

FORMATIVE RESEARCH FOR THE DEVELOPMENT OF STRATEGIES TO INCREASE
DUAL METHOD USE AMONG ADOLESCENTS AND YOUNG ADULTS

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ABSTRACT

Mollie M. Williams: Formative Research for the Development of Strategies to Increase Dual Method Use Among Adolescents and Young Adults
(Under the direction of Suzanne Havala Hobbs)

Unintended pregnancy and sexually transmitted infections (STIs) are significant health problems in the United States, and African American and Latino youth experience higher rates of both. The simultaneous use of birth control and condoms is a strategy that has demonstrated effectiveness in preventing both unintended pregnancy and STIs. Eight focus groups were conducted with African-American and Latino adolescents and young adults to inform strategies to increase dual method use, defined as the simultaneous use of condoms and highly effective contraceptives. Participants described dual method users as “smart,” “careful,” and “focused.” Positive emotions were also associated with dual method use, including confidence and security. Participants readily identified cost and access as environmental obstacles. Many believed dual method use was important, but others doubted that it was necessary, especially within a committed relationship. These findings, coupled with established theories of behavior change, suggest that public health professionals should emphasize the positive images and emotions associated with dual method use. They must help participants negotiate, and help reduce, environmental barriers to dual method use. It is also important to address dual method use within the context of relationships.

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CHAPTER 1: INTRODUCTION

Unintended pregnancies and sexually transmitted infections (STIs), including HIV, are significant public health problems in the United States. While condoms offer protection against STIs, they are not as effective at preventing pregnancy as other methods, such as hormonal contraception and intrauterine devices (IUDs)(Trussell, 2007). Therefore, it is often recommended that sexually active adolescents and young adults use condoms and another method of contraception simultaneously. This practice is referred to as dual method use. Despite health professionals' recommendations and the additional protection offered by dual method use, it is not widely practiced.

This dissertation describes formative research conducted to inform strategies to increase dual method use among adolescents (ages 15 to 18) and young adults (ages 19 to 24). In Chapter One, the research describes the public health problems of unintended pregnancies and STIs, explores strategies that could reduce unintended pregnancy and STIs, and presents information about the prevalence of and correlates with dual method use. Chapter Two is a literature review of interventions designed to increase dual method use. In Chapter Three, the researcher presents a conceptual framework and describes the qualitative research strategy, data collection procedures and instruments. She also presents ethical issues related to the research and how they were addressed. Chapter 4 summarizes the findings from the focus groups. In Chapter Five, the researcher discusses the implications and practical applications of the research findings. Finally, in Chapter Six, a plan for change is presented that draws upon leadership theories.

Unintended Pregnancy and STIs in the United States

In 2006, approximately 2.5 million women ages 15 to 24 became pregnant, and more than two-thirds of these pregnancies were unintended (Finer & Zolna, 2011). The unintended pregnancy rate for 15 to 19 year olds was 60 per 1,000 women. For 20 to 24 year olds, it was 107 per 1,000 women. Despite a 64 percent decline in teen pregnancy from 1991 to 2009, the rate is still 9 times higher than those of other developed countries (Centers for Disease Control and Prevention, 2011; United Nations, 2010)

Unintended pregnancies are associated with numerous negative consequences, not only for the mothers, but also for children, families, and society. Women with unintended pregnancies delay prenatal care at higher rates and have less favorable mental health during and after pregnancy. In addition, unintended pregnancies are associated with negative consequences for the children, including poorer physical health and psychological well being (Logan, Holcombe, Manlove, & Ryan, 2007).

The costs of unintended pregnancies are significant. In 2006, the annual cost to public insurance programs like Medicaid and the Child Health Insurance Program (CHIP) for births resulting from all unintended pregnancies in the U.S. was \$11.1 billion (Sonfield, Kost, Gold, & Finer, 2011). In 2004, The National Campaign to Prevent Teen and Unplanned Pregnancy estimated that the cost of teen pregnancy to taxpayers was \$9.1 billion (Hoffman, 2006).

There are substantial disparities in teen birth rates. The birth rate for African American and Latina teens is more than double that for White teens. In 2010, the birth rate for White, non-Hispanic 15 to 19 year olds was 23.5 per 1,000. For African Americans and Latinas in the same age group, the rates were 51.5 per 1,000 and 55.7 per 1,000, respectively (Martin et al., 2012).

Adolescents and young adults also have higher rates of STIs, including HIV, than other age groups. While 15 to 24 year olds only represent 25 percent of the population, they account for nearly half of reported STIs. In 2011, males and females ages 20 to 24 had the highest rates of chlamydia and gonorrhea as compared to other age groups (Centers for Disease Control and Prevention, 2012b). In 2011, persons ages 20 to 24 had the highest rate of new HIV infections, compared with any other age group (Center for Disease Control and Prevention, 2013).

African Americans and Latinos experience a disproportionate burden of STIs, including HIV. In 2011, African American females ages 15 to 19, were diagnosed with chlamydia and gonorrhea at approximately six and fourteen times, respectively, the rate of White females in this age group. The chlamydia and gonorrhea rates for African American women ages 20 to 24 were five and twelve times, respectively, the rates of White women in the same age group (Centers for Disease Control and Prevention, 2012b).

While the disparity is not as great as for African Americans, Latinos also have higher rates of chlamydia and gonorrhea when compared to Whites. In 2011, the chlamydia rate for 15-19 Latina females was 62% greater than it was for White females in the same age group. For Latina females 20-24 the chlamydia rate was 67% greater (Centers for Disease Control and Prevention, 2012b).

Strategies for Reducing Unintended Pregnancy and STIs

The high rates of unintended pregnancy and STIs, coupled with significant disparities, demand a response from organizations striving to improve sexual and reproductive health.

These problems, however, are not amenable to one, simple solution. In this following section, potential strategies are explored.

Abstinence from vaginal sex for the prevention of pregnancy and from vaginal, oral, and anal sex for the prevention of STIs is the best strategy for some adolescents and young adults. However, abstinence education has not been effective (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2009). While some people choose to abstain from sex until marriage, it is not the norm in the U.S. According to the National Survey for Family Growth, 86.4 percent of women and 90.6 percent of men have sex before marriage (Centers for Disease Control and Prevention, 2012a). Like other methods of contraception, there is a perfect-use effectiveness rate and a typical-use effectiveness rate for abstinence (Dailard, 2003). Typical-use rates represent the percentage of women who successfully avoid pregnancy during the first year of use, and include women whose methods fail due to inconsistent or incorrect use. Abstinence can fail too, when practiced inconsistently or incorrectly. For example, some adolescents and young adults may abstain from vaginal sex, but not oral and anal sex, putting them at risk for STIs. Others may abstain from vaginal sex periodically, but not 100 percent of the time.

Another potential strategy for reducing unintended pregnancies and STIs is the use of a highly effective method of contraception within a mutually monogamous relationship with an uninfected partner. Some researchers argue, however, that this approach “may provide only the illusion of protection” (Misovich, Fisher, & Williams, 1997, p. 73). Monogamy, as a way to prevent STIs, only works if both partners are absolutely monogamous and truly uninfected. There is limited research on infidelity within dating relationships, but one study of college students found that 49.1 percent of males and 30.8 percent of females had sexual

intercourse with someone else while in a serious dating relationship (Wiederman & Hurd, 1999).

Besides infidelity, there are many reasons that a supposedly STI-free person could infect a partner. First, it is not uncommon for people to misunderstand the meaning of medical test results. One study found that 78 percent of sexually experienced adolescent females believed that a Pap test was synonymous with an STI test (Blake, Weber, & Fletcher, 2004). Second, some people believe that STIs are always accompanied by symptoms. In a survey of adolescent patients of a primary care clinic, 64 percent believed that gonorrhea was always accompanied by a rash, pain, sores, or discharge (Biro, Rosenthal, & Stanberry, 1994). Gonorrhea, in fact, is usually asymptomatic in women (Detels et al., 2011). Third, some people receive a “clean” test for one or more STIs and assume this means they have tested negative for all possible STIs. The American College of Obstetricians and Gynecologists recommends screening asymptomatic adolescents for HIV, chlamydia, and gonorrhea, but not other STIs like syphilis and HPV (American College of Obstetricians and Gynecologists, 2011b).

Finally, people may lie to their partner about having an STI in order to avoid embarrassment, stigma, loss of the relationship, or other negative consequences. It is important to remember that these decisions about how “safe” one’s partner is can be influenced by one’s feelings of commitment toward one’s partner. In fact, greater commitment is associated with decreased perception of one’s partner as a potential source of harm (Agnew & Dove, 2011). In summary, while using a highly effective method of contraception within the context of a mutually monogamous relationship with an uninfected partner is theoretically an effective way to avoid pregnancy and STIs, it is not foolproof.

Condoms alone, when used correctly and consistently, provide good protection against pregnancy and excellent protection from STIs. Condoms, used alone or in combination with emergency contraception in the event of condom failure, is another possible strategy. O’Leary (2011) proposes that this strategy may be more effective than recommending dual method use because women counseled to practice dual method use may be more likely to forgo condoms than women counseled to use condoms alone. However, for many adolescents and young adults, the 15 percent typical-use failure rate for pregnancy prevention with use of male condoms (Trussell, 2007) is unacceptable. Furthermore, access to emergency contraception is not optimal. In a November 2012 statement, the American College of Obstetricians and Gynecologists wrote the following: “Access to emergency contraception remains difficult for adolescents, immigrants, non-English speaking women, survivors of sexual assault, those living in areas with few pharmacy choices, and poor women.” (ACOG Committee Opinion Number 542: Access to emergency contraception, 2012, p. 1251) As a result, many of the women who need emergency contraception the most are unable to get it.

Some sexual health experts advocate the promotion of “dual protection” which includes dual method use, as well as abstinence, using a highly effective method of contraception within the context of a mutually monogamous relationship, and condoms used by themselves. Promoting dual protection means educating those who want to prevent both pregnancy and disease about all four options and allowing the person or couple to choose which approach is best for them. Others argue, however, that dual method use is the best option, especially for adolescents and young adults, and should be emphasized over the other options. Higgins and Cooper (2012, p. 77) suggest that “adolescents may be especially good

candidates for dual method use given their relatively rapid relationship turnover... and high rates of both unintended pregnancies and STI.”

Due to the high rates of unintended pregnancy and STIs in adolescents and young adults, many health organizations recommend dual method use. The American College of Obstetricians and Gynecologists recommends “...sexually active adolescents should be encouraged to use condoms in conjunction with a more effective method of contraception to provide effective pregnancy prevention and protection against STIs. Adolescents should also be counseled in the specific steps required for correct use of condoms.”(American College of Obstetricians and Gynecologists, 2011a) Healthy People 2020, the ten-year health agenda set by the U.S. Department of Health and Human Services, includes four objectives (FP 11.1 – FP 11.4) for increasing dual method use, including the following: “FP 11.1: Increase the proportion of sexually active females aged 15 to 19 who use a condom and hormonal or intrauterine contraception at first intercourse.” The other goals related to dual method use target men in this same age group and aim to increase dual method use at last intercourse (U.S. Department of Health and Human Services, 2012).

Prevalence of Dual Method Use

Dual method use is not widely practiced. An analysis of dual method use among participants in the National Survey of Family Growth from 2006 to 2008 found that 7.3 percent of women ages 15 to 44 reported dual method use at last intercourse (Eisenberg, Allsworth, Zhao, & Peipert, 2012). However, dual method use was more common in younger age groups; 22.8 percent of 15 to 20 year olds compared to 12 percent of 21 to 25 year olds reported dual method use at last intercourse.

Despite its low prevalence, dual method use is increasing. (G. Martinez, Copen, & Abma, 2011). The 2006-2010 National Survey of Family Growth showed that 20.1 percent of 15 to 19 year olds engaged in dual method use, up from 3.3 percent in 1988.

A recent study of clients at four Planned Parenthood clinics in Northern California found that condom use declined significantly after initiation of a more effective method of contraception (Goldstein, Upadhyay, & Raine, 2012). Condom use declined from 36 percent to 27 percent in the first 3 months after starting another method. Among condom users who had stopped using a more effective method after one year, only 47 percent returned to using condoms. These findings are especially concerning given the high prevalence of STIs among the demographic groups represented in the study population—young (two-thirds were ages 15 to 19), predominantly Latina and African American females living in low-income neighborhoods.

Factors Associated with Dual Method Use

A number of studies have examined the factors associated with dual method use. A recent review of the literature (Higgins & Cooper, 2012) found that the following characteristics were positively associated with dual method use: younger age, motivation to avoid pregnancy, concern about STIs, confidence using condoms, past condom use, higher number of partners, shorter duration of relationships, partner support of condom use, parental communication about sexual risks, and receipt of sex education or contraceptive counseling. While the evidence of an association between race/ethnicity and dual method use is conflicting, there is some evidence to suggest that dual method use is more common among African Americans than other racial/ethnic groups (Higgins & Cooper, 2012). There is

conflicting evidence about the association between level of education, use of user-dependent methods, and perceived STI risk.

Another recent review of the dual method use literature revealed similar correlates (O'Leary, 2011). O'Leary also reported a positive relationship between dual method use and good communication with parents, later sexual debut, and having fewer nonsexual risk behaviors. Those with newer or less committed sexual relationships were more likely to use dual methods. Women with good communication with sexual partners and those who expected their partner to be supportive if they became pregnant were more likely to be dual method users. Being strongly motivated to avoid HIV and other STIs and believing that one's partner could have HIV or another STI was also associated with dual method use. In addition, women who were concerned about pregnancy and STIs, had a history of an STI, or perceived that condoms were effective in preventing STIs were more likely to use dual methods.

An older literature review by Bearinger and Resnick (2003) identified additional variables associated with dual method use: partners' history of STIs, needle-sharing, female requested partner to use condoms, partner communication of risk, and frequency of parents knowing who their adolescent was with when not at home or school.

Higgins and Cooper pointed out a number of limitations to the existing research on correlates of dual method use, including that few studies collected data from men or examined relationship factors. They summarize the studies that do examine the male partner's role in dual method use, including research that shows that partner's positive opinion of condoms was associated with dual method use. In addition, young men who believed that men were at least somewhat responsible for contraception and who talked to their partner about condoms and contraception use, were more likely to use dual methods.

Higgins and Cooper (2012, p. 77) suggest this as an area for possible intervention, writing the following: “Taken cumulatively, the above results strongly support the argument that men’s method preference and contraceptive attitudes can greatly facilitate dual method use.”

A qualitative focus group study of African Americans explored the social dynamics of dual method use (Woodsong & Koo, 1999). Woodsong and Koo found that while most participants were knowledgeable about dual method use and believed it was important, participants found it difficult to practice consistently. Barriers included discomfort discussing sex and condom use, norms prohibiting a woman from asking a man to use condoms, negative attributes of condoms, and tension and mistrust between the genders. Many women believed that asking their partner to use condoms would result in a negative reaction and potentially damage the relationship. Both men and women discussed that it was difficult to bring up condom use in an ongoing relationship and doing so might result in distrust or suspicion of infidelity.

A desire to create trust and to avoid distrust within relationships is a major barrier to the promotion of dual method use. Misovich, Fisher, and Fisher (Misovich, et al., 1997), in a review of the literature about HIV risk behaviors within close relationships, describe how people estimate partners’ HIV risk using personality theories and incorrect AIDS prevention heuristics. These estimates then influence risk taking behavior. For example, the beliefs that a known or trusted partner is unlikely to have HIV and that monogamous relationships are “safe” often take the place of well-reasoned, knowledge-informed decisions. In addition, motivation to engage in AIDS-preventive behaviors may diminish as a relationship progresses and interdependence increases. Couples may begin to “believe that

they are uniquely invulnerable to HIV, compared with similar or the average person” (Misovich, et al., 1997, p. 92).

Any successful effort to increase dual method use must address the important issues of trust and distrust. Higgins and Cooper (2012, p. 78) suggest that “cultural-level resistance to condoms as a barrier to intimacy and trust may also be an important focus for future research, development of interventions, and social messaging....Qualitative research methods could be especially helpful in identifying and addressing cultural and structural constraints.”

Most research examines the relationship between individual-level factors such as age, method of contraception, and perception of risk. Additional research is needed to understand how partners, family, community, and society-level factors influence dual method use. For example, Higgins and Cooper (2012) recommend that further research is needed to understand provider- and service-level barriers to dual method use.

Changing behavior, especially behaviors related to sexual health, is not a straightforward endeavor. Dual method use is a complex behavior involving two people and two components—condom use and contraceptive use—and all the concomitant barriers, facilitators, and sub-behaviors (buying condoms, using a condom correctly, obtaining contraception, adhering to the chosen method’s appropriate use, etc.). Furthermore, these behaviors are taking place within the context of relationships. For adolescents and young adults, these may be some of their first romantic relationships, so they are navigating decisions about their relationships, including decisions about sex, with little personal experience on which to base their decisions. Condom use requires active participation by the male partner, contraceptive use requires active participation by the female partner, and dual method use.

CHAPTER 2: LITERATURE REVIEW

This research will enhance understanding of dual method use and the complex array of behaviors, facilitators, barriers, decisions, and context associated with dual method use for the purpose of developing strategies to increase dual method use among adolescents and young adults. A literature review was conducted to understand what strategies have been tried and tested to increase dual method use. In this section, the literature review is presented, including the procedures followed, descriptions of the major studies and their findings, and a summary of what was learned.

The author conducted a broad and thorough search of the peer-reviewed literature. The following indexes were searched: PubMed, Web of Science, CINAHL, and PsychInfo. The exact phrases, “dual method use”, “dual use”, and “dual protection” were queried. All citations were imported to Endnote, and once duplicates were removed, 931 citations remained. The following inclusion criteria were applied, first to the 931 titles resulting in the exclusion of 749 obviously unrelated articles:

- Intervention studies, regardless of the intervention type
- All stages of intervention development, including developmental studies, proof-of-concept, pilot studies, and clinical trials
- Prospective or retrospective analysis
- All countries, all populations
- Complete article available in English

- At least one outcome measure of dual method use or intent to practice dual method use

After this step, 182 studies remained. These abstracts were reviewed, and 18 articles qualified for inclusion. The references of these articles were reviewed for additional relevant articles. Two more articles were identified and one of the articles initially included was excluded after further review.

The literature review described here was performed before the research plan was developed. During the course of the study, the researcher was made aware of a systematic review for the Centers for Disease Control and Prevention's Guide to Community Preventive Services of group-based interventions to prevent or reduce adolescent pregnancy, HIV, and STIs (Chin et al., 2012). According to the systematic review four of the studies included dual method use results (Aarons et al., 2000; Li, Stanton, Feigelman, & Galbraith, 2002; Philliber, Kaye, Herrling, & West, 2002; Stanton et al., 2005). However, upon reading the published articles, only one publication included the dual method use results. This study by Philliber was added to the literature review.

At completion, 20 articles were included in the literature review. A summary of the abstraction is presented in Tables 1 and 2.

Studies evaluating "dual protection" interventions were included if "dual protection" included the choice of dual method use. Several studies were excluded because neither the intervention nor the outcome measurement included dual method use. However, if the intervention included some kind of promotion of dual method use (even if offered as one way to practice dual protection) or if one or more outcome measurements addressed dual method use, the study was included.

The inclusion criteria were intentionally broad and did not exclude studies conducted outside the U.S., but it became clear during the review of the articles that a subset of studies was less relevant to this proposal because of the economic, cultural, and health differences between countries. Six of the studies were based in sub-Saharan African in either HIV-positive populations or in communities with very high prevalence of HIV. Another was based in Mexico City, Mexico. These articles will be discussed briefly at the end of the literature review, but in less detail than the studies based in the U.S., Canada, and Europe because of the cultural, economic, and health care system differences.

What follows are summaries of the studies found in the literature search and their major findings. Several articles were about the same research, so there are nine studies presented from the U.S., Canada, and Europe. Then the key findings of the six studies in Mexico and Africa are presented. Finally, similarities and differences between the studies, as well as limitations of the research are discussed.

