtained on 15 participants. It should be noted that on session one, the attendance was greater than anticipated. This unexpected increase in attendance caused a shortage in the number of available copies of the pretest. Therefore, since the pretest and posttest were identical except for demographics being included in the pretest and post session survey questions being included in the posttest, copies of the posttest were given to the additional session one participants to complete. It should be noted that the demographical information was obtained via the pretest and GVSU Women's Center program evaluations.

Demographics are the quantifiable characteristics of a given population.

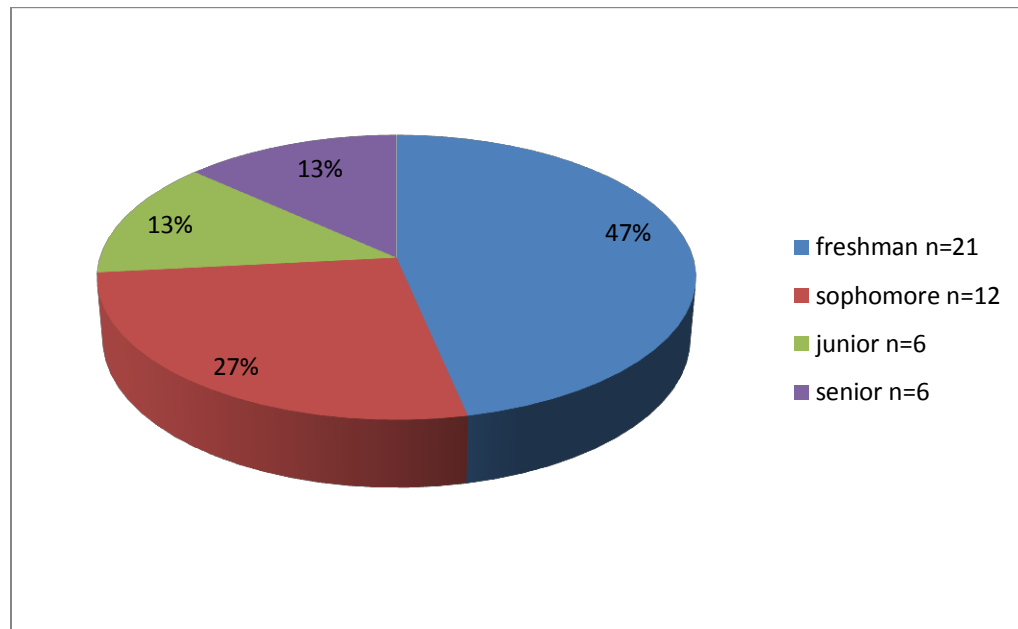
Participants were asked to provide their grade level, living arrangements, and ethnicity, and the marital status of their biological parents. Based on a combination of the pretest demographics and the program evaluations, approximately 31 to 47 percent of the participants stated their grade level as freshman. Sophomores represented around 27 to 40 percent while the remaining 26 to 29 percent were juniors and seniors. Figure 2 demonstrates the participant distribution by grade level according to the pretest demographical data. Figure 3 demonstrates the participant distribution by grade level according to the GVSU Women's Center program evaluation. The majority of the participants were underclass students.

Figure 2. Distribution of participants based on college grade level according to the pretest taken by 44 participants.



Note. Although there were 61 total participants, only 44 participants completed the pretest given in session one and three. Session two participants did not complete the pretest.

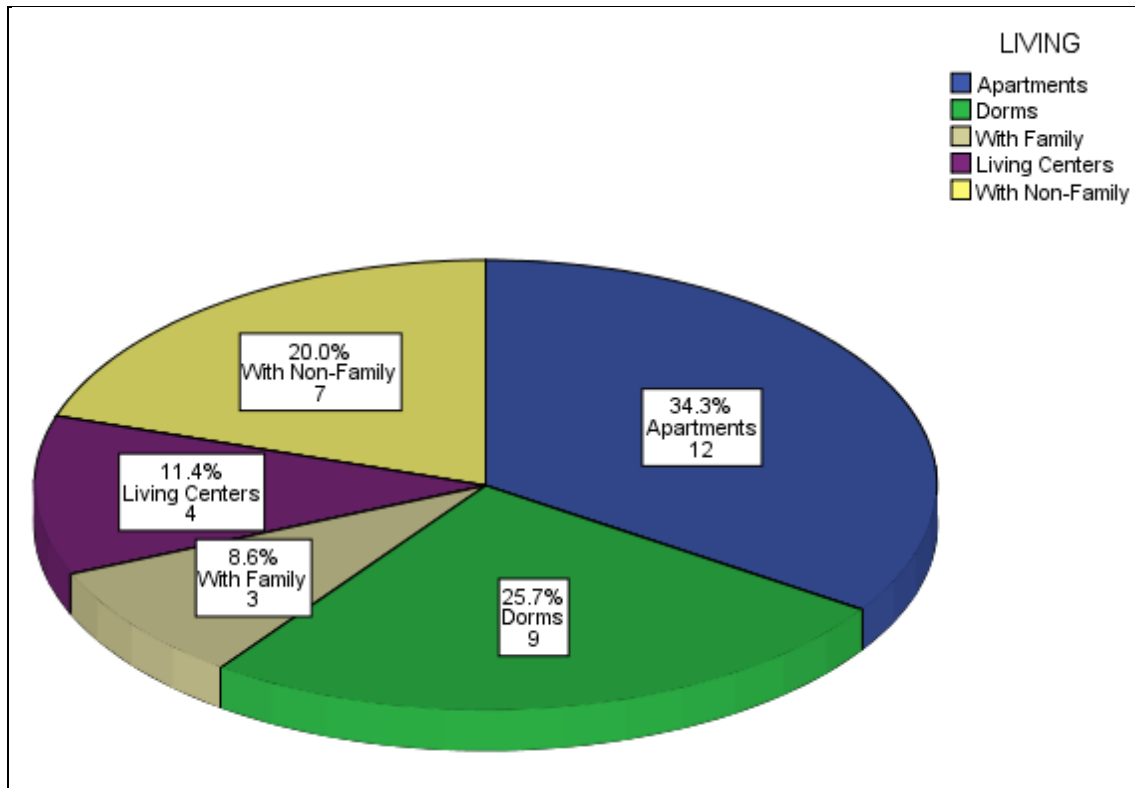
Figure 3. Distribution of participants based on college grade level according to the GVSU Women’s Center program evaluations completed voluntarily by 45 participants.



Note. Although all participants were asked to complete the program evaluation at the end of each session, only 45 of the 61 participants volunteered to complete the evaluation.

Living situation was a second demographic that was analyzed both with the pretests and the voluntary program evaluations. Figure 4 illustrates the breakdown of participants’ reported current living situation at the time of the sexual health program. Approximately 70 percent declared their living situation as on campus housing, either in dorms or living centers. Apartments were the largest percentage of on-campus living. For those living off campus 20 percent of participants lived with a non-related roommate. The remaining participants stated they were living off campus with family members.

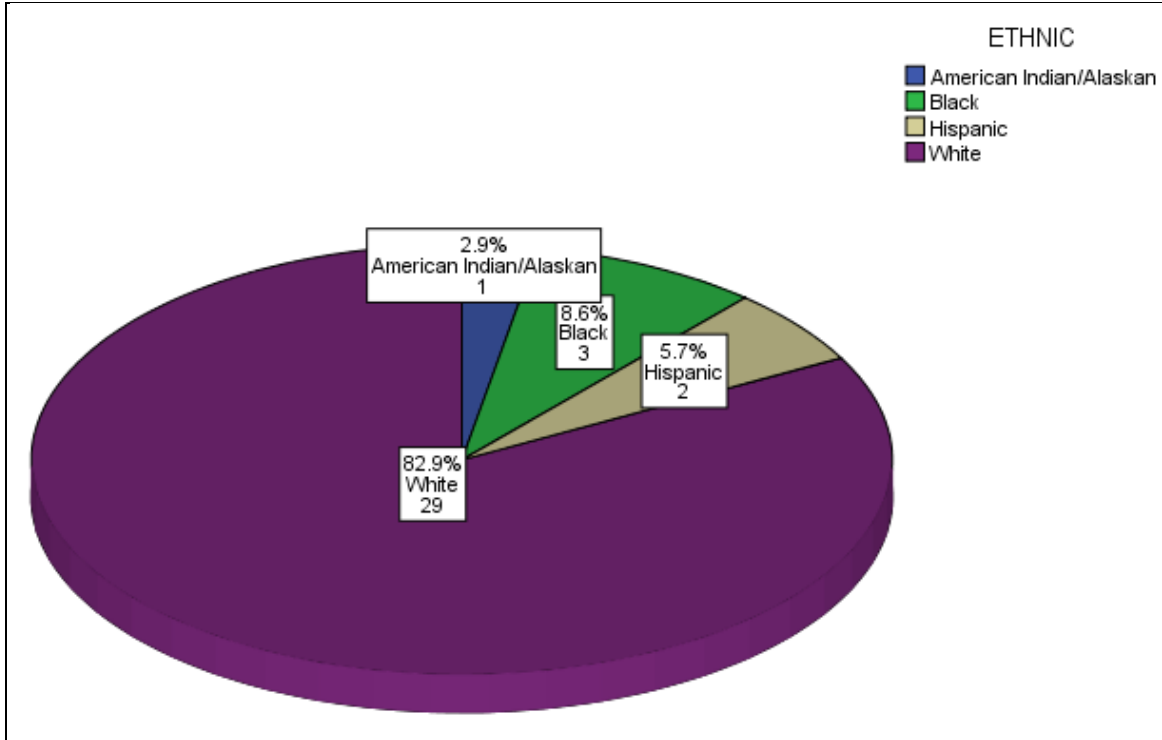
Figure 4. Current living situation as reported by participants according to pretests



Note. These self-reported data were obtained from the 42 participants who completed the pretest evaluation on sessions one and three.

