Utilizing Motivational Interviewing to Promote Condom Use Self-Efficacy

Ann Maria Bell
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Utilizing Motivational Interviewing to Promote Condom Use Self-Efficacy

by

Ann Maria Bell

A capstone project submitted to the faculty of
Gardner-Webb University Hunt School of Nursing
in partial fulfillment of the requirements for the degree of
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</table>
Abstract

Condom use is one of the most important preventive mechanisms available to combat sexually transmitted diseases and unintended pregnancies, yet over 70% of adolescents and young adults lack education on the proper use of condoms. Lack of education and confidence in using condoms contributes to a decrease in condom usage, resulting in increased rates of sexually transmitted diseases and unintended pregnancies. The purpose of Project Motivate was to determine if motivational interviewing significantly improves self-efficacy related to condom use among patients presenting for screening of sexually transmitted diseases. The project sought to determine if motivational interviewing is an effective intervention in promoting condom use self-efficacy. Project Motivate implemented awareness utilizing motivational interviewing (MI) as an intervention to promote condom use self-efficacy. The findings of Project Motivate suggested the potential benefits of integrating motivational interviewing into clinical practice. Motivational interviewing highlights the promise of a useful, inexpensive clinical tool for health promotion and disease prevention.

Keywords: condom use, motivational interviewing, self-efficacy, transtheoretical model
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TABLE OF CONTENTS

CHAPTER I: INTRODUCTION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Statement</td>
<td>1</td>
</tr>
<tr>
<td>Justification of Project</td>
<td>2</td>
</tr>
<tr>
<td>Purpose</td>
<td>5</td>
</tr>
<tr>
<td>Project Question</td>
<td>5</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>5</td>
</tr>
<tr>
<td>Summary</td>
<td>6</td>
</tr>
</tbody>
</table>

CHAPTER II: RESEARCH BASED EVIDENCE

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of Literature</td>
<td>7</td>
</tr>
<tr>
<td>Gaps in Literature</td>
<td>22</td>
</tr>
<tr>
<td>Strengths and Limitations of Literature</td>
<td>22</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>23</td>
</tr>
<tr>
<td>Summary</td>
<td>26</td>
</tr>
</tbody>
</table>

CHAPTER III: PROJECT DESCRIPTION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Implementation</td>
<td>27</td>
</tr>
<tr>
<td>Setting and Sample</td>
<td>28</td>
</tr>
<tr>
<td>Project Design</td>
<td>28</td>
</tr>
<tr>
<td>Protection of Human Subjects</td>
<td>29</td>
</tr>
<tr>
<td>Instruments</td>
<td>29</td>
</tr>
<tr>
<td>Data Collection</td>
<td>30</td>
</tr>
<tr>
<td>Timeline</td>
<td>30</td>
</tr>
<tr>
<td>Budget</td>
<td>31</td>
</tr>
<tr>
<td>Summary</td>
<td>31</td>
</tr>
</tbody>
</table>
CHAPTER IV: RESULTS

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Findings</td>
<td>35</td>
</tr>
<tr>
<td>Summary</td>
<td>36</td>
</tr>
</tbody>
</table>

CHAPTER V: DISCUSSION

<table>
<thead>
<tr>
<th>Implication of Findings</th>
<th>37</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application to Theoretical Framework</td>
<td>38</td>
</tr>
<tr>
<td>Project Limitations</td>
<td>38</td>
</tr>
<tr>
<td>Implications for Nursing Practice</td>
<td>38</td>
</tr>
<tr>
<td>Implications for Future Research</td>
<td>39</td>
</tr>
<tr>
<td>Conclusion</td>
<td>39</td>
</tr>
</tbody>
</table>

REFERENCES ................................................................. 40

APPENDIX

| Motivational Interviewing Intervention | 44 |
List of Figures

Figure 1: Conceptual-Theoretical-Empirical (CTE) Structure for Project Motivate........26

Figure 2: Comparison of Ages and Reported History of an STI ..............................34
List of Tables

Table 1: Gender Comparison of Participants..............................................................32
Table 2: Comparison of Racial Profile among Participants........................................33
Table 3: Variable Analysis with SAS®, Enterprise Guide® 6.1 ....................................35
CHAPTER I

Introduction

The Healthy People 2020 initiatives promote healthy sexual behaviors that reduce the transmission of sexually transmitted diseases (STDs) and decrease the number of unintended pregnancies (U.S. Department of Health and Human Services [USDHHS], 2013). Among the recommended healthy behaviors, condom use is one of the most important preventive mechanisms available to combat sexually transmitted diseases and unintended pregnancies. Although condom use has been identified as a protective barrier during sexual intercourse, many young adults report lacking the confidence required for proper use or fail to recognize the consequences related to not using condoms.

Problem Statement

Campaigns and reproductive health educational programs have been introduced to raise awareness and promote condom use in the communities. Tung, Lu, and Cook (2010) explained that only 12-25% of the college age population reported using a condom consistently. Next, 71% of sexually active individuals reported not receiving sexual education preceding his or her first sexual experience (Manlove, Ikramullah, & Terry-Humen, 2008). Therefore, the lack of education received creates a negative perception of condom use and a lack of confidence in the ability to use condoms consistently (Haley, Puskar, Terhorst, Terry, & Charron-Prochownik, 2012). Finally, the Centers for Disease Control and Prevention (CDC) recommended national initiatives to confront and prevent STDs with widespread public awareness and participation.

Project Motivate intended to implement public awareness utilizing motivational interviewing (MI) as an intervention to promote condom use self-efficacy. Motivational
interviewing is a client-centered counseling technique for seeking to elicit a change in behavior (Dart, 2011). The technique of MI is guided by the transtheoretical model, which emphasizes change as a sequential process with stability and flexibility (Dart, 2011). Motivational interviewing has been researched and applied to a number of studies related to weight loss, diabetes, and physical activity; however, there is lack of evidence where MI is applied to promoting condom use self-efficacy in young adults.

**Justification of Project**

Sexually transmitted diseases (STDs) pose a huge burden to public health within local sectors as well as nationally. In fact, STDs are considered a hidden epidemic because many Americans are reluctant to openly discuss sexual health issues due to the public stigma. STDs include more than 25 infectious organisms that are transmitted primarily through sexual activity (USDHHS, 2014). There are nearly 20 million newly reported sexually transmitted diseases in the United States each year (USDHHS, 2014). Almost half of new infections occur among individuals between the ages of 15-24 (USDHHS, 2014). In fact, the CDC estimates that one in four sexually active females has an STD, such as gonorrhea, chlamydia or syphilis (USDHHS, 2014).