Project PROTECT

Peipert and colleagues have published three articles about Project PROTECT, a computer-delivered, tailored intervention based on the Transtheoretical Model of Behavioral Change (Peipert et al., 2007; Peipert et al., 2008; Peipert et al., 2011). The first article described the design of the randomized clinical trial and the baseline characteristic of participants (Peipert, et al., 2007). Female patients were recruited at two hospital-based family planning clinics and one Planned Parenthood health center. To be eligible, clients had to be between ages 13 and 35, speak English, have been sexually active with a male partner within the last 6 months, want to avoid pregnancy for the next 24 months, and be at high risk

for STIs or unintended pregnancy. All women 13 to 24 were considered high risk, and older clients were deemed high risk if they had a history of unplanned pregnancy or an STI, used contraception inconsistently, had more than one partner in the last six months, or abused drugs or alcohol. The primary outcome of interest was dual method use, which included “1) use of hormonal contraception (e.g. oral contraceptives, estrogen–progesterone injections (Lunelle) long-acting progestin injections (Depo-Provera), etc.) plus a barrier method (e.g. male or female condoms or diaphragm); 2) male condoms plus female condoms; 3) condoms plus spermicide; or 4) intrauterine device or sterilization plus a barrier method” (Peipert, et al., 2007, p. 632).

The intervention consisted of three different sessions over a period of eighty days. It was interactive and used text, audio, and images. It was tailored to the participant’s stage of readiness to change and included the pros and cons of condom and contraceptive use, help with situations where condoms and contraception might not be used, and strategies to facilitate the participants progress through the stages of change. At eighteen-month follow-up, the intervention group showed faster initiation and overall higher rates of dual method use (Peipert, et al., 2008). There were no differences in unintended pregnancies or STI rates between the two groups. In a subsequent article, Peipert and colleagues published the results of 24-month follow-up (Peipert, et al., 2011). They reported that while the intervention group was more likely to initiate dual method use, this difference was not sustained. They continued to see no differences in unintended pregnancy or STI rates between the two groups. They did, however, find that women who reported dual method use on two or more follow-up interviews had a lower risk of unintended pregnancy compared to women who reported dual method use in one or no interviews. Participants with higher levels of education, those at

an advanced stage of change (action or maintenance), and women using contraception at baseline were more likely to adhere to dual method use.

Project PROTECT demonstrated that a computer-delivered, tailored intervention can lead to short-term behavior change (Peipert, et al., 2011). Peipert et al suggest that the addition of booster sessions could extend the effect of the intervention, as well as further tailoring the intervention to address the needs of new contraceptors and those with lower levels of education.

Project REACH

Project REACH is a clinic-based, provider-delivered intervention that used motivational interviewing and relapse prevention strategies to assist clients in selecting the best method of dual protection, including dual method use (Exner et al., 2011). Other options for dual protection were the use of male or female condoms alone or the use of effective contraception within a mutually monogamous relationship. The intervention was evaluated using a quasi-experimental, quantitative design. In addition, a separate article was published describing the development and validation of a Dual Protection Counseling Checklist to evaluate provider-client interactions in the main study (Adams-Skinner et al., 2009).

Project REACH was implemented at four clinics in New York City. Participants were predominantly African American, Caribbean, or Latina and ranged in age from 15 to 32. The primary outcome of interest was a reduction in the number of unprotected sexual encounters, defined as sex without a male or female condom. The intervention group experienced a greater reduction in unprotected sexual encounters than the usual care group at the six-month follow-up. In addition, quality nurse-client interactions as determined by the Dual Protection

Counseling Checklist, were significantly associated with clients' reduction in sexual risk behaviors (Adams-Skinner, et al., 2009).

Project REACH demonstrated that a provider-delivered counseling intervention could increase condom use (Exner, et al., 2011). They did not directly measure other types of dual protection, namely dual method use. Only quality nurse-client interactions were associated with reductions in sexual risk behaviors. Examples of quality nurse-client interactions include the nurse asking open-ended questions, giving empathetic responses, and having a non-judgmental attitude, as well as the client expressing concerns about STIs or pregnancy, volunteering relevant information, and expressing her own preferences about contraception. Use of motivational interviewing techniques and relapse prevention counseling were not associated with reduction in sexual risk behavior at 6 months follow-up.

One limitation of this study was that the intervention was delivered by one nurse who was not randomly selected (Exner, et al., 2011). Further study is required to determine if this intervention could be replicated and successfully carried out by multiple providers. Furthermore, since only quality interactions were associated with positive outcomes and not motivational interviewing or relapse prevention counseling, the approach used during the counseling intervention should be modified and tested. Finally, given the findings for Project PROTECT related to sustained behavior change, longer-term follow-up is needed (Peipert, et al., 2011).

Clinic-based Intervention Using Video

Roye and Hudson (2003) published two articles about the development and evaluation of a video-based intervention to promote dual method use among African

American and Latina female adolescents. First, the researchers describe the development of the video using a series of studies to determine what strategies and content would be most relevant to the target audiences. They began with a quantitative study of the relationship between condom use and contraceptive use. The researchers then conducted open-ended interviews with past and current hormonal contraceptive users, followed by semi-structured interviews with sexually active men and sexually active women who had used or currently used hormonal contraceptives. Two important themes were trust and “seeing is believing.” Teens indicated that they did not use condoms if they believed they could trust their partner and that the use of condoms could indicate distrust and harm the relationship. Interviewees also suggested that teens would respond to a message from a peer who had contracted HIV. After the 21-minute video was developed, the researchers showed the video to several focus groups, obtained feedback, and made minor changes to the videos.

Roye, Silverman, and Krauss (2007) then conducted a randomized controlled trial to test the impact of counseling alone (based on Project RESPECT, an HIV-prevention counseling protocol), the video alone, and the video plus counseling, compared to usual care. Four hundred female, African American and Latina, new or current hormonal contraceptive users, ages 15 to 21 were randomized to one of the four groups. The primary outcome of interest was condom use at last vaginal intercourse with her main partner. At the three-month follow-up, participants who received the video and counseling were 2.5 times more likely than the usual care group to have used a condom at last vaginal intercourse. However, the difference diminished at 12-month follow up to the point of statistical non-significance. There was no difference at 3 months or 12 months between the video only or counseling only and usual care group. Furthermore, there were no significant differences for any of the

interventions for other outcomes including self-reported STI diagnosis, positive chlamydia tests, number of casual partners, communication with partners about sexual history, or condom use during anal intercourse.

Like other interventions, sustained behavior change was not accomplished and the question remains whether booster sessions or other reminders would improve the results. Due to the small sample size and high attrition rates, small changes would have been difficult to detect (Royce, et al., 2007). The researchers suggest that the lack of intervention effect for the video alone and counseling alone may be explained by the Extended Parallel Process Model, which proposes that appeals based on fear, if followed by self-efficacy based messages, can result in behavior change. By featuring HIV positive young women in the video, it may have elicited fear, and the subsequent counseling session could equip the clients to take action based on that fear (Royce, et al., 2007).

Prime Time Pilot Study

In another clinic-based intervention, Sieving and colleagues examined the effect of a youth development program on condom use, hormonal contraceptive use, and their combined use (Sieving et al., 2012). The program targeted 13 to 17 year old girls at high risk of STIs and unintended pregnancy who visited one of three clinics in a Midwestern metropolitan city. The intervention consisted of monthly visits with a case manager, participation in a peer leadership group, and service learning activities. In contrast to the other interventions, there were no differences in the primary outcomes at the first follow-up (12 months), but at 18 months, the intervention group showed greater consistency in condom use and hormonal contraceptive use at statistically significant levels. There was a trend towards greater dual

method use. In addition, there was a significant dose-response relationship for dual method use; it was more common among participants who participated in a greater number of sessions.

The Prime Time Pilot Study demonstrates that an intensive, long-term, multi-faceted, youth development intervention can improve consistency of condom and hormonal contraceptive use, and may also increase dual method use among teens at high risk for STIs and unintended pregnancies. While limited by a small sample size (128) and its quasi-experimental design, it shows long-term effects where other interventions have failed to do so.

Carrera Program

This comprehensive youth development intervention was administered by six different social service agencies in New York City five days per week for approximately three hours each day for three years. It included the following components: a job-related intervention with stipends and employment experiences; academic assistance such as tutoring and SAT preparation; “comprehensive family life and sexuality education”; arts programs; and individual sports programs. Intervention participants also received mental health, medical, and dental care. Youth ages 13 to 15 were randomly assigned to the intervention or a control program and the primary outcomes of interest were pregnancy and childbirth.

After three years, female participants were significantly more likely to have used dual methods at last sex than females in the control group (odds ratio of 2.4 in a multivariate analysis). There was no significant difference in dual method use for male participants.

The researchers did not assess the relative importance of the program components. The cost of the intervention was about \$4,000 per year per teenager. While the improvements in dual method use are important, the duration, intensity, and cost of the intervention make it difficult to replicate.

Project PROTECT (Peipert, et al., 2007; Peipert, et al., 2008; Peipert, et al., 2011), Project REACH (Adams-Skinner, et al., 2009; Exner, et al., 2011), the clinic-based video and counseling intervention (Roye & Hudson, 2003; Roye, et al., 2007), the Prime Time Pilot Study (Sieving, et al., 2012), and the evaluation of the Carrera Program (Philliber, et al., 2002) employed well-designed studies that can advance public health professionals understanding of how to increase dual method use. The next four studies, while relevant, offer lessons for which the relevance is less straightforward. These studies are more limited due to research design and sample size. They do, however, suggest areas where further study is needed, including the impact of condom distribution and educational materials on dual method use.

HIV Counseling Among Users of Long-term Contraceptives

Cushman and colleagues (1998) asked clients at three urban, hospital-based family planning clinics to recall if they had been advised to use condoms with their new, long-term contraceptive method to protect against HIV. The primary outcome of interest was frequency of condom use. They found that women who recalled being advised to use condoms during the mandatory contraceptive counseling session were more likely to use condoms. The overall frequency of condom use was low, however, so the variable was dichotomized, collapsing all responses of “always,” “sometimes,” and “rarely,” and

comparing them to participants who responded, “never.” (Cushman, et al., 1998) Other weaknesses include the reliance upon recall of receiving the message about condoms and no follow-up beyond six months. While this study suggests that women who recall receiving an educational message about condoms and HIV are more likely to use condoms at least some, it is difficult to draw other conclusions. However, it is important to understand condom use among this patient population, long-term contraceptive users, as long-acting reversible contraceptives (LARCs) become more widely used among adolescents and young adults. Additional studies are needed to learn how to effectively increase dual method use among users of long-acting contraception.

Double Dutch

The term “Double Dutch” was first used to refer to dual method use in 1992 by three family planning physicians from the Netherlands (Gregson & Kirkman, 1999). Since then, it has been adopted in several European countries, including the UK. Gregson and Kirkman published an evaluation of a group of family planning clinic’s promotion of Double Dutch to their clients in Manchester, England. An anonymous survey was conducted with women under 25 who had been prescribed oral contraceptives. Twenty two percent of respondents reported that they used condoms most of the time and 7 percent used them occasionally. The most common reason for not using condoms was being “in a long-term relationship.” These long-term relationships varied from less than two months to more than one year. Only 14 percent of the participants were aware of the term “Double Dutch.”

Gregson and Kirkman’s (1999) study was the only article identified in the literature review about Double Dutch. It is likely that other research on Double Dutch exists in other

languages. Unfortunately, Gregson and Kirkman's study lacks a comparison group or any description of how Double Dutch was promoted within the clinics. It does, however, demonstrate that despite its promotion, few clients were aware of the term and more practiced it than knew its name.

Condom Distribution Within a School-based Intervention

Also in the UK, Parkes, Henderson, and Wight (2005) evaluated the impact of free condom distribution on dual method use. Intention to use both condoms and oral contraceptives was one of several outcome measures. However, when controlling for other factors, there was no relationship between condom distribution and intention to use two methods. There was also no association between receiving free condoms and anticipated regret if dual protection was not used. The extent to which free condom distribution was combined with any counseling or education, is unknown. Also, students were not randomized to receive free condoms or not, possibly confounding the results by unmeasured differences between students who took free condoms and those who did not. This strategy, commonly used in the U.S., is potentially important because it reduces barriers to condom use, such as cost and access. While the study does not support free condom distribution to increase dual method use, this strategy should not be eliminated based on this study alone.

Condoms and a Written Dual Method Message

Ullman and Lathrop (1996) evaluated a condom distribution intervention in Calgary, Canada, designed to promote dual method use. A family planning clinic introduced a campaign to encourage users of oral contraceptives to also use condoms through nurse

counseling and the distribution of condoms in an envelope printed with an educational message about dual method use. One hundred clients who had previously visited the clinic completed an anonymous, self-administered questionnaire. An age-matched sample from a similar clinic where such a campaign did not take place also completed questionnaires. Thirty nine percent of clients at the intervention clinic reported condom use at last intercourse as compared to 29 percent at the comparison clinic. However, this difference was not considered statistically significant. Once again, one cannot assume that condom distribution is ineffective in promoting dual method use. This study had a number of limitations, including that many of the clients at the comparison clinic also reported receiving free condoms. Additional research is needed to evaluate the impact of condom distribution on dual method use.

Interventions in Mexico and Africa

Finally, there were six studies set in Africa and one in Mexico. Due to the economic, cultural, and health care system differences between Africa, Mexico, and the United States, a full review of these articles was not warranted. It is worth noting, however, the various approaches used in these interventions, some of which may be relevant in the U.S. For example, two studies took systems-based approaches, evaluating how the introduction of new tools and training affected the actions of health care providers and in turn, their clients (Adeokun et al., 2002; Kim et al., 2005). These approaches demonstrated improvements in provider-client interactions, greater mention of HIV and condoms by providers, increased distribution of female condoms, and increased number of demonstrations of female condom

use. No U.S.-based studies examined health care provider or system-level influences on dual method use.

While most studies in the U.S., Canada, and Europe promoted condom use among new or existing contraceptors, several of the African studies took the opposite approach (Chibwasha et al., 2011; Exner et al., 2009; Feldblum et al., 2007; Mark et al., 2007). They implemented interventions to increase contraception in populations where condom use was already high, including HIV serodiscordant couples and sex workers.

While all of the U.S.-based interventions targeted females, one study in Nigeria targeted males (Exner, et al., 2009). Male partners of female family planning clients participated in two two-hour workshops and had monthly two-hour check in sessions. At three-month follow-up, participants in the intervention were four times as likely as the comparison group to report condom use at last sex. This approach, intervening with the partners of female users of contraception, could be relevant in the U.S.

Summary

This literature review was an important step in the formative research process, helping the researcher to understand what strategies have been attempted to increase dual method use and to what extent they were effective.

Various approaches were employed including motivational interviewing and relapse prevention (Exner, et al., 2011), case management, peer education, service learning (Sieving, et al., 2012), counseling by health care providers (Adams-Skinner, et al., 2009; Adeokun, et al., 2002; Chibwasha, et al., 2011; Cushman, et al., 1998; Exner, et al., 2011; Kim, et al., 2005; Roye, et al., 2007), group education sessions (Exner, et al., 2009), training of health

care providers (Adams-Skinner, et al., 2009; Kim, et al., 2005), teaching aids for health care providers (Kim, et al., 2005), written educational messages (Ullman & Lathrop, 1996), and free condom distribution (Parkes, et al., 2005; Ullman & Lathrop, 1996).

The interventions drew upon multiple theories including Social Cognitive Theory (Royce, et al., 2007; Sieving, et al., 2012), Resilience Paradigm (Sieving, et al., 2012), Theory of Planned Behavior (Parkes, et al., 2005), Theory of Reasoned Action, Health Belief Model (Royce, et al., 2007), Theory of Planned Behavior (Parkes, et al., 2005), and the Transtheoretical Model (Peipert, et al., 2007; Peipert, et al., 2008; Peipert, et al., 2011).

All but one intervention with multiple follow-up points found that the initial impact of their interventions diminished or disappeared over time. The youth development intervention conducted by Sieving et al. (2012) was the exception, showing a trend towards dual method use at 18-month follow-up

One major limitation of the studies reviewed here is the inconsistency of how dual method use was defined. For example, Peipert defines dual method use as, “1) use of hormonal contraception (e.g. oral contraceptives, estrogen–progesterone injections (Lunelle) long-acting progestin injections (Depo-Provera), etc.) plus a barrier method (e.g. male or female condoms or diaphragm); 2) male condoms plus female condoms; 3) condoms plus spermicide; or 4) intrauterine device or sterilization plus a barrier method.” (2007, p. 632). Among the studies reviewed here, Peipert’s studies are the only ones that include condom with spermicide as a dual method. Other authors only examined the use of condoms and hormonal contraceptives.

One study emphasized dual protection of which dual method use is one option presented. This approach encourages informed decision making by the client, but among

clients at high risk of STIs or unintended pregnancy, it may be more effective to encourage dual method use as a better alternative to other forms of dual protection (male or female condoms only or contraception within a mutually monogamous relationship).

Another limitation of this review of interventions, as well as the research examining the prevalence, trends, and correlates of dual method use, is the measurement of dual method use. Most studies ask about the methods used at last vaginal intercourse and do not assess consistent dual method use practices. Most studies do not measure consistency of condom use and none of the studies reviewed here measured consistency of contraceptive use (e.g., frequency of missed pills, late shots, etc.). Only one study reported outcomes related to condom use during anal sex (Exner, et al., 2011).

This review only includes articles published in English, likely resulting in the exclusion of research on the European “Double Dutch” programs. It also does not include efforts to increase dual method use not published in peer-reviewed journals.

The literature review demonstrates a need for further study of interventions that increase dual method use. While patient counseling, computer-delivered tailored education, and a youth development approach all show promise, the sample sizes were small and with the exception of the youth development approach, follow-up beyond 12 months was either lacking or showed no intervention effect. Other approaches, such as peer education, social marketing campaigns, and other types of electronically delivered interventions should be developed and evaluated. The emphasis should be on practical strategies that can be delivered in resource-constrained environments, including publicly funded family planning clinics. In addition, opportunities to integrate dual method use strategies into existing interventions, such as contraceptive counseling and school-based sexuality education

programs should be explored. Ultimately, dual method use should be part of all sexuality programs and not treated as a separate behavior. The researcher hopes that this formative research will equip the organizations and health professional working to improve sexual health to do just that.

Table 1: Studies Conducted in the U.S. Canada, and Europe

Authors, Year	Intervention	Definition of dual method use	Research Design	Primary Measure	Findings
Gregson & Kirkman, 1999	Promotion of “Double Dutch” message; nature of promotion was not described	The simultaneous use of oral contraceptives and condoms	Cross-sectional	Condom use	23 clients reported condom use most of the time and 7 reported occasional condom use
Sieving, et al., 2012	Monthly visits with case manager, participation in peer leadership group, service learning	Hormonal method plus condoms	Phase II clinical trial pilot study	Consistency of condom use	At 12-months, no difference; at 18 months, intervention group trended towards greater dual method use.
Peipert, et al., 2007	Computer-assisted, tailored, individualized intervention based on the Transtheoretical Model	Use of hormonal contraception plus a barrier method; male condoms plus female condoms; condoms plus spermicide; IUD or sterilization plus a barrier method	Randomized clinical trial	Dual method use	Not included

Peipert, et al., 2011	Computer-assisted, tailored, individualized intervention based on the Transtheoretical Model	Use of hormonal contraception plus a barrier method; male condoms plus female condoms; condoms plus spermicide; IUD or sterilization plus a barrier method	Randomized clinical trial	Dual method use	While intervention was associated with initiation of dual-method use, it was not sustained.
Peipert, et al., 2008	Computer-assisted, tailored, individualized intervention based on the Transtheoretical Model	Use of hormonal contraception plus a barrier method; male condoms plus female condoms; condoms plus spermicide; IUD or sterilization plus a barrier method	Randomized clinical trial	Dual method use	Intervention group reported faster initiation and overall higher rates of any dual use
Adams-Skinner, et al., 2009	Clinic-based, provider-delivered intervention using motivational interviewing and relapse prevention.	Dual protection: 1) use of male or female condom alone; 2) condom and non-barrier method; 3) use of effective contraceptive within mutually monogamous relationship	Quasi-experimental, quantitative design with embedded study to validate Dual Protection Counseling Checklist	Reduction in the number of male or female condom-unprotected sex occasions	Only scores on the Quality of Nurse-Client Interaction were associated with clients' reduction of sexual risk behavior at 6 months.

