CONTRACEPTION MYTHS AND THEIR INFLUENCES
A FOCUS GROUP APPROACH

by
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Abstract

In the United States, a total of 70% of pregnancies among unmarried women in their twenties are unplanned, and research suggests that myths about contraception may be a factor. Using focus groups of young women, aged 19-29 years, this study examined myths about contraception, the factors young women take into account when making decisions about contraception, how young women perceive different communication channels providing information about contraception, and how young women perceive possible interventions to decrease contraception myth. Focus group discussions revealed four main findings: confusion over contraception myth is common, young women consider multiple factors when making decisions about contraception, young women do not have a preferred communication channel for accessing information on contraception, and young women want interventions to help increase contraception knowledge and/or decrease contraception myth. Based on these findings, it is suggested that those interested in decreasing unplanned pregnancy among young women pay attention to contraception myth, the role of the social network in contraception decisions, and use cutting edge intervention techniques. These findings may allow health communication professionals to design more appropriate interventions to decrease contraception myth and unplanned pregnancy among young women.

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Preface

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Contraception Myths and Their Influences

In the United States, a total of 70% of pregnancies among unmarried women in their twenties are unplanned (Kaye, Suellentrop, & Sloup, 2009). Since 2001, the rate of unplanned pregnancy has increased from 92 in 1,000 to 95 in 1,000 (Zolna & Lindberg, 2012). In 2001, approximately 1.6 million unmarried women in their twenties experienced an unplanned pregnancy. This number increased to 1.95 million in 2008, resulting in 350,000 additional unplanned pregnancies. This number is remarkably high considering that the vast majority of unmarried young adults (aged 18-29 years) state that they do not want to get pregnant unintentionally (Kaye et al., 2009).

Richmond, Sabatini, Krueger, & Rudy (2001) suggest that myths about contraception are common and may be a factor in unplanned pregnancies. Some common myths about contraception include the inability to become pregnant while breastfeeding, without having an orgasm, if one douches after intercourse, or if the man pulls out before ejaculating (Cleveland Clinic, 2012). Other myths include the idea that oral contraception becomes effective immediately or the idea that plastic wrap or a balloon can be used as a condom. When practiced, all of these misperceptions about contraception can increase one’s risk for unplanned pregnancy. While Richmond and colleagues did not conduct any research on myths, they did advocate for research into a connection between myths about contraception and unplanned pregnancy.

To date, only one major study has been conducted to examine these myths among young adults. Kaye et al. (2009) surveyed 1,800 unmarried, young adults to investigate prevailing myths regarding contraception. While this study confirmed the existence of many myths about contraception, the study did not give participants an opportunity to describe what they have heard about contraception and where they heard it. The survey also lacked a way for participants to vocalize how they would like to learn about contraception and what factors into their decisions about contraception.
The present study seeks to expand on the research of Kaye et al. (2009) by using focus groups of young women to delve deeper into contraception myths. The present study examines the prevailing myths concerning contraception, asking young women what they know about contraception and myths about contraception. Also, this study asks young women about decisions regarding contraception. What factors do young women take into account when making these decisions? Do myths play a role? This study also looks at how young women perceive communication channels that provide them with information about contraception. Do young women turn to family members, friends, the Internet, and/or doctors for information? Lastly, this study asks young women how contraception myths can be dispelled.

For the present study, young women are defined as unmarried females living in the United States aged 19-29 years. A myth is defined as incorrect information that is widely believed to be true. Most methods of contraception are considered in this study, including barrier methods, hormonal methods, and fertility awareness methods. Nonreversible methods, including female sterilization and male vasectomy, are not included, as these methods are not widely used by young women (Jones, Mosher, & Daniels, 2012). Hormonal methods are known to be the most reliable at preventing pregnancy, followed by barrier methods, and then fertility awareness methods (Centers for Disease Control and Prevention, 2012). Hormonal methods include the intrauterine device (99% effective), the implant (99% effective), the injection (94-99% effective), pills (91-99% effective), the patch (91-99% effective), and the vaginal ring (91-99% effective). Barrier methods include the male condom (82-98% effective), the female condom (79-95% effective), the diaphragm and cervical cap (84-84% effective), and spermicide (72-82% effective). Fertility awareness methods, or natural family planning, can be 75-96% effective when used perfectly. Withdrawal, or pulling-out, is the least effective method, with an average effectiveness rate of 78% (Bedsider, n.d.).
Examining the source of contraception myths, how young women make decisions regarding contraception, what communication channels young women turn to for contraception information, and how young women would like to see myths dispelled may allow health communication professionals to plan more effective strategies that change perceptions, fight contraception myths, and reduce unplanned pregnancies.
Literature Review

Prior to conducting original research to investigate myth and contraception decisions, it is important to understand the current state of the literature. The following literature review delves into four issues related to contraception: existence of contraception myths/misinformation, contraception decision factors, communication channels for contraception information, and methods of increasing contraception knowledge. The review reveals several gaps in the literature, including little or no research on the topics of contraception myth and ways to dispel contraception myth. In addition, little consensus regarding trusted communication channels exists and studies examining contraception decision factors have failed to include myth as a variable.

Existence of Contraception Myths/Misinformation

Very little research has been conducted examining the existence of contraception myths, and even less research has been conducted to investigate a relationship between contraception myths and contraception use. Since there is so little information on the topic of contraception myth, including the lack of a definition, it is important to first confirm its existence. The studies discussed below include a variety of terms, including myth, misinformation, and rumor. Each study discussed below confirms that myths about contraception do exist.

Using a nationally representative telephone survey of 1,800 unmarried men and women, aged 18-29 years, Kaye et al. (2009) investigated why so many unplanned pregnancies occur in this demographic. To gauge the prevalence of myth, participants were asked six true-false questions about common contraception myths. In answering these questions, only 20% of respondents were able to answer more than half correctly. Some of these common myths included the need to take a break from using the pill, the acceptability of using petroleum jelly to lubricate condoms, and dangerous side effects associated with hormonal methods of contraception. Almost half of participants (44%) thought it was necessary to take a break from the pill, 37% thought it was okay to lubricate
condoms with petroleum jelly, and 27% thought that using hormonal methods of contraception for an extended period of time was extremely likely to lead to serious health problems. Despite these incorrect responses, 90% of participants believed that they had all the information they needed to prevent unplanned pregnancy. Researchers concluded that widespread myths and misinformation regarding pregnancy and contraception exist, and hypothesized that these beliefs result in an increased risk of unplanned pregnancy. Of all the studies examined in this section, this is the only one that examines specific myths; however, the quantitative nature of this study limited the findings to only six myths. This limitation possibly inhibited the discussion of other important contraception myths.

Tessler and Peipert (1997) also surveyed young women, examining what they know about contraception. Researchers conducted a survey of 336 female college students to see if misperceptions regarding contraception exist. The survey contained questions to assess knowledge of contraceptive effectiveness and the risks and benefits of using contraception. No questions were asked to examine where misinformation about contraception comes from or why it exists. Results revealed that most participants could estimate the effectiveness of oral contraception; however, most underestimated the failure rates of barrier methods and spermicide. A total of 59.2% underestimated the failure rate of condoms, 64.9% underestimated the failure rate of diaphragms, and 87.5% underestimated the failure rate of spermicide. Results also revealed that most participants overestimated the side effects of contraception. A total of 41% believed that use of oral contraception increased one’s risk for breast cancer and 33% believed that use of oral contraception increased one’s risk for cervical cancer. Researchers concluded that these false beliefs, or misinformation, could play a role in poor contraception compliance.

Also examining knowledge about contraception, Rajasekar and Bigrigg (2000) used a questionnaire to examine pill knowledge among oral contraception users in Scotland. The questionnaire included questions on safety, benefits, and mode of action. Results indicated that knowledge about these topics was lacking. Of 1,998 participants,
nearly 1/3 (31%) thought it was not safe to take oral contraception for more than 10 years. In addition, many respondents were unsure about the non-contraceptive benefits of oral contraception: 62% didn’t know if the pill decreased the risk of ectopic pregnancy and 40% didn’t know if the pill played any role in decreasing the risk of breast cancer. Mode of action was also misunderstood: 32% of respondents thought oral contraceptive pills killed sperm. The researchers concluded that users of oral contraception are not completely knowledgeable about their method of contraception. As in the previous two studies, the use of a questionnaire possibly limited the depth of this study. Participants were not asked to elaborate on their knowledge about contraception or asked to describe why they held certain beliefs.

DeClerque, Tsui, Abul-Ata, and Barcelona (1986) examined the relationship between rumor and use of oral contraception among women in Egypt. The researchers used a survey to measure exposure to three rumors about oral contraception, current contraception use, and planned contraception use. Results revealed a significant negative correlation between rumor and probability of future oral contraception use among inexperienced oral contraception users ($p < 0.01$). Thus, women who had been exposed to rumors about oral contraception and had less experience with oral contraception were less likely to have intentions for future oral contraception use. The researchers surmised that oral contraception rumors might result in women discontinuing use and thus a rise in unplanned pregnancy. This is the only study found that tested a relationship between myth and use of contraception. Like Kaye et al. (2009), the study only tested several rumors. Other important rumors among Egyptian women may not have been accounted for, possibly skewing study results.

In summation, these studies found that myths/misinformation regarding contraception exist. This is an important first step in exploring why myths are prevalent among young women and investigating what role they play in decisions about contraception use. One study found a significant negative correlation between myth and
future contraception use, meaning that the more myth a woman heard, the less likely she was to use contraception. This was the only study found to test such a relationship. All of the studies examined very specific myths and this limitation restricted the replies of participants, possibly failing to capture other important contraception myths.