Ethnic status was evaluated on the pretest questionnaire. Over eighty percent of the participant population was white with the remaining divided between Hispanic, African American, and Asian. Figure 5 demonstrates the breakdown of ethnicity of the participants that attended *Healthy Sexuality: knowledge, action, behavior*. The breakdown of ethnicity was similar to that of the GVSU student body.

Figure 5. Ethnicity of participants as self disclosed in pretest



Note. These self-reported data were obtained from the 42 participants who completed the pretest evaluation on sessions one and three.

Other demographics noted were gender and marital status of the participants' biological parents. The participants were equally divided between having married biological parents and having parents who were never married. One participant indicated having divorced biological parents. Although gender was not evaluated on the pre and posttest, of the 61 session participants, 12 participants were observed by the presenter to be male.

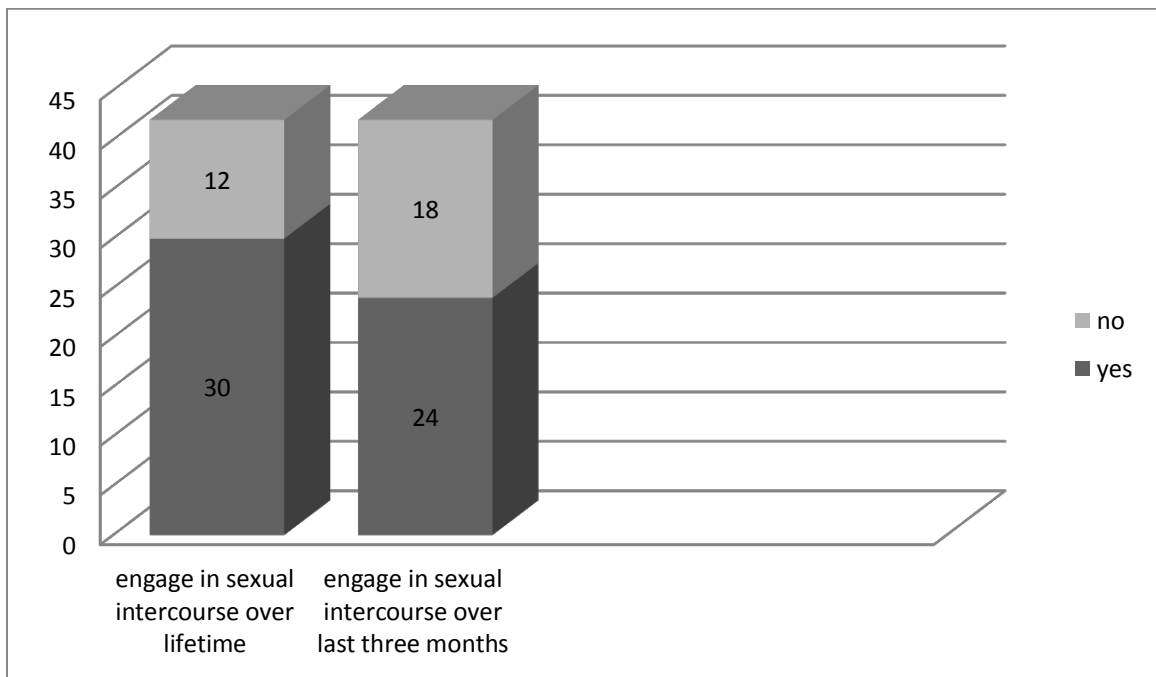
Sexual Activity

Participants addressed a question concerning whether they had ever had sexual intercourse during their lifetime. Twenty-eight percent ($n = 12$) of the participants self-reported never having sexual intercourse. A second question addressed whether the

participant had sexual intercourse within the last three months. For the remainder of this paper, this will be referred to as *recent sexual activity* or as *being sexually active*. Forty-three percent ($n = 30$) of participants self reported that they were not sexually active.

Figure 6 compares participants who have a history of engaging in sexual intercourse with those who have not, as well as the self report of sexual intercourse the previous three months before the intervention.

Figure 6. Sexual activity of participants for historical lifetime and engagement over past three months. $n = 42$

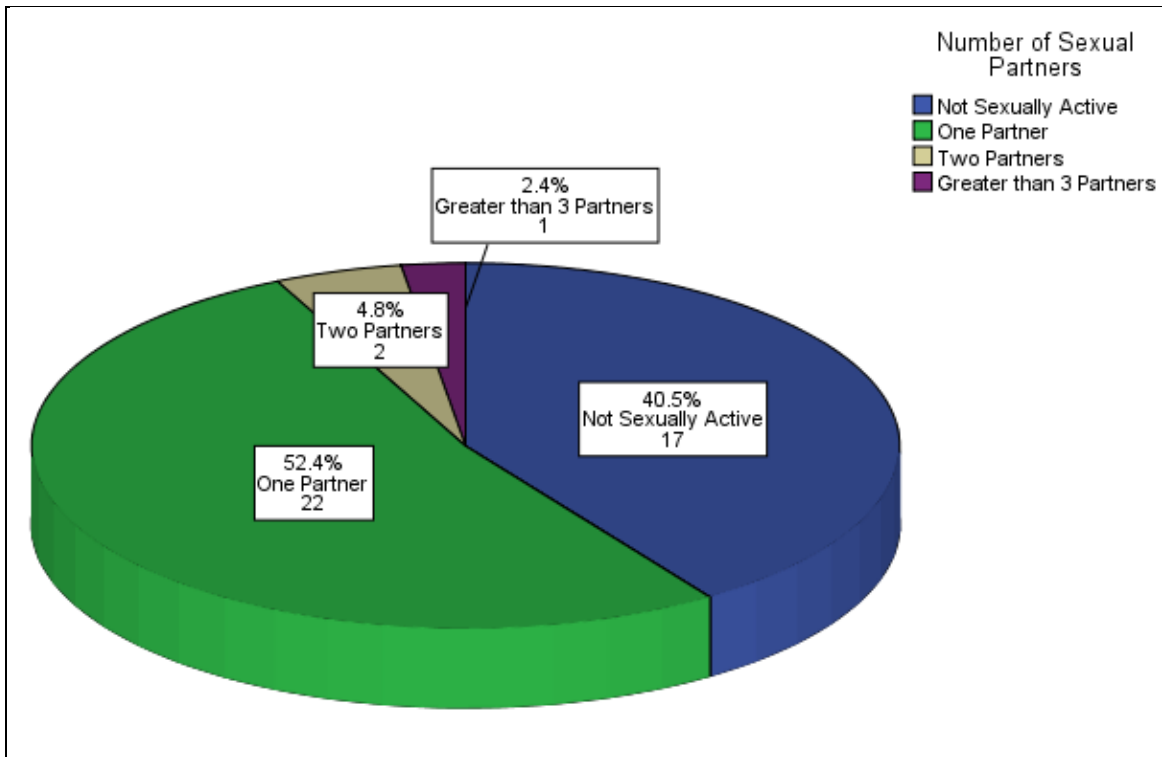


Note. These self-reported data were obtained from the 42 participants who completed the pretest evaluation on sessions one and three.

Just over 50% ($n = 24$) of the participants reported engaging in sexual activity in the last three months. When evaluating just the 25 participants who were sexually active, 88% ($n = 22$) of these respondents noted that their sexual activity was limited to one partner. Seven percent ($n = 3$) of the participants reported two or more partners within

the last three months. Figure 7 demonstrates the breakdown of this information. This population is at risk for negative outcomes from this high risk sexual behavior.

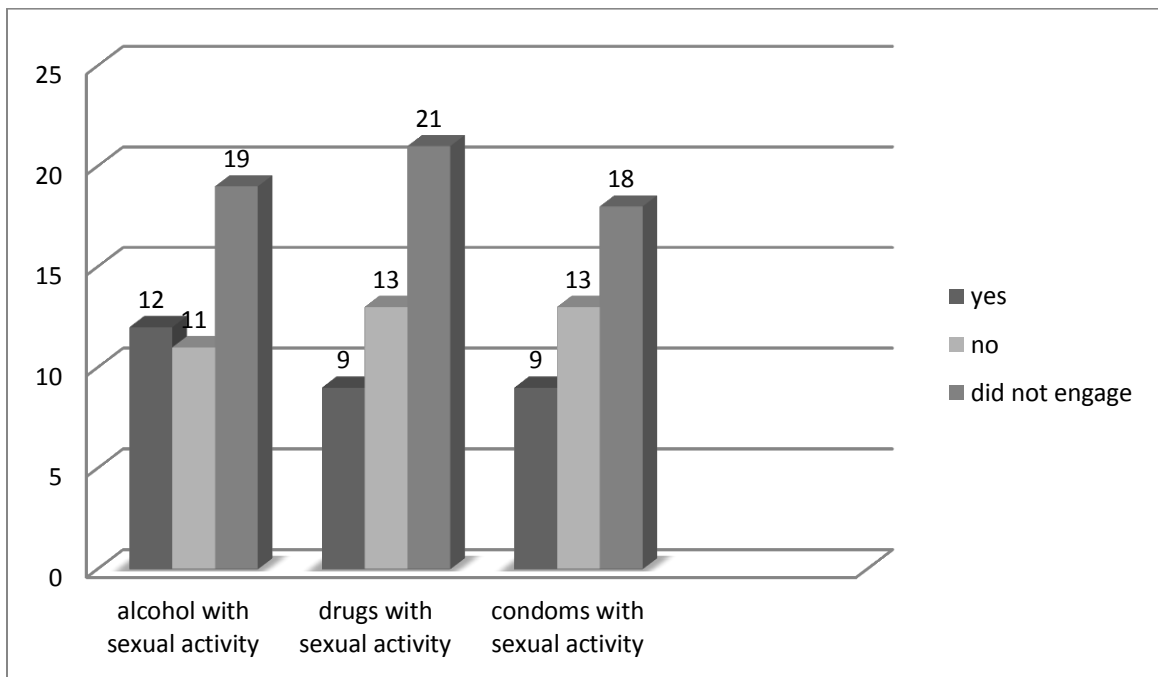
Figure 7. Reported number of sexual partners over last three months



Note. These self-reported data were obtained from the 42 participants who completed the pretest evaluation on sessions one and three.