Exner, et al., 2011	Clinic-based, provider-delivered intervention using motivational interviewing and relapse prevention.	Dual protection can be 1) use of male or female condom alone; 2) condom and non-barrier method; 3) use of effective contraceptive within mutually monogamous relationship	Quasi-experimental, quantitative design with interviewer-administered instrument pre and post intervention and at 6-month follow-up	Reduction in the number of male or female condom-unprotected sex occasions	The intervention group had a greater reduction in unprotected sexual encounters than the usual care group.
Parkes, et al., 2005	Visiting a service to get free condoms	Use of condoms and oral contraceptives	Cross-sectional, exploratory	Intention to use two methods	There was no relationship between condom distribution and intention to use two methods.
Ullman & Lathrop, 1996	Free condom distribution and promotion of condom use among pill users by nurse counselors and distribution of "condom cards"	Use of condoms and oral contraceptives	Anonymous self-administered questionnaire	Use of condoms at last intercourse	39% of intervention clients and 29% of comparison clients used condoms at last intercourse; not statistically significant

Cushman, et al., 1998	Mandatory contraceptive counseling for family planning clients	Condom use among clients receiving injectable or implanted contraceptives	Observational	Frequency of condom use during reliance on the implant or injectable.	LARC users who recalled being advised to use condoms had higher rates of dual method use.
Roye & Hudson, 2003	Video designed to improve condom use by teenage women who use hormonal contraceptives	Use of condoms and hormonal contraceptives	Series of preliminary quantitative and qualitative studies for development of video	Qualitative themes identified to inform video development	Developed video that emphasized that one cannot tell by looking at someone that they have HIV.
Roye, et al., 2007	Video featuring HIV positive young women; counseling by health care assistants based on Project RESPECT protocol; Video followed by counseling	Use of condoms and oral contraceptives	Randomized controlled trial	Condom use at last vaginal intercourse with main partner	Young women who received video and counseling were 2.5 times more likely than usual care group to have used a condom at last vaginal intercourse with main partner at 3-months. No difference at 12 months. No significant difference between usual care and video only or counseling only.

<p>Philliber, Kaye, Herrling & West, 20021</p>	<p>Participants received a work-related intervention, academic assistance, comprehensive sex education, and arts and sports programs. They also received mental health, medical, and dental care.</p>	<p>Condom with a highly effective methods (i.e. pill, injectable, or implant)</p>	<p>Randomized control trial</p>	<p>Pregnancy and childbirth</p>	<p>Females who received the intervention were 2.4 times more likely to have used dual methods at last sex than those who were assigned to the control group when controlling for sex before enrollment, use of health care before enrollment, age, race/ethnicity, and the number of social barriers.</p>
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Table 2: Studies Conducted in Africa and Mexico

Citation	Intervention	Definition of dual method use	Research Design	Primary Measure	Findings
Adeokun, et al., 2002	Trained family planning providers, introduced dual-protection counseling protocol, provided free female condoms	Use of male or female condom alone or condoms with non-barrier method	Mixed methods - observations of interactions between providers and clients, exit interviews with clients, interviews with dual protection acceptors, focus groups, service statistics	Distribution of condoms	More than half of the visits in which condoms were distributed, the client also received another method
Feldblum, et al., 2007	Peer education only versus peer education plus clinic-based counseling on protected sex and STIs. Peer educators counseled participants on the importance of consistent condom use for the prevention of both STI and pregnancy	Condoms and the use of a highly effective contraceptive method (hormonal, IUD)	Secondary data analysis of trial conducted with sex workers to measure the effect of male and female condoms on STI outcomes	Contraceptive use	Remained steady at 15-17%

Citation	Intervention	Definition of dual method use	Research Design	Primary Measure	Findings
Exner, et al., 2009	Two 5-hour workshops one week apart, with two 2-hour check-in sessions	Dual Protection – use of condoms alone or condoms and another method of contraception	Quasi-experimental	Condom use at last intercourse	Men in the intervention were four times as likely as men in the comparison group to use condoms at last intercourse.
Mark, et al., 2007	Educational session + free birth control; Ed session + free birth control + session on inheritance law and will preparation	Condoms plus another method of contraception	Randomized controlled trial	Initiation of non-barrier contraception within 3 months of randomization	33% of control, 80% of intervention ¹ , and 76% of intervention ² couples adopted method
Stephenson, et al., 2011	30 minute videos with info on contraception emphasizing IUD and implant	Use of a highly effective method of contraception with condoms	Randomized controlled trial	Adoption of contraception	92% of nonusers adopted a new contraceptive method

Citation	Intervention	Definition of dual method use	Research Design	Primary Measure	Findings
Chibwesa, et al., 2011	Reproductive health peer counselors and family planning nurses provided education and counseling emphasizing dual methods	Use of condoms and short or long-term contraceptive use or sterilization	Quasi-experimental quantitative design	Women desiring contraception after counseling	9.8% of women not already using contraception desired it after counseling (71 of 737 stated intention to use dual methods)
Kim, et al., 2005	Providers received the flipchart and 2.5 day training	Consistent and correct use of male or female condoms; condoms and another method of contraception; any family planning method with an uninfected partner	Pre and post intervention observation of provider-client interaction	Average length of counseling session	Increased from 6 to 10 minutes

CHAPTER 3: METHODOLOGY

The literature review revealed limited research about effective strategies to promote dual method use. In this chapter, a set of research questions are presented, key terms are defined, and a conceptual model is described. Finally, the researcher describes the methods she used to answer these questions employing a qualitative research design.

Research Questions

In this dissertation, the researcher set out to answer the following question: How can public health organizations and health professionals best support dual method use by adolescents and young adults?

Specifically, the following sub-questions were the focus of the research:

- What motivates adolescents and young adults to adopt dual method use?
- What motivates adolescents and young adults to maintain dual method use?
- What discourages or interferes with adolescents' and young adults' practices of dual method use?
- What messages do adolescents and young adults find most persuasive regarding dual method use?
- What strategies have been attempted to increase dual method use among adolescents and young adults? Which were effective, which were not, and why?
- What strategies do adolescents and young adults believe would be useful in promoting dual use among themselves and their peers?

- How can public health organizations and health professionals use this information to advance support for dual method use?

Definitions

For the purposes of this study, dual method use is defined as the simultaneous use of male or female condoms with a highly effective contraceptive method. Highly effective methods are those with perfect-use efficacy of 99 percent or greater and include hormonal methods (combined oral contraceptives, progestin-only pill, injections, vaginal ring, patch, and implant), intrauterine contraception (copper T intrauterine device and levonorgestrel intrauterine system), and male or female sterilization (Trussell, 2007).

Adolescence, the period between childhood and adulthood, has no standard scientific start and end date. Much of the research, however, about pregnancy and contraception categorizes respondents into the age groups, 15 to 19 and 20 to 24. Furthermore, the average age of first sexual intercourse in the U.S. is 17 (Chandra, Martinez, Mosher, Abma, & Jones, 2005; G. M. Martinez, Chandra, Abma, Jones, & Mosher, 2006). For the purposes of this research, the terms, “adolescents” refers to persons ages 15 to 19 and "young adults" to persons ages 20 to 24.

The sub-questions reference both “messages” and “strategies” that could be used to increase dual method use. Strategies are any effort to promote dual method use, such as patient counseling, social marketing campaigns, and education through social media efforts. The term “messages” refers to specific pieces of information that convey an important idea. Messages can be designed to inform, persuade, stimulate thinking, or issue a call-to-action. Messages can be delivered in a variety of ways and are usually part of a larger strategy.

This study examines the “motivations” for dual method use, as well as what “discourages or interferes” with dual method use. Motivation encompasses a wide variety of mental processes and is “a driving force or forces responsible for the initiation, persistence, direction, and vigour of goal-directed behavior” (Coleman, 2008) and for the purpose of this study, includes anything or anyone that encourages, promotes, or otherwise supports dual method use. Factors that “discourage or interfere” are those having the opposite effect. These terms are broadly defined and open to interpretation to allow for the greatest possible understanding of factors amenable to change or important to any efforts intended to increase dual method use.

Conceptual Framework

This research builds upon a foundation of existing knowledge about dual method use, its prevalence, correlates, and predictors, as well as several intervention studies. To help organize and make sense of this existing knowledge from various sources, the researcher used a conceptual framework.

Conceptual frameworks help bound and focus the collection of data while also providing structure for anticipatory data reduction (Miles & Huberman, 1994). Qualitative data collection can result in hundreds or even thousands of pages of data that must ultimately be reduced through the process of analysis. A conceptual framework provides an initial structure for decision-making, organization, and analysis. It requires the researcher to identify potential concepts and relationships; informs how to collect data and how much of it to collect; and helps the researcher make decisions about what is most important to her and what she thinks is likely to be meaningful. (Miles & Huberman, 1994)

The conceptual framework for this study was derived from an existing framework for the analysis of adolescent sexual behaviors (Guilamo-Ramos, Jaccard, Dittus, Gonzalez, & Bouris, 2008; Jaccard, Dodge, & Dittus, 2002) and several recent reviews of the literature for correlates and predictors of dual method use (Higgins & Cooper, 2012).

As noted in the literature review, the research on interventions to increase dual method use has relied upon a variety of different theories, models and paradigms. No single theory was applied consistently across the interventions. Bearinger and Resnick (2003, p. 341), in their review of the literature on dual method use, suggest that the limited knowledge base on how to promote dual method use stems from the “failure of most researchers in this area to use complex, integrative frameworks characterized by the potential for moving beyond and outside the limited conceptual spheres presented by most theories of health behavior” A similar limitation has been identified by other researchers in the field of sexual reproductive health, and to address that limitation, Guilamo-Ramos, Jaccard, and other colleagues have put forth an integrated framework of adolescent sexual behavior (Guilamo-Ramos, et al., 2008; Jaccard, et al., 2002).

In 2001, the National Institute of Mental Health brought together the leading theorists in social behavior with the goal of integrating the fundamental constructs of their respective theories into a single framework. The meeting included Bandura (social learning theory), Fishbein (theory of reasoned action), Kanfer (self-regulation theories), and Triandis (theory of subjective culture). While the theorists could not agree on a single, unifying framework, a general consensus emerged of common variable classes. Guilamo-Ramos and Jaccard have since presented these models (Figures 2 and 3) with their own modifications based on empirical evidence in the area of sexual and reproductive health and used it for their own research and

interventions. Their model provides the necessary integrated framework to analyze a complex behavior like dual method use.

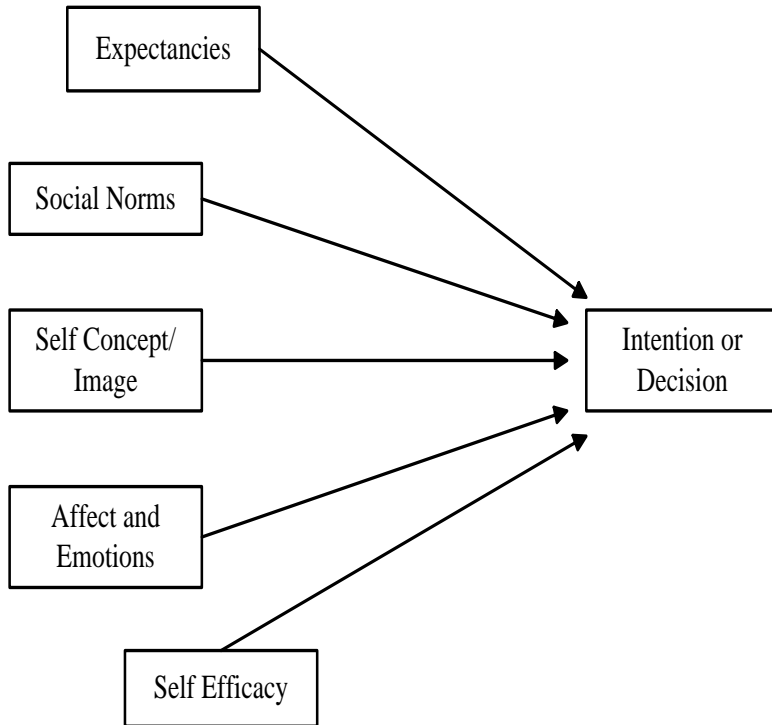


Figure 1: Distal Determinants

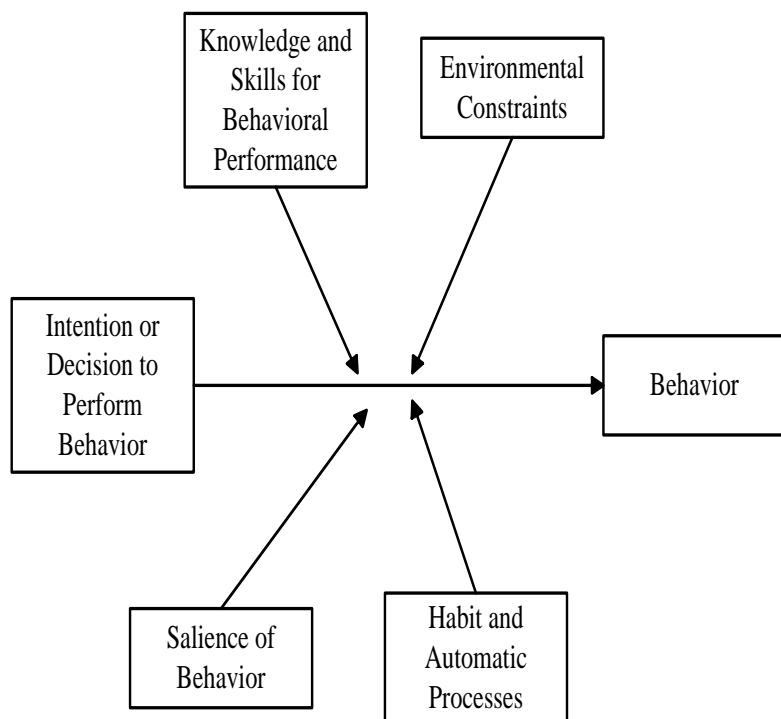


Figure 2: Proximal Determinants

The five variables in Figure 2 show the model’s primary determinants for a person’s decision or intention to perform a behavior(Guilamo-Ramos, et al., 2008). Each determinant, or class of variables, is derived from one or more well developed behavior theories. Expectancies are an individual’s perceived advantages and disadvantages of performing the behavior, or in other words, the positive or negative consequences they expect to result. Social norms can be divided into two types, injunctive norms, which come from the perceived approval or disapproval of other people, and descriptive norms, which refer to perceptions about to what extent one’s peers are performing the behavior. Norms may be experienced as social pressures. The more that someone feels social pressures, the more likely they are to behave according to the norms.

Self-concept and self-image are important, especially to adolescents, and can influence one's intention to perform a behavior through the desire to project a certain image. Also, an individual is more likely to intend to perform a behavior if it is congruous with the person's self-concept (Jaccard, 2009). Affect and emotions have important roles in intention as adolescents and young adults consider how a certain behavior "feels" affectively and emotionally. It is their "gut-level" response to a behavior. Finally, self-efficacy, or the extent to which an individual believes they can successfully perform a behavior, overcoming obstacles along the way, is a primary determinant for intention (Guilamo-Ramos, et al., 2008).

While intention is an important precursor to behavioral performance, there are other predictors. Figure 3 shows that in addition to intention, one must possess knowledge and skills to perform the intended behavior. Environmental constraints limit one's ability to translate intention into action, and environmental facilitators have the opposite effect. Behavior is also largely influenced by the salience of the behavior, or how important the individual believes that behavior to be, especially given competing alternatives(Guilamo-Ramos, et al., 2008). The concept of salience also includes "cues to action" or that people may need to be reminded of an intention before they enact the behavior (Jaccard, 2009). Finally, habit and automatic processes can either support or weaken the relationship between intention and behavior (Guilamo-Ramos, et al., 2008).

To better understand how the integrated framework applies to dual method use and to organize the current knowledge on the subject, the researcher refined the framework as seen in Figures 4 and 5. It was not necessary to conduct a systematic review of correlates and predictors because a recent review already existed(Higgins & Cooper, 2012). However, to protect against possible errors and omissions in Higgins and Cooper's review, the author also relied on two

other articles that included comprehensive literature reviews of dual method use correlates (Bearinger & Resnick, 2003; O'Leary, 2011). In addition, when only one study was cited for a particular factor or it was unclear where a variable best fit in the integrated framework, she reviewed the original study.