**Contraception Decision Factors**

The studies below investigate what issues women take into account when deciding whether to use or not use contraception and/or which methods to use or not use. These factors could be a number of things, like cost of contraception, satisfaction level with current method, and/or preferences of friends and family. From these studies, we know that personal orientation towards pregnancy and/or contraception plays a role in contraception decisions. While this result does not explain the role of myths in contraception decisions (myth or misinformation were not variables in any of the studies discussed below), it does add to a general understanding of the subject. It is also possible that contraception myths help shape one’s perceived vulnerability to pregnancy and/or attitudes towards contraception. For example, holding the belief that hormonal contraception can cause breast cancer, a myth, might result in a negative view of contraception. According to these studies, this negative view possibly increases one’s likelihood of using contraception incorrectly or using less reliable methods.

Frost and Darroch (2008) conducted a survey to study factors associated with contraception choice and inconsistent use of oral contraception and condoms. Female interviewers randomly contacted, by telephone, a nationally representative sample of 1,978 women, aged 18-44 years. The survey measured contraception behavior, asking about frequency and correctness of contraception use over the past three months. Participants were also asked how important it was to avoid pregnancy and to rate their satisfaction with their current method of contraception. Results revealed a significant negative relationship between importance of avoiding pregnancy and use of less effective methods of contraception (i.e. pulling out or periodic abstinence). In other words, those
who did not think it was very or somewhat important to avoid pregnancy were more likely to choose these less effective methods \((p < 0.001)\). As for contraception choice, not liking other methods of contraception was significantly related to method choice (pill: \(p < 0.001\), long-acting: \(p < 0.001\), condom: \(p < 0.001\), other: \(p < 0.05\)). It was concluded that interventions to help women select the most appropriate method are necessary. While this study explored a number of factors that contribute to contraception choice, it did not test for factors related to myth or misinformation, leaving many unanswered questions about the role that myths may play in contraception decisions.

Bruckner, Martin, and Bearman (2004) also examined attitudes towards pregnancy and contraception. Researchers used data collected from the National Longitudinal Study of Adolescent Health, a nationally representative survey consisting of two interviews. From this study, researchers extracted the results of 4,877 females, aged 15-19 years. The researchers examined questions measuring attitudes towards pregnancy and contraception use. As in the previous study, exposure to contraception myths was not measured. Analyses of the data revealed a significant positive relationship between attitudes towards contraception and consistent use of contraception \((p < 0.01)\). The more positive a participant felt about contraception, the more likely they were to use it consistently. Results also showed a significant positive relationship between ambivalence towards pregnancy and inconsistent contraception use \((p < 0.05)\). As ambivalence towards pregnancy increased, so did inconsistent use of contraception. While this study offered no specific information regarding contraception myth, it is possible that myth plays a role in attitudes about contraception. Exposure to myths may result in a less positive attitude towards contraception, and thus more inconsistent contraception use.

Using a survey, Schwarz, Lohr, Gold, and Gerbert (2007), explored the relationship between ambivalence towards pregnancy and contraception use. A total of 441 women, aged 18-45 years, were recruited from the waiting areas of two San Francisco urgent care clinics. Participants were asked about their use of contraception,
their frequency of unprotected sex, and their pregnancy intentions. Results showed that women with higher levels of ambivalence towards pregnancy were more likely to report unprotected sex. The survey showed that 17.5% of those trying to avoid pregnancy had unprotected sex in the last five days while 28.9% of those ambivalent towards pregnancy had unprotected sex in the last five days. Results also indicated that those ambivalent towards pregnancy were more likely to choose less effective methods of contraception than women trying to avoid pregnancy. A total of 55.5% of women ambivalent towards pregnancy chose withdrawal, natural family planning, or no method at all while 29.3% of women trying to avoid pregnancy chose these methods. The researchers surmised that ambivalence towards pregnancy is associated with use of less effective methods of contraception. While this study did not test the role of myth, it does help to explain reasons why women choose certain methods of contraception. It is possible that ambivalence towards pregnancy can stem from contraception myths. For example, ambivalence towards pregnancy could increase if one believes prolonged use of contraception can cause infertility, a myth. If one believes they are infertile, they may not use contraception.

Free, Lee, and Ogden (2002), conducted interviews to examine factors guiding the use of contraception among young women. Researchers interviewed 30 women, aged 16-25 years, who had been recruited from health practices, hostels for the homeless, youth groups, and family planning clinics near London. Questions explored participants’ reasons for use and non-use of contraception. Once the interviews were transcribed and coded, safety (protection from unplanned pregnancy) and vulnerability (susceptibility to unplanned pregnancy) arose as major themes. Those participants who vocalized a strong desire to avoid pregnancy spoke about using contraception. One young woman stated, “and it’s better to have two safety barriers than none at all and get pregnant and have a child” (Free et al., 2002, p. 1394). Another participant described feeling very vulnerable to pregnancy if she didn’t practice safe sex obsessively. She referred to an unplanned
pregnancy as a “complete disaster.” Some participants described feeling less vulnerable to pregnancy. A participant stated, “after I’d been on the pill for a while (I thought) I’m not going to get pregnant…it won’t happen to me, it always happens to the other person” (Free et al., 2002, p. 1394). Of these women that described feeling less vulnerable, some mentioned less worry for an unplanned pregnancy when using contraception incorrectly or not using it at all. With these findings, the study suggests that one’s attitudes and vulnerability towards unplanned pregnancy play a role in contraception decisions. While this qualitative study allowed participants to answer as they pleased, it did not include any questions or probes about contraception myths. Despite this, understanding factors into contraception choice is still important. As previously mentioned, these factors may be influenced by contraception myths. Exposure to myths may influence how vulnerable one feels towards pregnancy. If a woman feels less vulnerable to pregnancy, she may use less reliable contraception, increasing her risk for unplanned pregnancy.

In summation, all four studies found that attitudes towards pregnancy or contraception played a role in the contraception decisions of women. Women who felt vulnerable to pregnancy, had a desire to avoid pregnancy, or had a positive attitude towards contraception were more likely to use contraception correctly and opt for more reliable methods. Women who didn’t feel vulnerable to pregnancy, felt apathetic towards pregnancy, or had a negative attitude towards contraception were more likely to use contraception incorrectly, not use contraception, or choose less reliable methods. While these findings offer valuable information about contraception decision factors, the results say nothing about a key factor, contraception myths. Attitudes and vulnerability towards pregnancy and contraception use could be influenced by contraception myths. The belief in certain myths may cause a young woman to feel a specific way towards contraception or feel less vulnerable to pregnancy. These beliefs may lead young women to choose less reliable methods of contraception or to not use contraception at all, increasing the risk of unplanned pregnancy.
Communication Channels

The following studies examine how different communication channels for information on contraception are perceived. Communication channels are ways to access information and can include family members, friends, health care providers, the Internet, magazines, and a variety of other sources. Results were mixed, as two studies found doctors to be the most trusted while two found friends and family members to be the most trusted sources for information on contraception. This lack of consensus could help explain the existence and spread of contraception myths. A better understanding of where contraception myths come from could help communication practitioners reduce myth and unplanned pregnancy.

Virjo, Kirkkola, Isokoski, and Mattila (1999) conducted a survey to determine which communication channels provided the most information about preventing pregnancy to women in Finland. Researchers examined survey data gathered from 221 randomly selected women, aged 18-50 years. Participants were asked to estimate how much knowledge about preventing pregnancy they had gained from 15 sources. For women aged 18-29 years, doctors were the primary source of information for preventing pregnancy. Male sources as well as mother, sister, and radio ranked the lowest. The researchers concluded that doctors should be aware of the role they play and the existence of other sources of information, and modify their work accordingly. While this study did not examine where myths come from, its results do shed light on the subject. It is important to understand where young women obtain contraception information, both correct information and misinformation.

Vogt and Schaefer (2011) tested sources of information on contraception for young women. Researchers randomly contacted 3,344 young women, aged 18-24 years, from a representative research panel in Germany. Thirty women who fit the screening criteria completed an online questionnaire to collect information on participants’ current sources of information regarding contraception. Results showed that 21 participants
obtained information from their gynecologist, 15 got information from a pamphlet, and 15 also got information from the Internet. Friends, relatives, and other doctors were not as popular for information about contraception. As with the previous study, researchers did not investigate what type of information, good or bad, came from these sources. Despite this, it is still important to understand where young women turn for contraception information. Knowing where young women go for information may play a role in the spread (or the prevention of the spread) of myths.

Also studying communication channels, Yee and Simon (2010) focused on the role social networks play in the contraception decisions of young African-American and Latina women. The researchers recruited 30 postpartum women, aged 18 years and older, from a large academic medical center in Chicago. Participants took part in a semi-structured interview containing questions about history of contraception use, attitudes towards different methods of contraception, and the role of social networks in their contraception decisions. The role of other women, including mothers, sisters, and friends, emerged as a theme. Many participants thought the recommendations of other women were more reliable than the recommendations of health care providers. One participant commented, “they [doctors] tell you the percentage what could happen, but if you actually hear from somebody that did happen, then you realize what it [the side effects and efficacy] really is” (Yee & Simon, 2010, p. 376). Myths also arose as a common theme, often related to the efficacy, safety, and side effects of contraception. Speaking of hormonal contraception, one woman commented, “my mom always says it’s not safe” (Yee & Simon, 2010, p. 378). Another, participant said, “just basically that it was synthetic hormones …that your body is never the same” (Yee & Simon, 2010, p. 378). Participants often credited these myths as reasons for switching methods or discontinuing use. These results suggest that contraception myths may stem from communication with friends or family. Researchers suggested the need for more research into the role of the social network in accessing information on contraception.
Gilliam, Warden, Goldstein, and Tapia (2004) used focus groups to look at common sources of information on contraception among Latinas. The researchers conducted focus groups with 40 sexually active Latinas, aged 18-26 years, recruited in Chicago. The study found that many of the participants received erroneous information about the risks and benefits of using contraception from friends and family members. One woman said, “I have a sister-in-law that says in Mexico they don’t use them because…they stay in the stomach” (Gilliam, Warden, Goldstein, & Tapia, 2004, p. 302). Another woman added that oral contraception could get stuck in one’s intestines, leading to death. Speaking of a decision not to get a contraceptive implant inserted, one participant explained:

I was so excited that I was going to get it…but then a lot of my friends and my mom told me that she had friends that had told her, that they show sometimes, or that they hurt, or that they travel. I heard all these things, I just told her or him no (Gilliam et al., 2004, p. 302).