Another area of high risk taking behaviors related to sexual activity is alcohol and drug usage. Of the approximately 50% of participants engaging in sexual activity, half of those participants also reported using drugs at the time of sexual activity while just under half indicated using alcohol with participation in sexual activity. Figure 8 illustrates the number of participants engaging in high risk behaviors such as alcohol use, drug use, and lack of condom use while engaging in sexual intercourse. Focusing on positive sexual health and wellness behaviors related to alcohol and drug usage was included in the curriculum of session three.

Figure 8. Participants engaging in high risk behaviors



Note. These self-reported data were obtained from the 42 participants who completed the pretest evaluation on sessions one and three.

Data Interpretation

The pretest and posttest were identical in format. The questions were categorized into three areas of theoretical mediators: knowledge, attitude, and behaviors. The online *Merriam-Webster* dictionary (2013) describes knowledge as the fact of knowing something with familiarity that is gained through experience. Sexual health information for college participants was included in the curriculum. The pretest contained a section of questions on the basic knowledge of sexual health. The questions were posed as true/false and had the option of “don’t know” which was considered to be an incorrect response for data analysis. Participants demonstrated an overall acceptable general knowledge of sexual health related to transmission and reduction and prevention of sexually transmitted diseases. Scores on knowledge items range from 44% to 93% on the

true and false questions. There were three questions concerning condom usage towards prevention of adverse outcomes, unplanned pregnancy and STDs, which were evaluated using a 5-point scale ranked from *disagree strongly* to *agree strongly*. The mean score for these questions was 3.90 (SD = 0.6). The questions measured knowledge regarding contraception and sexually transmitted diseases. The questions that students most frequently answered incorrectly were those that focused on the transmission of sexually transmitted diseases during anal or oral sex. The mean of the questions using the 5-point scale demonstrated a general agreement with the concept of using condoms to prevent adverse outcomes, yet did not provide a strong agreement in the use of condoms for the prevention of unplanned pregnancy and self protection from STDs. This information emphasizes and supports that providing sexual health information to students is important.

During the planning phases of this project, it was determined that a pretest would be given prior to session one with a posttest given at the conclusion of session three. It was planned that the data would be analyzed with respect to overall scores in each category and the change in attitudes for each individual student. Although it was the expectation that participants would attend all three sessions, this was not the case in this project implementation. Not one participant attended more than one session. This phenomenon was noted at the second session and plans were made for the final session to provide a pretest, followed by the intervention session, and then completion of the posttest. This would allow for session three participants to be evaluated according to the project plan, before and after the education portions of the program. The scores for items on each of the 3 categories of the sexuality questionnaire were averaged for each student

resulting in 3 overall scores, for attitude, behavior and knowledge. To explore whether the students who had taken the survey once differed on these characteristics at pretest from those who eventually completed it twice, 2-sample *t*-tests were used. Average scores for attitudes, behaviors, and knowledge were not significantly different between the groups.

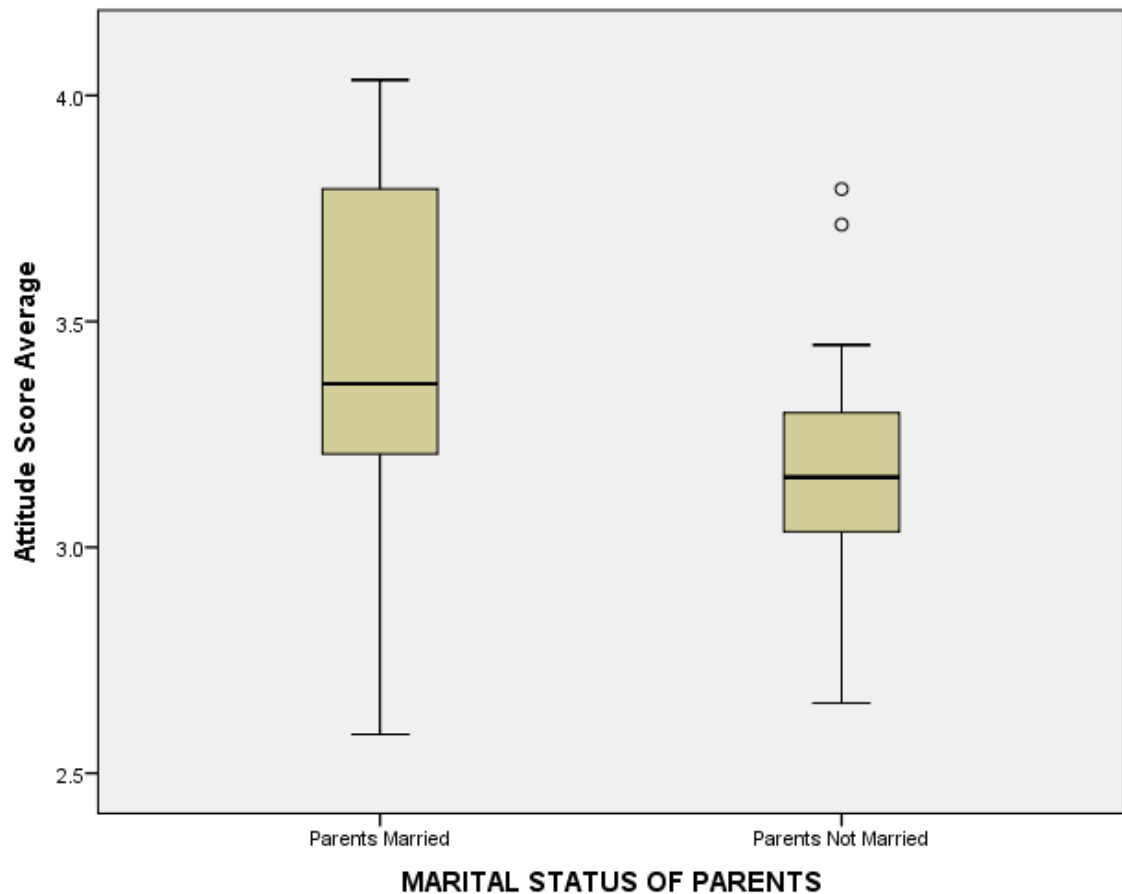
For specific selected questions of primary interest, the responses were analyzed separately for the participants ($n = 15$) to look for any change in response between the pretest and posttests. It was of interest if the intervention had an impact on three areas of interest: participant knowledge of STDs, sexual attitudes and sexual behaviors. Paired *t*-tests were performed on the change in score for each individual participant comparing the pretest score with the posttest score for these questions. However, no statistically significant difference was found in the overall participant knowledge scores between pretest and posttest ($t = 0.61, p = 0.5519$). In addition, no statistically significant difference was found in the overall participant attitude scores between the pretest and posttest ($t = -0.19, p = 0.885$). Finally, no statistically significant difference was found in the overall participant behavior scores between the pretest and posttest ($t = 0.22, p = 0.8297$).

There were two questions that addressed attitudes that appeared to change from the pretest to posttest in six participants. The first question stated “I will not have sex in the next 3 months”. The answers were recorded on a five point scale of disagree strongly to agree strongly. On the posttest, three students chose an answer one point higher on the scale towards agreeing with the statement. The second question asked “How easy or hard would it be for you to not have sex in the next 3 months?” The 5-point scale ranked from

very hard to *very easy*. Again, three students, (different from those three students who changed their answer on the first question), chose an answer one point higher on the scale towards it being easier to not have sex in the next 3 months. For both of these items, Wilcoxon Signed Rank Sum tests were not significant ($W = 3, p = 0.125$).

Combining the test questions into attitudes, knowledge, and behaviors scales allows for a more complete analysis of data. Again, with scores ranging from 1 to 5, the mean attitude scores among students with married parents were compared to students with parents who were not currently married. For the participants with married biological parents, the mean score was 3.42 (SD = 0.420). For students with parents who were not married, this mean was 3.18 (SD = 0.296). A *t*-test confirmed a significant difference between the groups ($t = -1.904, p = 0.033$). The distribution of attitudes of the students based on biological parents' marital status is demonstrated in Figure 9.