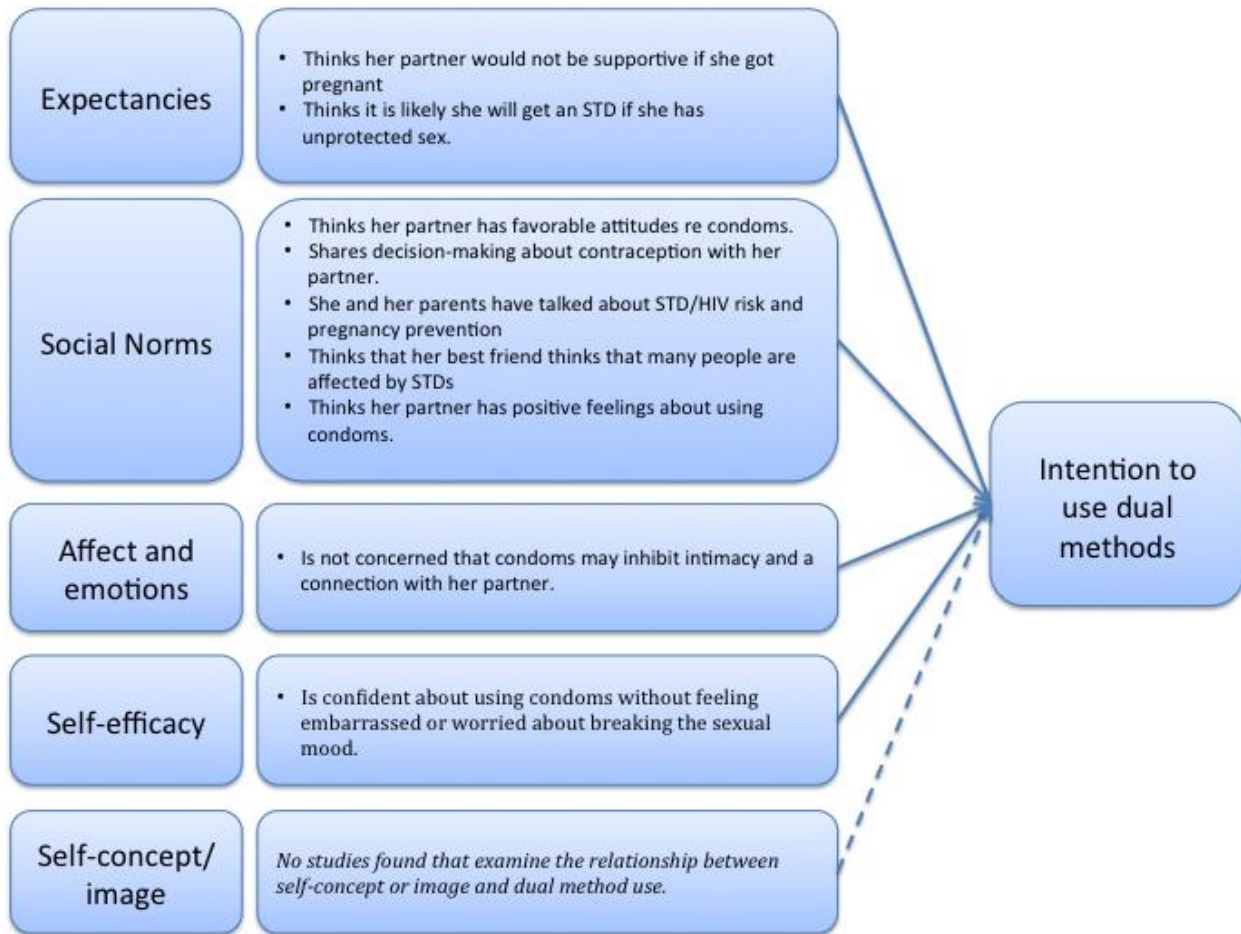


Figure 3: Distal Determinants of Dual Method Use

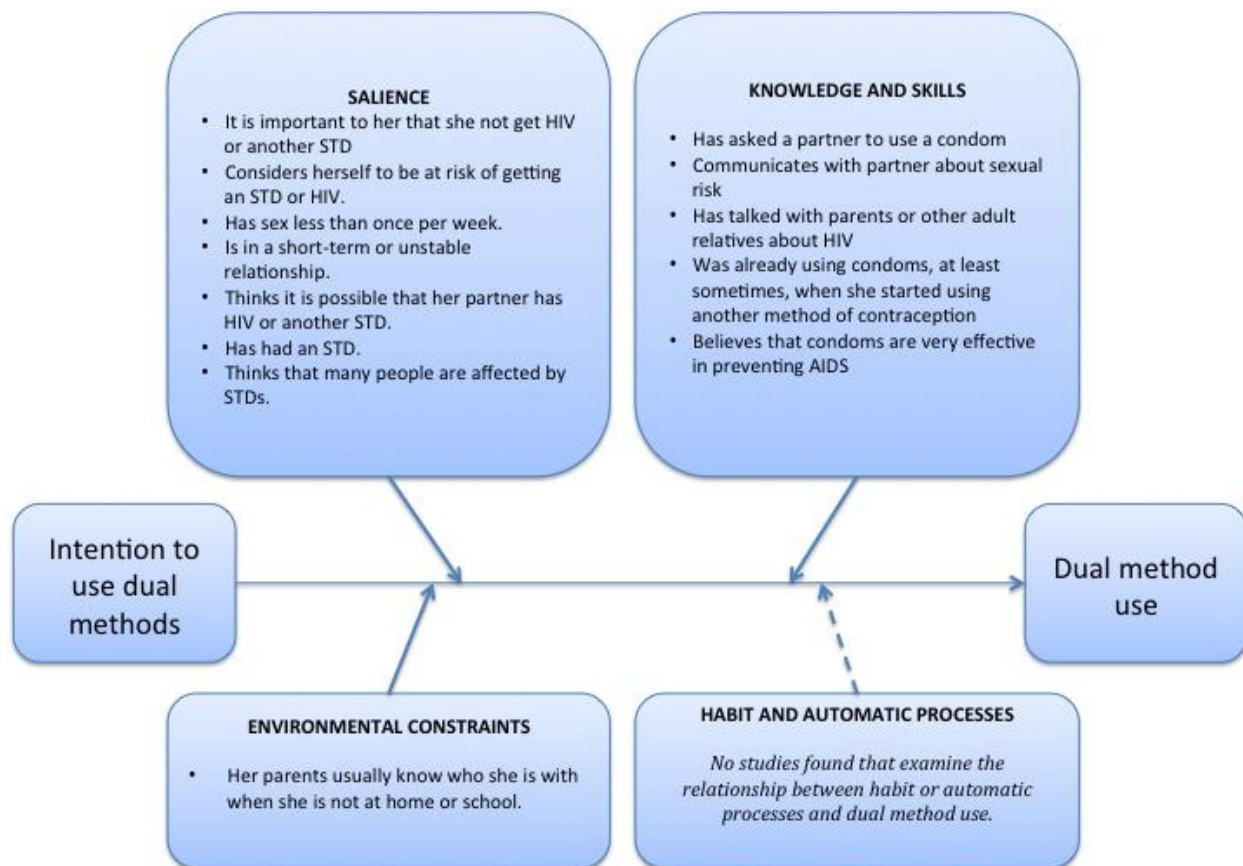


Figure 4: Proximal Determinants of Dual Method Use

Applying past research findings to the integrated framework was not always straightforward and it is possible that another person might place certain factors in different categories. The author also consulted with two colleagues familiar with the framework and used these different perspectives to make decisions about where to place the various correlates. Despite the subjective nature of the placement of some variables, the conceptual model serves an organizing function and deepened the researcher’s own understanding of what is already known about dual method use.

Known factors associated with intention to use dual methods clustered in the conceptual categories of expectancies, social norms, and affect and emotions. Among the two types of social norms, only injunctive norms were identified (one’s perception of what other people might think

about one performing a behavior) and no instances of descriptive norms were found (one's perception of the extent to which his or her peers perform the behavior). Only one factor clearly related to self-efficacy was identified. The association between self-concept/image did not appear to have been examined as a predictor or correlate with dual method use.

Similarly to the distal determinants, the proximal determinants clustered together around a limited number of concepts – salience and knowledge and skills. Only one environmental constraint/facilitator was identified and no studies measuring the association between habit and automatic processes and dual method use were found.

Some correlates of dual method use do not fit this model, including demographic characteristics and other health risks. Dual method users are typically younger (e.g. more likely to be a teenager than an adult, and among teens, she is a younger teen)(Higgins & Cooper, 2012). Dual method users are also less likely to engage in other risk behaviors (Santelli et al., 1997), more likely to delay the onset of sex until age sixteen or older (Santelli, et al., 1997), and more likely to have had more than one sexual partner in the last six months (Cushman, et al., 1998). These more distal variables are useful for tailoring, but are generally not predictive by themselves (Jaccard, 2009). Rather, they act through the more proximal variables included in the two conceptual models.

Relationship and partner characteristics are not explicitly included in the model. However, it is known that dual method users are less likely to be married or living with their partner.(Higgins & Cooper, 2012). They are also less likely than women who do not use dual methods to consider their partners to be their “boyfriend” or would not describe the relationship as “committed”(Higgins & Cooper, 2012). The desire to trust or please one's partner may take the form of expectancies, norms, or other variables in the model. For example, the social

pressures from the norms of one's sexual partners can be particularly strong. In addition to the concepts outlined in the conceptual framework, the researcher will listen for partner and relationship-related influences on dual method use.

Qualitative Research

The conceptual model demonstrates that there are many unanswered questions about why adolescents and young adults intend (or do not intend) to use dual methods, as well as why (or why not) those intentions translate into behavior. Rather than testing a hypothesis, the researcher aims to inform strategies that are grounded in the real lives of the target population. This purpose calls for a qualitative approach. Using qualitative methods offered insight into the thoughts and experiences of adolescents and young adults, including those who have tried dual method use or may be currently practicing dual method use. It also allowed the researcher to explore possible messages and strategies with both the target population and experts in the field. In this section, an overview of qualitative research and its characteristics will be presented.

Qualitative approaches explore the human elements of phenomena, including the thoughts, feelings, and interpretations of those who have experienced them (The SAGE encyclopedia of qualitative research methods, 2008). In this case, the phenomenon of interest for the proposed research is dual method use by adolescents and young adults. The researcher believes that understanding how adolescent and young adults think, feel, and interpret dual method use will enrich and strengthen the strategies designed to increase this practice.

Qualitative research is a large and diverse set of methods. There are many characteristics that distinguish qualitative research, and different scholars emphasize various characteristics.

Creswell (2009) synthesized many of those characteristics into a list of nine. The following three characteristics from Creswell's list are most relevant to this study: the use of inductive analysis, multiple sources of data, and an emphasis on participants' meanings (Creswell, 2009). In the following paragraphs, each of these characteristics is described in greater detail.

Qualitative research is inductive, in that the researcher identifies patterns and themes, moving from abstract to specific. Working iteratively, the researcher works between the data and themes until a comprehensive set of themes have been developed. In this study, a conceptual model frames the questions and will provide the researcher an initial set of themes on which to build during the analysis. While some qualitative researchers begin with no pre-conceived theories, the use of a priori theoretical frameworks is acceptable. Unlike quantitative approaches where theoretical frameworks serve to define variables and explain the relationship between them, in qualitative research, they serve as a mental model to guide the initial research design and analysis. They are meant to be flexible and should stimulate, rather than inhibit, new ideas.

In qualitative research, the researcher seeks to understand the meanings that participants give to the phenomenon. Emphasis is placed on the participants' interpretations over the researcher's or other author's. The focus group interviews will be recorded and transcribed, capturing the participants' words verbatim. The analysis process, which is described later, included the use of "in-vivo codes" which come directly from the words and phrases the participants use (Strauss & Corbin, 1990). In-vivo coding, a uniquely qualitative technique, is particularly useful when conducting research with children and adolescents as using their words "enhances and deepens an adult's understanding of their cultures and worldviews" (Saldaña, 2009, p. 74).

Multiple sources of data were used in this study, a common feature of qualitative research. Because no single source of data can be expected to provide a comprehensive view of the

phenomenon, using multiple sources allows for a fuller, more complex picture. It helps the researcher look for supporting, as well as disconfirming evidence, an important part of qualitative analysis. Using multiple sources of data also exposes a variety of perspectives on the phenomenon and allows a richer, more nuanced understanding to emerge. All types of data collection have their limitations and using multiple sources helps compensate for those. It also allows the researcher to triangulate the findings, strengthening the validity of the results (Patton, 2001).

By using a qualitative approach, the results complement the existing quantitative studies about correlates and predictors of dual method use, as well as the intervention research.

Researcher's Role

In qualitative research, it is important to be explicit about the role of the researcher. The researcher is herself an instrument in the study, as the collector and interpreter of participants' experiences. Creswell (2008) recommends, "inquirers explicitly identify reflexively their biases, values, and personal background, such as gender, history, culture, and socioeconomic status, that may shape their interpretations formed during a study." In this section, the researcher will reflect upon her own experiences and interpretations in an effort to be explicit regarding how her involvement influences the research.

A paradigm is "a set of basic beliefs...that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the 'world,' the individual's place in it, and the range of possible relationships to that world and its part..." (Guba & Lincoln, 1994, p. 107). The researcher's approach to the topic and the use of qualitative methods reflects a constructivist paradigm. This research paradigm places an emphasis on understanding a

phenomenon, in contrast to the positivist paradigm that seeks to explain a phenomenon. (Strauss & Corbin, 1990, p. 41) The constructivist suggests that the world is shaped by our experiences and assumptions and true objectivity does not exist. While the researcher recognizes the value of quantitative research and positivist approaches, her bias is that this kind of research often misses the nuanced reality of people's complex thoughts, feelings, and interpretations of the world around them.

The author works for Planned Parenthood Federation of America and has worked in the field of women's health for more than fifteen years. Early in her public health career, she volunteered as a sexual health educator and met many adolescents and young adults who were uninformed or misinformed about sex. She also volunteered for a hospice serving those with AIDS, which motivated her to continue working to prevent the spread of HIV. Most of her career has been spent working with communities that bear a disproportionate burden of poverty and disease. She has worked towards ending health disparities and views health as a human right and a matter of social justice. These experiences have predisposed the researcher to believe that women and men, including adolescents, should have access to the information and services to protect and promote their sexual and reproductive health. She believes that a person's life experiences and environment are just as important to their health as their knowledge, attitudes, and beliefs.

The cultural differences between the researcher and participants must be acknowledged as a limitation of the research. To minimize the differences, the researcher used a professional focus group firm specializing in multicultural qualitative research to recruit, host, and facilitate the focus groups. The focus group guide used lay language, and the facilitators were of the same race/ethnicity as the participants.

Delimitations

To further define the scope of this research, the delimitations, or what is out of scope, will be described in the next section. While dual method use can benefit people of all ages, the focus of this research was on adolescents and young adults. These age groups were chosen due to the high rates of STIs and unintended pregnancies. This research did not include persons under the age of 15 or over the age of 24. While dual method use is relevant to sexually active teens younger than 15 and those considering becoming sexually active in the near future, the average age of sexual initiation in the U.S. is 17 (Chandra, et al., 2005; G. M. Martinez, et al., 2006).

Dual method use is considered by some to be a sub-category of dual protection. Other behaviors that are considered dual protection, such as using only condoms or using only a highly effective method of contraception within a mutually monogamous relationship, were not examined except as they relate to dual method use.

Finally, an important delimitation is that this study is strictly qualitative. Questions, such as those that begin with “how much,” “to what extent,” and “how often,” were not answered. Furthermore, the qualitative data was not be transformed into quantitative data through counting words or phrases. The intent of this research was to gain a deep, rich understanding of dual method use, and any statements about its frequency, correlates, or statistical significance is outside the scope of this study.

Data Collection Procedures

A series of eight semi-structured focus group interviews. The focus group interview is “a qualitative research technique used to obtain data about feelings and opinions of small groups of

participants about a given problem, experience, service, or other phenomenon.” (The SAGE encyclopedia of qualitative research methods, 2008)

Focus group interviews are useful when exploring the range of ideas or feelings people have about an issue or when one wants to understand the different perspectives across groups of people. They are also useful when seeking “insight into complicated topics when opinions or attitudes are conditional or when the area of concern relates to multifaceted behavior or motivation.”(Basch, 1987, p. 414) Dual method use is certainly a multifaceted behavior, requiring the use of two different methods and the various behaviors required to correctly and consistently use those methods. Decisions about dual method use may also be conditional, depending on factors such as length of the relationship, trust of one’s partner, and assessment of one’s risk of pregnancy or STIs.

When using focus group interviews, the synergy among the participants can produce a wide range of information and elucidate key insights. (Krueger & Casey, 2009) The interaction among the group members can help create a relaxed environment and stimulate responses that may not have been produced during an individual interview. Once an opinion is voiced, the facilitator can check with the group to see if others feel the same way, or if there are differing opinions. Focus group discussions can help uncover decision-making processes and the criteria one uses when making certain choices. If the climate is comfortable, conversation is flowing, and the moderator probes appropriately, one may “uncover the ‘models of rationality’ operating within participants.” (Basch, 1987)

Because African American and Latino adolescents and young adults have the highest rates of STIs and unintended pregnancy and could benefit most from dual method use, the focus groups

were conducted with these groups. In addition, focus groups were held in different U.S. cities to ensure maximum variation in geographic influences.

The focus groups were conducted by a firm that specializes in professional focus group facilitation. The groups were conducted in Raleigh, North Carolina; Los Angeles, California; Boston, Massachusetts; and Milwaukee, Wisconsin in April 2013. A total of eight focus groups were held with up to eight people per group for a total of 58 participants. Table 3 provides additional details about the characteristics of participants.

Table 3: Participant Characteristics

	%	Count
Gender		
Male	48	28
Female	50	29
Transgender	2	1
Age		
15-18	59	34
19-25	41	24
Race/Ethnicity		
African American	47	27
Latino/a or Hispanic	47	27
Multiracial	7	4
Education		
Attending HS	58	33
Attending College	26	15
Grad HS	7	4
Grad College	5	3
Some College	4	2
Ever Had Vaginal Intercourse?		
Yes	60	35
No	40	23

The groups were segmented by gender, race/ethnicity, and age. One focus group was conducted with each of the following groups:

- 15-18 year old African American women
- 15-18 year old Latina women
- 15-18 year old African American men
- 15-18 year old Latino men
- 19-24 year old African American women
- 19-24 year old Latina women
- 19-24 year old African American men
- 19-24 year old Latino men

The focus group firm recruited participants from its existing database of persons who had expressed an interest in focus group participation. Trained recruiters screened participants for eligibility by telephone using a standard script (Appendix A). They began by asking to speak to the head of the household, explained the purpose of the call, and then determined if there were members of the household who were eligible to participate in the focus group. If there were multiple eligible persons, the recruiter selected someone based on the demographics of the eligible persons and the need to have focus groups that were balanced in terms of age. If the potential participant was under age 18, the recruiter spoke to the parent first to obtain their consent. The recruiter then spoke to the child to obtain their assent. The focus group firm recruited 10 people per group, expecting that six to eight will actually attend.

Six of the eight focus groups were held at a professional focus group facility. Two were conducted in a hotel meeting room. As participants arrived, the focus group facility staff (or in the case of the focus groups held in the hotel, the facilitators) obtained the participants' signatures. Participants under age 18 were instructed to arrive with a parent and the parent signed the parental permission form, and the child signed the assent form. The researcher was present to

answer any questions that arose about the consent, assent, or parental permission forms. Parents could leave during the group, but if they stayed, they were not allowed to observe the group. Snacks or a light meal was provided, depending on the time of day.

Before the focus group began, participants completed a brief questionnaire to collect basic demographic information and their experience using condoms and birth control methods (see Appendix B).

At the focus group facilities, the researcher and other Planned Parenthood staff observed the focus group from behind a one-way mirror. At the hotel, they observed via closed circuit television in a nearby meeting room.

Groups were matched with professional focus group facilitators of the same race/ethnicity – an African American facilitator led the groups of African Americans teens and young adults and a Latina facilitator led the groups of Latino teens and young adults. The two facilitators were female, so the focus groups with females had facilitators of the same gender. The male groups were not matched by gender. The facilitators establish a welcoming, nonthreatening, supportive environment and encouraged all participants to share their views. They asked questions in a non-biased way and remained non-judgmental of the responses, as demonstrated by their verbal and nonverbal responses.

A focus group discussion guide was used (see Appendix C). The questions moved from general to more specific, placing more sensitive questions later in the discussion when rapport and comfort was established. Probing questions were included to elicit further response to a question when needed. Transitional statements were also included in the focus group discussion

guide to help shift the conversation from one topic to another without disrupting the flow of conversation.

Focus groups lasted approximately 90 minutes. When the focus group has concluded, the facilitator thanked the participants. Before leaving, participants received \$75 cash.

Sampling

Focus group recruitment was based on conceptual grounds, rather than with the goal of representativeness (Miles & Huberman, 1994). Because African American and Latino youth have the highest rates of STIs and unintended pregnancy and could benefit most from dual method use, the focus groups were designed to engage African American and Latino youth. There was no attempt to randomly select participants, a technique appropriate for quantitative research, but not qualitative. In addition, focus groups were held in different U.S. cities to ensure maximum variation in geographic influences.

Data Management Plan

The focus groups were video and audio recorded. A professional transcriptionist used the audio recordings to transcribe the focus groups verbatim. Later, a research assistant reviewed the transcripts while watching the video and added names to the transcripts to help with analysis. The research assistant also corrected any errors in the transcripts and made additional attempts to capture comments originally transcribed as “inaudible.” After analysis was complete, the focus group transcripts were de-identified.

The final de-identified transcripts were stored in a password-protected file on the researcher's password-protected computer. A backup copy is stored on a remote server managed by Planned Parenthood Federation of America. After the transcripts were received and verified, the recordings were deleted and destroyed.

The researcher does not plan to destroy the de-identified transcripts when the research is complete. Because qualitative data collection is time-consuming and costly, the data is valuable and should be retained for additional analysis in the future. This will save money as well as duplicative work in the future. Louise Corti and Paul Thompson (2004) describe six types of secondary analysis of qualitative data: descriptive; comparative research, re-study, or follow-up study; reanalysis; research design and methodological advancement; verification; and teaching and learning. Retaining the transcripts will allow for secondary analysis and further development of the field's understanding of this important topic.

Analysis

Using a qualitative data analysis software program, MAXQDA (VERBI GmBH, 1989-2013), each transcript was coded by the author and a research assistant hired by Planned Parenthood Federation of America for this purpose. The use of more than one coder can enhance the reliability of the analysis by introducing alternative interpretations and competing explanations, while contributing insights that emerge from disagreements and discussions (Barbour, 2001).

The coders used a set of pre-determined codes derived from the conceptual framework. To ensure a common understanding of the codes, the researcher developed a codebook that included definitions of the codes and examples of when and when not to apply each code. The researcher shared the codebook with the research assistant to help ensure a common understanding of the

codes. The research assistant also read the research proposal and additional background materials about the conceptual framework to inform her understanding of the codes.

Codes were assigned without regard to directionality. For example, the code, IMAGE, was assigned to statements about the kinds of people who use dual methods and to statements about the kinds of people who do not use dual methods. Chunks were mostly phrases and sentences. Occasionally, a chunk could be several sentences or a paragraph because any less would not provide sufficient context. The researcher and research assistant aimed to code chunks that were long enough to provide sufficient context, but not so long that multiple ideas or concepts were lumped together. Multiple and overlapping codes were allowed and frequently used.

The researchers worked independently to code each of the transcripts. While coding, they wrote brief memos to document idea for new codes, explore questions or doubts about the use of codes, and to note surprising or unexpected results. After coding of the first transcript was complete, they compared their work using MAXQDA's intercoder agreement function. They discussed each instance of disagreement which resulted in lengthy conversations about the meanings of certain codes. They jointly identified concepts for which the pre-determined codes did not apply, and decided when to add new codes.

After the first transcript was coded, the research assistant transferred the codebook definitions MAXQDA as code memos, allowing the researchers to more quickly reference and revise definitions. Definitions were only revised and new codes were only added after discussion between the researchers. Modifying, organizing, and reorganizing the codes was part of the analytic process as the researchers worked together to identify categories, themes, hierarchies, and major concepts.