This confusion about contraception led many of the women to use less-effective methods or to not use contraception at all, which can result in unplanned pregnancy. Researchers recommended that health care providers assess their patients’ knowledge about contraception and utilize particular counseling approaches to reach this audience. This study yielded similar results to the previous study and shows examples of contraception myth stemming from communication with friends and family members.

Results of the four studies on communication channels for contraception information are mixed. In two studies, participants indicated that they relied on doctors the most for information on contraception while relying on friends and family members to a much lesser degree. The other two studies found the exact opposite. These participants indicated distrust in health care providers and preferred to speak with friends and family members for information on contraception. Despite this lack of consensus, the results of these studies are still important. Understanding where young women obtain information about contraception, specifically where young women obtain incorrect information, can help health communication professionals understand where myths come
from and which communication channels can help to dispel these myths. Based on these four studies, one might deduce that friends and family members may spread contraception myths. While it might make sense for health care professionals to help dispel these myths, some populations indicated distrust in the health care field. More research into this topic is needed to help health communication professionals design appropriate interventions to reduce contraception myth.

**Increasing Knowledge About Contraception**

After exploring contraception myth, its role in decisions, and its sources, it would make sense to examine ways to decrease contraception myth. However, no research is available on the subject. Thus, this section examines attempts to increase knowledge about contraception. All of the following studies found significant relationships between a stimulus, either counseling, distribution of a leaflet, or a web site, and increased knowledge about contraception. This shows that contraception knowledge can be increased; however, it is unknown whether an increase in knowledge can decrease contraception myth. Since interventions to decrease contraception myth don’t yet exist, it is important to explore whether interventions to increase knowledge can also decrease myth.

Gaudet, Kives, Hahn, and Reid (2004) used a survey to examine the role that contraception counseling plays in knowledge about oral contraception. A total of 649 Canadian women, with an average age of 25.6 years, completed the survey while filling oral contraception prescriptions. The survey found that 69.3% of the participants had discussed the risks, benefits, and side effects of oral contraception with a health care provider. Those who received counseling were significantly more likely to correctly answer questions about the noncontraceptive benefits, potential problems, side effects, and myths related to use of oral contraception. Participants who had received counseling were more likely to know that oral contraception will make periods lighter and less painful \( p < 0.001 \), that another form of birth control is necessary if oral contraception is missed \( p < \)
0.001), and that other medications can make oral contraception less effective ($p < 0.001$). Those receiving counseling were also significantly more likely to identify that weight gain ($p = 0.001$) and loss of fertility ($p < 0.001$) were oral contraception myths. The results of this study, especially the fact that participants were able to identify myths, are encouraging. More research is needed to see if contraception counseling can actually decrease contraception myth.

Little, Griffin, Kelly, Dickson, and Sadler (1998) also examined knowledge about oral contraception; however, they examined the relationship between distribution of leaflets and knowledge. Researchers recruited 636 women, aged 18-45 years, from general health practices in England. Each participant was currently visiting a doctor to get a refill for oral contraception. Those participating were given an initial survey to assess oral contraception knowledge; this survey did not include questions about exposure to contraception myths. Those not randomized into a control group were then given an educational leaflet about oral contraception. Three months later, participants were mailed another survey, measuring knowledge of factors causing oral contraception failure, subsequent action to oral contraception failure, emergency contraception, and 12 rules that apply to the use of oral contraception. Results indicated a significant increase in knowledge in each area tested following leaflet distribution ($p < 0.01$). The researchers concluded that doctors should provide educational leaflets to patients using oral contraception. The results of this study are promising to those looking to increase contraception knowledge; however, it is still unclear whether an increase in knowledge results in a decrease in myth.

Unlike the previous studies that examined controlled research into ways of increasing contraception knowledge, Philliber Research Associates (2012) evaluated an actual campaign aimed at increasing contraception use and knowledge. The campaign, Bedsider, is a program by the National Campaign to Prevent Teen and Unplanned Pregnancy. The researchers recruited 740 women, aged 19-29 years, from three Planned
Parenthood clinics in Florida. After an initial survey, participants were encouraged to visit the Bedsider web site. Researchers also contacted participants via e-mail or phone with additional surveys at one month, three months, six months, and one year, and tracked participants’ use of the site with Google Analytics. A total of 547 women completed at least one follow up survey while 150 completed all surveys. Researchers measured changes in knowledge, effectiveness of birth control used, and sources of contraception information, following visits to the Bedsider web site. Results indicated a significant increase in knowledge following use of the web site ($p < 0.001$) and a significant increase in use of more effective methods of contraception ($p < 0.001$). Participants were also significantly more likely to contact health care professionals ($p < 0.001$) and avoid other Internet sources ($p < 0.001$) for information on contraception.

While this study did a thorough job testing portions of the Bedsider campaign, the study did not address contraception myths. Gaining a better understanding of ways to decrease contraception myth would allow campaigns, like Bedsider, to effectively reach out to young women in hopes of decreasing unplanned pregnancy.

In summary, each study found significant relationships between a different stimulus and increased knowledge regarding contraception. While the ability to increase contraception knowledge is encouraging, it does not necessarily mean that these programs can decrease contraception myth. The lack of research on ways to decrease contraception myth presents a gap in the literature. More research is needed to explore whether knowledge and myth have any relationship. An increased understanding may allow health communication professionals to devise campaigns that decrease contraception myth and unplanned pregnancy.
Rationale

As evident from this literature review, very little is known about contraception myth or its relationship with contraception decisions among young women. Despite the availability of effective methods of contraception and sexual education, unplanned pregnancy still remains a problem among young women. Research on the issue of myths and contraception is not robust and, very little is known about the relationship between myth, contraception use, and unplanned pregnancy.

The present study was inspired by my experiences with friends and the findings of Kaye et al. (2009). As an assistant editor at the American College of Obstetricians and Gynecologists, working on publications for patients and doctors, my knowledge about contraception is high. Over the past few years I have heard several incorrect statements about contraception from friends. One young woman told me that she was going to go off the pill for a while due to the fact she was now single. She thought taking the pill for an extended period of time would lead to health problems. Another young woman told me she often had unprotected sex because her sexual partner did not like the feel of condoms. She also told me that she often missed pills, but did not worry about getting pregnant because it had not happened yet, surmising she must be infertile. In both situations, I pointed out their incorrect logic and their increased risk for unplanned pregnancy; however, I was told that my advice was unwanted and would not be considered.

It was not until I read Kaye et al. (2009) that I began to understand my friends’ reactions. The quantitative study tested the existence of several myths and found that many young women and men believed these myths to be true. After reading this study and hearing the same myths come from the mouths of my friends, I started to wonder how prevalent myths about contraception are. Which other myths exist and where do they come from? These myths clearly played a role in the contraception decisions made by my friends; however, how common is this? If this is indeed common, it may lead to increased unplanned pregnancy among young women.
The lack of research in this area is surprising. Information on the dispelling of contraception myths was sought for the literature review; however, nothing was found. Another issue is the lack of definition for the term “myth” in the literature. It is unclear whether myth, misinformation, and rumor are one in the same and comparable. The lack of conceptual clarity poses a problem for future research on the topic of myth. The study at hand will be the first to define myth in regards to contraception use. This will help to formalize the concept for use in future research, allowing others to examine the role that myth plays in decisions. Study population may also be a shortcoming of the literature reviewed above. Many studies discussed focused on specific populations, such as low-income women, certain age ranges, or nationalities. In addition, many of the studies focused on users of oral contraception and ignored users of other methods, possibly missing key information. While these studies may be useful in identifying needs of specific groups, they may not reflect the needs and attitudes of young women in the United States using various methods of contraception.

**Research Questions**

The purpose of the present study is to address the shortcomings and gaps in the literature regarding the role of myths in contraception decisions. All the studies examined regarding the existence of contraception myths used quantitative methods. The survey from Kaye et al. (2009) only included questions about six myths while DeClerque et al. (1986) only included questions about three myths. The inability to provide an answer that is not included in the survey or questionnaire, a limitation of quantitative methods, possibly limits responses and could result in unrepresentative results. *RQ1* hopes to address this issue. The present study asks, *what are the prevailing myths regarding contraception among young women?* By using focus groups, the present study aims to use group discussion to gain more information on more contraception myths. Allowing young women to speak for themselves should reveal the most prevalent myths as well as less well-known myths.
In addition, the present study aims to expand on the contraception decision factors discussed in this literature review by including questions on contraception myth. RQ2 asks, *what factors do young women take into account when making contraception choices?* All of the studies examined as part of this literature review failed to include any questions on contraception myths. Several of the studies examined throughout this review hint at the fact that myths play a role in contraception decisions (DeClerque et al., 1986; Yee & Simon, 2010; Gilliam et al., 2004). Since little research exists on the role that myths play in the contraception decisions of young women and none of the studies examined included myth as a variable, the present study will work to fill this gap in the literature.

The review of the communication channels trusted by women to provide contraception information yielded mixed results. This difference possibly stemmed from the use of qualitative/quantitative methods or the contrasting study populations. I hope to address this difference and these issues by posing RQ3, *how do young women perceive different communication channels for information on contraception?* The studies reviewed above looked at various populations, from very general to very specific. The present study will examine this issue among young women. Using a qualitative method, focus groups, the present study will also seek to clarify the mixed results. It is interesting to note that both the quantitative studies found one answer while both the qualitative studies found the exact opposite answer. Perhaps this stemmed from the limited responses available through quantitative methods. My use of focus groups will allow young women to speak candidly about the communication channels they turn to for information on contraception.

The studies that discussed increasing contraception knowledge did not address the decreasing of contraception myth. This was due to the fact that no studies on this topic were found. My study aims to fill this gap in the literature through RQ4. This research questions asks: *how do young women perceive different methods of intervention for*
*decreasing contraception myth?* Through focus groups I will ask young women specifically about interventions they have seen and those they would like to see.