In 2013, there were 1,401,906 cases of Chlamydia reported with an average of 446.6 per 100,000 people (USDHHS, 2014). Rates were higher in the Southern Region, with 485.1 per 100,000 (USDHHS, 2014). Meanwhile 2012 data indicated chlamydia had the largest number of cases ever reported to the CDC for any communicable disease with the highest rates occurring among adolescents and young adults. In fact, the rates increased 18.1% during 2008-2011 among those 20-24 years of age (USDHHS, 2013).
In addition, chlamydia in women can be asymptomatic, and with no treatment can result in a number of serious complications such as pelvic inflammatory disease (PID) (USDHHS, 2014). PID can result in pelvic pain, infertility, and ectopic pregnancies (USDHHS, 2014). Furthermore, chlamydia can increase the transmission of human immunodeficiency virus (HIV) infection and can be transmitted to infants during delivery (USDHHS, 2014). Neonatal complications from the transmission of chlamydia can result in a number of complications such as pneumonia (USDHHS, 2014). The risks associated with such disease are predictable yet preventable. Moreover, the CDC recommended that all sexually active women under the age of 26 be screened for chlamydia and other sexually transmitted diseases on a yearly basis (USDHHS, 2014).

Gonorrhea is the second most commonly reported STD in the US (USDHHS, 2014). In 2013, there were 333,004 total cases of gonorrhea reported, which resulted in a rate of 107.5 cases per 100,000 (USDHHS, 2014). According to the statistics, gonorrhea rates increased approximately four percent since 2011 (USDHHS, 2014). Although the rates of transmission are typically highest among adolescents and young adults with the highest among men and women aged 20-24 years of age, 2013 results revealed an increase in other age categories (USDHHS, 2014). Since 2000, gonorrhea cases among men increased by four percent, which was a greater increase than that in women (USDHHS, 2014).

Syphilis is a genital ulcerative disease that also increases the transmission of HIV (USDHHS, 2014). Unfortunately, the rates of syphilis increased by over 10% from 2011-2012 with a total of 14,503 cases reported (USDHHS, 2014). In 2013, 1,708 more cases were reported than in 2012 (USDHHS, 2014). In fact, 91% of the cases reported were
men (USDHHS, 2014). Syphilis also resulted in perinatal death in 40% of cases and can lead to transmission to the fetus in 80% of cases (USDHHS, 2014). In 2013, a marked increase in congenital syphilis was demonstrated with a total of 348 cases (USDHHS, 2014). Not only do STDs impact the individual physically and emotionally, but also the financial burden poses a threat to the nation. In fact, sexually transmitted diseases cost our nation over 16 billion dollars each year (USDHHS, 2014).

Inconsistent condom use increases the rate of unintended pregnancies among adolescents and young adults. Unintended pregnancy is defined as an unplanned or unwanted pregnancy (Finer & Zolna, 2011). There were 3.2 million reported unintended pregnancies in 2006, with a slight increase from 48% to 49% (Finer & Zolna, 2011). There were also 52 unintended pregnancies for every 1,000 women between the ages of 15-44 (Finer & Zolna, 2011).

Several factors influenced the rates of unintended pregnancy such as age, level of education, race and ethnicity, and income. According to Finer and Zolna (2011), women aged 19 years and younger had more than four out of five unintended pregnancies (Finer & Zolna, 2011). There was an increase from 59% to 64% of unintended pregnancies among women aged 20–24 years (Finer & Zolna, 2011). Women with the least amount of education had the highest unintended pregnancy rate (Finer & Zolna, 2011). Women with a previous pregnancy were almost twice as likely as those with no previous pregnancy to have additional unintended pregnancies (Finer & Zolna, 2011).

Condom use is a multidimensional concept that requires a broad range of behaviors, such as learning proper application, purchasing condoms, carrying condoms, negotiating condom use with a sexual partner, and then actually using a condom in sexual
intercourse. Research and interventions in the past have focused on general condom use rather than identifying each individual’s stage of readiness to change and then utilizing that information for individualized interventions. An individual’s desire to change varies depending on their beliefs, confidence, and goals in life. Motivational interviewing utilizes the individual’s unique goals and beliefs to promote change. There was no research found that applied motivational interviewing as an intervention in promoting condom use self-efficacy.

**Purpose**

The purpose of Project Motivate was to determine if motivational interviewing significantly improved self-efficacy related to condom use among patients presenting for screening of sexually transmitted diseases. The study sought to determine if motivational interviewing is an effective intervention in promoting condom use self-efficacy.

**Project Question**

The questions this project sought to answer include: Does motivational interviewing through education and awareness increase condom use self-efficacy? Will the participant’s self-efficacy in condom use improve if they are educated on its proper use and effectiveness?

**Definition of Terms**

For clarity, the term condom refers to several types of condoms. Specific to this study, condom refers specifically to male, latex condoms. In addition, self-efficacy refers to the confidence of an individual’s own ability to perform a given behavior and is directly linked to an individual’s stage of change (Barkley & Burns, 2000). Self-efficacy is a construct of the transtheoretical model (Shumaker, Ockene, & Riekert, 2009). The
term ‘self-efficacy’ is open to interpretation among scholars; therefore, self-efficacy will be referred to as the confidence of utilizing condoms during sexual activity.

The terms sexually transmitted disease and sexually transmitted infections are used interchangeably. Many times ‘sexually transmitted infections’ refers to asymptomatic infections, whereas sexually transmitted disease refers to symptomatic, diagnosed infections. Therefore, to rebuke confusion, the terms are used interchangeably based on the presentation in references.

**Summary**

Motivational interviewing was utilized to identify a participant’s readiness to change and implement a scripted, yet individualized, counseling session. Individualized interventions are vital to increasing condom use self-efficacy among adults. Although abstinence is the best choice, proper application and usage of condoms can facilitate a decrease in the transmission of sexually transmitted infections and unintended pregnancies.
CHAPTER II
Research Based Evidence

The purpose of Project Motivate was to determine if motivational interviewing significantly improved self-efficacy related to condom use among patients presenting for STD screening. The study also sought to determine if motivational interviewing is an effective intervention in promoting condom use self-efficacy.

Review of Literature

Transtheoretical Model

A literature review was conducted by searching various databases and search engines to identify research articles utilizing the Transtheoretical Model (TTM) related to condom use and/or sexual behaviors. These databases included Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest, Medline, PubMed, Sage Premier and search engine Google Scholar. Three studies were identified that utilized the concept stages of change and self-efficacy: Tung et al. (2010), Prat, Planes, Gras, and Sullman (2011), and Arden and Armitage (2008).

In 2010, Tung et al. applied a descriptive, cross sectional, quantitative survey to explore the nonuse of condoms and the determinants that influenced a change in behavior to use condoms regularly among college students in Taiwan. The researchers surveyed 996 students using a structured self-report questionnaire in September and October (Tung et al., 2010). The university registrar’s office randomly selected four classes from each academic level with 16 classes chosen in all (Tung et al., 2010).

A cluster sampling method was used to recruit the participants. Participants completed a demographic questionnaire which collected information such as age, gender,
academic year, student status, marital status, health perception, religious preference, tobacco use, use of illicit drugs, and alcohol use (Tung et al., 2010). Each participant was further questioned about his or her sexual behaviors. Those participants who reported having vaginal, anal, or oral sex were asked to complete the condom use scale (Tung et al., 2010). The condom use scale is a 5-item algorithm that measures the stage of change for condom use (Tung et al., 2010). Participants were categorized into a stage of change based on responses to questions about frequency, duration of condom use, and intention to use condoms in the future (Tung et al., 2010).