The researchers repeated this process of independent coding and then discussion for each transcript. Initially, the discussions about coding differences lasted several hours. They became shorter as coding progressed and many times differences were resolved through brief email conversations. If consensus could not be reached, the researcher made the final decision. They aimed for intercoder agreement of least 85%. Actual coder agreement exceeded 90%.

After both researchers had coded most of the data, the research assistant grouped together chunks of text with the same codes. This allowed the researchers to examine each category more closely. In some instances, data was recoded and sub-codes were created to further break apart and define the categories. They also looked at common intersections of codes. Both researchers wrote memos throughout the process. The researchers wrote memos to explore new concepts, differences between codes, and instances of overlapping codes. Memos were shared and discussed. The researchers also used data displays to organize, analyze, and share information. Modifying, organizing, and reorganizing the codes was part of the analytic process as the researchers worked together to identify categories, themes, hierarchies, and major concepts (Miles & Huberman, 1994; Saldaña, 2009).

Reliability and Validity

While treated differently than in quantitative research, the concepts of reliability and validity are important to qualitative research. Because of its constructivist paradigm, reliability as repeatability is not appropriate for qualitative research (Lewis-Beck, Bryman, & Liao). Rather, dependability is an appropriate analog.

The following procedures were used to ensure qualitative reliability:

- Transcripts were checked for accuracy and errors corrected.
- The data were coded by two researchers.
- Codes were revisited regularly to protect against drifting definitions. Notes were made when codes are revised.

Validity has been defined in numerous ways by qualitative researchers, but for the purposes of this study, Hammersley's definition will be used: "the extent to which an account is faithful to the particular situation under consideration" (Lewis-Beck, et al.). Using this definition, the results must meet the test of credibility and plausibility. To ensure validity, the researcher collected data until saturation was reached and only used themes that had sufficient support from the data.

Ethical Considerations

It is important to understand and ultimately increase dual method use among adolescent and young adults. Equally important is the protection of those who may participate in the research. In this section, the potential ethical issues related to the proposed research are explored, with an emphasis on the inclusion and protection of persons aged 15 to 17.

Risks and Benefits

The researcher carefully assessed the risks and benefits involved in the research and conducted the research in such a way that minimized risks and maximized benefits. She anticipated that participants in the focus groups and individual interviews may feel some

embarrassment talking about sexual behaviors with their peers or in the presence of the facilitator. This risk was minimized for focus group participants by clearly communicating that they could decide which questions to answer and could choose not to participate in any part of the discussion. Furthermore, none of the focus group questions required participants to reveal their own sexual behaviors. Instead, they were asked about what they thought their friends or people their age do, do not do, and why. Some participants chose to share their personal experiences, but they were not asked or prompted to do so. Focus groups were segmented by gender, age, and race/ethnicity so the possibility of embarrassment may have been reduced when talking with persons similar to themselves.

All participants also faced the risk of a breach of confidentiality and disclosure of sensitive information to others. This could happen if a focus group participant shared what someone else said with a non-participant. While participants were asked to keep what others said confidential, the researcher could not control what happened outside the group. Furthermore, there is a risk, albeit minimal, that the plans to protect the data could fail. To protect against possible embarrassment should confidentiality be breached, participants were reminded that they could choose to what degree they shared their own sexual experiences.

Department of Health and Human Services (DHHS) regulations (CFR 45 Part 46) define minimal risk as “the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests”(U.S. Department of Health and Human Services, 2009). Given the only possible risks are temporary embarrassment and breach of confidentiality, the researcher believes this meets the standard of minimal risk.

In addition to the potential risks, the researcher also considered the benefits of the research. Teens and young adults may benefit from involvement in carefully controlled research by expanding their base of experience. Participation in behavioral research could result in greater self-understanding of one's current behaviors and may prompt a positive change in some participants. In addition, teens who participate in the informed consent process may experience a greater sense of self-control and decision-making capacity (Santelli et al., 2003).

This research also offers the potential for significant benefits to the field of sexual and reproductive health. It provides new information and guidance for public health professionals and organizations wishing to increase dual method use. Increasing dual method use has the potential to reduce unintended pregnancy and STIs, serious public health problems in the United States.

Parental Consent

Parental consent is generally required if children are to participate in research. DHHS regulations define children as “persons who have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law of the jurisdiction in which the research will be conducted.” (U.S. Department of Health and Human Services, 2009).

Parental consent was obtained for all participants under age 18. In addition, minor participants were asked to assent to participation. Participants were fully informed about the research goals and the kinds of questions that would be asked.

Racial/Ethnic Issues

Because of the disproportionately high rates of unintended pregnancy and STIs among African Americans and Latinas, the researcher aims to recruit adolescents and young adults from these racial/ethnic groups. They are also the groups most likely to benefit from the research. Because of a history of abuse by researchers, it was important that the researcher be aware of possible mistrust and that she communicate clearly and honestly, avoid real or apparent coercion, and work to develop a rapport with participants.

CHAPTER 4: RESULTS

In this chapter, focus groups results are presented. First, the researcher describes the participants' familiarity with the term "dual method use." Then, using the codes derived from the conceptual framework, the findings are presented using summary descriptions and illustrative quotes. Next, a set of emergent codes are described and summarized. Finally, the participants' reactions to messages tested during the focus group are described, as well as the recommendations they made for other messages and spokespersons.

Familiarity with Dual Method Use

Few participants were familiar with the term "dual method use." After the facilitator defined the term, most participants said they were familiar with the concept and understood that its practice could reduce transmission of STIs and offer greater pregnancy protection than either method alone. When asked if they had heard other terms to describe using both condoms and birth control, participants indicated that the phrases, "double up," "extra support," "extra protection," and "being safe" were also used.

Pre-established Codes

Expectancies

Participants named several advantages to dual method use, including protection from STIs and pregnancy; feeling safer, more secure, or less worried about STIs or pregnancy; and being protected from pregnancy if one method failed. When asked about disadvantages of dual method use, participants usually replied with disadvantages of condoms or disadvantages of birth control, especially hormonal methods. Participants named few disadvantages of dual method use, though some mentioned that using two methods seemed extreme. This idea is explored further under the code Saliency. Another perceived disadvantage of dual method use was that expressing a desire to use dual methods to one's partner could create suspicion, especially in the case of a long-term, committed relationship. Several participants admitted that they would question the trust and motives of a partner, as well as the strength of their relationship, if the partner wanted to use dual methods, as illustrated by the following exchange between participants when asked how they would respond if their partner said he wanted to use dual methods:

Participant 1: I would question him, like, why? Why do you want to use it? I mean, but at the same time, I would respect, and would feel good about it, but I would still wonder why. Like, what is the motive?

Participant 2: Because if you're in a relationship, and you've been tested, and you know the person's safe, and whatnot. And you're on your own birth control? It just makes me wonder why.

Participant 3: I would definitely ask, but it's like wow, you're actually taking the initiative to want to be extra safe.

Participant 2: Like in the beginning...

Participant 3: Yeah, if it was years down the line, and he was like, yeah, we need to use condoms, I would think he has something going on down there and he just doesn't want to man up to it.

Table 3 summarizes the perceived advantages and disadvantages frequently mentioned for condoms, birth control, and dual method use. Most of the disadvantages mentioned for birth control were for oral contraceptives or other hormonal methods.

Table 4: Expectancies of Condoms, Birth Control, and Dual Methods

	Condoms	Birth Control	Dual Methods
Advantages	<ul style="list-style-type: none"> • protect against STIs • safe and effective • available in many different sizes, types, and flavors 	<ul style="list-style-type: none"> • more effective than condoms • alleviate menstrual cramps • improve complexion and help with acne • regulate periods 	<ul style="list-style-type: none"> • prevent pregnancy • prevent STIs • users feel more confident, secure, safe, protected
Disadvantages	<ul style="list-style-type: none"> • take away from or diminish pleasure • cause discomfort • may rip, pop, break, or tear • can expire • cannot be reused • can get stuck • not 100% effective • smell bad • some are allergic to latex 	<ul style="list-style-type: none"> • weight gain • need to be taken daily • can cause cramping or spotting • pain • problems with hormones • soreness in chest • irregular menstruation • no STI prevention • moodiness 	<ul style="list-style-type: none"> • taking too many precautions or doing too much. • suggestion of dual method use could create distrust in relationship • additional planning and communication required

Preventing pregnancy as a benefit of dual method use was mentioned more often than preventing STIs. Participants offered the following reasons why they believed that pregnancy prevention was important:

- Having a child can get in the way of one's education, career, and other future plans;
- Most people their age were not ready to take care of a child;
- Their parents had told them they would not help raise their children;
- Having children costs a lot of money.

Descriptive Norms

Many participants did not know whether dual method use was commonly practiced by their peers, while others believed dual method use was uncommon. In every group, when the facilitator asked if they thought people their age used dual methods, most participants said “no” or shook their heads. A female participant said, “A lot of people I know, they don't use anything, or they are probably using one.” A male participant said about his friends, “They use condoms, but I don't know, they don't ever talk about birth control, or anything like that.”

Sometimes participants indicated that their peers did not use dual methods, but perceived that other people might. The other groups that were named by participants as possibly engaging in dual use included “older people,” “Whites,” people who can afford to “buy all that stuff,” and “people who are more sexually educated.”

Injunctive Norms

The facilitators inquired about perceived approval or disapproval by parents, other family members, peers, and partners. While most participants said that their parents would think dual

method use was “a good thing,” many also said that their parents would disapprove of them being sexually active. For example, one participant shared the following:

My family is like really into our religion and they are like really conservative. So I think, I know they would rather not think of us as having sex at this age, but I think they would feel like a little more like trust, if you like use protection, and stuff like that.

Also, in response to the question “What would your parents think about young people, your age, using both condoms and birth control?” another participant shared, “My mom would say that they are responsible, but at the same time, she thinks that we are too young to be getting involved with sex.”

A few participants shared positive experiences talking with their parents about sex. In one group, the other female participants shared that their parents did not talk to them about sex, and one participant said the following:

My mom is the complete opposite. For years she has been talking about use condoms! Get on the pill! Use both at the same time! And she’s very open about it, because...she doesn’t think about it as something that is taboo. She feels that if she talks to my sister and I about it, then, we will be more likely to go to her with questions and advice and stuff. And that would be better than not knowing at all, and not knowing what to do.

Some participants said they would look to other family members like older siblings, cousins, aunts, or uncles for approval. Some said that their friends would approve of dual method use. Others said that their friends would not have opinions about their use of dual methods.

Partners’ approval was considered likely and important, but their role went beyond approval. As a necessary participant in dual method use, they had to cooperate and take action. They might approve of dual method use in theory, but encounter their own obstacles to taking action. For example, a male who wants to practice dual method use must rely on his female partner to obtain, effectively use, and sustain use of birth control. Male participants named many reasons why a partner might not do this, including negative side effects, cost, and access. Female

participants depended on their male partners to use condoms and named some reasons why a partner might object, including reduced sensation or a latex allergy. Partners became an emergent code and this concept is explored further below.

Image

Overall, participants expressed a mostly positive image of both females and males who used dual methods. Adjectives used to describe people who used both condoms and birth control included “smart,” “intelligent,” “safe,” “careful,” “focused,” and “protective.” Several participants also expressed that one who uses both condoms and birth control cares about his or her future.

A male participant described females who use dual methods as follows: “Careful. She is looking out for herself. She... I guess, she’s sure. I mean, she knows what she’s doing.” A female participant described males who use dual methods as follows:

Respectful. Just because of the same reasons. Like most of the time it’s the guy who wants to, in the spur of the moment, have sex. And he may not have a condom with him and it would be respectful, if he waited until he did, to have sex with his girlfriend.

People who didn’t practice dual method use were often characterized as lazy. An adolescent male participant said, “They don’t got the time to buy any condoms. They are just too lazy” (African American, adolescent, male). Similarly, a female participant said the following:

I feel that it would be too much of a hassle to like remember the condoms and the pills. I don’t know, it’s just like they start getting lazy, and they kind of have that mindset, that this can never happen to me. (Latina, adolescent, female)

Other negative adjectives associated with people who did not use dual methods were “irresponsible,” “stupid,” and “ignorant.”

While dual method users were not commonly matched with negative images, some negative adjectives were mentioned, including “scared,” “insecure,” “controlling,” and “promiscuous.” For example, one participant described males who used dual methods as follows:

I don't know, it just makes me feel like he's a coward or something. I don't know, just something like a wimpy little boy. I just had that picture in my head for some reason. That he would use both. (African American, adolescent, female)

Emotion

The majority of emotions regarding dual method use were positive. Several female participants noted that if a woman uses dual methods, she may feel more confident that she will not get pregnant, while male participants commented on feeling confident that they would not get someone pregnant. Similarly, participants expressed that they or others would be less worried about getting pregnant or contracting an STI, feel more secure, and have peace of mind when dual methods were used. Embarrassment and fear were negative emotions associated with buying and discussing condoms and birth control, as well as dual method use. Participants also provided examples of negative emotions that could motivate someone to use dual methods. Many noted that people may adopt dual use after a “pregnancy scare” or a “bad experience,” if they are worried or nervous about getting pregnant or if they are concerned that they may contract diseases from a sex partner.

Self-Efficacy

The researchers included questions about the difficulty or ease of dual method use in the interview guide to better understand self-efficacy. However, because of the group format, it was not appropriate to ask participants directly about their own experiences with dual method use.

Instead, the facilitators asked, “Do you think it is easy to use condoms and birth control? Or is it difficult?” Some participants did not understand the question, and the facilitators had to restate it.

Some participants believed that dual method use was difficult to practice. For example a female participant said, “I feel that it would be too much of a hassle to like remember the condoms and the pills.” A male participant said, “It’s hard to get people to use one. Right, so, to get them to use like two, both, it’s harder to get tow things now, not just one.”

A few women expressed with confidence that they could practice dual method use (no men volunteered this information). A female participant said, “If I was sexually active, and I was trying to remember that I had to use both, if I didn’t have both, I wouldn’t have sex.” No male participants made similar statements.

Knowledge and Skills

Participants noted that adolescents and young adults lack accurate and appropriate information regarding dual method use, as well as sex education and information about contraception in general. One result is that many participants, and likely their peers, are under the impression that “one is enough” and that using the method most accessible or known to them is sufficient to prevent pregnancy and STIs. One participant said, “Usually you just see, ‘be protected’. It’s not real specific as to what that means.” (African American, adolescent, female)

Participants emphasized that information regarding contraception, and particularly dual method use, should be shared at earlier ages and consistently throughout secondary education. However, participants also remarked that such education could be a “double-edged sword,” suggesting that increased access to sex education and contraceptive methods may lead to an increase in sexual activity.

Environment

Participants readily identified multiple environmental obstacles to dual method use, mainly cost and physical access to condoms and birth control. Participants frequently mentioned cost as a barrier to both condoms and birth control use. For example, one participant said, “It could be economic issues. I work at a grocery store and a box of condoms, they are like \$7 or \$8. Some people just can’t afford that as teenagers.” In response to a question about why someone might just use condoms, a participant said, “Birth control is way more expensive than condoms. Like if you only had so much a budget, you would have to go with it.”

Physical access to birth control and condoms was seen as a barrier by some participants. One participant said that, “it’s easy to use a condom, but not getting that birth control because you have to go to the doctor.”

Participants also identified the location of sex as another potential environmental obstacle to dual method use. One participant said the following:

I think it just comes down to the fact that the condom is still like a physical object. So it’s like if I’m going out to a party, I have to remember I’ve got to grab one and got to have it in my pocket. They always say carry it in your wallet. But it’s like I have a very thin wallet, so that’s not even like a thing. So, then it’s do I have a jacket, where am I carrying it? And do I actually expect to go after someone? And then you get there, and it’s like, oh well I probably should have grabbed one. So it’s just always having one.

Another participant said,

When you are like older, and in your own house, and you can just set it up. If you’re a kid, and you are trying to like sneak your girlfriend in the house, or whoever, or just like doing it in a random place, because that’s where you can find your privacy, it’s a lot harder to like be responsible.

The cost of condoms, combined with embarrassment of being seen buying them, made for an even greater obstacle. For example, one participant remarked “It could be that they are just too scared to go in and grab a box of condoms. I mean, it doesn’t exactly look that great!”

Saliency

While most participants said that dual method use was important, some expressed doubt that it was necessary, especially within a committed or long-term relationship. Some participants also believed it was not realistic to expect people to use both. Others believed that using more than one method was extreme, as demonstrated by the following exchange between the moderator and two Latina, adolescent females:

Participant 1:	They feel like it’s doing too much.
Moderator:	What do you mean?
Participant 1:	Like, taking both, when they are both said to be 99% sure, is doing too much. They realize that they are being, I don’t want to say extra...
Participant 2:	They’re taking too many precautions.

When female participants expressed that dual method use was important to them, it was often coupled with information that their partner or someone they knew had cheated or that they experienced a pregnancy scare.

Some participants did not explicitly state that dual method use was important, but other comments were suggestive of saliency including the statement: “No condom, no sex.”

Habit

The conceptual model and guide included questions about making dual method use a habit. Similarly to self-efficacy, this concept was difficult to explore without asking questions

directly about participants own experiences. Some participants seemed confused by the questions about making dual use a habit.

Several participants mentioned that it was important to educate youth at a young age so that they started out using dual methods. For example, one participant said, “Start educating kids earlier, like maybe 10? Because there’s lots of kids already going about it by 13, and then they get bad habits.” Others suggested that people their age should carry condoms with them all the time, so they don’t get caught unprepared. This concept of unplanned sex is explored further in the emergent codes. Other suggested technological reminders such as “a little app on your phone, like, a reminder. Text message reminders, things like that.”

Emergent Codes

These emergent codes were developed collaboratively by the two researchers who coded the focus group transcripts. When participants discussed concepts that did not readily fit into the conceptual framework, the researcher made a note of the idea. They then discussed these notes and decided whether a new code should be added.

The first three emergent codes discussed below, Trust, Gender Differences, and Partners, are closely linked. The researchers considered, at numerous points, whether these codes should be combined, but ultimately, there were always enough differences between the concepts to justify retaining the separate codes. Many times, however, a segment was coded with more than one of these codes.

Trust

Participants most commonly mentioned the concept of trust when speaking about the duration or nature of relationships (e.g. committed vs. casual). Participants noted that one uses or

suggests dual method when he or she doesn't trust a partner and vice versa. For example, according to participants, one would use dual method if he or she just met someone and decided to take them home to have sex, since no trust had been built in the relationship yet. This is in contrast to being in a committed relationship with someone. Typically, when things start to get serious, partners trust each other, feel more comfortable with one another, and don't want to or don't feel that they need to use both methods.

Participants often mentioned that those who had unintended pregnancies or caught diseases "trusted too much." Several participants of both genders noted that one can never really trust anyone else. For example, one participant emphasized that it is "better to be safe than sorry" seeing as a partner could be "hiding something" such as a disease, and another participant even stressed this point when she shared how her long-term boyfriend had cheated on her. Still, other participants admitted that they would question the trust and motives of a partner, as well as the strength of their relationship, if a long-time partner wanted to use dual methods.

Gender Differences

Participants frequently described differences between males' and females' experiences with dual method use. Female participants described persuasion and pressure by both short and long-term male partners to have sex without condoms. They also noted how females are generally blamed for their unintended pregnancies while the participation of males is overlooked by society. Furthermore, both male and female participants remarked that in the event of an unintended pregnancy, it is not uncommon for males to leave their partners. For example, one participant noted the following:

It's easier for the guy to then take on the stereotype of once a girlfriend does get pregnant, because he didn't really want to feel like using his condom, he just takes off.

And that just goes and emphasizes the carelessness of the guy. And it makes the girl feel even more.... It's like you always lose, if you are the girl. Like if you don't coerce your boyfriend to use a condom or whatever, then it's like you are frowned upon. And then when you get pregnant, it's like you are the one that is at fault. You are the one that let the sperm get in your vagina, whatever, so it's all your fault. And the guy can just kind of shrink in the shadows, and they often do.

A similar sentiment was also shared by males, as demonstrated by the following statement:

Yeah, I mean, it's like more consequences for the woman in all of this. Because I'm not saying that every guy would do that, but it's very easy for men to just walk away. Like, it's really nothing tying him.

Also common among both genders was the belief that the female is or should be more responsible regarding use and acquisition of birth control ("it's more on the girl's side") because she would be the one carrying the child and because there are more consequences for her in the event of an unintended pregnancy.