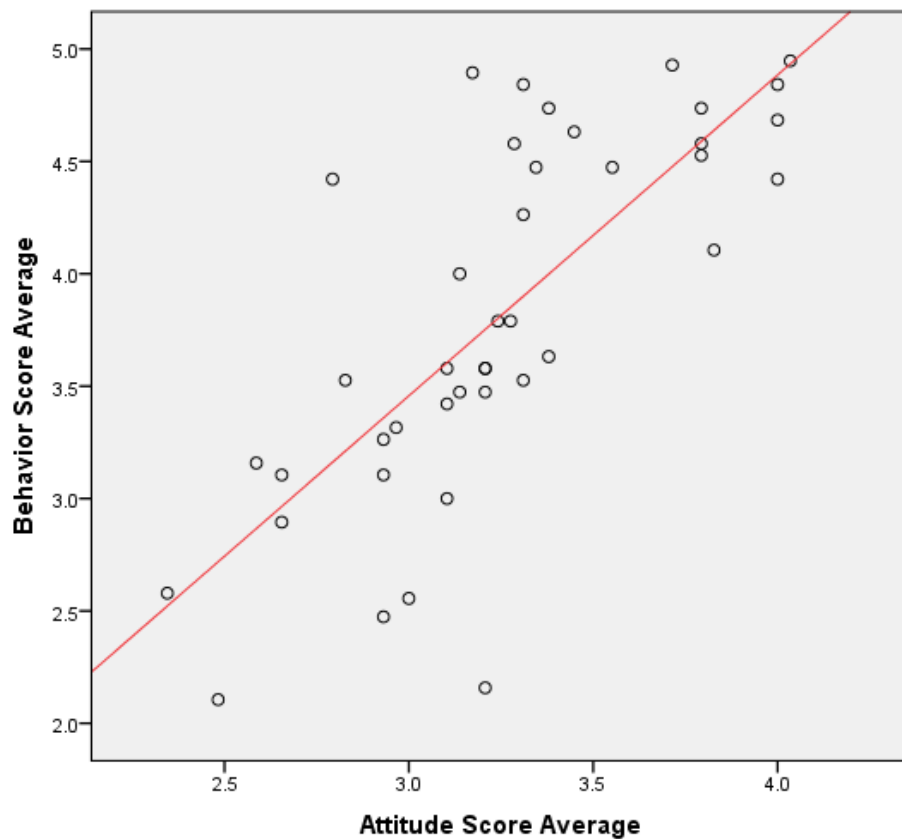
Figure 9. Distribution of sexual health and wellness attitude among participants with biological parents that are currently married and participants with biological parents not married



Pearson's Correlation was calculated to explore the association between the overall attitude scores and behavior scores of the participants. As participants' scores increased on the sexual health and wellness attitude questions, their scores on the personal behavior questions related to sexual health also tended to increase. Positive personal behaviors were described in the test in questions addressing abstaining from intercourse, limiting the number of partners to one within the last 3 months, and

participating in behaviors that reduce sexually transmitted diseases. Positive personal attitudes were described in the test in questions addressing ability to practice abstinence as desired and to use safe sex practices when engaging in sexual activity. The Pearson's $r = 0.743$ and was strongly significant $p < .0001$. Figure 10 illustrates a plot of the association of attitudes and behaviors.

Figure 10. Scatter plot of the association of participants' attitudes and behaviors.



Program Evaluation

Another point of evaluation was the 2012-2013 Student Services Program Evaluation that was given to participants attending each session. There was a program

evaluation given each night by the Women's Center for a total of three administrations. The evaluation was based on the learning outcomes from the Liberal Education and America's Promise (LEAP). The Association of American Colleges and Universities (2012) describes LEAP as a national advocacy, campus action, and research initiative that champions the importance of twenty-first century liberal education. The objectives focused on are critical thinking, foundation and skills for lifelong learning, and integrative learning. Participants were asked to rate the objective on a scale from strongly agree (5) to strongly disagree (1). The overall average scores ranged from 4.08 to 4.89. Appendix E contains a table describing the 2012-2013 Student Services Program Evaluations for the *Healthy Sexuality: knowledge, action, behavior* program.

Participant comments were recorded on both the Student Services Program Evaluations and posttest surveys. These comments included that the information was helpful and the activities required thought and reflection on concepts of consent and negotiation. Participants indicated feeling comfortable with the environment and the activities. Many students remained after the end of the sessions to ask further questions. Some of the participants of session three expressed disappointment on missing the other sessions. A request was made to repeat the sessions. Most participants stated they would recommend the program to others while some had been referred to the session by friends. Overall, the subjective responses were positive.

In conclusion, as the score for behavior questions increased, the score for attitude questions also increased on average indicating that a positive attitude towards healthy sexual behaviors indicates healthier sexual choices. Testing knowledge of the participants indicated that although the knowledge levels were high, a knowledge deficit

pertaining to anal and oral sexual activities remains. Subjective information from the participant program evaluation noted an overall agreement that the program entitled *Healthy Sexuality: knowledge, action, behavior* based on the curriculum *Making A Difference!* met the learning objectives.

CHAPTER 6

DISCUSSION

The purpose of this scholarly project was to implement an evidence-based intervention designed to improve sexual health and wellness knowledge, attitude, and behaviors. In addition, it provided an opportunity to collaborate with the GVSU Women's Center to provide programming valuable to the student population. This chapter will discuss accomplishments and challenges that were encountered during program development and implementation in accordance with structure, process, and outcomes. In addition, a summary of limitations will be addressed. Finally, feasibility and sustainability of the project along with the Doctor of Nursing Practice (DNP) roles and *Essentials of Doctoral Education for Advanced Practice* related to the project implementation will be analyzed.

Discussion of Findings in Relationship to the Literature Review

The outcomes from the scholarly project were representative of the literature review described in Chapter 2. The pretest discussed in Chapter 5 provided data that approximately 50% of participants reported being sexually active in the past three months. During the session, some students expressed concerns about not having the sexual knowledge and experience that they assumed other college students possessed. This perception is consistent with a report from Scholly et al. (2005) who noted that students overestimated their peers' levels of sexual activity. These misconceptions support the project's aim of educating college students concerning sexual activities.

Providing sexual health education at the college level addresses needs of the adolescent who is in a transitional phase into adulthood. Knowledge is built upon early reproductive health information received in the junior and senior high education. Sexual health and wellness programs focused on the college participant addresses attitude and behaviors towards abstinence and health sexual choices. Although in the current project, there were no statistically significant changes in participants' knowledge, attitudes and behaviors, which this is congruent with Aarons et al. (2000). They found that there were no changes in sexual intent among participants. In addition, Milhausen et al. (2008) found no significant differences in reported frequency of sex between the sexual health intervention group and the control. While it was difficult to evaluate changes in attitude and behaviors over the short 2-hour time frame of the intervention, comments given on program evaluations indicate that the content of the intervention challenged students to think about personal sexual health and wellness. This is consistent with Rye et al. (2008). They found that there was an impact on the participants related to sexual health knowledge, the ability to communicate sexual matters, and the confidence in personal ability to enact a variety of safer sexual behaviors (see Appendix A). The data analysis revealed that there was an association between attitude and behaviors. Finally, it was noted that 6 participants reported changes in attitude toward healthier sexual behaviors from the pretest and posttest answers.

The subjective comments during the sessions support the continuation of the program delivered during this scholarly project. The participants describe the program intervention as informative and helpful with planning of decision making related to sexual activity. These statements are consistent with Higgins et al. (2011) who noted that

although many respondents reported that they were satisfied with their current sexual lives, they would like to enhance their sexual well-being with information to improve sexual self-comfort, alleviate sexual guilt, and promote longer term relationships.

Overall participant feedback denotes the success of the project programming.

Conceptual Framework

The JHNEBP process was designed in three phases to provide the clinician with a step-by-step guide. The first step is developing a practice question of importance. Next the evidence is located and reviewed. The final step is translating the evidence into practice. The scholarly project was implemented within the desired setting with the desired participants. The evidence-based practice curriculum of *Making A Difference!* was translated to be implemented at the college level producing the program entitled *Healthy Sexuality: knowledge, action, behavior*. Developing this program has been a learning process related to the translational process. This process combined the educational, developmental, and activity level to create a curriculum that engaged the participants in an interactive session program. The process of the scholarly project has taken the course of the three steps.

The concept of self-efficacy was noted in the results of the scholarly project. The outcome of a significant positive linear relationship between each student's attitude and behavior scores notes that when the participant stated a higher level of positive sexual health attitude, a positive behavior was associated. As participants' scores increased on the sexual health and wellness attitude questions, their scores on the personal behavior questions related to sexual health also tended to be higher on average. These beliefs and attitudes can be targeted by behavior change interventions demonstrated by the scholarly

project implementation of education regarding risks, and by practicing of decision making and negotiation skills.

Feasibility/Sustainability

The feasibility and sustainability of the scholarly project being continued within the immersion site is possible. The program evaluations discussed in Chapter 5 demonstrated the overall interest in the topic and success as a program. The GVSU Women's Center has expressed interest in the continuation of the program. The cost of implementing the program is based on facility rental, printing of handouts, and compensation of the facilitator. The curriculum has been developed and a current copy has been placed on file at the GVSU Women's Center.

Sustainability requires a program facilitator. This program developed from the scholarly project requirement of the DNP program at Kirkhof College of Nursing. In order to maintain the program, the facilitator could return to be a guest presenter or possibly train a new facilitator. The program notes, power points materials, and interactive activities have been developed. The GVSU Counseling Center has also expressed interest in the program curriculum. With the addition of a nurse practitioner on staff at the counseling center, this may present an option for the continuation of the program *Healthy Sexuality: knowledge, action, behavior*. Sustainability will depend on a program facilitator.