Participants also completed an International AIDS questionnaire-Chinese version (IAQ-C), a condom use decisional balance scale and a condom use self-efficacy scale (Tung et al., 2010). The IAQ-C was used to measure Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV/AIDS) related knowledge. The condom use decisional balance scale was used to assess the participant’s perception on the benefits and barriers to condom use (Tung et al., 2010). Higher scores demonstrated a higher perception of the benefits and barriers with condom use (Tung et al., 2010).

Subsequently, the condom use self-efficacy scale was administered. The condom use self-efficacy scale consisted of 10 items that measured the strengths of the individual’s perceived ability to use a condom (Tung et al., 2010). The higher scores reflected more confidence in using condoms. If a participant reported not using condoms every time on the condom use scale, one question was posed: If you don’t use a condom every time, what are the reasons? (Tung et al., 2010). Participants were given six choices and asked to choose all that applied. The six choices included: trust in partner, partner
dislikes condoms, necessary with prostitutes, condoms reduce pleasure, embarrassing to buy, or difficult to find (Tung et al., 2010).

The transtheoretical model’s stages of change were utilized throughout the study to explore the determinants for inconsistent use of condoms and the factors influencing the stages of change (Tung et al., 2010). The study placed participants in stages based on their determined readiness for change. The stages are as follows: pre-contemplation, contemplation, preparation, action, and maintenance. The pre-contemplation stage is defined as individuals not using condoms and with no intention of starting (Tung et al., 2010). The contemplation stage is when the individual does not currently use condoms but plans to within the next six months (Tung et al., 2010). The preparation stage encompasses the individual not currently using condoms but with intentions to start within 30 days (Tung et al., 2010). The action stage consists of the individual currently using condoms every time for less than six months (Tung et al., 2010). The maintenance stage is defined by consistent condom use every time for more than six months (Tung et al., 2010).

The study discussed the concept of self-efficacy and decisional balance. Self-efficacy is defined as an individual’s confidence to perform a given behavior (Tung et al., 2010). Additionally, decisional balance is discussed as a reflection of the weighing of the pros or the perceived benefits and the cons, also known as perceived barriers (Tung et al., 2010). Researchers applied the participant’s responses to the condom use self-efficacy scale and the condom use decisional balance scale to the participant’s perceived level of change in order to determine a significant correlation.
Results revealed that condom use was inconsistent and students lacked the
willingness to adopt healthier behaviors related to using condoms consistently (Tung et al., 2010). Only 227 out of the 996 participants reported having sexual experience; however, 190 reported not using condoms consistently (Tung et al., 2010). The study revealed the most common reasons for not using condoms included: trust in partner (21.30%), partner dislikes condoms (19.49%), and perceptions that condoms are not necessary (18.77%) (Tung et al., 2010, p. 477).

Finally, there were significant associations between the TTM stages of change, self-efficacy, perceived behavior, and religiosity (Tung et al., 2010). The majority of participants (52.4%) were classified into the pre-contemplation and the contemplation stage (Tung et al., 2010). Those participants in the pre-contemplation and contemplation stage were less likely to demonstrate a high self-efficacy score but more likely to demonstrates a high knowledge score. Tung et al. (2010) explained that the participants in the action/maintenance phase were more likely to demonstrate a lower knowledge score and were more likely to present high self-efficacy scores. The results demonstrated that knowledge alone does not determine patient behaviors. Therefore, future research should target real life experiences and misguided perceptions (Tung et al., 2010).

Prat et al. (2011) examined the relationship between decisional balance and the stages of change for consistent condom use. Although the research design is not mentioned in the study, the study demonstrated a cross-sectional, quantitative survey design. The study sample consisted of 619 undergraduate students randomly sampled and organized into strata (Prat et al., 2011). The strata criterion was the student’s field of study, which included (a) humanities and social science and (b) natural sciences and
health, technical studies (Prat et al., 2011). Next, inclusion criteria included participants 25 years of age or less, identified themselves as being heterosexual or bisexual, had previous sexual relationships with penetration, were not attempting to get pregnant, and had a heterosexual partner (Prat et al., 2011).

A self-reported questionnaire was administered based on the CIVIUP, which is a questionnaire for assessing the importance of the pros and cons of condom used (Prat et al., 2011). The standard name of the abbreviation CIVIUP is not revealed to the reader. The results of the study provided evidence that the pros and cons of using condoms were significantly related to the stages of change, with the pros more strongly related (Prat et al., 2011).

Prat et al. (2011) discussed cessation of risky behaviors as a process of change through stages. This study assessed the applicability of the transtheoretical model of change with the following specific aims:

- To assess the construct validity and reliability of the decisional balance measure for consistent condom use with a heterosexual partner.
- To evaluate the distribution of stages of change for condom use with a heterosexual partner and whether there are gender related differences.
- To analyze the relationship between the pros and cons of condom use and the stages of change (Prat et al., 2011, p. 1195).

As mentioned above, the major concepts were the transtheoretical model’s stages of change and decisional balance. The stages of change used in this study are pre-contemplation, contemplation, preparation, action, and maintenance (Prat et al., 2011).
The researchers defined decisional balance as weighing the advantages and the disadvantages of the health related behavior (Prat et al., 2011). The advantages are defined as the expected benefits of condom use, such as protection from unintended pregnancies and sexually transmitted diseases. The disadvantages were defined as the expected consequence or cost of condom use (Prat et al., 2011). Examples of disadvantages to using condoms were reduction in pleasure, partner disapproval, and cost (Prat et al., 2011).

Participants (n=579) were placed into the stages of change categories (Prat et al., 2011). The results included the following: pre-contemplation (46.3%), contemplation (1.7%), preparation (4.3%), action (7.8%), and maintenance (39.9%) (Prat et al., 2011). In addition, the study results revealed the pros outweighed the cons in the contemplation and preparation stage for women while the pros outweighed the cons in the action and maintenance stage for men (Prat et al., 2011).

Next, a Kruskal-Wallis NPAR revealed statistical significance among the pros in the stages of change (p < .001) (Prat et al., 2011). In addition, a Mann-Whitney NPAR test revealed that participants in the maintenance stages had a significant higher pros score than those in the pre-contemplation stage (p < .001) (Prat et al., 2011). Overall, the females were identified to have more pros than the males (Prat et al., 2011). A significant mean difference in cons was found among the stages of change. In fact, results revealed the cons were lower among participants in the action and maintenance stage (Prat et al., 2011).

Arden and Armitage (2008) explored the stages of change and their relevance to condom carrying behavior. The study utilized an experimental longitudinal research
design (Arden & Armitage, 2008). Initially, 580 adolescents and young adults aged 16 and older in the community college setting were asked to complete and return questionnaires on attitudes pertaining to sexual health (Arden & Armitage, 2008). Only 525 out of the 580 volunteered to participate (Arden & Armitage, 2008). The participants were randomly assigned to an experimental or control group (Arden & Armitage, 2008).