Partners

Another code, Partners, emerged during the coding. It often co-occurred with gender differences, but was distinct in that it captured examples of how dual method use may depend on the nature of the relationship. Regarding this concept, one participant explained,

Maybe they are in a relationship, and they get serious, and why not stop using them? It's a different feeling. It feels better. "We're going to be together forever," you know, people say that, but, and just like forget it and keep going.

This sentiment was popular among both male and female participants. Many participants expressed that as one begins to feel more secure, relaxed, or comfortable in a committed relationship, it is acceptable, or even preferable, to stop using condoms. Participants who believed that dual method use was important regardless of the nature of the relationship

emphasized “it’s better to be safe than sorry,” “you never know,” and that partners can cheat on each other, so one should always use both.

Participants noted that condoms are important for “random sex” and “hook-ups”, but conversation about dual method is especially awkward, and possibly unrealistic, for these kinds of relationships.

Unplanned

The emergent code, Unplanned, was created because both male and female participants mentioned being unprepared for sex or being “in the moment” as reasons for not using condoms. One participant noted, “When you are in the moment, if you don’t have a condom in your back pocket and it’s happening? Like your mind just goes on a like a joyride. For real. Like that’s what happens...”

It’s Not Going to Happen to Me

This emergent, in vivo code was created in response to comments by participants that they or their peers believe that STIs or pregnancy are not going to happen to them. Participants acknowledged that this is a common sentiment. “People, young people, we’re kind of reckless. We don’t really care, so... I mean, we do care, but we’re thinking like, what are the chances of that happening to me type of thing.” They also expressed disapproval of this way of thinking. For example, a female participant said, “I hate guys that say, oh, it’s only one night, and you are not going to get pregnant.”

The Urge

The Urge, another emergent, in vivo code, used to indicate when a participant describes how the urge to have sex supersedes any decisions a person may have made to use dual methods. It was inspired by the following comment: “It could be like the urge sometimes is just too much for some people.” Another male participant described how a female might run out of birth control pills and have to wait for an appointment, but “during that time she still gotta get some.” A female participant described how a male might forgo plans to use dual methods:

He’s just kind of like out of it. So he was probably using condoms with his girlfriend. And then when he saw this girl that was really like cute or whatever, so he didn’t have a condom on him, but he is going to have sex, because he’s feeling special that night.

In addition, a male participant talked about the overwhelming feelings that might cause someone to not use condoms:

I think for a lot of people, it just comes down to, when you’re really aroused, you’re just not thinking. Like, or you just don’t care. You might even know or say, I should do it, but I don’t care.

Message testing

Across all the messages, participants had the following suggestions: make the messages short, casual, and catchy; make messages rhyme or sound like song lyrics or poetry; compose messages that sound like a text message that a peer would send; avoid messages that sound demanding or otherwise parental. Below, participants’ reactions to the each message is described.

“She said she was on birth control. Now she’s pregnant. Birth control is not enough. Use condoms too. I wish I had.”

Reactions were mostly positive to this message, with participants describing it as relatable and easy to understand. A female participant believed it would be effective because “most guys think like that. And it will, you know, make them wear a condom.” This message sparked conversations about how this concept could be used in commercials to portray the negative consequences of unprotected sex, in a photograph with a young man holding a baby, or on posters together with the “He said he was clean” test message. Some participants proposed alternative wordings, such as, ““He said, She said/Is not enough/Be responsible” and “Birth control??? LIES... she’s pregnant” with hashtag, #usecondomstoo. (A hashtag is a short phrase after the # symbol commonly used in social media.)

However, in two focus groups of female participants, they criticized this message for blaming the female partner and neglecting to address the male partner’s role. For example, one participant states, “That is ignorant... It takes two to tango,” while another states, “He should blame the birth control, not her.”

“She’s on birth control, but that doesn’t mean you don’t need a condom. Be extra safe and use both condoms and birth control.”

Most participants believed this message would be ineffective. Some participants commented that it sounded like something a parent, not a friend, would say. Others said it was long, wordy, not catchy, and too demanding. Those who liked this message thought it was direct. Some participants suggested that the two sentences worked well separately, while other commented that it could be used as an explanation after a more catchy phrase. Another participant suggested the first sentence be rephrased in the following way: “She’s on birth control, but you should still use a condom.”

“Using condoms and birth control together is the best way to prevent pregnancy and diseases.”

Reactions to this message were mixed. Some participants praised it for being direct, self-explanatory, short, and positive. Others criticized it for not being catchy, boring, too formal, and too wordy. One participant disagreed with the statement, saying that abstinence was the best way to prevent pregnancy and diseases. Another participant commented that some people might question the importance of birth control since condoms protect against pregnancy and diseases.

Participants suggested the following alternatives:

- Condoms and birth control are the best way to prevent pregnancy and diseases.
- Condoms + Birth Control = The best way to prevent pregnancy and diseases.
- Using condoms and birth control together is an effective way to prevent pregnancy and diseases.
- She uses condoms and birth control... (referring to a person in a photograph)
- It is proven that the use of condoms and birth control together is the best way to prevent pregnancy and diseases.
- Condoms and birth control together – best way to prevent pregnancy and diseases

“If you don’t want to get pregnant, use condoms and birth control for extra protection.”

Participants did not believe this message would be effective. They criticized it for not mentioning STIs, not being catchy, too formal, negative, and geared towards adults, not young people. Some participants suggested improvement, including the following:

- Add a picture and a hashtag (#condomsandbirthcontrol)
- Add “or an STD” after “get pregnant”

- Make it a question and answer message, for example “Don’t want to get pregnant? Use condoms and birth control.”
- Add an image of a young person with a child and the text, “Most teenagers won’t learn until it happens to them.”
- Pair the message with picture of an pregnant woman holding condoms and thinking “I should’ve used protection!” or pair with picture of a man with multiple children saying “I shouldn’t have ran out”

“He said he was ‘clean.’ Now I have HIV. Birth control is not enough. Use condoms too. I wish I had.”

Reactions to this message were largely positive. Participants liked the message because it was shocking, relatable, straight to the point, sounded like something a friend would say, and thought-provoking. One participant suggested that other STIs could be used in place of HIV to create similar messages. Those who didn’t find the message effective, thought it was too long, not catchy, and that it sounded more like a calm explanation than something a peer would actually say. One participant suggested that the message be paired with a man smiling or winking, saying, “I’m clean.”

Spokespeople

In response to the question, “Who do you think would be the best person to talk to people your age about the importance of using both condoms and birth control?” participants suggested people their own age or slightly older, friends, and cousins. Some participants mentioned their

parents, but others felt strongly that parents were not the right people to deliver this message. Celebrities, including professional athletes, actors, reality television personalities, models, and musicians were also frequently mentioned.

Message Development

Towards the end of each focus group, participants were divided into small groups and asked to brainstorm messages they believed would effectively help people their age use both condoms and birth control. They were then asked to choose their three favorite ideas from the list of brainstormed ideas. Below, the participants' favorite responses are grouped into three categories – messages that could be used in traditional or social media, messages designed for use in social media, and images. The phrases are written exactly as written by the participants, including grammatical errors and self-censorship for profanity.

General Messages

- 2 is better than 1
- Wrap Bobby before you stick him in Brittany
- you can never be too safe!
- safe sex is always a yes
- Better safe than sorry.
- NO WORRIES 2 in 1 condom & pill!!!
- USE CONDOMS & BIRTH CONTROL!!! its worked before, Trust Me....
- Why go through the trouble when you can use the double.

- Why bother if you dont want to be a father.
- Wrap it before you tap it
- Think with your brain not with your penis
- A dollar for a condom
- Don't say maybe, If you don't want a baby
- Double your protection, not the risk
- just because you got pregnant or got an STD doest mean you'll make it on MTV.
- it happened to me it can happen to you.
- protect your private square.
- Double Down on pregnancy
- At the same d*** time
- Both at the same time
- No baby no big decisions
- Pill & Condoms leading to healthy relationships
- Dual Method, one purpose
- I feel safe as F*@K
- If you don't use the dual method... Then you can get out
- dual method is the way to go
- Don't let in the 'D' without using the P & C!
- Double or Nothing
- If you don't want that late text use that latex
- Got Protection?
- Twins (dual method) or Twins (two babies)

- Air Condom

Messages for Social Media

- #useitorloseit
- #Strapuporgoforbroke
- Its not worth it #thinksmart
- Safe sex is great sex #DUALmethod #condomsandpills
- Two is better than one or none #stayprotected
- How u know it's right when you do the #DM

Images

- Cartoon images of condom and birth control pill holding hands under a heart (Figure 5)
- No glove no love with illustration (Figure 6)
- Plan B (letter B crossed out) Two!! (Figure 7)

Participants made other creative recommendations for marketing dual method use. For example, one group suggested that birth control pills should be packaged along with condoms and called, “The Safe Box.” Another group recommended an adaptation of the hip-hop song, “Same Damn Time” made popular by Future. One group also suggested that posters or brochures include “real life examples” of dual method use. Another recommended a condom giveaway via the social media platform, Twitter. Another suggested a commercial in which men “guys react to lack of 100% efficiency of condoms.”



Figure 5: Condoms and Pill Pack Walking Hand-in-Hand



Figure 6: No Glove, No Love

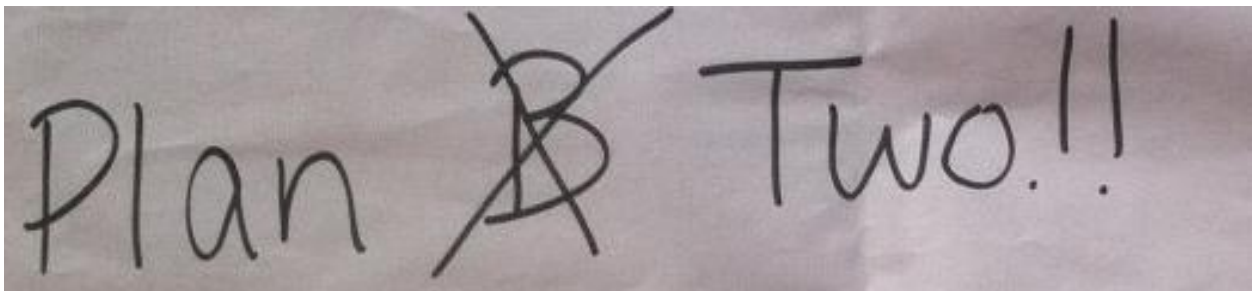


Figure 7: Plan for Two Methods, not Plan B

CHAPTER 5: DISCUSSION

Dual method use is a complex behavior. It requires that the male or female partner acquire condoms, the female partner selects and obtains another method of birth control, the couple uses condoms correctly and consistently, the female partner uses birth control correctly and consistently, and if either partner wishes to conceal the sexual activity from his or her parents, that he or she effectively hides evidence of condom or birth control use. Each of these behaviors may be influenced by expectancies, norms, salience, knowledge, skills, image, emotions, habit, self-efficacy, environment, and other factors. The beliefs and experiences of the focus group participants offer new insights into these factors.

Existing research about the correlates and predictors of dual method use examines the conceptual categories of expectancies, injunctive norms, salience, and knowledge and skill (Bearinger & Resnick, 2003; Higgins & Cooper, 2012; O'Leary, 2011). The results contribute to a better understanding of how image, emotions, and environmental constraints may support or get in the way of dual method use. It also reinforces earlier research that found dual method use to be conditional upon a number of relationship factors (Agnew & Dove, 2011; Gregson & Kirkman, 1999; Misovich, et al., 1997).

This chapter explores further the concepts of image, descriptive norms, emotions, environmental constraints, and relationship factors. The author identifies how the focus group findings relate to existing research on these factors, describes the limitations of the research, and

proposes a research agenda. This chapter sets the stage for the sixth and final chapter, a plan for change, which describes how these findings will be applied to public health practice.

Image and Descriptive Norms

Intention to perform a behavior is influenced by multiple factors, including its social image implications and the perceived actions of one's peers (Jaccard, 2009). While it is greatest during early adolescence, older adolescents and young adults experience greater egocentrism than older adults and believe that "others are preoccupied with his appearance and behavior" (Elkind, p. 1030).

In this study, participants ascribed positive images to dual method use including the adjectives, "smart," "safe," "responsible," "cautious," "careful," and "focused." These responses, however, should be considered cautiously, due to the possibility of social desirability bias. While less frequently mentioned, some participants also ascribed negative images to dual method users, including "scared," "insecure," "controlling," and "promiscuous." Many participants also indicated that dual method users were "doing too much" or "taking too many precautions." The frequency with which this concept was mentioned led to the development of the emergent code, "One is Enough." While not expressed as a social image, it supports the idea expressed by some participants that dual method users were not normal.

Participants' assessment that few of their peers use dual methods is likely accurate. In a nationally representative sample, 22.8 percent of 15 to 20 year olds and 12 percent of 21 to 25 year olds reported dual method use at last intercourse (Eisenberg, Allsworth, Zhao, & Peipert, 2012).

The focus group findings suggest that adolescents and young adults perceive dual method users to be smart, overly cautious, and rare. The low prevalence of dual method use poses a challenge to practitioners trying to increase its use. Strategies to increase dual method use should emphasize positive images associated with dual method use. However, the negative views must also not be ignored.

Emotion

Emotion is a key element of persuasion (Buck, Anderson, Chaudhuri, & Ray, 2004). It influences decision-making, risk assessment, and behavior (Ferrer, Fisher, Buck, & Amico, 2011). The desire to avoid negative emotions such as shame or regret is associated with consistent condom use (Buunk, Bakker, Siero, van den Eijnden, & Yzer, 1998; Hynie, Macdonald, & Marques, 2006). While many sexual and reproductive health interventions emphasize cognition and access, emotion is rarely targeted (Ferrer, et al., 2011).

Buck examined gender differences in emotions associated with buying condoms, discussing condom use with a new sexual partner, using condoms, and not using condoms. He examined “reptilian emotions” such as feelings of eroticism and power, “fearful individualist emotions” such as feeling nervous or uncomfortable, “angry individualist emotions” such as feeling selfish or insulted, “negative prosocial emotions” such as shame and embarrassment, and “positive prosocial emotions” such as confidence and security (Buck, et al., 2004).

Focus group participants mentioned all these types of emotions, though not explicitly. While no participants talked directly about eroticism or desire, many did describe the difficulties of using condoms “in the moment.” It was mentioned so often that an emergent code was developed to capture instances in which participants mentioned sexual activity being unplanned, mentioned

unpreparedness, happening spontaneously, or being caught up in the moment. For example, one participant said, “I think for a lot of people, it just comes down to, when you’re really aroused, you’re just not thinking.” Research has shown that sexual arousal affects men’s judgment and decision making about their willingness to engage in risky sex (Ariely & Loewenstein, 2006).

Positive prosocial emotions were mentioned most often, including comfort, confidence, and security. Participants identified “peace of mind” and feeling more confident, secure, and less worried, as benefits of dual method use. Fear and discomfort (fearful individualist emotions) as well as shame and embarrassment (negative prosocial emotions) were mentioned when talking about buying condoms and participants’ parents discovering their condoms or birth control. Angry individualistic emotions were rarely mentioned, though one female participant said that some men “might get offended” if asked to use a condom when she was already using birth control.

Few interventions that emphasize emotions associated with sexual health behaviors have been tested, and more research is needed. In the meantime, efforts to increase dual method use may benefit from emphasizing the positive emotions associated with dual method use. They may also frame dual method use as an opportunity to avoid negative emotions, like worry. Marketers know well the importance of emotion in selling a product. Public health practitioners could benefit from the appropriate (non-coercive) use of emotion to influence behavior.

Environmental Constraints

The findings here support the important role that environment plays in dual method use. In previous systematic reviews, the only environmental obstacle shown to be associated with dual method use was whether a teen’s parent knew who she was with when not at home or at

school (Crosby et al., 2001). In this study, access to condoms and birth control were frequently mentioned as environmental barriers to dual method use. While many participants mentioned access to free condoms as an environmental facilitator, some reported that free condoms were available sometimes but not consistently. Some participants also considered free condoms to be of poorer quality and more likely to break.

Many obstacles to obtaining birth control were named, including having to make an appointment, travel to a health center, and pay for services. These logistical and financial concerns, coupled with the fear of one's parents discovering they were using birth control, were thought to prevent some women from using dual methods.

Any intervention should consider what environmental constraints may be getting in the way of adolescents' and young adults' intentions to use dual methods and should minimize those obstacles. As a health care provider, Planned Parenthood is also in a position to help increase access such as extending hours of operation, offering services to less densely populated communities via telemedicine, offering services at reduced prices, and helping patients enroll in benefit programs or access marketplaces for low-cost health insurance. Interventions could also help participants identify ways to overcome environmental obstacles they may encounter.

Relationship Factors

While relationship characteristics are not explicitly included in the integrated framework, research has shown that various dimensions of relationships are associated with condom use (Aalsma, Fortenberry, Sayegh, & Orr, 2006; Bauman & Berman, 2005; Fortenberry, Tu, Harezlak, Katz, & Orr, 2002; Gebhardt, Kuyper, & Greunsvan, 2003) and dual method use (Kusunoki & Upchurch, 2011; Woodsong & Koo, 1999).

Dual method users are less likely to be married or living with their partner (Riehm et al., 1998; Sangi-Haghpeykar, Posner, & Poindexter, 2005) and dual method use is also less common among women in more committed relationships or in relationships they consider to be exclusive (Poppen & Reisen, 1999).

Some argue that these relationship variables are rooted in “implicit personality theories and heuristics” that influence risk-taking behaviors (Misovich, et al., 1997, p. 89). The beliefs that a known or trusted partner is unlikely to have HIV and that monogamous relationships are “safe” often take the place of well-reasoned, knowledge-informed decisions. People use heuristics to help solve complex problems.

In addition, motivation to engage in AIDS-preventive behaviors may diminish as a relationship progresses and interdependence increases. Couples may begin to “believe that they are uniquely invulnerable to HIV, compared with similar or the average person” (Misovich, et al., 1997, p. 92).

The predominance of discussions about gender differences, trust, and relationships suggests that strategies should address and be tailored to these considerations. For example, different messages may be needed to influence dual method use among people in long-term, committed relationships versus those who have a series of shorter, more casual relationships.

Limitations

This study has a number of limitations. First, findings cannot be generalized to populations. Qualitative research strives for analytic generalization not statistical generalization, or in other words, it cannot be generalized to a defined population, and instead contributes to the

understanding of the phenomenon under study. (The SAGE encyclopedia of qualitative research methods, 2008)

Another limitation is that participants were not asked directly about their personal experiences, and were asked what they thought people their age did or thought. Some participants shared their personal experiences voluntarily, but it was not required. Participants perceptions of what other people do or think may not be accurate. Forty percent of participants reported having never had vaginal intercourse. The researcher observed a greater sense of optimism about dual method use among the focus groups among adolescents as compared to the groups with young adults, especially in response to questions about how easy or hard it might be to use both condoms and birth control. These participants may have had less experience to draw upon when answering questions and therefore, made more guesses and assumptions.

While the use of an integrated model of intent and behavior provided a nearly comprehensive framework upon which to organize the existing evidence and establish codes for analysis, this model has its limitations. First, it combines many different theories resulting in concepts that may be overly broad and lack precise definition. For example, “image” has been conceptualized in many different ways in the sexual health literature, including body image (Schooler, 2013), prototypes (Gibbons & Gerrard, 1995), and stigma (Helweg-Larsen & Collins, 1994). These concepts, and all other versions of “image” could be studied in greater depth and perhaps provide insight into the behaviors associated with dual method use and how they can be influenced.

Practical Implications and Further Research Needed

The findings from this research suggest a number of ways that public health professionals can help more adolescents and young adults use dual methods. There is no simple solution or set of actions that would change the behavior of all adolescents and young adults, but there are likely changes in practice that could increase the prevalence of dual method use.