Policy

Rodwin (2001) notes that when evidence suggests that one therapy is superior to another, this information can be used to change prevailing medical practice. The Patient Protection and Affordable Care Act (ACA) of 2010 is landmark legislation designed to

expand access to care (Lee, Kelly, & McHugh, 2011). With the passage of this legislation and the upholding of the ACA by the Supreme Court, adolescents will have the available medical access needed to become and continue to stay healthy. In a case study report of public school sexual health curriculums, Allotey et al. (2011) notes challenges faced in mainstreaming the teaching of sexual and reproductive health and rights into public health education. Allotey et al. defined sexual and reproductive health and rights education as including not only its biomedical aspects but also an understanding of its history, values and politics, grounding in gender politics and social justice, addressing sexuality, and placed within a broader context of health systems and global health (2011). Sexual health and wellness needs to be a continuum, beginning in the early junior high educational years and progressing throughout the transitional years of college. Sexual health and wellness programs can be incorporated into the educational curriculum. Health care workers will be able to use sexual health and wellness curricula to assist adolescents in making healthy choices.

This scholarly project of *Healthy Sexuality: knowledge, action, behavior* based on the *Making A Difference!* curriculum has been an example of a sexual health and wellness education project. It is based on participants' positive attitudes and beliefs regarding abstinence, abstinence negotiation skills, and confidence in the ability to abstain from sex or make the decision to participate in sexual activity when ready (Jemmott, Jemmott & Fong, 2010). The project has been facilitated with the campus Women's Center utilizing campus housing for the recruitment of incoming college participants. This curriculum provided prevention education to increase self-awareness and knowledge of sexual pressures and experiences during this transition into adulthood.

DNP Roles

As a practice-focused profession, nursing responds to the healthcare needs of individuals, communities, and systems. The roles of the DNP nurse contribute to healthcare. The roles of clinician, leader, advocate, scholar, innovator, and educator are important aspects of the doctorally prepared nurse. Chism (2013) states that leadership and collaboration are integral aspects of every potential role of the DNP graduate. Completion of the scholarly project has allowed for leadership skills in identifying an interest in a practice problem, analyzing literature, investing in a conceptual framework, planning a curriculum program, implementing the planned program, and evaluating the program outcomes while planning for future implementation.

Designing a program based on an evidence-based curriculum, *Making A Difference!* (Jemmott et al., 2002), demonstrated clinical leadership in the role of an innovator and educator. The *Healthy Sexuality: knowledge, action, behavior* program included three preplanned sessions that included activities such as interactive power point games to educate the participants on sexually transmitted diseases, scenarios that promoted role playing, and several uses of media to demonstrate gender socialization. The clinician and educator roles were represented with an open question and answer forum at the end of each session.

The role of advocate has been demonstrated in this scholarly project by focusing on ways to raise awareness of violence against women, providing prevention education, and improving reporting and documentation of violence. The mission of the GVSU Women's Center is to create meaningful learning about women and gender and to advocate for gender justice through the education, engagement, and empowerment of

students and the greater GVSU community (GVSU Women's Center, 2011). The scholarly project fits within the scope of this mission.

DNP Essentials

The *Essentials of Doctoral Education for Advanced Nursing Practice* outlines the curricular elements and competencies that demonstrate the DNP candidate's skills and abilities (American Association of Colleges of Nursing, 2006). The DNP Essentials delineated here address the foundational competencies that are core to the advanced nursing practice role.

Essential I is the *scientific underpinnings for practice* (AACN, 2006). This scholarly project has allowed for the integration of nursing science into a clinical practice. During the course of the project, an evidence-based program developed for junior and senior high school was adapted and applied to an older population, college students. This integration of a curriculum has allowed for the development and evaluation of a new practice approach.

Essential II is *organizational and systems leadership for quality improvement and systems thinking* (AACN, 2006). The scholarly project has allowed for the development and evaluation of care delivery (sexual health implementation programs) approaches that meet current and future sexual health and wellness needs of a patient population based on self efficacy toward attitudes, behaviors, and knowledge. Communication skills have been utilized to coordinate the sexual health and wellness program. The program was developed with a conscious effort for gender neutral language. The program encouraged the participation of students of gay, lesbian, queer, bisexual, and other sexual

orientations. Overall leadership was demonstrated in all stages of the project from conception to evaluation.

Essential III encompasses *clinical scholarship and analytical methods for evidence-based practice* (AACN, 2006). During the course of this project, a literature review on sexual health issues focusing on populations of young adults was completed. The literature review also focused on an evidence-based practice that was implemented and evaluated. The project required time management and budget planning. The data collection and evaluation utilized data spread sheets and statistical software. The data has been disseminated in formal conference settings with the utilization of a poster presentation and in informal settings, such as the GVSU Women's Center. The project will be completed with an oral defense which will employ technology.

Essential IV describes the use of *information systems and technology and patient care technology for the improvement and transformation of health care* (AACN, 2006). During the course of this project, technology has been utilized to create an electronic pretest with the potential to be administered to all GVSU college students for data collection. Data were entered into a code book in an excel spreadsheet, and evaluated with statistical software utilized for analysis. During the early phases of the project, an evaluation of consumer health information sources for accuracy, timeliness, and appropriateness was completed for the project population.

Essential V is *the understanding of health care policy for advocacy in health care* (AACN, 2006). Completion of the scholarly project has allowed for participation in the advocacy for college health both at the local and state levels. Information obtained has been disseminated with community consumers, nursing, other health professions, and

other stakeholders such as the GVSU Women's Center. Advocating for social justice in the arena of violence against women has been a highlight for this project.

Essential VI is *enacting interprofessional collaboration for improving patient and population health outcomes* (AACN, 2006). This scholarly project has allowed for work in an interprofessional environment collaborating with other disciplines, such as social work, psychology, education, and students at both the undergraduate and graduate levels. Employment of effective communication and collaborative skills in the development and implementation of the curriculum has been important to planning for the sustainability of the program.

Essential VII is the *competency in clinical prevention and population health for improving the nation's health* (AACN, 2006). The objective of the scholarly project has been the promotion of sexual health and wellness of college students. Analyzing epidemiological, biostatistical, environmental, and other appropriate scientific data related to individual, aggregate, and population health for college students has been a focus of this project. There has been sensitivity to diversity in regards to sexual orientation and cultural backgrounds within the program development.

Essential VIII is the focus on *advanced nursing practice* (AACN, 2006). This scholarly project has allowed for the development of the program design, implementation, and evaluation of therapeutic interventions based on evidence-based practice in nursing. Information obtained during the DNP project was beneficial in implementation of educational programs directed at the sexual health and wellness of the vulnerable college population. The overall learning process has been valuable in the development of the advanced nursing practice role.

Limitations

The scholarly project has some limitations. The biggest limitation is the inability to fully evaluate the program because of attendance patterns of participants. In the project development phase, the plan for evaluation was a pretest at the beginning of session one and a posttest at the conclusion of session three. This did not happen as planned because although 61 participants attended, no one returned for a second session. The pretest was only administered to session one and session three participants after it was determined that participants were not attending more than one session. This limited the comparison of the knowledge and attitudes before the session with those following the sessions.

A second limitation was the inability to fully finance extensive advertising. The information describing the program was distributed to the GVSU activity web page and received Liberal Arts Studies 100 and 200 approvals. It may have been helpful to have been able to post information fliers throughout the campus and place an announcement within the school newspaper. It may also be helpful to offer a different incentive to attend all sessions. This incentive could be included in the advertising. Although a fifty dollar cash drawing was offered to participants who attended all three sessions, no one attended more than one session. Advertising and offering incentives may have fostered higher attendance.

A third limitation was the factor of weather and timing. The program sessions were held the month of January, 2013. Adverse weather was present all three sessions. January can be a busy month beginning with the return of students from semester break

and the start of new classes. The sessions were held only on Wednesday evening, limiting availability for students to attend alternative days and times.

Recommendations

The recommendation from this scholarly project would be to continue the program. The GVSU Women's Center in cooperation with the Counseling Center could reproduce the program sessions. The program plan has been created. To decrease program session time, the evaluation of the pretest and posttest may be condensed or eliminated to create a session time frame of approximately 60-75 minutes. This decrease in time commitment may draw more students into attending the program events. A second option might be to schedule alternative program times such as a weekend session. It may also be helpful to schedule the sessions both in the fall and winter semesters.

The program could also be facilitated in different environments. Participants may be willing to attend if the program was hosted in different settings such as living environments or other on campus facilities such as the recreation center. To diversify the program site, multiple facilitators, such as healthcare students, could be trained. With the additional availability of facilitators, a variety of settings could be utilized.

The recommendation can be made to continue the systematic evaluation of the program based around the translation of the evidence-based project to other sites. This type of curriculum programming could be implemented at other colleges and universities as well as settings such as community-based facilities. The participant feedback noted a request for similar programs related to sexual health and wellness.

In conclusion, the scholarly project has been a journey of bringing evidence-based practice of sexual health and wellness into a college-based setting. The project has

fostered the roles of clinician, leader, advocate, scholar, innovator, and educator within the DNP prepared graduate. The eight essential competencies that demonstrate the DNP candidate's skills and abilities have been outlined. The goal of meeting sexual health and wellness education needs of college students was addressed. Participants' posttest and program evaluation responses demonstrated individual changes in knowledge, attitudes, and anticipated behaviors. The anticipated outcomes are healthier sexual choices among the participants, reducing the number of STD incidences, unplanned pregnancies, and high risk taking behaviors of drug and alcohol usage. In addition, the participants are empowered to advocate for the sexual health and wellness of other students.