Questionnaires were completed at baseline measuring the following variables: demographics, stage of change, the theory of planned behavior constructs, anticipated regret, and moral norm related to condom carrying behaviors (Arden & Armitage, 2008). Those participants in the experimental group were asked to carry condoms for two months (Arden & Armitage, 2008). The experimental group and the control group were then re-evaluated at a two-month follow up (Arden & Armitage, 2008).

Furthermore, Arden and Armitage (2008) applied the transtheoretical model’s stages of change to condom carrying behavior. The stages of change include pre-contemplation, contemplation, preparation, action, and maintenance. Pre-contemplators are defined as those who are not thinking about performing a health behavior in question and may not be aware of the risk associated with the behavior (Arden & Armitage, 2008). This study explained that contemplators are people who have begun to think about their behavior but with no corrective action (Arden & Armitage, 2008). The third stage is the preparation phase where people are preparing themselves for a change in the near future (Arden & Armitage, 2008). The action phase is when the individual has successfully and consistently practiced the health behavior. The final stage, maintenance, emphasizes a continued practice of the health behavior for at least six months (Arden & Armitage, 2008). Moreover, Arden and Armitage (2008) demonstrated that decisional balance and
self-efficacy are predictors of change; however, the definition of decisional balance and self-efficacy were not discussed in the study.

Approximately 525 participants (n=525) were recruited initially, of which only 393 were available for follow-up (Arden & Armitage, 2008). A MANOVA was utilized to determine where responders or non-responders differed in demographic variables, stage of change, and other variables such as regret (Arden & Armitage, 2008). The MANOVA revealed no differences among responders and non-responders. In addition, MANOVA and chi-square test confirmed randomization of the study. No significant differences were noted between participants randomized to the experimental group and control group. The study also revealed a significant association among the number of partners and stage of change (Arden & Armitage, 2008). Mann-Whitney U tests demonstrated a higher number of sexual partners in the maintenance stage. Finally, a discriminant analysis demonstrated a prediction of the stage of change based on a number of predictors (Arden & Armitage, 2008).

In conclusion, the transtheoretical model has been applied to various health promotion activities such as weight loss, smoking cessation, and condom use. Clinicians have recognized the TTM as a valuable asset to determining a patient’s readiness to change, thus allowing clinicians to create patient centered interventions using awareness, education, and motivation to prompt changes in behavior. The application of the transtheoretical model and interventions influenced by this model will create standard guidelines to influence a change in behavior, therefore providing a defense against sexually transmitted infections and unintended pregnancies.
Furthermore, a literature review was conducted by searching various databases and search engines to identify research articles discussing condom use and related concepts such as motivational interviewing, and condom use self-efficacy scale (CUSES). These databases included Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest, Medline, PubMed, Sage Premier, and the search engine Google Scholar.

**Condom Use**

Calsyn et al. (2013) compared treatment-seeking male and female substance abusers and reported barriers to condoms and condom use skills using a cross sectional, quantitative research design. The participants were randomly selected from a pool from Real Men are Safe (n=590) and Safer Sex Skill Building for Women (n=515) (Calsyn et al., 2013). Inclusion criteria included English-speaking men and women aged 18 years and older enrolled in a substance abuse program that had unprotected sexual intercourse within the last six months (Calsyn et al., 2013). Voluntary participants were randomly assigned into one of two intervention groups (Calsyn et al., 2013). Next, the following measures were completed at the baseline assessment: Condom Barriers Scale (CBS), Condom Use Skills (CUS), Sexual Behavior Inventory (SBI), or Sexual Experiences and Risk Behavior Assessment Schedule (SERBAS) (Calsyn et al., 2013). The CBS is a self-reported 29-item instrument that is used to determine attitudes about condoms. This scale is rated on a 5-point Likert scale from 1 (strongly agree) to 5 (strongly disagree) (Calsyn et al., 2013).

Next, the CUS consists of two sub-scales: male condom use skills and female condom use skills (Calsyn et al., 2013). The items correspond to the correct application
of a condom. Finally, the SBI/SERBAS scales were administered using a computer assisted self-interviewing process. The assessment included a number of variables such as being sexually active or being in a monogamous relationship (Calsyn et al., 2013).

Overall, men and women did not differ significantly in their reported sexual risk behavior (Calsyn et al., 2013). The study revealed that women were slightly more sexually active than men, but used condoms less often than their male counterparts (Calsyn et al., 2013). Men were more likely to exhibit barriers to condom use as well as being religiously opposed to condom use (Calsyn et al., 2013). Consistent with other studies, men were also more likely to report decreased sexual experiences with condom use (Calsyn et al., 2013). Also consistent with other studies, participants who reported not using condoms consistently had a more negative attitude toward condom use (Calsyn et al., 2013).

Finally, several limitations were identified in this particular study. Calsyn et al. (2013) explained that the data was parallel, yet the studies were not designed to compare men and women. Therefore, sample differences could have contributed to the findings described above. In summary, the findings suggested that further research is needed on condom use and gender specific barriers.

Stanton et al. (2009) explained that methods to acquire information about condom-application skills are a necessity, especially when direct observation is not feasible. As a result, the researchers constructed a condom use skills checklist that assessed condom use knowledge and skills (Stanton et al., 2009). This randomized longitudinal study examined the use of a safe sex intervention in school age children and
adult population in Nassau, Bahamas that was being evaluated as a curriculum to be implemented by the Bahamian Ministry of Education (Stanton et al., 2009).

Initially, 26 elementary schools were invited to participate in the study. Seven hundred eighty-five students from nine schools participated (Stanton et al., 2009). A parental consent was obtained prior to the initiation of this study. In addition, 678 parents were enrolled into a complementary parent program that discussed communication skills about human immunodeficiency virus/acquired immunodeficiency disease syndrome (HIV/AIDS) prevention and goal setting (Stanton et al., 2009).

In addition, there were two sub-studies that took place, which included paper questionnaires and an observational study among the parents (Stanton et al., 2009). Participants were asked to complete the assessments at baseline and again at follow-up. The first assessment was the Bahamian Youth Health Risk Behavioral Inventory (BYHRBI) (Stanton et al., 2009). The first section of the BYHRBI assessed demographic information while the second section assessed involvement in risk-behaviors. The next section of the BYHRBI assessed the participant’s perception of risk and protective behaviors including perceived condom use self-efficacy, and intention to use condoms (Stanton et al., 2009). The final section of the BYHRBI assessed the participant’s knowledge about HIV/AIDS. In addition, the parents only completed the knowledge assessment portion of the BYHRBI (Stanton et al., 2009).

Additionally, the researchers implemented the condom-use skills checklist (CUSC) consisting of 17 items (Stanton et al., 2009). The checklist included eight correct statements and nine incorrect statements. The participants were asked to circle the correct answers and received a score ranging from 0-17 based on his or her response to the items
(Stanton et al., 2009). Several participants were unable to complete the CUSC assessment due to insufficient time; therefore, only 502 participants (n=502) were included in the study (Stanton et al., 2009). Moreover, a convenience sample of 24 adults was asked to demonstrate the correct application of a condom using a plastic penile model (Stanton et al., 2009). All participants agreed to participate except one. During the observation study two observers scored six tasks that corresponded to the CUSC (Stanton et al., 2009).