Additional research is needed to understand how these factors influence dual method use. Interventions designed to increase dual method use have utilized various strategies, including clinic-based education (Adams-Skinner, et al., 2009; Exner, et al., 2011; Roye & Hudson, 2003; Roye, et al., 2007), computer-delivered education (Peipert, et al., 2007; Peipert, et al., 2008; Peipert, et al., 2011), and youth development approaches (Sieving, Bearinger, Resnick, Pettingell, & Skay, 2007; Sieving, et al., 2012). While all these approaches show promise, few demonstrated sustained changes in dual method use past 12 months and many would be cost-prohibitive for many health organizations. Other approaches, such as peer education, social marketing campaigns, and other types of electronically delivered interventions should be developed and evaluated. The emphasis should be placed on practical strategies that can be delivered in resource-constrained environments, including publicly funded family planning clinics. In addition, opportunities to integrate dual method use strategies into existing interventions, such as contraceptive counseling and school and community-based sexuality education programs should be explored. The researchers hope that this formative research will equip the organizations and health professionals working to develop, implement, and evaluate new approaches to increase dual method use.

CHAPTER 6: PLAN FOR CHANGE

This research was conducted to support the development of strategies to increase dual method use. In this chapter, a Plan for Change is proposed that can be implemented by Planned Parenthood. The research findings will support the development of strategies to increase dual method use in several ways. First, the findings have already informed the development of several digital education tools, and to ensure wide utilization of these tools, a strategic marketing plan is proposed. Second, the results will be shared with health educators employed by Planned Parenthood affiliates. Third, these findings will be shared with other public health professionals and organizations wishing to increase dual method use through publications and conferences.

Below, each of these practical applications will be explored in greater depth. Each recommendation will be summarized in a table that includes the rationale, research findings that support it, other research that supports the recommendation, age, gender, and race/ethnicity considerations, suggested content, and leadership considerations.

First, it may be useful to become familiar with the multiple channels PPFA has available through which to promote dual method use. Planned Parenthood has nearly 800 health centers, operated by 74 affiliates, at which 2.9 million people receive health services annually (Planned Parenthood Federation of America, 2012a). In 2010, more than 2.2 million women received a method of contraception from Planned Parenthood (Planned Parenthood Federation of America, 2012b). They also provide testing and treatment for STIs, cervical and breast cancer screening, pregnancy testing, and abortion services. There are numerous opportunities to promote dual

method use to new and existing clients of these health centers, including during the patient visit and in the waiting room.

In addition to their health services, Planned Parenthood provides education to its clients and throughout the community. In 2010, Planned Parenthood affiliates educated more than 1.1 million people, not including patient education delivered by the clinician during a health services visit (Planned Parenthood Federation of America, 2012a). Planned Parenthood receives more than 4 million visits a month to its website, plannedparenthood.org. In addition, they have a robust social media presence on Facebook, Twitter, Tumblr, YouTube, and other sites (Perry, 2012).

Digital Education Tools

Planned Parenthood recently launched a suite of nine digital education tools, or apps, designed to be used on mobile phones. The apps encourage younger teens to delay the onset of sexual activity and older teens who are sexually active to use condoms and birth control. They are designed with African American and Latino teens in mind, but are appropriate for all racial/ethnic groups. Their content was informed by the same integrated framework for adolescent behavior used in this research (Guilamo-Ramos, et al., 2008; Jaccard, et al., 2002) and other research about delaying sexual initiation and safer sex practices among teens. These apps were being developed at the same time the focus groups were being conducted and analyzed. Preliminary findings from this research were shared with the developers of the apps and the researcher reviewed the apps and provided feedback based on her preliminary findings.

One app called “Been There/Done That” features seven videos of African American and Latino teens talking about their experiences with birth control and condoms. Each video is

followed by a question and a tailored response. In many instances, language for the videos came directly from the focus group participants. In one video, an African American male adolescent says the following, “I always have a condom with me – no reason not to. Then the girl knows that I respect her and myself, and that I’m responsible. And I make sure she’s on birth control too. It’s better to be double safe than double sorry.” This last line comes from one of the slogans developed by focus group participants. In another video, a Latina adolescent female says, “I was going out with a guy who said he didn’t want to use condoms because I have the implant. I said, no condoms, no sex.” Again, this last line comes directly from one of the focus group participants.

The videos, questions, and answers emphasize factors shown to be important in the analysis of the focus groups. One teen says the following about dual method use: “Even though we’ve been together a while and I’m on the pill, I still say that we need to use a condom. It’s better to be safe than sorry, and it’s just better for me – I’m less worried, so it’s easier to enjoy myself. Guys are always saying it feels better without a condom, but my boyfriend knows the truth: It’s good for both of us when he wears a condom because he lasts longer and it still feels good for him. And he really likes it when I put the condom on him.”

This statement addresses multiple factors related to dual method use including the length of the relationship, emotion (less worried), and expectancies (less pleasurable). After watching the video, the app displays the following question: “Do you think that couples who’ve been together a while should use both condoms and birth control?” If the user answers “Yes,” the following text is displayed: “In a good relationship, couples do everything they can to keep each other safe and healthy. Using both makes them feel confidence and secure.”

This last sentence came directly from the focus group results and addresses the emotional benefits of dual method use. If the user answers “No,” to the question about couples using both condoms and birth control, the app displays the following: “Using condoms and birth control is the best way to feel confident and secure that you’re both protected. Using both condoms and birth control is the smart and responsible thing to do.”

In addition to emphasizing the positive emotions associated with dual method use, this message incorporates the language used by participants to describe the image they associate with a person who uses both methods. By emphasizing positive emotions and images, these messages may be more effective than traditional educational approaches which focus on knowledge. Other videos in “Been There/Done That” reference parental support for dual method use, being prepared “in the moment,” and expectancies about the ease or difficulty of obtaining condoms and birth control.

Another app called, “It Takes Two,” poses the following question on the first screen: “Starting to feel comfortable in your relationship? Keep a good thing going, worry-free.” The app begins by asking what kind of birth control the user plans to use. It then plays a video in which a Latino or African American teen talks about her experience using this kind of birth control. She also explains why it is important to use condoms in addition to birth control. For example, the teen who uses birth control pills says the following, “The pill protects me from getting pregnant, but I still use condoms every time I have sex to protect me from getting STDs.” In another video, a teen says, “Condoms give you extra protection from pregnancy and they also protect you both from STDs...Usually my boyfriend has them with him, but I always keep a few with me just in case he forgets. I don’t want to get caught in the moment without one.” Another

video includes the line, “Using both condoms and birth control doesn’t mean you don’t trust each other. It means you want to be doubly protected.”

On December 16, 2013, Planned Parenthood launched a digital marketing campaign targeting five states with high STI and teen pregnancy rates: Louisiana, Mississippi, Alabama, Arkansas, and Oklahoma. After trying a variety of digital ad vehicles, Facebook and Pandora were the most successful in reaching the target audience. During the initial three weeks of the promotion, 8,499 youth clicked on ads for the tools and 42.24% of all users were in the target audience of 13 to 19 year old African-American and Latino youth in Oklahoma, Mississippi, Louisiana, Arkansas and Alabama. The average time spent on the tools was over 4 minutes. Most apps have an average use time less than one minute and health apps have an average use time of 2.5 minutes. The average completion rate was 33.96%. The highest completion rate for an individual tool (My Birth Control) was 66.38%.

While the initial promotion has been fruitful, a comprehensive marketing campaign is needed, especially for tools like “Been There/Done That” and “It Takes Two” that may not be actively searched for by teens. The table below summarizes the recommendation that a strategic marketing plan be developed.

Table 5: Recommendation: Develop comprehensive marketing strategy

Strategy	Develop a comprehensive marketing plan for “Been There/Done That” and “It Takes Two,” digital education tools, or apps, designed to promote dual method use.
Rationale	The apps incorporate preliminary findings of this research and are currently available online. For adolescents and young adults to benefit, the app must be widely disseminated and widely used.
Formative research relevant to this strategy	Focus group participants were somewhat familiar with the concept of dual method use, but identified many barriers to practicing it.
Prior research	The apps incorporate both the focus group findings, as well as other

relevant to this strategy	research about how to influence intention and behavior for safer sex practices among teens.
Age target/considerations	The target population for these two apps is African American teens ages 16 to 19. Older individuals may not find the approach as appealing, but the information is still relevant. Other means to reach young adults should be developed.
Gender target/considerations	The tools are tailored to males and females. However, there is not the option when selecting gender to indicate that one is transgender. In addition, the tools target individuals with opposite-gender partners. Future versions of the tools should consider how content could be tailored to transgender audiences and teens with same gender partners.
Race/ethnicity target/considerations	The tools were designed with African American and Latino teens in mind, but may be appropriate for teens of other racial/ethnic backgrounds.
Content	A comprehensive marketing plan should include the following: a marketing audit or situational analysis; establishing marketing objectives; strategies and action plans; distribution, advertising, and promotions plans; and budgets and monitoring plans (Westwood, 2013). The plan will clearly describe the market structure and segmentation, differentiation from competing sources of information about sexual health, and targets for growth (McDonald & Wilson, 2011).
Leadership/Change Management Considerations	A strategic marketing plan is key to the introduction of any new product to the market. Developing and implementing this plan will require a cross-functional team from across Planned Parenthood, including representatives from multiple divisions including Education, Communications, Brand, and Digital, as well as affiliate staff and vendors. Cross-functional teams offer many benefits. They are flexible vehicles for mobilizing individuals with varied skills to solve a common problem. A diverse team can foster communication, increase creativity, and promote organizational learning. Cross-functional teams need strong leaders with good inter-personal skills. Leaders of cross-functional teams must also demonstrate the following leadership behaviors: envisioning, organizing, social integrating, and external spanning (Yukl, 2006)

Affiliate Education Programs

For sex education professionals, these findings provide important information to be included in programs designed to increase dual method use. In Kirby’s “Characteristics of Effective Curriculum-Based Programs,” he reported that effective sex education programs “addressed sexual psychosocial risk and protective factors that affect sexual behavior (e.g., knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy) and changed them” (Kirby, 2007). Most Planned Parenthood affiliates employ health educators who provide various types of education programs in the health centers, schools, and communities. By sharing existing research and the findings from the focus groups, the researcher could help Planned Parenthood educators more effectively promote dual method use. The researcher will host a webinar for affiliate education staff in which she shares an overview of the research.

Table 6: Recommendation: Facilitate webinar for Planned Parenthood health educators

Strategy	Share knowledge via a webinar with health educators employed by Planned Parenthood affiliates.
Rationale	Planned Parenthood’s 68 affiliates reach over 1.1 million people annually with their education programs. Planned Parenthood educators are viewed by their communities as reliable sources of age-appropriate, medically accurate information about sexual and reproductive health. By sharing existing research and the findings of this study with Planned Parenthood health educators, they will be able to promote dual method use more effectively.
Formative research relevant to this strategy	Health education programs that aim to increase dual method use may be strengthened by addressing image, descriptive norms, emotion, environmental constraints, and relationship factors
Prior research relevant to this strategy	Health educators may benefit from learning about the prevalence, trends, and correlates of dual method use. They may also be able to incorporate lessons learned from intervention studies.
Age target/considerations	While the immediate audience for this strategy is health educators who are employed by Planned Parenthood affiliates who are usually young or

	middle-aged adults, the ultimate audience is the participants in their education programs, most of whom are between the ages of 15 and 24.
Gender target/considerations	Most health education is conducted in co-educational settings. While this may make it difficult to tailor the message to gender, it provides an opportunity to explore through activities and dialogue the impact of relationship factors and gender differences on dual method use.
Race/ethnicity target/considerations	The recommendations are the same for people of all races/ethnicities. Educators are encouraged to deliver messages in a culturally competent manner, tailoring the message to the race/ethnicity of the patient.
Content	The focus group findings coupled with established theories of behavior change, suggest that sex education should emphasize the positive images and emotions associated with dual method use. Sex education professionals must help participants negotiate, and help reduce, environmental barriers to dual method use. It is also important to address dual use within the context of relationships.
Leadership/Change Management Considerations	Repenning (2002) describes the process of “innovation implementation” and the necessary ingredients for sustained change, including commitment to the goal of the innovation, reinforcement by observing desirable outcomes, and diffusion by observing results obtained by others. The webinar should elicit a commitment to the goal – increasing dual method use among adolescents and young adults. Furthermore, ongoing communications with affiliates should reinforce desirable outcomes obtained by the educators as well as others.

Dissemination to other Professionals

This research builds upon existing published research, and in turn, should be shared with the research community. There are many ways to do this, but the primary and most widely-accepted means is through publication of the findings in a peer-reviewed journal. In late 2013, the author submitted the research to the UK-based journal, Sex Education, but they declined to publish it. The reviewers provided useful feedback which has been incorporated into this dissertation and will be applied in future submissions. The author will submit a revised manuscript to one or more of the following journals: Journal of Adolescent Health, Health

Education and Behavior, Family Planning Perspectives, Contraception, Perspectives on Sexual and Reproductive Health.

Planned Parenthood has extensive relationships with professional organizations with an interest in dual method use, including the American Social Health Association and Advocates for Youth. Both have expressed an interest in convening a national meeting of organizations interested in promoting dual method use. This would be an ideal venue to share not only the findings of the focus groups, but also the literature review. By engaging leaders from a variety of national organizations in a discussion about dual method use, Planned Parenthood’s reach could be greatly expanded.

In addition, this research should be shared at other national meetings. Preliminary results were shared as part of a presentation about the digital education tools at the Society for the Scientific Study of Sexuality Annual Meeting in November 2013. The author will submit the research for presentation at other conferences, including the American Public Health Association.

Table 7: Recommendation: Disseminate research findings

Strategy	Share research findings via peer-reviewed journals and national meetings.
Rationale	By sharing these research findings, other researchers can build upon what was learned and practitioners can enhance their promotion of dual method use.
Formative research relevant to this strategy	Public health practitioners may develop more comprehensive approaches to the promotion of dual method use by addressing image, descriptive norms, emotion, environmental constraints, and relationship factors. Researchers may choose to study certain aspects of the findings in greater depth or study certain variables using quantitative methods.
Prior research relevant to this strategy	Public health practitioners may benefit from learning about the prevalence, trends, and correlates of dual method use. They may also be able to incorporate lessons learned from intervention studies.

Age target/considerations	While the immediate audiences for this strategy are public health practitioners and researchers, the ultimate audience is the participants in their programs or research, most of whom are between the ages of 15 and 24.
Gender target/considerations	Given the apparent importance of relationship factors in dual method use, practitioners and researchers will be encouraged to explore gender difference in perceptions and practice of dual method use and to tailor messages according to relationship status.
Race/ethnicity target/considerations	Researchers and practitioners will be encouraged to deliver messages in a culturally competent manner, tailoring the message to the races/ethnicities of the target audiences.
Content	The focus group findings coupled with established theories of behavior change, suggest that public health practitioners should emphasize the positive images and emotions associated with dual method use. They must help participants negotiate, and reduce, environmental barriers to dual method use. It is also important to address dual use within the context of relationships.
Leadership/Change Management Considerations	Through publication and presentation at national meetings, Planned Parenthood establishes itself as a leader in the promotion of dual method use. This is important, not only for accomplishing the desired outcome of improved sexual health, but also in bridging the perceived or real gap between organizations with a mission to promote contraception and those promoting STI prevention, including HIV prevention.

Other Opportunities

Planned Parenthood’s Chat/Text Program provides real time answers to teens and young adults with an urgent sexual or reproductive health question and connects users to health services. Trained agents use a bank of more than 900 scripted responses to converse with users who contact them using SMS text messaging on a mobile phone or Instant Messaging (IM) on the Planned Parenthood website (Giorgio, Kantor, Levine, Arons, & Eysenbach, 2013). The program currently focuses on four topics: emergency contraception, pregnancy tests, abortion, and STI testing. There may be opportunities to integrate messages about dual method use into the Chat/Text Program.

Social marketing is a planning framework that can be applied to a variety of program types. It is often used to plan and implement broad-based communications campaigns and has been used extensively in international settings to market condoms for HIV prevention.

Leveraging Planned Parenthood's national and local communications resources, there are opportunities to conduct a dual method use campaign similar to other campaigns like "Let's Talk," which encourages parents to talk to their children about sex, and "Get Yourself Tested," which promotes STI testing.

A final and very important opportunity to apply these findings is by translating them into actionable recommendations for health care providers. These findings have been shared with a team of researchers at Planned Parenthood who are developing and testing an approach to contraceptive counseling. The researchers intend to incorporate dual method use into contraceptive counseling, and if found effective, these practices will be disseminated to all Planned Parenthood health care providers. In the meantime, the researcher presented the findings to Planned Parenthood's Medical Affairs Division in December 2013. This group is considering other means of disseminating the findings to Planned Parenthood health care providers.

APPENDIX A: FOCUS GROUP SCREENER TELEPHONE SCRIPT

SCREENER QUESTIONNAIRE

	Boston, MA	Los Angeles, CA	Raleigh/Durham, NC	Milwaukee, WI
African American -15-18 Females -15-18 Males -19-24 Females -19-24 Males	1	1	1	1
Latinos -15-18 Females -15-18 Males -19-24 Females -19-24 Males	1	1	1	1

Respondent's name: _____
 Address: _____
 City/State/Zip: _____

Date: _____
 Telephone #: _____
 Cell #: _____
 Email: _____

Interviewer's name: _____

Hello, is this the [LAST NAME] household? May I please speak to the head of the household?

(CONTINUE) My name is [INTERVIEWER NAME] and I'm with [RECRUITING COMPANY], a national research organization. We will be conducting group-discussion interviews in your area on...(see table above for date)

...and if a member of your household qualifies, we would like to ask him or her to participate.

1. For today's survey, we need to talk to people between the ages of 15 and 24. Is there anyone in your household between 15 and 24?

- () Yes (CONTINUE)
 () No (THANK AND TERMINATE)

2. What is the gender, age, and race or ethnicity for each person between the ages of 15 and 24 living in your household?

GENDER

AGE

RACE/ETHNICITY

- | | | |
|------------------|----------|-------|
| 1. Male / Female | 1. _____ | _____ |
| 2. Male / Female | 2. _____ | _____ |
| 3. Male / Female | 3. _____ | _____ |

(TERMINATE IF HOUSEHOLD HAS NO AFRICAN AMERICAN OR LATINO PERSONS BETWEEN AGE 15 AND 24.)

(RECRUIT 10 RESPONDENTS PER SESSION AS APPROPRIATE TO GENDER, AGE AND ETHNICITY/RACE. RECRUIT PARTICIPANTS SO THAT THERE IS AN APPROXIMATELY EVEN AGE DISTRIBUTION IN EACH GROUP. FOR EXAMPLE, IN THE YOUNGER GROUP, THERE SHOULD BE APPROXIMATELY 2 15-YEAR OLDS, 2 16-YEAR OLDS, 2 17-YEAR OLDS, AND 2 18-YEAR OLDS.)

IF RECRUITING A PARTICIPANT UNDER AGE 18, TURN TO PAGE 5.

CONTINUE HERE FOR PERSONS 18-24

3. What is the name of the MAN/WOMAN who is [SELECTED AGE]? _____

4. Is [NAME OF POTENTIAL PARTICIPANT] home right now? (IF PERSON IS NOT HOME, ASK WHEN YOU COULD CALL BACK.)

DATE: _____

CALL BACK TIME: _____

My name is [INTERVIEWER NAME] and I'm with [RECRUITING COMPANY], a national research organization. Let me tell you a little more about what we are doing. Project Health is a national research project being conducted by Planned Parenthood to help them develop programs that encourage teens and young adults to protect themselves against unintended pregnancy and sexually transmitted diseases. In this project we are talking to people between the ages of 15 and 24 to learn why people in this age group might use condoms and birth control or why not. You do not have to be sexually active to participate. May I ask you a few questions to determine if you're eligible for the study?

5. For our study, we need to speak to people of different ethnic backgrounds. Which of the following ethnic backgrounds do you consider yourself? (READ LIST. RECORD ONE RESPONSE.)

- | | |
|---|-------------|
| <input type="checkbox"/> Hispanic/Latino | (CONTINUE) |
| <input type="checkbox"/> African-American | (CONTINUE) |
| <input type="checkbox"/> Other | (TERMINATE) |

6. We would like to potentially include your opinions in a paid group discussion with your peers on topics related to the health of people your age.

If you choose to participate in this study, you will be asked to be part of a 90-minute focus group with up to 6 to 8 other people (a focus group is small meeting in a room). The questions for discussion will focus on sexual health. Information provided from this study will be kept secure by the research staff. Participation in this study is completely voluntary. The focus groups will be audio/video tape recorded. The focus groups will take place (WHERE AND WHEN). Each participant will receive a token of appreciation of \$75 in cash.