Although this project has been completed, the expedition of the application of learning continues over the lifetime career of the DNP graduate. Reflective evaluation including examination of the DNP roles and the *Essentials of Doctoral Education for Advanced Nursing Practice* brought recognition that the processes to bring an evidence-based program to an organization are as important to the long term goal of improving sexual health and wellness among the college population. Program evaluation resulted in the request to continue the *Healthy Sexuality: knowledge, action, and behavior* sessions. Through the continuous program evaluation of the evidence-based implementation practices, healthcare providers can bring the tools needed to assist college students in achieving sexual health and wellness.

APPENDICES

APPENDIX A

EVALUATION TABLE OF LITERATURE REVIEW OF SEXUAL HEALTH EDUCATION

Study Citation	Conceptual Framework Purpose	Design/ Method	Sample setting	Major variables studies and their definitions	Measurement	Data analysis	Findings	Appraisal: worth to practice
<p>Surveys of sexual health programs</p> <p>Olsen J., & Weed, S</p> <p>Student evaluation of sex education programs advocating abstinence. (1992)</p> <p>Country: United States</p> <p>No conflict of interest</p>	<p>This research examined the attitudes of students who were enrolled in three different sex education programs that emphasized abstinence.</p> <p>Question: would abstinence sex education programs be well received by students?</p> <p>Three Programs for use in public schools: <i>Values and Choices</i> (Minnesota Search Institutes: 15 sessions), <i>Teen Aid</i> (Teen Aid Inc.: 3 weeks), and <i>Sex Respect</i> (12 sessions)</p>	<p>Survey following intervention of abstinence based program</p>	<p>1988-89 school year</p> <p>9 Jr High schools and 5 Sn High schools in Utah</p> <p>Sex Respect: urban district Teen Aid: suburban district Values and Choices: rural school district</p> <p>N=1425</p>	<p>IV: grade, gender, sex education program</p> <p>DV: attitudes of students towards sex education program and positive attitude toward the teacher who presented the program</p>	<p>105-item youth survey used in an evaluation following abstinence-oriented sex education programs.</p> <p>Instrument tool designed by the Institute for Research and Evaluation. It is designed to assess the effects of these programs and to describe the influences and dynamic involved in teen sexuality.</p>	<p>Factor analysis of grade, gender, and program</p> <p>ANOVA</p>	<p>Significant effect of the program and by younger students (7th grade) F= 7.23 p<.01 program F=35.69 p<.01 grade F=4.06 p<.02 grade/program</p> <p>Significant effect of program and teacher rating</p> <p>No significance in gender.</p>	<p>Strengths: Majority of students rated the program as effective on a scale of 1-5.</p> <p>Weakness: area of Utah only which does not have large urban population.</p> <p>Clinical implications: Sex education programs are rated more effective at the junior high level as compared to High school.</p> <p>The students rated the abstinence program as effective. Currently the participants are now adults and the parents of today's Junior high students. This research would help communicate with parents and their expectations based on their experiences.</p>

Study Citation	Conceptual Framework Purpose	Design/ Method	Sample setting	Major variables studies and their definitions	Measurement	Data analysis	Findings	Appraisal: worth to practice
<p>Byers, E. S., Sears, H. A., Voyer, S. D., Thurlow, J. L., Cohern, J. N., & Weaver, A. D.</p> <p>An adolescent perspective on sexual health education at school and at home: II Middle school students (2003)</p> <p>Country: Canada</p> <p>No conflict of interest noted</p>	<p>The purpose of study was to evaluate attitudes towards and experiences with sexual health education (SHE) at school and home.</p>	<p>Spring 2001: part of larger project</p> <p>Questionnaires on student attitudes about SHE including what should be covered, when, and parental involvement of the SHE</p>	<p>Nine middle schools and two combined schools (grades 6-12) in New Brunswick</p> <p>745 middle school students in grades 6-8</p>	<p>IV: grade, gender, sex</p> <p>DV: attitudes of students towards the SHE intervention</p>	<p>Students rated 10 sexual health topics in terms of importance, to the extent they were covered in school, and the grade level at which they would like to learn about them.</p>	<p>ANOVA gender and grade in students' attitudes towards SHE</p> <p>Gender and grade of students attitude towards parental involvement,</p> <p>T-Test comparing attitudes towards SHE in school as compared to parental involvement with SHE</p>	<p>Majority of participants support school-based SHE- 93% agree/strongly agree. 69% agree/strongly agree with parental sharing in SHE. 67% of student felt SHE should begin in middle school.</p> <p>ANOVA: insignificant for both</p>	<p>Themes that came from questionnaires included students' desire for facts and information, practical skills and values clarification.</p> <p>Strengths of study: 745 students participated in study.</p> <p>Weaknesses: New Brunswick providence only (it would be expected that the information is transferable)</p> <p>Clinical implications: The findings indicate that middle school is an appropriate time for SHE interventions. The study also indicated the approval of middle school student of parental involvement</p>
<p>Saewyc, E. M., Taylor, D., Homma, Y., & Ogilvie, G.</p> <p>Trends in sexual health and risk behaviours among adolescent students in</p>	<p>Regular monitoring of sexual health trends among adolescents provides strong</p>	<p>BC adolescent Health surveys of 1992, 1998, and 2003.</p>	<p>Grades 7 to 12 in British Columbia</p> <p>N=greater than 72,000 youths</p>	<p>Demographic variables: gender, age, ever having sexual intercourse, age</p>	<p>140 item questionnaire; topics included demographic items, questions relate to health</p>	<p>Statistic used: complex cluster-stratified sampling method</p>	<p>British Columbia youth are taking fewer sexual health risks in 2003 than youth 5-10 years earlier. They are</p>	<p>Strengths: large scale</p> <p>Weakness: Data obtained only from public school</p>

Study Citation	Conceptual Framework Purpose	Design/ Method	Sample setting	Major variables studies and their definitions	Measurement	Data analysis	Findings	Appraisal: worth to practice
<p>British Columbia (2008)</p> <p>Country: British Columbia</p> <p>Funding: none listed</p>	<p>evidence to guide intervention programs and health policies. The purpose of the study is to document trends in sexual health and compare with sexual health education</p>		<p>participated since 1992</p>	<p>at first intercourse, drug alcohol use before last intercourse, condom use at last intercourse, and effective contraceptive use.</p>	<p>experiences and various risk exposures, health and risk behaviours, as well as protective factors or assets in youth's lives, such as family, school and community connectiveness</p>		<p>waiting longer to have sex and then using contraception when the engage in sex.</p>	<p>adolescents, missing home school, private school, and those not attending school (homeless)</p> <p>Trends are reported as cross-sectional cohorts in time and not longitudinal.</p> <p>No evident risk or harm with questionnaire</p> <p>This is positive encouragement that interventions are working in the BC school system.</p>
<p>Madkour, A. S., Farhat, T., Halpern, C. T., Godeau, E., & Gabhainn, S. N.</p> <p>Early adolescent sexual initiation and physical/psychological symptoms: A comparative analysis of five nations (2010)</p> <p>Country: Finland, Scotland, France, Poland, and United States</p> <p>No conflicts of interest noted</p>	<p>Inter-country variability in developed countries</p> <p>Examine the relationship between early adolescent sexual initiation and physical/psychological symptoms.</p>	<p>Comparative analysis of timing of sexual initiation, early sexual initiation, demographic predictor of earlier sexual initiation, national contexts and adolescent sexual health, prevalence, and symptoms and sexual initiation.</p>	<p>Population samples: 6111 15-year-olds who participated in Health Behaviors in School-aged Children Study or National Longitudinal Study of Adolescent Health</p>	<p>IV: age, gender, country, living arrangements</p> <p>DV: sexual initiations and symptoms</p>	<p>School interviews, home interviews and self-administer questionnaires for sensitive information</p>	<p>Chi-square</p> <p>ANOVA</p> <p>Multivariable ordinary least squares</p>	<p>Descriptive analysis table comparisons</p> <p>Boys/Girls living in single parent/blended family and having low socioeconomic situation are significantly positively associated with physical/psychological symptoms. European boys experience significantly higher symptom score than US residing boys.</p>	<p>Strengths: large population and comparison of 5 countries</p> <p>Weaknesses: European emphasis in addition to US</p> <p>Clinical implications: Demonstrate positive socio-economic status with the initiation of sex. Demonstration the significance of</p>

Study Citation	Conceptual Framework Purpose	Design/ Method	Sample setting	Major variables studies and their definitions	Measurement	Data analysis	Findings	Appraisal: worth to practice
<p>Intervention studies</p> <p>Aarons, S. J., Jenkins, R. R., Raine, T. R., El-Khorazaty, M. N., Woodward, K. M., Williams, R. L., Clark, M. C. & Wingrove, B. K.</p> <p>Postponing sexual intercourse among urban junior high school students- A randomized controlled evaluation. (2000)</p> <p>Country: United States</p> <p>no conflicts of interest</p>	<p>Randomized, controlled evaluation of school-based intervention to delay sexual intercourse among urban junior high school students</p>	<p>Cross-sectional design</p> <p>Postponing <i>Sexual Involvement Curriculum</i> (3 classroom sessions) taught by 3 health professionals to students in the intervention schools (follow-up of 5-session of 45 minutes)</p>	<p>6-Washington DC JR. High School randomly chosen to be control or intervention</p> <p>4 School African American</p> <p>2 schools Latino n=582</p>	<p>7th and 8th grade was evaluated with cross sectional surveys at baseline, end of seventh grade, beginning end of eighth grade</p>	<p>75-item self administered questionnaire that included demographics, smoking, alcohol use, health service utilization, sexual behaviors and attitudes and contraceptive knowledge and use.</p>	<p>Odds ratios and regression</p> <p>Outcomes: virginity status</p>	<p>Males: No changes in virginity, self-efficacy to refuse sex, or sexual intent</p> <p>Females: more likely to report virginity, self efficacy to refuse sex, and decrease intention to avoid sexual involvement. (11.1%, 95% CI)</p> <p>Odds ratio for using birth control at last intercourse among non virgins went up 3-5 times for the intervention group</p> <p>Intervention group had significantly higher knowledge of birth control, attitudes toward delayed childbearing, knowledge of reproductive health service, and</p>	<p>single parent and blended families as risk factors for initiation of early sexual intercourse. This will help in practice to identify those adolescents at higher risk for sexual initiation.</p> <p>Strength: African American and Latino descent</p> <p>Weakness: Minority</p> <p>Gender differences suggest a possible need for separate, gender specific interventions to adequately address social and cognitive needs of both sexes.</p>