Several analyses were used to establish psychometric properties and internal consistency of the CUSC scale (Stanton et al., 2009). The Cronbach alpha was used to determine the internal consistency, which was determined to be adequate for the adults (Stanton et al., 2009). Furthermore, the researchers examined the correspondence of the CUSC with HIV knowledge including both transmission and prevention knowledge using the Pearson’s moment correlation coefficients (Stanton et al., 2009). The overall knowledge of HIV/AIDS in the adults and the transmission-knowledge in the youth correlated positively with the CUSC score (Stanton et al., 2009). In contrast, general HIV/AIDS knowledge and perceived self-efficacy in regards to condom-use skills did not show a correlation to the CUSC score. There was no correlation found between intentions to engage in sex, condom-use intention, nor prior sexual experiences with the CUSC score (Stanton et al., 2009).

In summary, there are several limitations identified in the study including the inability to directly observe condom-use skills among students since the school system would not permit youths to handle condoms (Stanton et al., 2009). Secondly, direct observation in using a large group of subjects can be a challenge due to a lack of time and resources. Overall the scale does offer a reasonable alternative to direct observation of
condom use among older adults; however, further adaptation of the scale will be required to make it more useful among pre-adolescents (Stanton et al., 2009).

**Motivational Interviewing**

Motivational interviewing has gained a lot of attention in research and clinical practice. Brobeck, Bergh, Odencrants, and Hildingh (2011) explored the utilization of motivational interviewing in primary healthcare. Brobeck et al. (2011) explained that motivational interviewing is one way of promoting lifestyle changes by applying a proven effective technique. Motivational interviewing has been proven more effective than conventional methods in motivating patients to make lifestyle modifications. This study utilized a qualitative, descriptive methodology (Brobeck et al., 2011).

Twenty nurses working in primary health care utilizing motivational interviewing in practice were interviewed about his or her experiences. Nurses interviewed described positive experiences. In fact, “The primary healthcare nurses’ experiences with motivational interviewing as a method of health promotion practice demonstrated that motivational interviewing is a demanding, enriching, and useful method that promotes awareness and guidance in the care relationship” (Brobeck et al., 2011, p. 3322). Finally, the study explained that increased motivational interviewing knowledge and skills would contribute to both health promotion and lifestyle changes.

Motivational interviewing was applied as a weight reduction strategy for obese cardiac patients. Low, Giasson, Conners, Freeman, and Weiss (2013) examined the efficacy of motivational interviewing compared to nutritional counseling for weight loss. The sample was obtained by recruiting fifty-seven (n=57) obese individuals from a cardiology practice in the northeast (Low et al., 2013). Participants were assigned to one
of two groups, motivational interviewing group or nutritional counseling group. Trained undergraduate students completed the motivational interviewing session.

The limitations of the study were small sample size, nonrandomized groups, and attrition over time. The study revealed that significant weight reductions were noted in women in the motivational interviewing group, but not men (Low et al., 2013). The results of this study suggested that motivational interviewing can be an effective strategy for weight reduction in obese women.

**Condom Use Self-Efficacy Scale**

Brafford and Beck (1991) conducted a study that proposed to develop and validate a scale for the college population to measure self-efficacy in utilizing condoms. The Condom Use Self-Efficacy Scale (CUSES) consisted of 28 items that described an individual's feelings of confidence toward being able to purchase condoms, correctly apply them, and negotiate the use of condoms with a new sexual partner (Brafford & Beck, 1991). This scale was administered to a sample of 768 college students with 35 not calculated due to incomplete data (Brafford & Beck, 1991). The racial profile of the students completing the survey included: 80% white, 80% single, and 97% heterosexual, and 84.5% had previous sexual encounters (Brafford & Beck, 1991). The sample population was 45% male with the majority between the ages of 19 to 22 years of age (Brafford & Beck, 1991).

The results revealed adequate reliability (Cronbach's alpha = .91; test-retest correlation = .81) of the scale (Brafford & Beck, 1991). Students with varying measures of previous condom use and sexual intercourse experience demonstrated a significant difference on this scale, providing evidence of this scale's discriminant validity (Brafford
& Beck, 1991). Although the study was found to have limitations, “this investigation showed that the CUSES is both internally consistent and stable across time. The results also indicated that this scale is a convenient and discriminately valid instrument for this population” (p. 223). In addition, the potential uses of this scale in a college population were discussed as well as the issues underlying condom usage self-efficacy (Brafford & Beck, 1991).

Encabo and Malonzo (2012) conducted a study to explore the condom use self-efficacy beliefs of Filipino college students utilizing the Condom Use Self-Efficacy Scale. Approximately 600 Filipino students participated; however, only 580 completed the full survey successfully (Encabo & Malonzo, 2012). Of the 580 participants 425 (73.27%) were female and 155 (26.72%) were male (Encabo & Malonzo, 2012). There was a range of ages with 20 years old being the median; the youngest participant was 17 years of age and the oldest was 29 years of age (Encabo & Malonzo, 2012).

Participants completed the full version of the CUSES, consisting of 28 items. The survey required participants to answer each item according to a Likert-type scale. The responses range from “Strongly Agree” to “Strongly Disagree”. There were seven negatively stated items (8-10, 15-18) in which the responses have to be coded in reverse (Encabo & Malonzo, 2012). Next, the results showed that beliefs related to condom use have three to four dimensions. The dimensions are partner’s pleasure, which deals with the considerations of the partner’s pleasure, sexual prejudices, appropriation, and assertiveness or the ability to persuade a partner to use a condom (Encabo & Malonzo, 2012). This study contributed to the assumption that condom use is multidimensional.
Gaps in Literature

Research studies have investigated condom use and various influences such as age, risk behaviors, gender, and barriers to condom use; however, there are a number of gaps in the literature related to this topic. In fact, 71% of sexually active individuals report not receiving sexual education, including condom use, preceding his or her first sexual experience (Manlove et al., 2008). In addition, only 20% report using condoms without evidence of barriers such as lack of education, resources, or self-efficacy (Calsyn et al., 2013). Research articles provided evidence in the lack of education, yet gaps in educational strategies lead to ineffective teaching methods about condoms use (Stanton et al., 2009). In addition, interventions such as motivational interviewing (MI) have been used in smoking cessation, improved blood glucose, diet, and weight management. MI techniques have also been explored with problem drinking in the clinic setting. However, the literature failed to evaluate the method of motivational interviewing as an intervention in increasing condom use self-efficacy (Madson, Loignon, & Lane, 2009; Mulimba & Byron-Daniel, 2014; Stanton et al., 2009).