You need to know that not all of the people recruited to come to the research will be participating in the discussion but if you arrive on time to the research, you will be paid \$75 cash whether or not you are selected to participate. Can you join us?

- | | |
|------------------------------|---------------------------|
| <input type="checkbox"/> Yes | (CONTINUE) |
| <input type="checkbox"/> No | (THANK AND END INTERVIEW) |

(★IT IS VERY IMPORTANT THAT THE RESPONDENT UNDERSTANDS THAT HE/SHE MUST ARRIVE PRIOR TO THE SCHEDULED START TIME SO THAT THE GROUPS MAY BEGIN ON TIME. IF A RESPONDENT IS LATE, HE/SHE MAY NOT BE PAID.)

7. Now I want to make sure you know that you will be talking with other people your age, along with a professional interviewer. What you say is really important to us, and we want to be sure you know what will happen. The group will be discussing the use of condoms and birth control. You do not have to have personal experience with condoms or birth control, or even be sexually active, but you need to be comfortable talking about these things with other people your age. Is this something you're still interested in doing?

- | | |
|------------------------------|---------------------------|
| <input type="checkbox"/> Yes | (CONTINUE) |
| <input type="checkbox"/> No | (THANK AND END INTERVIEW) |

(★IT IS VERY IMPORTANT THAT THE RESPONDENT UNDERSTANDS THAT HE/SHE MUST ARRIVE PRIOR TO THE SCHEDULED START TIME SO THAT THE GROUPS MAY BEGIN ON TIME. IF A RESPONDENT IS LATE, HE/SHE MAY NOT BE PAID.)

(WHEN CALLING TO CONFIRM THE APPOINTMENT, ASK THAT THE RESPONDENTS ARRIVE APPROXIMATELY 20 MINUTES EARLY SO THAT EACH RESPONDENT CAN BE RESCREENED AND THAT THE GROUPS CAN BEGIN ON TIME. LATE RESPONDENTS MAY NOT BE PAID.)

- () RECONFIRM THE DAY BEFORE SCHEDULED GROUP
- () REMEMBER TO GIVE DIRECTIONS TO THE FACILITY

START HERE TO RECRUIT 15-17 YEAR OLDS

8. Are you the parent or legal guardian of [CHILD'S NAME]? (IF NO, ASK WHEN YOU COULD CALL BACK TO SPEAK TO PARENT.)

DATE: _____

CALL BACK TIME: _____

9. My name is [INTERVIEWER NAME] and I'm with [RECRUITING COMPANY], a national research organization. Let me tell you a little more about what we are doing. Project Health is a national research project being conducted by Planned Parenthood to help them develop programs that encourage teens and young adults to protect themselves against unintended pregnancy and sexually transmitted diseases. In this project we are talking to people between the ages of 15 and 24 to learn why they might use condoms and birth control or why not. Your child does not have to be sexually active to participate. Before we can decide if your child is eligible to participate, we need to ask you a few questions. Is that okay?

Yes

No

(CONTINUE)

(TERMINATE)

10. We would like to potentially include your son or daughter's opinions in a paid group discussion with his/her peers on topics related to sexual and reproductive health.

If you choose to have your child participate in this study, he/she will be asked to be part of a 90 minute focus group with up to 6 to 8 other youth (a focus group is small meeting in a room). The questions for discussion will focus sexual health. Information provided from this study will be kept secure by the research staff. Participation in this study is completely voluntary. The focus groups will be audio/video tape recorded. The focus groups will take place (where and when). Each participant will receive a token of appreciation of \$75 in cash.

We would need to speak with your child to ask a few quick questions to determine that he/she fits the criteria for our group as well as his/her willingness. Would that be agreeable?

11. Is [CHILD] home right now? (IF TEEN IS NOT HOME, ASK WHEN YOU COULD CALL BACK.)

DATE: _____

CALL BACK TIME: _____

My name is [INTERVIEWER NAME] and I'm with [RECRUITING COMPANY], a national research organization. Let me tell you a little more about what we are doing. Project Health is a national research project being conducted by Planned Parenthood to help them develop programs that encourage teens and young adults to protect themselves against unintended pregnancy and sexually transmitted diseases. In this project we are talking to people between the ages of 15 and 24 to learn why people their age might use condoms and birth control or why not. You do not have to be sexually active to participate. May I ask you a few questions?

11. For our study, we need to speak to people of different ethnic backgrounds. Which of the following ethnic backgrounds do you consider yourself? (READ LIST. RECORD ONE RESPONSE.)

- Hispanic/Latino (CONTINUE)
- African-American (CONTINUE)
- Other (TERMINATE)

12. We're conducting group discussions with people your age in your area on (date and time) and we would like you to participate. You will be asked to talk and share what you think about teenage activities, with an adult, as well as other people your age. You will be at the research facility for about one hour and 30 minutes. You need to know that not all of the people recruited to come to the research will be participating in the discussion but if you arrive on time to the research, you will be paid \$75 cash whether or not you are selected to participate. Can you join us?

- Yes (CONTINUE)
- No (THANK AND END INTERVIEW)

(IT IS VERY IMPORTANT THAT THE RESPONDENT UNDERSTANDS THAT HE/SHE MUST ARRIVE PRIOR TO THE SCHEDULED START TIME SO THAT THE GROUPS MAY BEGIN ON TIME. IF A RESPONDENT IS LATE, HE/SHE MAY NOT BE PAID.)

13. Now I want to make sure you know that you will be talking about things you like and things you do with other people your age, along with a professional interviewer. What you say is really important to us, and we want to be sure you know what will happen. The group will be discussing the use of condoms and birth control. You do not have to have personal experience with condoms or birth control, or even be sexually active, but you need to be comfortable talking about these things with other people your age. Is this something you're still interested in doing?

- Yes (CONTINUE)
- No (THANK AND END INTERVIEW)

14. Let me reconfirm your mailing address with your parent and that they are still willing to bring you to our facility on _____. We will not discuss the topics with your parent and all of your opinions will remain between us.

15. TO PARENT: During the discussion, HE/SHE will be asked to share HIS/HER opinions and attitudes about teenage activities with a professional interviewer and other people HIS/HER age. HE/SHE will be at the research facility for about one hour and 30 minutes. This experience should be both fun and educational for your teen. For HIS/HER participation, HE/SHE will be paid \$75 cash. Can (CHILD) join us?

- Yes (CONTINUE)
 No (THANK AND END INTERVIEW)

Please understand that your (SON/DAUGHTER) is being paid to speak and discuss HIS/HER opinions. What HE/SHE says is important to us, as important decisions will be based on what is learned from this research. We would appreciate it if you could stress the importance of the research to your teen and the need for HIM/HER to share HIS/HER thoughts as HE/SHE is comfortable. It is also very important that HE/SHE arrive right on time – not a minute late, so that the groups may begin on time.

(IT IS VERY IMPORTANT THAT THE RESPONDENT UNDERSTANDS THAT HE/SHE MUST ARRIVE PRIOR TO THE SCHEDULED START TIME SO THAT THE GROUPS MAY BEGIN ON TIME. IF A RESPONDENT IS LATE, HE/SHE MAY NOT BE PAID.)

(WHEN CALLING TO CONFIRM THE APPOINTMENT, ASK THAT THE RESPONDENTS ARRIVE APPROXIMATELY 20 MINUTES EARLY SO THAT EACH RESPONDENT CAN BE RESCREENED AND THAT THE GROUPS CAN BEGIN ON TIME. LATE RESPONDENTS MAY NOT BE PAID.)

- RECONFIRM THE DAY BEFORE SCHEDULED GROUP
 REMEMBER TO GIVE DIRECTIONS TO THE FACILITY

APPENDIX B: PRE-FOCUS GROUP SURVEY

1. How old are you? _____

2. What is your gender?

- Male
- Female
- Transgender

3. Which of the groups below describes your racial or ethnic background? Please select one or more groups:

- Black or African American
- Latino/a or Hispanic
- Other: _____

4. Are you currently in school full-time or part-time?

- Yes
- No

4a. If YES (If you are currently in school full or part time)...

What grade or year are you in?

- 8th grade
- 9th grade
- 10th grade
- 11th grade
- 12th grade
- 1st year of college
- 2nd year of college
- 3rd year of college
- 4th years of college
- 5th year of college of greater
- In graduate school

4b. IF NO (You are not currently in school)...

What is the highest grade level of school you have ever attended?

- 8th grade
- 9th grade
- 10th grade
- 11th grade
- 12th grade
- 1 year of college or less
- 2 years of college
- 3 years of college
- 4 year of college
- 5 or more years of college
- Graduate school

5. Have you ever had sexual intercourse?

- Yes
- No

5a. IF Yes... The last time you had vaginal intercourse, which of the following methods did you or your partner use to prevent pregnancy and/or sexually transmitted infections? (Select all that apply)

- None
- Condom
- Birth control pills
- A shot (such as Depo-Provera), patch (such as Ortho Evra), or birth control ring (such as NuvaRing)
- Hormonal implant (Nexplanon or Implanon)
- IUD (such as Mirena or ParaGard)
- Emergency Contraception (Plan B)
- Not sure
- Other method: _____

APPENDIX C: FOCUS GROUP DISCUSSION GUIDE

Instructions: This focus group discussion guide is to be used to moderate focus groups conducted with adolescents and young adults about dual method use, to ascertain motivators for dual method use, and get input into messages that may motivate more young people to use dual methods. In advance of the focus group, it should be modified to include the proper language for the group's age and gender. The questions should be asked in the order presented here, but additional clarifying questions can be added as needed. The questions in *italics* are probing questions and should be used if prompts are needed to encourage the group to have further discussion.

Introduction (10 minutes)

The purpose of the focus group is to talk about dual method use. Dual method use is when someone uses both condoms and birth control at the same time, like the IUD or the Pill, or something else. We hope that by holding these focus groups, we can learn what teens and young adults think about using condoms and birth control at the same time, why they do it or don't do it, and what you think would motivate more people to use both condoms and birth control together. We'll be using what we learn to develop posters, brochures, and online messages on Facebook and Twitter plus sharing it with our doctors and nurses to give them a sense of what they can say to patients to help people to use both birth control and condoms. Do you have any questions?

I will hold about approximately eight of these groups around the country. I will hold them with men and women, as well as teens and young adults. The conversation should last about an hour and a half. I am video recording and audio recording so that I and my colleagues can watch and listen to it later and have someone write down what was said. We have these name tags, so I know what to call you, but we will not use your name in any reports or presentations. Do you have any questions about the study or the focus group?

Okay, before we get started, I would like you to help me write some ground rules. These are rules that we will all agree to follow for the good of the group. Who would like to suggest a ground rule? [Write ground rules on a flip chart.]

What about talk about what other people said outside of this focus group?

What about welcoming all opinions?

What about when two people disagree? How would you like us to handle disagreement?

[Ensure ground rule include confidentiality, welcoming all opinions, respect for others.]

Okay, these are good ground rules. I also want to remind you that may decide which questions to answer and how much to share. You may choose not to participate in any part of the discussion. Do you have any questions?

Finally, please be honest. Don't just tell me what you think I want to hear. And last, but not least, please turn off your cell phones. Has everyone turned them off?

Warm-up Activity and Questions (10 min)

Before we get started, I want us to get to know each other a little. Let's go around the room. Tell us your name and your favorite kind of food.

[Everyone introduces themselves.]

Okay, thank you for sharing a little about yourself. Let's get started.

We are going to talk today about health messages – things you hear or read about being healthy. Where do hear or see these kinds of messages?

Where else do you hear or see information about health?

What are some examples of things you have heard or seen that encourage you to make healthy choices?

What about things you read online?

See on television?

Hear from your friends or your parents?

What have you heard about birth control pills?

What have you heard about IUDs, that stands for intrauterine devices?

What have you heard or seen about using condoms?

Part 1: Knowledge and skills, Descriptive Norms, Expectancies, Salience and Intention (15 min)

Before today, what had you heard about dual method use? If yes, what had you heard?

Maybe they didn't call it dual method use, but had you heard it was a good idea to use condoms and birth control?

How did you hear about it?

Who told you about it?

Do you think other [girls/women/boys/men] your age who are having sex use both condoms and birth control?

How common is it for someone your age to use both condoms and birth control?

Do most people your age use both condoms and birth control?

Research shows that between 10 and 20 percent of people use both condoms and birth control. Does that sound about right to you? Do you think it is more or less?

Do you think your friends who are having sex use both condoms and birth control? Why or why not?

In your opinion, what are the advantages of using both condoms and birth control?

What are the benefits?

Why would someone want to use both condoms and birth control?

What do you think are the disadvantages of using both condoms and birth control?

What are some reasons someone might not want to use both condoms and birth control?

Why would someone choose NOT to use both condoms and birth control?

A lot of [teens/young adults] know that birth control doesn't protect against sexually transmitted diseases like chlamydia and HIV, but they still don't use condoms. Why do you think they don't use condoms?

Partners don't want to use them?

They don't want to or they can't buy condoms?

They think they won't get a disease?

You've mentioned X, Y, and Z reasons. What else?

Which of these reasons do you think is most important?

Sometimes people start out using both condoms and birth control, but then stop using condoms, stop using birth control, or stop using both. Why do you think they stop using birth control and only use condoms?

Do you know anyone who has done this? Why did they stop using birth control?

If they started out using both condoms and birth control, why would they stop using condoms and just use birth control?

Do you know anyone who has done this? Why did they stop using condoms?

Why might they stop using both condoms and birth control and use nothing?

Do you know anyone who has done this? Why did they stop using both condoms and birth control?

How important do you think it is for [girls/boys/women/men] your age to use both condoms and birth control?

Sometimes we intend to do something, but don't actually do it. For example, sometimes I mean to exercise more, but I don't actually get out and exercise. This is true for some people when it comes to using both condoms and another kind of birth control. Why might someone intend to use both condoms and birth control, and not actually do it?

Part 2: Self-Concept and Injunctive Norms (10 min)

Transition: This has been very useful. Now we are going to shift gears a bit and I am going to ask you to think about the kinds of people that use both condoms and birth control, what other people think about birth control, and how using both condoms and birth control makes you feel. You may not always be sure of the answer, but I still want to hear what you think.

What kind of [girls/women/boys/men] uses both condoms and birth control?

Imagine you found out that a friend and his/her girlfriend/boyfriend were using both condoms and birth control, what would you think? What are some words you would use to describe them?

What words would you use to describe a young woman who uses both condoms and birth control?

What words would you use to describe a young man who uses both condoms and birth control?

I hear you saying that [girls/women/boys/men] who use both condoms and birth control are [insert a few representative responses from previous question]. Are these good or bad qualities?

What would your mother or father think about using both condoms and birth control? Would they think it was a good thing to do?

What about another family member who is important to you like a brother, sister, aunt, or cousin? What would they say about using both condoms and birth control.

What about your friends? What would they think about using both condoms and birth control?

What would your boyfriend/girlfriend think if you said you wanted to use both condoms and birth control?

Imagine bringing up to your [boyfriend/girlfriend] or partner that you want to use both condoms and birth control? How do you think [he/she] react?

MEN: I want you to pretend that I am your girlfriend and I say, “I am going to get on birth control, but we still need to use condoms.” How would you respond?

What would she say?

What would she do?

WOMEN: I want you to pretend that I am your boyfriend and I say, “Even if you start using birth control. I still want to use condoms.” How would you respond?

What would he say?

What would he do?

Part 3: Environmental Constraints, Self-Efficacy, and Habit and Automatic Processes (15 min)

Transition: This discussion is great! Thank you for being so honest and open. Next, I want to talk about what we can do to help more [teens/young adults] use both condoms and birth control.

First, let me ask – do you think it is easy to use both condoms and birth control? Or is it difficult?

IF DIFFICULT: What would make it easier for [girls/women/boys/men] your age to use both condoms and birth control?

IF EASY: What would make it more difficult for [girls/women/boys/men] your age to use both condoms and birth control?

Are there certain times or situations where [teens/young adults] are more likely to use both condoms and birth control?

- *Condoms available?*
- *Where sex was taking place?*
- *Privacy?*
- *Timing?*

Are there certain times or situations when someone who has used both condoms and birth control in the past might not use both – they might just use condoms, or just use birth control, or neither? Why might this happen?

What would make it easier for someone who is already using both condoms and birth control and continue using both?

It is easier to do something if it is a habit. For example, if I were in the habit of jogging – I jogged almost every day – then it would be easier for me to go jogging today. So what about the habit of using both condoms and birth control? What could [teens/young adults] do to make it a habit?

What would help make using both condoms and birth control more of a habit for more than a few weeks? Like for months or even years?

How could using both condoms and birth control become something that [teens/young adults] do automatically, without thinking?

Part 4: Strategies (15 minutes)

Thank you. You guys are great! Okay, we are going to do an activity now – a brainstorm [Divide the participants into groups of 3 to 4 persons each. Give each group a sheet of butcher paper and a marker.]

In your small groups, I want to imagine that you are making a poster or a brochure to encourage your peers to use both condoms and birth control. What would it say? It might also have pictures or other designs, but I am most interested today in the words you would use. Come up with as many ideas as you can think of. Choose someone to write down what people say. No idea is too crazy or weird. Write down every idea. Get creative. Think of catchy phrases, if you can, or things that you are your friends might remember. You will have five minutes to come up with as many ideas as possible. Do you have any questions? Okay, on your mark, get set, go!

[After four minutes, give a one-minute warning. At five minutes, give the following instructions]

Now I want to imagine that you writing a blog, Facebook messages, or Tweets about using both condoms and birth control. What would you say? Again, come up with as many ideas as you can think of. Continue writing down all the ideas. You will have five more minutes to come up with as many ideas as possible. Any questions? Okay, go!

[After four minutes, give a one-minute warning. At five minutes, give the following instructions]

Okay, as a group, I want you to look at the list you have made and pick the top three ideas. They can be from the list you made for posters or brochures, or from the second list for Facebook or Twitter. Choose the three messages that you think would be most likely to persuade your peers to use both condoms and birth control. Circle or put a star next to your group's three favorite messages. You will have three minutes to decide which ones you like the best. Any questions? Okay, three minutes and counting!

[After three minutes, reconvene the group. Ask each group to share their top three messages. Tape the pieces of butcher paper on a wall where everyone can see them.]

[After every group has shared their top three messages...]

What do you think about these messages?

Which do you like best? Why?

Which do you think would be most persuasive to you and your peers?

Thank you for sharing these ideas. This is very useful. Next, I am going to show you a few messages that we created earlier before we had a chance to see your ideas. These are messages you might hear from a doctor, a parent, or a friend. Or you might see this on a poster, on Facebook, or on a billboard. I want to hear what you think about this message.

Example 1: Using condoms and birth control together is the best way to prevent pregnancy and diseases.

Example 2: She's on birth control, but that doesn't mean you don't need a condom. Be extra safe and use both condoms and birth control.

Example 3: If you don't want to get pregnant, use condoms and birth control for extra protection.

Example 4: "He said he was 'clean.' Now I have HIV. Birth control is not enough. Use condoms too. I wish I had."

Example 5: "She said she was on birth control. Now she's pregnant. Birth control is not enough. Use condoms too. I wish I had."

Okay, great! Your thoughts and suggestions are very useful.

I mentioned earlier that we might use these messages in lots of different ways – posters, brochures, Facebook, Twitter – or even suggest that doctors or nurses say these things to their patients to persuade them to use both condoms and birth control. Think about the messages you just created and the ones I showed you. What would be the best way to share them with you and your peers?

Sometimes we are more likely to take advice or follow the recommendations of certain people. Who do you think would be the best person to talk to people your age about using both condoms and birth control?

Health care provider, like a doctor or nurse?

A parent?

Another family member?

A friend?

Conclusion (15 min)

Before we wrap up, I want you to write down (pass out blank notecards) the one thing you have heard today that you most disagree with.

(Pause, allow everyone to write, then collect notecards.)

Now, I want to go around the room and ask everyone to say, in your own words, what the most persuasive thing you could say to a friend, brother, sister, or someone else you care about to encourage them to use both condoms and birth control. Pretend you are talking to them. Use your own words. For example, I might say to my brother, “Doug, you and Amy are getting pretty serious. I know you don’t want kids right now, so I hope you will use condoms, even if she’s on birth control.”

Okay, this has been a wonderful conversation. Thank you again for participating.

[Collect and keep butcher paper from small group exercise.]

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