Study Citation	Conceptual Framework Purpose	Design/ Method	Sample setting	Major variables studies and their definitions	Measurement	Data analysis	Findings	Appraisal: worth to practice
<p>Denny, G., Young, M., Rausch, S. & Spear, C.</p> <p>An evaluation of an abstinence education curriculum series: <i>Sex can wait</i> (2002)</p> <p>Country: United States</p> <p>No conflicts of interest</p>	<p>Examine the effects of an abstinence education curriculum series on student outcomes</p>	<p>Quasi-experimental: pretest-posttest control-group design</p> <p>Comparison of <i>Sex can wait</i> (5 weeks of 23 lessons) curriculum to the current curriculum in each school.</p>	<p>Upper elementary, junior high and high schools</p> <p>N=1421 pretest Posttest=1195</p> <p>Arbitration=84%</p>	<p>15 schools districts</p> <p>grade levels: 3 levels upper elementary, junior/middle, high school</p>	<p>Questionnaire: baseline, after 5 week intervention and 1-2 month after the intervention</p>	<p>Analysis of covariance</p> <p>Logistic regression</p>	<p>empowerment to not have sex if she feels she is not ready.</p> <p>Results indicated that upper elementary program produced gains in knowledge and self-efficacy and a more hopeful outlook. There were no significant gains over the control group. High school, there was a significant difference between the treatment and control groups relative to desirable attitudes, intent to remain abstinent.</p>	<p>Weakness: same curriculums in the same school, non randomized schools, no control group, and lack of long-term follow up</p> <p>Strengths: multi level grade implementation</p> <p>Practice: <i>Sex can Wait curriculum</i> received favorable review by parents and teachers. Conflict of interest with both the control and intervention curriculum within the same school system.</p>
<p>Milhausen, R. R., DiClemente, R. J., Lang, D. L., Spitalnick, J. S., Sales, J. M. & Hardin, J. W.</p> <p>Frequency of sex after an intervention to decrease</p>	<p>Sex education message of abstinence is best way to prevent STIs. Encourage adolescents</p>	<p>RCT</p> <p>Assessment at baseline, 6 month and 12 month after HIV intervention of</p>	<p>522 sexually active African-American females between 14 and 18 years of age Birmingham,</p>	<p>Time of study condition-independent and time-dependent on variable of outcome</p>	<p>Data collected from self-administered questionnaire assessing socio-demographic information and</p>	<p>Linear regression</p> <p>Model constructed Control for repeated within</p>	<p>No significant differences were observed in the frequency of sex between the intervention and control group at any of</p>	<p>Strengths: gender and ethnic pride included in the interventions for the African American females.</p>

Study Citation	Conceptual Framework Purpose	Design/ Method	Sample setting	Major variables studies and their definitions	Measurement	Data analysis	Findings	Appraisal: worth to practice
<p>sexual risk-taking among African-American adolescent girls: Results of a randomized, controlled clinical trial (2008)</p> <p>Country: United States</p> <p>No noted funding nor conflict of interest</p>	<p>who choose to have sex to use condom correctly and consistently. Teach skills on consistent and correct use of condom</p> <p>Use of social cognitive theory and theory of gender and power</p>	<p>four 4-hour interactive group sessions with trained health educator and peer educator</p>	<p>Alabama</p>		<p>psychosocial mediators and an interview with trained female African-American in an in-depth face-to-face interview. Interviewers were blind to the HIV intervention and control group.</p>	<p>subject measurement</p>	<p>the three follow-up assessments.</p> <p>Adjusted means frequencies for vaginal sex for HIV interventions group to control general group 14.23 vs. 17.08 (P=0.91) at baseline to 6-month assessment 16.67 vs. 17.94 (p=0.64) at 6-month to 12 month assessment 15.82 vs. 18.86 (p=0.62) at 12-month follow-up.</p>	<p>Weakness: application to other ethnic groups and to general adolescents</p> <p>Importance to practice is that interventions receive positive feedback from adolescents and parents-suggestive of effective programs</p>
<p>Rye, B. J., Yessis, J., Brunk, T., McKay, A., Morris, S., & Meaney, G. J.</p> <p>Outcome evaluation of <i>Girl Time</i>: Grade 7/8 healthy sexuality program (2008)</p> <p>Country: Canada</p> <p>No conflict of interest noted</p>	<p>Sexual health curriculum was created and implemented with the goals of encouraging young girls to delay sexual intercourse and practice safer sex when they begin to engage in sexual activity. <i>Girl Time</i> is 10 weekly sessions held during the school day.</p>	<p>Quasi-experimental, non equivalent control group design</p> <p>Interrupted time series</p> <p>Pretest/posttest</p>	<p>10 schools were selected to receive the interventions and schools served as the control.</p> <p>Schools were in the Waterloo Region</p> <p>Attrition: Compared with those whom dropped out for poor attendance, behavioral problems, moved to another school, and students who dropped out of the program</p>	<p>Participants are girls in grades 7 and 8</p> <p>External participants-schools in which intervention was not taught N= 479</p> <p>Internal comparison participants-school in which intervention was taught but these students did not participate n=130</p>	<p>Outcome questionnaire with a baseline, 2-3 months after baseline and after intervention, 10-12 months post-baseline, and 13-14 months following a "booster" session of <i>Girl Time</i></p>	<p>ANCOVA</p> <p>Multivariate analyses of covariance were conducted for each time point.</p> <p>Univariate analyses of covariance were conducted for each outcome variable corresponding to time 1.</p>	<p>Overall positive impact on participants: more likely to gain sexual health knowledge, discuss sexual matters with parents, feel confident in their ability to enact a variety of safer sexual behaviors, and intend to engage in safer sexual practices</p>	<p>Only two variables showed significant longitudinal program effects: communication with parents and comfort with sexual issues.</p> <p>Clinical implications: overall increase in comfort levels, increase in intent to engage in safer sexual practice, and knowledge of sexual issues.</p> <p>Future research: researchers would</p>

Study Citation	Conceptual Framework Purpose	Design/ Method	Sample setting	Major variables studies and their definitions	Measurement	Data analysis	Findings	Appraisal: worth to practice
<p>Jemmott III, J. B., Jemmott, L. S., Fong, G. T.</p> <p>Efficacy of a theory-based abstinence-only intervention over 24 months (2010)</p> <p>Country: United States</p> <p>No conflict of interest noted</p>	<p>The purpose of the study was to evaluate the efficacy of an abstinence-only intervention in preventing sexual involvement in young adolescents.</p> <p><i>Making a Difference!</i> curriculum consists of 8 sessions (can be done in 1 hour session or combined in 4- two hour sessions or all day seminar)</p>	<p>RCT</p> <p>A comparison of 8-hour abstinence-only intervention compared with an 8-hour safer-sex interventions, 12-hour safe-sex intervention, and 8 hour health promotion control intervention targeting issues unrelated to sexual behavior.</p> <p>Evaluation at pre-intervention, immediate post-intervention, 3, 6, 12, 18, and 24 month follow-up questionnaires.</p>	<p>N=1039 girls</p> <p>359 participants in Girl Time Control=536 (no Girl Time-external comparison) and 144 (Girl Time-internal comparison)</p> <p>662 African American students in grade 6 and 7 from 4 public middle schools that serve low-income African American students in northeastern US</p>	<p>The groups differed in only 4 of 21 demographic variables (i.e. Rural/urban, religious affiliation, number of years at current residence)</p> <p>Age, gender, living with parental status, ever having sexual intercourse, sexual intercourse in last 3 months, multiple partners in last 3 months, unprotected sexual intercourse in last 3 months, consistent condom use in past 3 months, and randomized intervention.</p>	<p>Data collected by collectors blind to the participant's intervention administered questionnaires.</p>	<p>χ^2 and t tests to analyze attrition</p>	<p>Abstinence-only intervention reduced sexual initiation, and had fewer incidences of sexual relationships in the past 3 months in those that were previously sexually active. Abstinence-only interventions did not change the use of condoms among participants.</p> <p>The 8 and 12 hour comprehensive interventions reduced reports of having multiple partners compared with the control group. No other differences between interventions and controls were significant.</p>	<p>like to extend the longitudinal study into high school and early adulthood.</p> <p>Theory-based abstinence-only interventions have an important role in preventing adolescent sexual involvement. The self-reported rate of sexual involvement was reduced among the abstinence intervention group over the 24 months follow-up. Both the 8 and 12 hour comprehensive interventions significantly reduced the incidence of multiple sexual partners.</p>