Strengths and Limitations of Literature

A number of randomized qualitative research studies have explored safe sexual practices (Stanton et al., 2009; Tung et al., 2010). As a result, condom use is one of the most significant preventive mechanisms available to combat sexually transmitted infections and unintended pregnancies. In addition, research provides evidence that condom use is a multidimensional practice that requires intention, motivation, changes in behavior, and positive attitudes (Calsyn et al., 2013, Prat et al., 2011). These studies have been conducted worldwide using a number of populations with variations in ages, gender,
and sexual preferences. Yet, many studies are conducted without using a theoretical model as a framework (Arden & Armitage, 2008). Next, many scales and questionnaires used have a low reliability score and need further adaptation and evaluation (Calsyn et al., 2013; Prat et al., 2011). In addition, the scales and questionnaires are self-reported by patients creating limitations related to patients’ truthfulness (Stanton et al., 2009; Tung et al., 2010; Prat et al., 2011).

**Theoretical Framework**

The transtheoretical model (TTM) served as the theoretical framework for Project Motivate. The TTM was developed by James O. Prochaska (Shumaker et al., 2009). The TTM is an integrative theoretical framework that focuses behavior changes as a dynamic process utilized in progressive behaviors (Andres, Gomez, & Saldana, 2006). TTM proposed that people’s readiness to change varies. The transtheoretical model is founded on four central constructs. The central constructs are the stages of change, processes of change, decisional balance, and self-efficacy (Shumaker et al., 2009).

**Constructs**

**Stages of change.** First of all, change is examined as a progression that takes place over time. The transtheoretical model emphasized that people make changes in health behaviors after progressing through the stages of change (Tung, Cook, & Lu, 2011). The stages of change included pre-contemplation, contemplation, preparation, action, and maintenance.

In the pre-contemplation stage, the individual had no desire for change within the next six months. Individuals in this stage may lack the knowledge of consequences related to a particular behavior (Shumaker et al., 2009). On the other hand, the
contemplation stage depicts an individual who is considering making a change in health behavior practices within the next six months (Shumaker et al., 2009). Individuals in this stage are usually aware of the pros and cons of the behavior, yet the individual may remain stuck in this stage, also known as procrastination (Shumaker et al., 2009). The preparation stage encompassed a plan to change within the next six months while individuals in the action stage have transitioned to applying the modifications within the last six months. Finally, the maintenance stage consisted of continuously working to prevent relapse while applying the desired behavior (Shumaker et al., 2009).

**Processes of change.** The processes of change refer to the application of interventions that allow progression through the stages of change (Shumaker et al., 2009). There are ten processes of change; however, only consciousness raising was used in this project. Consciousness rising is the awareness of causes and consequences related to a problem (Shumaker et al., 2009). Consciousness rising also addresses interventions based on the individual’s stage of change. Interventions used in consciousness raising include education, feedback, and media campaigns (Shumaker et al., 2009).

**Decisional balance.** In addition, decisional balance reflects an individual’s concept of change and the weighing of the pros and cons (Kobetz, Vatalaro, Moore, & Earp, 2005). During this time, the pros and cons are examined and outweighed to make a decision to change. Additionally, research conducted using the transtheoretical model has determined that the cons of changing usually outweigh the pros in the pre-contemplation stage (Hall & Rossi, 2008). Next, the pros are heavily weighted in the contemplation and preparation stages. Finally, the pros prevail over the cons in the action stage (Hall & Rossi, 2008).
**Self-efficacy.** Self-efficacy is another construct of the transtheoretical model. Self-efficacy is described as a mediator of change (Shumaker et al., 2009). Self-efficacy is the perception of an individual’s own ability to perform a given behavior and is directly linked to an individual’s stage of change (Barkley & Burns, 2000). In addition, evidence of research demonstrates that a person with a high level of perceived self-efficacy is more prone to be proficient at a particular behavior than one with a lower level of self-efficacy (Barkley & Burns, 2000).

**Major Assumptions**

There are several assumptions that drive the transtheoretical model and its application to practice. Initially, no single theory can take into account the multidimensional aspects of behavior change (Shumaker et al., 2009). Next, behavior change is a progression that occurs over time through a succession of stages (Shumaker et al., 2009). These stages are both stable and flexible (Shumaker et al., 2009). Furthermore, most individuals will remain in the early stages of change without a plan to change, especially if an intervention is not introduced (Shumaker et al., 2009). Finally, interventions and principles of change should be applied to the individual’s specific stage of change (Shumaker et al., 2009). Figure 1 illustrates the Conceptual-Theoretical-Empirical (CTE) structure and linkages of Project Motivate.
Figure 1. The Conceptual-Theoretical-Empirical (CTE) Structure and Linkages for Project Motivate.

Summary

Finally, as evidenced by research articles, patient education and individualized behavior interventions are vital to reinforce safer sex messages (Peate, 2012). Many patients report having limited, if any, education about proper use of condoms. Although abstinence is the best choice, proper application and use of condoms can help decrease the transmission of sexually transmitted infections and unintended pregnancies.
CHAPTER III

Project Description

Campaigns and reproductive health educational programs have been implemented to raise awareness and promote condom use in the communities, yet 71% of sexually active individuals report not receiving sexual education prior to his or her first sexual experience (Manlove et al., 2008). A lack of education received by patients creates a negative perception of condom use and a lack of confidence in the ability to use condoms appropriately. Therefore, the title of this project is Utilizing motivational interviewing to improve condom use self-efficacy. The purpose of Project Motivate was to determine if motivational interviewing improves self-efficacy related to condom use among sexually active adults in a rural health department in the southeastern United States. In addition, the project sought to determine if motivational interviewing is an effective intervention in promoting condom use among adults.

The study used motivational interviewing (MI) as a one on one counseling intervention to promote condom use. Motivational interviewing is a “client-centered counseling style for eliciting behavior change” (Dart, 2011, p. 2). MI is based on the transtheoretical model, which emphasized change as a sequential process with stability and flexibility. Motivational interviewing has been researched and applied to a number of studies related to weight loss, diabetes, and physical activity; however, there is lack of evidence where MI is applied to promoting condom use self-efficacy.

Project Implementation

The study took place in a local health department within the southeastern United States. Participants completed a demographic form with related sexual health questions.
The demographic form asked participant’s age, race, and history of STDs. The data was collected utilizing a self-reported questionnaire. A pretest and posttest of the Condom Use Self-Efficacy Scale (CUSES) was utilized to collect data to determine the effectiveness of Project Motivate.

**Setting and Sample**

Patients presenting to the STD clinic were approached to voluntarily participate by providing self-reported data, which would remain anonymous. Each participant placed his/her numbered packet with responses for participant’s sexual health history questionnaire, condom use survey, and the pretest and posttest in a designated box within the clinic. The inclusion criteria of patients were male and female sexually active participants over the age of 18 years old. Informed consent was granted based on voluntary participation. Sexually active participants were defined as engaging in sexual intercourse via vaginal, anal, or oral sex. An estimated sample size of at least 47 participants was required based on completion of a power analysis.