Given the high unplanned pregnancy rate among this demographic, the high costs associated with unplanned pregnancy, and this group’s desire to avoid unplanned pregnancy, it is important to research this topic. The present study will focus specifically on contraception myths, investigating the role that they play in contraception decisions. Specifically knowing which myths are prevalent, which factors young women incorporate into their contraception decisions, which communication channels young women trust, and which interventions are preferred can help those in the field of women’s health, whether communicators or doctors, address these myths, increase proper use of contraception, and decrease unplanned pregnancy.
Method

The present study utilized focus groups to examine the prevailing myths concerning contraception, how young women make decisions regarding contraception, how young women perceive different communication channels providing information on contraception, and how young women perceive possible methods of intervention aimed at decreasing contraception myth.

Focus Group Methodology

The focus group methodology was an appropriate method for this study. In asking questions of young women, I gained multiple opinions on the topics of contraception social norms and myth, thereby addressing the constraints of previous quantitative research on this topic. According to Mack, Woodsong, MacQueen, Guest, and Namey (2005), “focus groups are especially effective for capturing information about social norms and the variety of opinions or views within a population” (p. 52). In addition, this study benefited from interaction between participants, an advantage of focus groups. According to Stacks (2011), “the focus group allows members to ‘tag’ off each other’s responses, often providing extensive insight into the topic of discussion” (p. 179). Most importantly, the use of focus groups allowed for an infinite number of responses from participants. The majority of studies discussed above consisted of surveys or questionnaires. This type of research forces participants to choose from a preselected list, possibly missing important information. By asking participants to discuss and elaborate on ideas, unexpected themes and answers arose. These advantages to the focus group methodology helped to make this methodology appropriate for addressing the shortcomings in the literature on the topic of contraception myths.

Participant Recruitment

I recruited 13 volunteers based on a number of criteria. These criteria included identifying oneself as heterosexual or bisexual, aged 19-29 years, unmarried, able to speak English, and living in the Washington, DC metropolitan area. I excluded those who
identified as homosexual, as that population is not at risk for an unplanned pregnancy. The age and marital status criteria combine the definitions of young women used by Kaye et al. (2009) and the Guttmacher Institute (Zolna & Lindberg, 2012). The Guttmacher Institute, a reproductive health non-profit, conducts research on the use of contraception among young women. I limited the language requirement and geographic location of volunteers to minimize logistical issues.

To recruit volunteers, I forwarded a participation invitation and focus group interest form to the Johns Hopkins University’s Master of Arts in Communication program listserv, and posted the information on Facebook, a social networking web site, and Craigslist, a web site featuring online classified listings. The invitation contained several questions to determine if volunteers fit the study criteria (see Appendix A and Appendix B). Possible volunteers were asked to indicate their age, gender, marital status, sexual preference, and possible dates and times for focus group discussion. The screener also made sure that possible volunteers spoke English and had the ability to attend a focus group session. Those interested in participating were asked to submit their focus group interest form to me via e-mail or fax. After viewing and screening completed interest forms, those who fit study criteria and had compatible schedules for focus group participation were selected and sent an e-mail with participation information (see Appendix C and Appendix D). A total of 19 people submitted a focus group interest form and six were excluded from the study due to scheduling conflicts, resulting in 13 volunteers. Participants were asked to sign a consent form prior to the start of the focus group discussion (see Appendix E). Participants were instructed to contact the university or the researcher with any questions regarding the consent form. Those who participated received a $10.00 gift card to Starbucks.

**Procedures and Instruments**

Human Subjects approval was obtained from the Johns Hopkins University’s Homewood Institutional Review Board for the conduct of this research. This approval
process ensures the ethical treatment of participants. Recruitment did not begin until the Board approved the study.

Two focus group sessions were conducted. The first focus group was held on Sunday, March 10 from 5:30 p.m. to 7:00 pm. in a conference room at McKeldin Library on the campus of the University of Maryland. The second focus group took place on Wednesday, March 13 from 7:30 p.m. to 9:00 p.m. in a conference room at 1717 Massachusetts Avenue, NW, Washington, DC. Once participants arrived, I explained the study, went over ground rules, discussed confidentiality, and collected signed consent forms. Participants were reminded that their participation was voluntary and that they were free to leave at any time. Each focus group lasted approximately 90 minutes. I recorded the two focus group discussions using Audacity software and a laptop.

Using a focus group moderator guide (see Appendix F), I moderated the focus group discussions. The moderator guide asks questions about contraception, contraception myths, factors that play a role in contraception decisions, sources of contraception information, and possible interventions to decrease contraception myth.

Participants

The first focus group contained six participants aged 19-24 years while the second focus group contained seven participants aged 25-29 years. All of the participants in the first focus group were full-time students at the University of Maryland and lived on or close to campus in College Park, Maryland. In the second focus group, all participants were employed and lived in Washington, DC or a suburb of Washington, DC. Differences in maturity level may exist between participants in their late teens and participants in their late twenties. Creating groups based on participant age may have helped participants feel more at ease and speak more candidly.

Data Analysis

Following the focus groups, the audio recordings were transcribed into text. A grounded theory approach was utilized to identify themes. First, I read the transcripts
several times and conducted open coding. Open coding is the initial phase of coding under grounded theory, it allows data to be broken down and classified into categories (Lockyer, 2004). Next, I used selective coding to refine my analysis. Selective coding is the process of “selecting the core category, relating it to other categories while confirming and explaining these relationships” (Lockyer, 2004, p. 137). Following coding, I selected the strongest themes along with the strongest associated quotes to answer each research question. I discuss these themes in the results section.
Results & Discussion

The results of the analysis of the focus group transcripts are reported below. I organized the results based on research question and theme. In each research question section, several themes were derived in an attempt to answer the corresponding research question. The supporting data was drawn from the focus group discussions.

RQ1: What Are the Prevailing Myths Regarding Contraception Among Young Women?

Focus group results revealed high levels of knowledge regarding methods of contraception and reasons why contraception may fail. Results also uncovered numerous contraception myths, most dealing with when a woman can or cannot become pregnant and contraception side effects. While participants agreed that most of the myths were untrue, discussion about several specific myths resulted in debate about the validity of these myths. This result shows that both contraception knowledge and confusion about contraception myths can be high at the same time, an interesting finding not reflected in the current literature.

Knowledge about contraception. Surprisingly the young women in this study demonstrated a high level of knowledge regarding contraception. All of the literature reviewed found knowledge about contraception to be low among young women. Participants correctly identified popular methods of contraception, including male condoms, the pill, the patch, the ring, the shot, the intrauterine device, and abstinence, as well as less common methods, including the implant, withdrawal, the female condom, the lactational amenorrhea method, the rhythm method, as well as several surgical methods. Participants also demonstrated an understanding of why certain methods may fail at preventing pregnancy. It was understood that no method is perfect, and that protection from pregnancy hinges on the effectiveness of contraception used and human error.

Methods of contraception. Each discussion began with the moderator asking participants to name methods of contraception. Participants quickly rattled off some of the
more common methods, like condoms, birth control pills, and abstinence. Additionally, participants named several hormonal methods like the intrauterine device, the implant, and the shot. One young woman asked, “isn’t there a shot?” A participant answered, “yeah, the progesterone, Depo-Provera.” Another participant stated, “there is also like the implant, Implanon,” to which other young women replied, “in your arm,” and “yeah, it releases hormones like every so often or something.” Participants also brought up barrier methods. One participant quickly named several methods, “cervical cap, sponge, and diaphragm.” Participants also demonstrated knowledge of surgical methods. One young woman inquired, “does a vasectomy count?” Another young woman replied, “that’s reversible, I know that,” while others agreed they knew about the method. Sterilization for women was also discussed. One participant explained different types of sterilization, “tubal ligation, that’s not reversible, and the spring. They put the spring in your fallopian tubes and that is sort of a less invasive tubal ligation.”

**Failure of contraception.** Participants also exhibited knowledge on why contraception may fail. “It only prevents it like 99% of the time; I think that’s the statistic. There is still a chance that it won’t work,” commented one young woman. Others gave examples of user error, “not taking it regularly, the pill that is,” “if you are going with pulling out, that could just not happen,” “doesn’t use it correctly,” and “if they are using the calendar method and they are off by a few days.” Another participant described how birth control pills could be made less effective when taken with other medications, “or antibiotics, certain mediations, if you are taking the pill.” To that comment, another participant shared a personal story:

I remember one time that I hurt my knee really bad and was taking this medication, and they didn’t tell me until after I had been taking it for a good month, and the nurse called me and said, oh, by the way I didn’t realize you were taking birth control. This will make it not effective…so now every time I get a medication, I call the pharmacist and say I am taking this and this is my birth control, will it affect me?

Others shared more complicated failure examples:
When you are drinking, I know that sometimes makes the pill less effective. If she gets too drunk and throws up, cause it comes out that way. Or, just forgetting to take the pill. Or, trusting a guy and he doesn’t have a condom and they are both just too drunk and they get too wild.

People have told me that they have used a condom for sex and then they have messed around with each other afterwards without the condom on and it’s like if you haven’t cleaned everything properly, then it’s like even if you don’t have penetration, you still have like semen everywhere… I feel like that could cause problems.

**Prevalent myths.** In addition to knowledge about contraception methods and contraception failure, participants also demonstrated knowledge about numerous contraception myths. These included myths about when a woman can and cannot become pregnant and myths about contraception side effects. While participants did not consider the validity of most myths discussed, several myths incited debate. With these myths, participants were unable to decide whether the myths being discussed were true or false.

**Pregnancy myths.** Most of the myths discussed in both focus groups centered on when a woman can and cannot get pregnant. Common myths included, “you can’t get pregnant on your period,” “you can’t get pregnant if you are on the pill,” “if you pull out before ejaculation, you won’t get pregnant,” and “you can’t get pregnant if the girl is on top.” Other myths included, “you can’t get pregnant if there is no penetration,” “if the girl doesn’t orgasm, then you can’t get pregnant,” and “or while breastfeeding… I know people who have gotten pregnant.”