APPENDIX B

Literature Review Table

Author	Year	Sample	Design	Intervention	Major Finding
Olsen et al.	1992	14 schools N=1425	Comparative analysis of student reception of Sexual education classes	Sexual education classes <i>Sex Respect, Teen Aid, and Values and Choices</i>	High effectiveness among Junior high students
Byers et al.	2003	N= 745 middle school students in grades 6-8	Cross sectional study	Sexual health education	Students strong support of sexual health education in middle school (97%)
Saewyc et al.	2008	Grades 7-12 N=greater than 72,000 youths participated since 1992	Health surveys	Questionnaires concerning sexual risks/ protective factors	BC youth are taking fewer health risks in 2003 than youth 5-10 years earlier
Madkour et al.	2010	N=6111 students 15 year-old	Comparative analysis	Sexual health education	Correlation between social economic status, relationship with parents and sexual initiation
Aarons et al.	2000	6 schools: 4 School African American 2 schools Latino N=582	Cross sectional design	<i>Postponing Sexual Involvement Curriculum</i>	No significant changes in males, females increase self efficacy to refuse sex
Denny et al.	2002	15 schools N=1421 pretest Posttest=1195	Quasi-experimental pretest-posttest control-group	<i>Sex Can Wait</i> Abstinence curriculum	Upper elementary gain in knowledge and self efficacy. High school significant to desirable attitude and abstinence.
Milhausen et al.	2008	N=522 African American females	RCT	HIV intervention sessions	Strengths in gender and ethnic pride
Rye et al.	2008	10 schools N=609	Quasi-experimental, non equivalent control group	<i>Girl Time</i> (sexual health education classes)	Long term increase communication with parents and comfort level with sexual issues
Jemmott et al.	2010	4 middle schools N = 662 African American students	RCT	<i>Making A Difference!</i> (HIV, AIDS-sexual health curriculum)	Theory-based abstinence-only interventions may prevent adolescent sexual involvement

APPENDIX C

Evaluation table of Evidence-Based Sexual Health Curricula

Reference	Curriculum	Age of group	Length of intervention	Who lead the intervention/ where intervention held	Topics covered in the intervention	Activities utilized	Evaluation tools
Aarons et al., 2000	<i>Postponing sexual involvement</i>	Junior high (7/8 grade)	3 classroom session (45 minutes) then 5 session with high school peers	3 health professionals within classroom setting followed by 5 sessions of high school peers School classroom	Reproductive health	Lecture for information, Discussion groups, peer support from high school	Survey of virginity, intent to have sex, beliefs about sexual activity of peers, birth control used, ability to refuse sex
Denny et al., 2002	<i>Sex Can Wait</i>	Upper elementary, middle school, and high school components	5 weeks (23-24 sessions)	Teachers who received 3 ½ days training workshops School classroom	“Knowing myself” (self-esteem, reproductive anatomy/ physiology, values, decision-making), “relating to others” (communication skills), and “Planning my Future” (goal setting and life planning)	Educational lectures, handouts, parent/child homework, activities,	Behavioral questionnaire, sexual questionnaire for 8 th grade and above (initiation, decision-making, and sexual activity)

Milhausen et al., 2008	Comprehensive sexual health	Ages 14-18	Four-4 hours interactive group sessions	Trained health educator and peer evaluator Community health-based intervention (family medical clinics)	HIV/AIDS General health-promotion/risk reduction, gender/ethnic pride, sex refusal and safe sex negotiation, and health relationships	Discussion groups, educational lecture,	Questionnaire
Rye et al., 2008	<i>Girl Time</i>	7/8 grade	10 weekly meetings with 2 follow-up sessions	Teachers/peers School environment	Sexual risk behaviors, accurate information, models and practice of relevant communication, refusal and negotiation skills	Informational teaching, hands on activities	Evaluation of sexual health, attitudes, social norms, and development of behavioral skills r/t sexual health
Jemmott et al., 2010	<i>Making A Difference!</i>	Junior high 6/7 grade	8 sessions, can be done in four-2 hours session or 8-one hour sessions	Trained facilitators with bachelors and masters degrees Classes were on Saturday at participating schools	HIV/AIDS knowledge, strengthen behavioral beliefs supporting abstinence, attainment of future goals, increase skills to negotiate abstinence and resist sexual pressure	Informational teaching, activities, games, role playing	Self-report of sexual behaviors

APPENDIX D

Teaching Plan for *Healthy Sexuality: Knowledge, Action, Behavior*

Session One

Time Frame	Teaching Content	Learning Objectives	Activities
10-15 minutes	Introduction of program: explanation of project/program, welcome/information sheet, group rules	*Provide participants with an overview of the program *Increase participants' personal investment and comfort in participating in the program *Identify group rules for participation	Discussion with Q & A Sharing of group rules
15 minutes	Pretest	*establish baseline knowledge	Pretest
10-15 minutes	What does <i>Healthy Sexuality: knowledge, action, behavior</i> mean? (What does <i>Making A Difference!</i> mean?) Personal goals/values setting	*Identify what it means to make a difference: Making positive change, taking action, act on your values *Identify proud and responsible personal behavior: to be secure and confident in your decision making, to have self worth, integrity, and to value yourself and others including partners. Responsible: to be dependable, dedicated and committed. *Identify why *Identify personal values, goals, and options to help you achieve personal success.	Brainstorm Goals and dreams timeline Group discussion
15 -30 minutes	Why participate in sexual activities?	*Identify why college-age women have sex *Identify sexual messages from media, peers, &	Brainstorm/group discussion

		family *Identify pros and cons of having sex	
30-45 minutes	Outcomes of sex: negative consequences: Pregnancy/myth busters, STDs (s/s) Positive experiences: What is positive sex?	*Distinguish myths from fact about pregnancy *Express positive feelings toward pregnancy prevention and risk reduction *Identify s/s of STDs *Identify risk for contracting STDs *Identify positive sexual experience	Transmission exercise game Group discussion STD jeopardy Women's health PowerPoint
15 minutes	Situational problem solving/role playing Q & A for next week	*State and explain problem solving to promote positive personal outcomes	Role playing Discussion Fill out cards for next week's discussion

Teaching Plan for *Healthy Sexuality: Knowledge, Action, Behavior*

Session Two

Time Frame	Teaching Content	Learning Objectives	Activities
10 minutes	Opening/Welcome	*review content/clarification of session one	Discussion
30 -45 minutes	Attitudes & beliefs concerning gender roles Self Efficacy: define <i>Self-efficacy</i> is the measure of one's own competence to complete tasks and reach goals Self empowerment: increasing the strength of each individual to make decisions	*Identify role gender messages from media, peers, & family *identify positive characteristics about themselves *explain how self-esteem affects decision-making	Group discussion Power point: Media/images: gender socialization Handout: positive attributes
30 -45 minutes	Responding to peer pressure and partner pressure (Social norms) Setting Boundaries Consent: definition of consent, disclosure, and incapacitation per GVSU	*recognize pressure from peers to engage in sexual activity *identify specific sexual behaviors that fit within their personal comfort zone *advocate for others/active bystander intervention *boundary setting *Recognize the concept of Consent * Negotiation of consent	Role plays
10 minutes	Q & A from session 1		Discussion Mini-lecture
10 minutes	Wrap-up evaluation Q & A for session 3		

Teaching Plan for *Healthy Sexuality: Knowledge, Action, Behavior*

Session Three

Time Frame	Teaching Content	Learning Objectives	Activities
10 minutes	Opening/Welcome Q/A from session 2	*review content/clarification of session two	discussion
45-60 minutes	Refusal /negotiation skills Acceptance/negotiation skills	*identify strategies for negotiating in relationships *Identify and explain the characteristics of saying "no" and "yes" effectively *Demonstrate the ability to negotiate with a partner	Discussion of STOP (Handout) Role play
30 minutes	Other risk taking behaviors: discussion of statistics concerning alcohol and drug usage, violence and sexual assault Q/A from session 3	*Identify risk taking behaviors (alcohol, drug, group associations) * Identify predator behaviors and how to remove self from the situation/protect self *identify resources available to participants	Mini-lecture Discussion Assault/Consent PowerPoint Handout on sexual assault
15 minutes	Posttest evaluation	*establish end of intervention knowledge	Posttest

APPENDIX E

Student Services Program Evaluations

Objectives	Session 1 Average Scores	Session 2 Average Scores	Session 3 Average Scores
Critical Thinking (LEAP)	4.72	4.6	4.25
Foundations and Skill for Lifelong Learning (LEAP)	4.78	4.8	4.42
Integrative Learning (LEAP)	4.78	4.27	4.08
Presenters knowledge	4.89	4.67	4.67
Program was interesting	4.44	4.67	4.25
Program was well presented	4.61	4.47	4.25
Aware of different perspectives	4.61	4.73	4.17
Plan to apply what I learned	4.61	4.8	4.5
Would recommend this program	4.44	4.53	4.25

APPENDIX F



DATE: October 11, 2012

TO: Kim Lanning
FROM: Grand Valley State University Human Research Review Committee
STUDY TITLE: [365321-1] An evidence-based approach for the development of a sexual health and wellness program for university women

REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: NOT RESEARCH
EFFECTIVE DATE: October 11, 2012
REVIEW TYPE: Administrative Review

Thank you for your submission of materials for your planned research study. The Human Research Review Committee has determined that this project *DOES NOT* meet the definition of covered human subject research* according to current federal regulations.

The project, therefore, *DOES NOT* require further review and approval by the HRRC.

If you have any questions, please contact the HRRC Office, Monday through Thursday, at (616) 331-3197 or hrrc@gvsu.edu. The office observes all university holidays, and does not process applications during exam week or between academic terms. Please include your study title and reference number in all correspondence with this office.

cc:

*Research is a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge (45 CFR 46.102 (d)).

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