**Project Design**

Initially, a research proposal was submitted to the Institutional Review Board (IRB) at the University as well as at the local health department. Once both approvals were confirmed the sample of participants was recruited on a volunteer basis as he or she presented to the STD clinic. The participants were required to read a consent form stating that participation was voluntary and the participant could decline or withdraw at any given time. The participant completing the survey instruments demonstrated an understanding of consent to participate.
Next, the demographic questionnaire and pre-test CUSES were completed simultaneously. The intervention, which was developed by the project administrator, consisted of an individualized counseling session based on a dialogue inspired by motivational interviewing techniques (Appendix). The dialogue was inspired by evidence-based motivational interviewing techniques and the Centers for Disease Control and Prevention’s recommendations for an effective health education curriculum (Dart, 2011; USDHHS, 2014). Additionally, the posttest CUSES was distributed after completion of the intervention. Finally, the participants’ pretest and posttest CUSES data was analyzed utilizing data analysis and descriptive statistics.

**Protection of Human Subjects**

The protection of participants was addressed by requiring participants to read a consent form stating his or her participation was voluntary. Information gathered was anonymous and kept confidential. Patients did not disclose identifiable information during data collection and the intervention. Next, the consent form explained the risk of participating in Project Motivate as minimal to none. There was no incentive for participation or penalty for declining to participate; however, participants gained resourceful knowledge. Finally, the consent form reported available resources for participants exhibiting emotional stress related to the study.

**Instruments**

The project administrator utilized the CUSES to assess the participant's perception of his or her confidence and ability to use condoms (Tung et al., 2010). Permission to use the CUSES was granted. The Condom Use Self-Efficacy Scale consisted of 28 items that described an individual's feelings of confidence toward being...
able to purchase condoms, correctly apply them, and negotiate the use of condoms with a new sexual partner (Brafford & Beck, 1991). The CUSES has four subscales: mechanics (putting a condom on self or other), partner disapproval (use of condom with a partner's approval), assertive (ability to persuade a partner to use a condom), and intoxicants (ability to use condoms while under the influence) (Tung et al., 2010). The CUSES scale has adequate reliability and validity (Cronbach’s alpha= 0.91) demonstrated in a number of clinical trials (Brafford & Beck, 1991; Tung et al., 2010).

**Data Collection**

The project administrator utilized a pretest/posttest design to collect self-reported data assessing condom use behaviors among sexually active adults. The data was quantitatively analyzed to determine the significance of Project Motivate. Several variables were analyzed such as comparison of totaled scores from the pre-test and post-test, age, race and history of a sexually transmitted disease. The CUSES pre-test was administered with the demographic questionnaire and the condom use survey prior to the intervention. The project administrator conducted the individualized counseling session based on personal responses from participants. Finally, the CUSES posttest was administered when the individualized intervention had concluded. Participant responses were kept secure for data collection and data analysis.

**Timeline**

The study took place over the course of six months. The IRB approval process started in August and approval was granted after approximately two months. The data was collected for four weeks in the month of October to acquire an appropriate
sample size. The data collection and analysis process took approximately two months. Therefore, the timeframe for the overall study was August to February.

**Budget**

The approximate budget was unknown initially; however, the estimated budget included copying paper, folders, writing utensils, and data analysis. The basic necessities cost approximately 50 dollars. The developer of the CUSES scale permitted the project administrator access to make copies at no cost. The statistician and data analysis cost approximately 150 dollars. In addition, the binding, formatting, and editing of the final document cost approximately $300. Overall, the final budgeted cost was 500 dollars.

**Summary**

In summary, the purpose of this study was to determine if motivational interviewing significantly improved self-efficacy related to condom use among sexually active adults utilizing a quantitative pretest/posttest design. The study also sought to determine if motivational interviewing is an effective intervention in promoting condom use self-efficacy. The questions this project sought to answer included: Does motivation interviewing through education and awareness increase condom use self-efficacy? Will the patient’s confidence in condom use improve if they are educated on its proper use and effectiveness?

Finally, as evidenced by research articles, patient education is vital to understanding the correct use and application of condoms. Many patients reported having limited, if any education about proper use of condoms. Although abstinence is the best choice, proper application and use of condoms can help decrease the transmission of sexually transmitted infections and unintended pregnancies.
CHAPTER IV

Results

The purpose of Project Motivate was to determine if motivational interviewing significantly improves self-efficacy related to condom use among patients presenting to a public health department for screening of STIs. The study also sought to determine if motivational interviewing is an effective intervention in promoting condom use self-efficacy.

Sample Characteristics

Participants (n=40) completed the participant administered sexual history form, a condom use survey, a pre-test and a post-test that were collected for data analysis. However, one participant’s responses were incomplete and excluded from data analysis (n=39). Participant ages ranged from 19 years old to 57 years old, with a mean age of 28.36 years (SD, 9.51). The majority of the participants were women (n=29, 72.5%) as demonstrated in Table 1.

Table 1

*Gender Comparison of Participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
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<tr>
<td>M</td>
<td>10</td>
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<td>10</td>
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<tr>
<td>F</td>
<td>29</td>
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</tr>
</tbody>
</table>
Table 2 illustrates the racial profile of Project Motivate participants. The majority of the participants were African American (n=19) with the second highest racial population being Caucasian (n=17).

**Table 2**

*Comparison of Racial Profile among Participants*

<table>
<thead>
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<th>Race</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
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</thead>
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<td>48.72</td>
<td>19</td>
<td>48.72</td>
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<tr>
<td>Caucasian</td>
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<td>5.13</td>
<td>38</td>
<td>97.44</td>
</tr>
<tr>
<td>Biracial</td>
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<td>2.56</td>
<td>39</td>
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</table>
More than half of the participants reported a history of an STI (n=23, 57.5%). The highest percentage of participants with a reported history of an STI is noted among the 20 to 29 year olds as depicted in Figure 2.

![Figure 2. Comparison of Ages and Reported History of an STI](image)

The responses to the condom use survey and the Stages of Change Algorithm were utilized to identify the participant’s current use of condoms and the participant’s reported stage of change. Over 60% (n=27) of the participants reported using condoms sometimes while 27% (n=11) reported always using condoms. Two participants reported never using condoms. Finally, most of the participants were in the planning phase of using condoms consistently (n=24).
Major Findings

Descriptive statistics, including means and standard deviations, and counts and percentages, were calculated for all variables. SAS®, Enterprise Guide® 6.1, was utilized for all data analyses. The primary analysis was a Wilcoxon Signed-Rank Test comparing pre-test and post-test CUSES scores. The Wilcoxon Signed-Rank Test was utilized since the data was paired but not normally distributed.

A two-tailed p-value of less than 0.05 was considered statistically significant. Comparatively, scores increased by 3.8 on average (standard deviation=7.4) from pre-test to post-test scores. The change between pre-test and post-test scores was considered to be statistically significant (p = 0.0004, signed-rank test); therefore, relatively indicating post-test scores were significantly higher than the pre-test scores as demonstrated in Table 3.