**Side effect myths.** Myths about contraception side effects also proved popular in discussion. All participants agreed they had heard one myth in particular, “birth control pills make you gain weight.” Another popular myth among participants dealt with negative side effects from birth control pills, “it causes cancer, breast cancer or cervical cancer.” This finding correlates with Tessler and Peipert (1997) and Rajasekar and Bigrigg (2000). These studies found that women misunderstood certain aspects of contraception, especially side effects.
**Confusion over myths.** While there was little discussion over whether or not the pregnancy and side effect myths were true or untrue, several myths incited debate among focus group participants. The first debated myth stemmed from an episode of *Glee* where one character said she was impregnated when her boyfriend ejaculated in a hot tub they were both sitting in. One participant commented, “the myth is that you can’t [get pregnant] because of the chemicals or whatever in the water.” Others went back and forth trying to figure out if it was a myth or true:

Oh, that’s another myth
I’ve heard that one.
That you can or can’t?
Can’t.
I’ve heard that, you can.
You can’t.

Another hotly debated myth was whether or not use of hormonal contraception leads to conception problems later in life. One young woman asked, “is it a myth that if you are on the pill for a really long time, that when you get off it you can’t get pregnant or it’s like really hard to get pregnant?” Other participants weighed in, some stating that they had heard that, some agreeing that it is true, and some stating that it is a myth. One participant attempted to explain the myth:

I can tell you my mom’s experience. My mom was on it for like 12 years and she said that it’s not like it takes you a long time to get pregnant, you have to wait for your first natural period. You know when you go off the pill, you get your period, and you have to wait for your next period before you can actually get pregnant. That can take like awhile. I asked my gyno because I have been on it for like 13 years. So, what happens when I go off? She said it might just take months for you to get a period. But I don’t think it’s true.

This myth about negative effects from prolonged use of hormonal contraception was also found in Kaye et al. (2009), Tessler and Peipert (1997), and Rajasekar and Bigrigg (2000). Specifically, Kaye et al. (2009) found that 27% of respondents thought
extended use of hormonal contraception was extremely likely to lead to serious health problems and 44% thought it was necessary to take a break from the pill.

The difference between the morning after pill, commonly known as Plan B, and the abortion pill, also known as RU-486 or mifepristone, also stirred debate. A young woman questioned:

Is that another myth, that the Plan B pill, you are pregnant already and it makes you abort the baby? I’ve heard that, but I thought it’s just preventing the egg from being fertilized and you have to take it within a certain amount of time. I’m not even sure what the real story is.

Other focus group participants added to the discussion:

I feel like a lot of people might not know that though. I feel like people could think they are the same, I’m not even 100% sure.

They are completely different, but I think a lot of people think the morning after pill is the abortion pill.

You can’t take it [abortion pill] after three months. Like the earlier on you are you can take the pill and the later it gets towards like the 12 weeks, then you have to go to surgical procedures. But, they recommend the pill because it’s less invasive. But I think what you say is correct, that a lot of people think that the two are one in the same and they are actually completely different.

Cause you see them together a lot, cause I was confused. There is confusion, you hear like Plan B- abortion pill.

**RQ1 summary and discussion: High knowledge & existence of contraception myth.** In summation, participant comments revealed a high level of knowledge about contraception methods and contraception failure, an interesting finding. Comments also uncovered numerous myths, many dealing with the times a woman can or cannot get pregnant or contraception side effects. While most participants knew these myths were untrue, several myths incited questions and debate.

This research question was designed to reveal common myths about contraception; however, focus group discussions led to a more interesting finding: the fact that knowledge about contraception and confusion from contraception myths were both high. The high level of contraception knowledge exhibited by participants was surprising. While Kaye et al. (2009) found that 90% of respondents felt knowledgeable about contraception,
none of the studies discussed in the literature review found participants to be knowledgeable about contraception. Thus, this study’s finding differs from the literature reviewed. Why did the participants in this particular study seem to have more knowledge about contraception than participants in previous studies? Possibly, the questionnaires and surveys used in previous studies were unreliable in accurately assessing contraception knowledge. If previous studies asked overly complicated questions or used technical jargon, participants may have been confused and possibly answered questions incorrectly. It is also possible that the participants in this study were not as knowledgeable about contraception as they appeared. Perhaps, the young women in this study only volunteered information they felt confident sharing and shied away from discussing topics that they were less knowledgeable about. Or maybe the participants in this study were indeed knowledgeable about contraception. All of the younger participants were currently full-time students at the University of Maryland and all of the older participants attended some college, and likely received a bachelor’s degree. In addition, according to the US Census Bureau, the Washington, DC area is one of the most educated cities in the United States (Kurtzleben, 2011). Perhaps participants in this study were more educated than participants in previous studies.

The high level of confusion from contraception myths was also an interesting finding. While most participants were aware that the examples discussed were indeed myths, there was still uncertainty. For example, participants argued over whether the hot tub myth was “you can get pregnant in a hot tub” or “you cannot get pregnant in a hot tub.” Thus, participants understood it was a myth, but did not know whether or not a woman can get pregnant in a hot tub. This finding poses future questions. Is there any relationship between contraception knowledge and contraception myth? Are young women receiving unhelpful information about contraception or does one’s knowledge about contraception not matter when it comes to contraception myth exposure? These
results show that even while knowledge about contraception and myth may be high, contraception myths are common and result in confusion among young women.

RQ2: What Factors Do Young Women Take Into Account When Making Contraception Choices?

Focus group discussion revealed several important factors that young women take into account when making contraception decisions. These factors included convenience (ease of use or accessibility), control, and side effects. Young women also considered the opinions of others, including friends and health care providers. This finding is completely different from the previously discussed studies on contraception decision factors. Frost and Darroch (2008), Bruckner et al. (2004), Schwarz et al. (2007), and Free et al. (2002) found that attitudes towards pregnancy and/or contraception played a role in contraception decisions. While the factors discussed in this study may appear distant from attitudes towards pregnancy and/or contraception, the opinions of others and one’s ideas about convenience, control, and side effects may shape one’s attitudes, and thus one’s contraception decisions.

Convenience of contraception method. Young women in this study felt that the convenience of contraception played a role in their decisions. This idea of convenience differed among participants; to some taking a pill everyday was easy while to others having something placed inside the body, like an intrauterine device or ring, was more practical. A young woman commented, “if ease of use is really a concern for you or the concerning factor, I feel like the procedures are the ones you are going to go with so you don’t have to think about it everyday.” To this comment, another participant replied, “I think taking a pill everyday is really easy.” This comment garnered agreement from most participants. Building on this, the same participant added:

I set an alarm, I hear it go off, I grab my pill and then I take my vitamins with it. When I switch purses, that’s the first thing I grab, even before my wallet. For me… I think taking the pill is the easiest thing.
Accessibility, another facet of convenience, was also important to participants. When asked about the most important factor in contraception decisions, one participant stated, “ease of getting it.” Another mentioned, “I don’t know how accessible things are. It’ll just be like; maybe I will try to get condoms that are free. Then, that’s just the most accessible thing.”

**Control over reproductive health.** Participants also vocalized the importance of control in their contraception decisions. Many wanted to be in charge of their own reproductive health, removing men from the situation. One participant commented, “I prefer to be under birth control because that is completely under my control. I don’t have to count on my boyfriend to remember to buy condoms or use them.” Another young woman echoed the same sentiment:

> I feel like part of it may be control. I mean, think about it, if you are taking the pill, you have control over it. I have to take it at this time everyday, someone sets an alarm and you do it. If someone is using a condom, that is kinda in their hands. Yes, you can watch them put it on, but they could rip it and you don’t know. I feel like taking the pill you get a sense of control for yourself because you’re the one taking it. You know that you took it.

**Side effects of contraception.** Another factor in contraception decisions was side effects. Participants were concerned about weight gain, blood clots, acne, and cramping. Several participants noted weight gain and other negative side effects as reasons to not use a particular method. “Side effects, like weight gain or making you crazy,” commented one young woman. Another stated, “side effects, I don’t want to gain weight or I don’t what this or that.” Discussing her decision to not take birth control pills, one participant shared:

> We were talking about whether or not I should go on birth control and my mom was like; you are probably going to gain weight. I was like, that is going to be a problem because I am not going to able to row lightweight.

Other comments regarding negative side effects included, “like weight gain and acne, or that it can cause other irregularities,” and “or, if I’m a smoker and I’ve heard it can cause blood clots.” Only one participant commented on how positive side effects can play a role
in contraception decisions. She asked, “isn’t there one that helps with that [cramps] more than others? That could influence someone’s choice.”

Curiously, myths about side effects also proved common and confusing among participants. Is it possible that exposure to myths, particularly those about side effects, could influence one’s contraception decisions?

**Opinions of others.** Participants also indicated that the opinions of others, especially friends and health care providers, factored into their contraception decisions. The role of family did not appear noteworthy.

**Friends.** Many of the participants stated that they considered their friends’ opinions and contraception decisions when making their own decisions about contraception. “I feel like friends could play a role,” commented one young woman. Others agreed, “I think with your friends, you look to what they did and what worked,” and “what your friends are using and what has worked for them.” One participant explained, “I think if all your friends say birth control is going to make you infertile in 20 years or 10 years then you are more likely to be afraid of that or not use it too.” Another participant described how she stopped using condoms based on the opinions and actions of a friend:

I didn’t know that you could be on the pill and not use condoms. Like, I always used condoms and my friend was like, I’ve been on the pill for two years and my boyfriend and I don’t use condoms and he never pulls out and I’ve never gotten pregnant. So, that was how I decided to not use condoms while on the pill.

More simply, one participant stated, “you are probably more likely to use a certain type if your friends use that too.” Another participant verified this statement, “my friend is taking birth control so I am going to take that too.”

Interestingly, participants also surmised that friends could be the source of contraception myths. “I definitely think friends play a big role in what people believe,” stated one participant. Another participant explained how myths could start with friends, “because people don’t like to ask health professionals, who actually know, and they go to
their friends, and their friends don’t know so they just make stuff up.” “I think sometimes people don’t know, so they just go with what they personally think. It just kinda spirals,” stated another young woman. Thus, despite blaming friends as a possible source of contraception myth, the young women in this study described friends as a major source of contraception information.

**Health care providers.** In addition to considering the opinions and decisions of friends, many young women put complete trust in recommendations from a health care provider. One participant commented, “I would blindly trust a gynecologist unless I didn’t like the pill. I would complain and they would put me on something else.” Another young woman also mentioned blind trust in a gynecologist:

Well, for me I started on birth control for my skin, so I sort of already had that system in place, and then talking to my gynecologist, she recommended something different than what my dermatologist said. I sort of blindly trusted her on that one.

Other participants also shared stories of trust:

Yeah, my doctor recommended a low dosage one, so I was a little nervous about that one at first because I didn’t know if this is actually going to work. But it wasn’t any of those ones, you know the TV commercials that say, “if you have taken this birth control you might die.” It wasn’t one of those ones so I was like; I guess I will go with her opinion…so I was like okay. I trusted my doctor with that.

At a time when I wanted to switch… I didn’t have health insurance anymore… She was like here; here is a coupon for this one brand… That’s just how I decided. I didn’t know anything about it or if it was good for me and now I am still on it years later.

**RQ2 summary and discussion: Multiple factors in contraception decisions.**

Based on focus group discussions, it appears that young women factor multiple issues into their decisions about contraception. These factors include convenience, control, possibility of side effects, and the opinions of others, especially friends and health care providers.

While these findings differ greatly from Frost and Darroch (2008), Bruckner et al. (2004), Schwarz et al. (2007), and Free et al. (2002), these factors may be related to one’s attitudes towards pregnancy and/or contraception. Do these factors shape one’s attitudes? For
example, could a friend’s negative experience with a certain method of contraception influence how one views that method of contraception?

Additionally, it seems as if one’s social network plays an important role in contraception decisions. The young women in this study discussed the influence that friends and health care providers have in their contraception decisions. This influence was also found in Virjo et al. (1999), Vogt and Schaefer (2011), Yee and Simon (2010), and Gilliam et al. (2004); however, these studies disagreed over who exerted the most influence, health care providers or friends. Both these sources of information arose as themes for RQ3, and will be discussed later in the results section.

**RQ3: How Do Young Women Perceive Different Communication Channels for Information on Contraception?**

Results indicated that perceptions of communication channels providing contraception information are mixed. Some young women liked accessing information online out of convenience, while some found the Internet to be untrustworthy. Some young women trusted friends for information, some trusted only certain friends, and some shied away from asking friends about contraception. As for health care providers, only one participant shared a positive experience, while others felt crossed by a health care provider or thought dealing with doctors was too inconvenient. The mixed finding mirrors the results reported in the studies included in the literature review. Virjo et al. (1999) and Vogt and Schaefer (2011) found doctors to be the preferred communication channel for contraception information, while Yee and Simon (2010) and Gilliam et al. (2004) found friends to be preferred.

**Internet.** Young women’s perceptions of the Internet were mixed. Some participants vocalized distrust in online content. “I don’t know if I would trust the Internet,” stated one young woman. “I think in the back of your mind you don’t trust it…I think there is a skepticism about whatever you find on the Internet,” stated another.
Other participants stressed the utility of the Internet. “For convenience, I would probably go online because it would be the quickest,” said one participant. Some shared how they use the Internet for information on contraception:

I have sometimes if I have missed a pill but I don’t have the packet of information with me. I will look on the Internet, like the manufacturer’s web site or a general site, like a WebMD-type site, to make sure I am okay or to see what I need to do.

I used to be like, if something was weird, I would go on Google and like type in questions… if it was the general consensus that nothing bad was going to happen to me, I’d be like okay I probably shouldn’t be too concerned.

Some young women also appeared to bridge the gap between the two schools of thought, agreeing that the Internet has utility; but holding that information must be used carefully. One participant explained:

I think it just comes down to common sense and your gut feeling. We all get on the Internet and are like this is ridiculous. No one has to tell you that. So, you kinda just know what’s credible and what’s not and then you take it further.

Another participant elaborated, “yeah, so like things like that won’t hurt, so I will take those sorts of things in when I read it. But, obviously, ridiculous stuff I just take with a grain of salt.”

**Friends.** Feedback on how young women perceive information obtained from friends was contradictory. Previously in these focus group discussions, participants indicated that the opinions and decisions of friends shaped their own contraception decisions. Despite this, only a few participants claimed to prefer friends as a source of information on contraception. One young woman commented, “I’d say for convenience I would choose a friend first.” Another participant described experience as a reason for consulting friends:

I know whenever I am concerned about something to do with pregnancy or like anything along those lines, I usually talk to one of my friends who has gotten pregnant and like has a baby because I am like, if anyone is going to know what it feels like it is probably going to be this person.

Some participants described trusting certain friends while doubting the advice of others. One young woman reported trusting one specific friend over others, “one of my
friends is pre-med and then her mom is a nurse and she asks her mom everything without like feeling awkward about it. So, like her information I usually trust.” Another participant described a friend she does not turn to for information:

Yeah, one of my friends, we make fun of her all the time because she just makes things up. Like we will be talking to her and she will be like…did you know that segways can go up to 60 mph. I was like there is no way that is true and then she does that with all sorts of topics so I probably wouldn’t trust her all that much on things like that. But, some of my other friends are definitely more reliable sources.

One young woman spoke of how her friends turn to her for information, despite the fact that she does not know the answers:

Last summer I worked as like a street campaign canvasser/fundraiser for Planned Parenthood and I knew the political side of things but not the health side of things; but I had a lot of friends who would ask me questions about like birth control or contraception or sex. I had to keep telling them that I had no idea, like; I can’t answer these questions for you.

To this story, another replied, “but I feel like if you had said something, even if it wasn’t true, I would definitely probably believe you. Like you could make something up and I would be like, oh obviously she would know the correct answer.”

Most of the participants indicated they were cautious as to which friends they asked for information. One young woman summed it up best, “your friends can also not be trustworthy, it depends on each person’s situation.”

Health care providers. The moderator asked each focus group what communication channel is the most trustworthy for providing information on contraception. In both groups, doctor was the unanimous answer. Despite this, only one participant shared a positive experience with a health care provider:

My gynecologist, like if I tell her something’s wrong, she’ll ask like 10 follow up questions and then come to a conclusion. So, she will make sure she is fully informed and it’s not just a generic answer… I had run out of my birth control…so she actually refused to give me a refill until I came in and saw her and then she checked everything, like my weight, to make sure like I was still taking the right birth control and stuff like that.
While this one participant described a great relationship with her health care provider, another participant shared a story of how a friend had a different experience with a birth control pill prescription:

I had a friend who was pushed, because the particular doctor’s office had sales people come to that office, so that was what they were pushing. She was on it for four or five months and the pill was completely wrong for her body. She had her period straight for like four months…she called and the doctor spoke to her over the phone and basically bullshitted it and then it took her a couple months to realize that this was completely screwed up and so she ended up switching doctors.

Another participant shared her own health care provider story, how a doctor answered her question about birth control pills:

She went to the computer…and she went to WebMD, stupid idiot. I was like; I could have done this at home. I just wanted to walk out. She looked irritated, which I couldn’t stand…no matter how dumb you think my question is, even if that’s not what you really think, you need to not look like that. It’s just like ridiculous.

Not all participants indicated distrust in health care providers; however, many lamented the inconvenience of dealing with health care providers. One young woman shared:

I think because of the cost and inconvenience of driving to the doctor’s office, I would prefer not to have to deal with that. But if it is just getting on the phone and asking a question, well I probably wouldn’t call the doctor because that is also too much work to look it up.

Another participant echoed this sentiment:

I hate having to call my doctor for just about anything because it’s expensive to go in and get an appointment…So unless I think that I could die or become like permanently disabled or I am sure I will absolutely end up pregnant if I don’t immediately consult with a professional physician then I am going to use whatever other options are available like talking to friends, talking to family members, going online. I dunno, just anything, anything but the doctor’s office because that is like $70 or $80 down the drain.

The inconvenience aspect of seeing a health care professional was especially concerning to the younger focus group participants. One college student commented, “even making a health center appointment, you have to make it way in advance and you have to fit it in your schedule.” Another student complained, “or you have to go online and make it online and fill out all these questions before going in.”
This was especially confusing, as participants had previously voiced trust in health care providers and agreed that they play an important role in contraception decisions. To add to the confusion, when asked what quality they found to be the most important in a source providing contraception information, the majority of participants replied expertise or knowledge. When asked, participants said, “knowledge,” “the information to back it up,” “I would definitely put expertise first,” and “personally, I would trust expertise over experience.” Nearly all participants echoed this sentiment. Thus, despite wanting to get contraception information from experts and factoring the opinions of health care providers into their decisions, participants indicated problems getting this information from health care providers.

**RQ3 summary and discussion: Varying communication channels.** This finding only adds to the confusion from Virjo et al. (1999), Vogt and Schaefer (2011), Yee and Simon (2010), and Gilliam et al. (2004). Clearly, there is no preferred communication channel for information on contraception among young women. Participants appeared to trust health care providers and expertise over friends, the Internet, and other sources, yet health care providers did not arise as a preferred source of information. A possible explanation is the “I need it now” mentality of the millennial generation (Navarrette, 2011). Participants complained about the time it took to make an appointment with a doctor, the time one must spend filling out forms, and how they cannot be expected to find reliable web sites that do not appear on the first page of Google results. Perhaps young women in today’s environment need quicker results, and thus turn to less reliable sources, like friends and the Internet. A possible intervention could involve removing obstacles to speedy and accurate answers about contraception.

The role of the social network is also a possible explanation for this finding that some young women prefer to access less reputable sources despite a desire for expert advice. As previously discussed in RQ2, it appears that others in one’s social network, whether friends, health care providers, or others, play an important role in contraception
decisions. Is it possible that each young woman assigns different social values to the advice of others? For example, some young women may value the opinions and experiences of friends more than the advice of health care providers. In this particular study, one participant voiced trusting a pre-med friend for contraception information while another stated she preferred to speak with experienced friends. This may help to explain the conflicting findings in this study’s literature review. If this is so, those planning interventions may need to reach out to the target audience’s social networks as well as the target audience.