Table 3

Variable Analysis with SAS®, Enterprise Guide® 6.1

<table>
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<th>Std Dev</th>
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<th>Maximum</th>
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<td>25.00</td>
<td>9.51</td>
<td>19.00</td>
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<td>Pretest</td>
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<td>11.28</td>
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<td>112.00</td>
</tr>
<tr>
<td>Posttest</td>
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<td>103.85</td>
<td>107.00</td>
<td>9.18</td>
<td>80.00</td>
<td>112.00</td>
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<tr>
<td>diff. post/pre</td>
<td>posttest minus pretest score</td>
<td>39</td>
<td>3.82</td>
<td>3.00</td>
<td>7.43</td>
<td>-11.00</td>
<td>37.00</td>
</tr>
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</table>
Summary

Overall there was a significant increase in post-test scores after the intervention. Motivational interviewing did significantly improve self-efficacy related to condom use among patients. Furthermore, motivational interviewing did prove to be an effective intervention in promoting condom use self-efficacy.
CHAPTER V

Discussion

The questions Project Motivate sought to answer included: Does motivational interviewing through education and awareness increase condom use self-efficacy? Will the patient’s condom use self-efficacy improve if they are educated utilizing motivational interviewing and basic facts on correct use? The exponential rise of sexually transmitted infections can be linked to the lack of condom use; therefore, motivational interviewing was shown to be an excellent tool for clinicians to encourage condom use based the participant’s current stage of change.

Implication of Findings

There was a significant increase in posttest scores following the intervention, thus demonstrating an increase in condom use self-efficacy. The statistically significant difference in pretest and posttest scores demonstrated the benefit of applying motivational interviewing in the clinical setting. Numerous studies have concluded similar significance of motivational interviewing related to weight loss and smoking. Clinicians have also recognized the TTM as a valuable asset to determining a patient’s readiness to change, thus allowing clinicians to create individualized interventions utilizing motivational interviewing to promote awareness, education, and motivation to prompt changes in behavior.

Qualitatively, participants reported the intervention was very informative and the knowledge gained would benefit them in future decisions to use condoms. Participants reported feeling more confident in using condoms and discussing condom use with current and future partners once the intervention had taken place. Many participants
reported common reasons for not using condoms consistently. Examples of common responses included my partner disapproves; trust in partner, or condoms unavailable.

Application to Theoretical Framework

The TTM is an integrative theoretical framework used to understand an individual’s progressive behavior to adopt and maintain healthy behaviors (Shumaker et al., 2009). The TTM was utilized to determine the participant’s stage of change based on the condom use survey. Each question in the survey was to determine the participant’s current use of condoms and his/her future intentions to use condoms. The stages of change include pre-contemplation, contemplation, preparation, action, and maintenance. The application of the TTM stages of change and interventions influenced by this model will provide guidelines in creating individualized education programs and campaigns, therefore providing individualized defenses against sexually transmitted infections.

Project Limitations

This study has several potential limitations. The methodological limitation of the study was the nature of self-reported data from participants. Therefore, generalizability may be limited. Caution should be exercised in generalizing the results to populations in comparable settings. Secondly, there were a limited number of participants that volunteered to participate. Finally, the participants were recruited utilizing a convenience sample.

Implications for Nursing Practice

Advanced practice nurses (APNs) promote healthy behaviors via therapeutic communication with hope to see an improvement in patient outcomes. In public health, improvement in patient outcomes can be reflected by decreased transmission of STIs.
The findings provided insight into the challenging dialogue that occurs between a clinician and the patient. For example, qualitative data provides knowledge into the challenges individuals face when deciding to use condoms. The study provided specific demographic populations that can be targeted for education and screenings, such as African Americans and women. Furthermore, APNs can seek training in motivational interviewing techniques to promote lifestyle modifications related to sexual behaviors.

**Implications for Future Research**

Future research studies should assess a larger volume of randomized participants. Future research should also be individualized to each participant’s stage of change, thus identifying barriers that prevent the progression of one phase to another with the ultimate goal of using condoms consistently with each sexual act. Next, in future studies the CUSES could be converted to an electronic form for ease of use and data analysis.

Finally, future research should target the different subscales of the CUSES. The subscales are mechanics (item 1, 27, 14, 22), partner disapproval (item 9, 10, 16, 17, 18), assertive (item 4, 5, 6), and intoxicants (item 24, 25, 28) (Shaweno & Tekletsadik, 2013). A comparison of subscales will demonstrate a more specific analysis on the benefit of motivational interviewing.

**Conclusion**

There was a positive correlation between the intervention and the increase in posttest scores from pretest scores, thus resulting in an increase in condom use self-efficacy. These findings suggested the potential benefits of integrating motivational interviewing into clinical practice. Motivational interviewing highlights the promise of a useful, inexpensive clinical tool for health promotion and disease prevention.
References


http://dx.doi.org/10.1111/j.1525-1446.2010.00890.x


Appendix

Motivational Interviewing Intervention
Appendix

**Project MOTIVATE**

**Introduction:** *MOTIVATE* is a counseling, tailored intervention based on motivational interviewing techniques to increase condom self-efficacy among sexually active young adults.

**Objectives:**

At the completion of this activity, participants will be able to:

- Discuss the positive and negative aspects of condom use.
- Identify the types of condoms available.
- Demonstrate proper use and application of a condom
- Formulate goals toward improving confidence in condom use.

**Target Behavior: Condom Use**

**Step 1: Ask about the positives of using condoms**

1. Tell me what you know about using condoms or your experience with using them.
2. What are some of the benefits (good things) about using condoms?
3. How has using condoms benefited you?
4. Tell me when you would use a condom.

**Step 2: Prevention Measure: Discuss the positive aspects of using condoms every time participant engages in sexual activity to decrease:**

1. Chance of getting an STD such as gonorrhea, chlamydia, HIV/AIDS, herpes or syphilis
2. Unplanned pregnancy

**Step 3: Ask about the negatives of not using condoms**

1. Tell me why you would choose not to use a condom during sexual intercourse
2. What has happened in the past when you chose not to use condoms?
3. What do you dislike about using condoms?

**Step 4: Prevention Measure: Discuss the negative aspects of using condoms every time participant engages in sexual activity.**

1. Getting STD such as gonorrhea, chlamydia, HIV/AIDS, herpes or syphilis
2. Unplanned pregnancy

**Step 5: Explore participant’s life goals and values?**

1. What are some things that are important to you?
2. What are your short and long term goals?
3. Where do you see yourself in one year?
Step 6: Prevention Measure: Discuss options for male and female condom use and demonstrate proper condom application.

Step 7: Ask participant for a decision.
1. Is the importance of condom use for self-protection now clear?
2. How important is it for you to make this change? (0-no importance, 10-most important) _____
3. Can you make a decision to use condoms with each act of intercourse? If no, when will you be ready to make this change?

Step 8: Setting Goals/Conclusion
1. How confident are you in making this change? (0-lowest level of confidence, 10-highest level of confidence) _____
2. What will you do today to make this change?
3. Can you set one short term goal to reach within the next 2 weeks, such as:
   a. I will have condoms available for use the next time I have sex.
   b. I will discuss condom use with my partner.

   **My short term goal is to:**

4. Can you set one long term goal to reach within 6 months such as
   a. I will use condoms every time I have sex.

   **My long term goal is to:**

If no decision or decision is to continue the behavior, inquire about other options that would assist in making a behavioral change.
States of Change Algorithm, Related to Condom Use

Adopted from Tung, Cook, and Lu, 2011