RQ4: How Do Young Women Perceive Different Methods of Intervention for Decreasing Contraception Myth?

Perhaps one of the most important findings is that young women are eager for interventions so they can make better decisions about contraception. Besides high school health classes and small-scale college efforts, participants were unable to name any interventions to help increase contraception knowledge and/or decrease contraception myth. Participants recommended adult sexual education, campaign advertising, more reliable web sites, more government programs, more relatable scenes on television, and appropriate endorsements as possible interventions.

Awareness of interventions. Participants had very little awareness of any interventions or campaigns aimed at increasing contraception knowledge and/or decreasing contraception myth. Several young women recalled interventions they encountered in college. One participant explained an intervention she saw in a dorm, “I know one dorm that did an event that was like a Valentine’s Day event and they made valentines and they also handed out condoms and were like, hey, here is some information about contraception.” Another participant described a campaign by a campus health center:

I know at some colleges…there is like SHARE, the sexual health and reproduction girls. Like, I don’t know who they go to, but one of my friends was one of the educators but… I don’t know who they go to, but they are teaching people too.
Most participants shared experiences from high school health classes, like disgust from viewing sexually transmitted disease slides or watching a birthing video. Despite these stories, most participants admitted they did not remember much from high school health classes. Participants commented, “I honestly don’t remember” and “I have no idea what we talked about in that class.” When asked to describe information learned in health classes, young women responded, “what they remember from health class…is like so diluted and old,” and “abstinence.”

**Future interventions.** Since participants had a tough time discussing interventions they had seen, the moderator asked participants to describe the types of interventions they would like to see.

**More sexual education.** Participants agreed that more sexual education is necessary after high school. One young woman said, “I think beyond high school it is important to have similar campaigns throughout college and stuff like that… it is easy to overlook the things you learned 4-8 years ago.”

Some participants had women’s groups at their workplace and expressed interest in covering topics related to contraception as part of these groups. One participant shared, “I am interning at the Census Bureau and they have like a women’s network, but like maybe a week or two ago did breast cancer screening like in the building, which I thought was a good idea.” “As part of a new hire program they could have a talk or a day dedicated to like health in general and have a segment on sexual health and contraception,” suggested another participant.

**More advertising.** A desire for educational advertising campaigns was also popular among participants. Many wanted to see advertisements to dispel myths and answer their questions in prominent places, like on public transportation, on billboards, or at stadiums. Some participants shared:
I have been riding the metro a lot recently and I always look at the ads they have in there because I always forget something to do and have to stare at random things. So, I think that might be a decent method.

Like posters and billboards in popular spots, I mean, I took the metro here, and with all these myths we have talked about, if there was just like one sentence, you know and like with the myths we talked about, just the truth or whatever. Just things like that everywhere in popular spots, like at universities, there are so many places you could find to do that.

Another participant recommended non-print advertising, suggesting television and Spotify, an online music streaming service. She suggested, “I think commercials too are helpful. Just because we are exposed to them so much. On TV obviously, but also like if you are watching TV on your laptop or listening to music on Spotify, there are always commercials.”

**Reliable Internet sites.** Despite distrust in the Internet, possibly the biggest desire from participants was the creation of a reliable web site to answer questions about contraception. When asked to name current reliable web sites for contraception information, no one was able to name a web site they would visit. Participants wanted to see a web site from a reliable organization, possibly a non-profit or medical organization, that could be easily found, easily navigated, and had a place for questions and answers. One participant explained:

Also, just creating a web site that is like, I mean, I don’t know how you could endorse it so that it was like clearly reliable, but like one place that consolidated a lot of information on a lot of different types of birth control and that was like validated by doctors, and find what you needed to find there and not be concerned about who was posting it and whether it is true or not.

Participants also discussed what they would like to see in a web site, including a search feature and an easy to remember address. One young woman commented, “a key web site where you could search for things easily.” Another participant added, “versus like if there was some way that you could easily remember and just type in CDC/healthinfo/pregnancy and then you will have like top picks. Then that might be more helpful to find a reliable source.”
Participants also recommended other possible uses of the Internet and technology, like social media, texting, and applications. One young woman suggested links to educational web sites be embedded in posts on Facebook and Twitter. Another suggested the use of text reminders:

I get text reminders from my dentist when I am going to have an appointment… That is more useful to me than an e-mail or something I think cause I guess I check my phone more often. So many people have smart phones, if you pushed a link about it to someone’s smart phone then you could click on it and look it up there.

More government programs. Participants also indicated that they wanted interventions backed by the government. The younger participants indicated trust in the National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC); however, they did not feel they could understand scientific information from these agencies. The younger participants commented about the government’s online presence:

Is there stuff on like NIH about contraceptives?
I was just wondering if there are government pages?
There probably is but like no one thinks to go there.
If it is not a top Google hit I don’t know how it would be.
It would be cool if the legit sites could just pop to the top of Google because I otherwise forget that they exist.
Course, when I think of NIH I think of studies.
But, if they have a study on contraceptive effectiveness, then…
I feel like that would be a little more technical and hard to sort through.
That’s true.
NIH for dummies, that would be a cool web site.

While discussing the role government can play in reducing contraception myth, several participants shared examples of how other governments have successfully tackled sexual health issues. These government interventions included Thailand’s Condom King to minimize the stigma of condom use and Uganda’s ABC campaign to decrease the
spread of AIDS. A participant expanded on this, discussing how a government backed campaign could work in the United States:

I feel like there has to be some type of government backing almost to any type of intervention, cause like no drinking and driving, no texting and driving. Like those only became things that everybody, even if you don’t follow it, that everyone knows to do it… But I feel like if there was some type of state campaign where you had like a ton of advertisements and like billboards everywhere and advertising, like go get educated about sexual health, like don’t have sex unless you know how to deal with the consequences or whatever. It might become something that people are more aware of but otherwise, I mean, teenage girls and young adults, I mean like 16 or 19-29, they are going to make dumb mistakes unless it’s shoved in their faces.

Relatable television. Television was a topic that got participants fired up. Participants repeatedly brought up how television shows spread unclear messages about sex and contraception. The normality of sex without any sort of discussion or visible use of contraception angered participants, especially on shows like Girls, Glee, and a variety of other primetime shows. One participant lamented, “it’s still totally normalized…I would feel like everyone around me must be having sex.” Another participant compared sex on television to violence in video games. She commented, “like video games, they’re saying that violent video games cause people to kill people. It’s the same thing, if you’re watching a show like Girls, you get ideas from it.”

The young women wanted to see more true to life representations of sex and contraception on popular shows, such as partners reaching for a condom or young women learning about different methods of contraception. One young woman suggested, “they should insert it into TV shows. Like right before Hannah has sex, oh here, I should put on a condom,” Another participant added, “show them making the decision or have some scene where someone is actually learning about the choices and that there isn’t just condoms or the pill.” “Show them going to CVS and standing in the aisle and picking out condoms…the most awkward experience ever,” added another participant.

Trustworthy endorsements. The focus group participants also wanted to see endorsements for contraception, whether by non-profits, advocacy groups, or reputable
celebrities. One participant noted, “I think it goes back to what you were saying, having the backing of some kind of advocacy group, or some notable figure, or something that you know would be honorable about it.”

Participants commented that they wanted to see well-respected groups recommend reliable web sites, books, or other products to help young women access contraception information. One young woman shared:

Or even if they promoted a book…then I would hear about the book through an advertisement of some type of web site. It would be like, here is a book that we vouch, that we deem to be a reliable source and it goes in depth into anything on a certain subject that you would want to know about. A source leading you to another source or something.

Other participants recommended possible celebrities to endorse contraception use, “Dr. Oz for example, he wouldn’t endorse a book that was telling you not to use contraception and have sex or whatever, someone like that or Oprah or whatever.”

Another participant gave a celebrity endorsement example to explain why the concept could work:

I think that’s a good point, because there are all sorts of celebrities that endorse different products and for the most part, you are like whatever…but, I remember thinking this when I saw the Aveeno commercial with Jennifer Aniston…they show her on the phone with her agent, and her agent is throwing her all these products that they want her to endorse, and they finally get to the point where she is in the bathroom and putting Aveeno on, and they are like, I got it, you should do Aveeno. She was like, oh, let me think about it. It was like so perfect cause they show her using it, whether she uses it or not is sort of irrelevant, but the fact is her skin is beautiful and it sort of makes you connect the dots that it’s trustworthy…So, maybe if there was someone who used it and they admitted they used it, and they are clearly not pregnant or whatever, then maybe that would be something that makes sense.

Nancy Snyderman was also brought up as a possible celebrity endorser, “Nancy Snyderman is on the Today Show…and she is also a doctor. So, it’s the media but she is also a doctor, so she gets what she is saying.” Others agreed, stating, “it’s having someone credible behind what they are saying,” and “it is combining the expertise and the experience.”

**RQ4 summary and discussion: Interventions wanted.** These results differ greatly from the interventions discussed in the literature review section. When asked to
name interventions they would like to see, contraception counseling and leaflets, as studied by Gaudet et al. (2004) and Little et al. (1998), did not come up. While these two methods were found to be effective through research, they may not be plausible for young women today. This may be due to the fact that these two studies focused specifically on evaluating the effectiveness of those two methods but did not explore their effectiveness within the context of all the other campaigns or information on contraception. In addition, the inconvenience of seeing a health care provider likely contributed to the lack of interest in contraception counseling. Could counseling prove popular if obstacles preventing young women from consulting with health care providers were removed? As for leaflets, one participant commented that she had received a leaflet from a health care provider; however, it was lost and the participant opted to go online for information. Since both Gaudet et al. (2004) and Little et al. (1998) are not recent studies, perhaps technology and the Internet have changed the types of interventions young women would like to see. Despite this possible technology explanation, participants were unable to name any web-based interventions, like Bedsider. Participants named what they would want to see in a web site providing information about contraception: easily found, easily navigated, and a place for questions and answers. This describes the Bedsider web site, as studied by Philliber Research Associates (2012). Perhaps the web site needs a more aggressive marketing campaign to target young women.

In conclusion, participants had a difficult time naming interventions to decrease contraception myth and/or increase contraception knowledge. In regards to future interventions, participants recommended numerous options for tackling the problem of contraception myth. These ideas included sexual education after high school and college, use of advertising to combat myths, government programs, use of web-based technologies, more realistic television programming, and endorsements from respected sources. Based on these findings, more work is needed to target young women. Those interested in
reaching this demographic must take care to understand the motives, attitudes, and preferences of young women.

**Overall Summary**

Based on the results, it appears as though contraception myths are prevalent among young women, despite high levels of knowledge about contraception. Knowledge and myths appear to be different things, and interventions to address contraception myth should likely include considerations of the social networks of young women, as well as the communication channels likely accessed by young women. This is due to the fact that focus group discussion revealed young women to be confused by contraception myth, despite knowledge about contraception. In addition, multiple factors were found to play a role in contraception decisions, including specific concerns and the opinions of others in one’s social network. Also, young women appeared to value expert sources for information on contraception; however, they sometimes turned to less reliable sources, mostly out of convenience. Finally, young women did not feel targeted by interventions to increase contraception knowledge and/or decrease contraception myth.

Several important lessons can be learned from these findings. First, contraception myth is a problem that should not be ignored. Despite displaying contraception knowledge, young women in this study were still confused about contraception myths. This problem will likely not be solved with current educational interventions, and thus new interventions are necessary, particularly interventions that incorporate new communication channels that young women are more likely to access. In addition, more attention needs to be paid to the role that one’s social network plays in contraception decisions. Since the young women in this study admitted to getting contraception advice from friends rather than health care providers, those planning interventions need to keep in mind the importance of the social network. In addition, it is important to keep in mind that young women are on the cutting edge of technology, thus interventions should be on the cutting edge as well. While interventions like pamphlet distribution and contraception
counseling proved effective in previous studies, the young women in this study did not find these interventions practical. Participants in this study recommended the use of more technology to simplify access to contraception information, like smart phone applications, text messaging, reliable web sites, and advertisements on music streaming sites like Spotify. Keeping up with what young women want could make reaching this audience easier and help make messages more effective.

**Limitations**

While the use of a focus group methodology offered many benefits to the study design, it also created several limitations. Most importantly, the opinions and ideas of a few cannot be generalized to a larger audience (Fern, 2001). In addition, focus groups may not always be appropriate to examine sensitive topics, like contraception and sex (Debus, 1986). Many researchers have successfully used focus groups to examine these topics; however, some participants may have a hard time discussing these topics in a group setting. While no participants in this study appeared shy during focus group discussions, participants may have edited their responses to avoid embarrassment.

In addition to focus group methodology drawbacks, this study may also be limited by participant recruitment. While recruitment of older participants went smoothly, the researcher had difficulty recruiting younger participants. Thus, the researcher turned to a personal contact at the University of Maryland who helped to recruit qualified participants. Unfortunately, most of the participants knew each other through a sports club or a shared social circle. The fact that participants knew each other and attended the same school possibly skewed results. Perhaps similar personalities or shared experiences limited possible viewpoints or the associations between participants led the young women to be selective about their responses.

**Implications for Future Research**

This study is possibly the first to examine the role that myth plays in contraception decisions. By conducting this study and defining the term myth in the context of
contraception, hopefully others will begin to study this issue. As of now, very little is known about contraception myth, and this study seems to raise more questions than provide answers. With the exception of studies confirming the existence of contraception myth, the results of this study do not agree with previous literature.

Curiously, this study found participants to exhibit high levels of contraception knowledge and confusion over contraception myths. One would expect that those expressing confusion would have less knowledge about contraception; however, that may not be the case. This finding leads to further questions about a relationship between myth and knowledge. These questions may benefit from quantitative research, specifically testing contraception knowledge and confusion about contraception myths.

Future research should also take a deeper look into the role myth plays in contraception decisions. This study only scratched the surface of this issue, adding more questions than answers to the discussion. Do myths stem from less reliable sources, like friends and the Internet? Do young women really believe contraception myths? These questions could be further examined through other research methodologies. Use of in-depth interviews could help participants open up more and explain how they really feel about specific myths. Surveys could test participants’ knowledge about specific myths to see what they believe and where they obtained specific information.

In addition, further research is needed to test possible interventions for young women. Participants in this study were unable to name interventions to increase contraception knowledge and/or decrease contraception myth. Despite nationwide campaigns by the federal government and the National Campaign to Prevent Teen and Unplanned Pregnancy, participants were unaware they were being targeted. Use of focus groups, surveys, and market research could help communication practitioners and health professionals reach more of their target audience and make more of a difference in decreasing contraception myth and unplanned pregnancy.
Conclusion

In summation, focus group discussions revealed four main findings: confusion over contraception myth is common, young women consider multiple factors when making decisions about contraception, young women do not have a preferred communication channel for accessing information on contraception, and young women want interventions to help increase contraception knowledge and/or decrease contraception myth. Since the majority of these findings disagree with previous literature, more research is merited. Future research should examine a possible relationship between contraception knowledge and confusion over contraction myth, the role that myth plays in decisions, and specific interventions. A better understanding of contraception myth and its role in contraception decisions could help to combat contraception myth, and as a result, unplanned pregnancy.
Appendices

Appendix A: Invitation to Participate in a Focus Group about Young Women and their Perceptions of Contraception (University of Maryland location)

Attention: Unmarried, young women aged 19-29 years in the Washington, DC metropolitan area.

I am looking to recruit 12-16 volunteers to participate in research involving focus groups to examine the prevailing myths concerning contraception, how young women make decisions regarding contraception, how young women perceive communication channels providing information on contraception, and what type of interventions young women would like to see regarding contraception. The focus group should last approximately 90 minutes and will be conducted in person at a University of Maryland building in College Park, MD.

Time: TBD based on volunteer preference

How to qualify:

Volunteers should:
- Be unmarried
- Be heterosexual or bisexual
- Be between the ages of 19 and 29 years
- Speak English
- Live in the Washington, DC metropolitan area

How to sign up:

If you are interested in volunteering, please complete the attached form and submit it via e-mail (scasway@gmail.com).

Please remember that your participation is voluntary and confidential. Prior to participation, all participants must sign an informed consent form. At the beginning of the focus group session, I will go over each section of the consent form directly with participants so as to answer any questions and to ensure that all volunteers understand what their participation involves before they consent.

If you have any questions or concerns, please feel free to contact me via e-mail. Thank you!
Focus Group Interest Form

Name:
E-Mail:
Telephone:
Age:
Gender:

Marital Status (please select one by bolding your selection)

- Married
- Single
- Divorced

Sexual Preference (please select one by bolding your selection)

- Men
- Women
- Both men and women

I speak English (please select yes or no by bolding your selection)

- Yes
- No

I live in the Washington, DC metropolitan area and I am able to travel to a University of Maryland building in College Park, MD (please select yes or no by bolding your selection)

- Yes
- No

(Please see next page)
Availability for focus group interaction (please select as many as you wish by bolding your selection or selections)

- Monday, 3/4: 7:30-9:00 p.m.
- Tuesday, 3/5: 7:30-9:00 p.m.
- Wednesday, 3/6: 7:30-9:00 p.m.
- Thursday, 3/7: 7:30-9:00 p.m.
- Friday, 3/8: 7:30-9:00 p.m.
- Sunday, 3/10: 5:30-7:00 p.m.
- Other: ________________
- If none, are dates the problem, or are times the problem? ________________

Please return completed form to Stephanie Casway at scasway@gmail.com
Appendix B: Invitation to Participate in a Focus Group about Young Women and their Perceptions of Contraception (Johns Hopkins location)

Attention: Unmarried, young women aged 19-29 years in the Washington, DC metropolitan area.

I am looking to recruit 12-16 volunteers to participate in research involving focus groups to examine the prevailing myths concerning contraception, how young women make decisions regarding contraception, how young women perceive communication channels providing information on contraception, and what type of interventions young women would like to see regarding contraception. The focus group should last approximately 90 minutes and will be conducted in person at a JHU building in Washington, DC.

Time: TBD based on volunteer preference

How to qualify:

Volunteers should:
- Be unmarried
- Be heterosexual or bisexual
- Be between the ages of 19 and 29 years
- Speak English
- Live in the Washington, DC metropolitan area

How to sign up:

If you are interested in volunteering, please complete the attached form and submit it via e-mail (scasway@gmail.com).

Please remember that your participation is voluntary and confidential. Prior to participation, all participants must sign an informed consent form. At the beginning of the focus group session, I will go over each section of the consent form directly with participants so as to answer any questions and to ensure that all volunteers understand what their participation involves before they consent.

If you have any questions or concerns, please feel free to contact me via e-mail. Thank you!
Focus Group Interest Form

Name:
E-Mail:
Telephone:
Age:
Gender:

Marital Status (please select one by bolding your selection)

- Married
- Single
- Divorced

Sexual Preference (please select one by bolding your selection)

- Men
- Women
- Both men and women

I speak English (please select yes or no by bolding your selection)

- Yes
- No

I live in the Washington, DC metropolitan area and I am able to travel to a TBD JHU building on Massachusetts Avenue, NW, Washington, DC (please select yes or no by bolding your selection)

- Yes
- No

(Please see next page)
Availability for focus group interaction (please select as many as you wish by bolding your selection or selections)

- Monday, 3/4: 7:30-9:00 p.m.
- Tuesday, 3/5: 7:30-9:00 p.m.
- Wednesday, 3/6: 7:30-9:00 p.m.
- Thursday, 3/7: 7:30-9:00 p.m.
- Friday, 3/8: 7:30-9:00 p.m.
- Sunday, 3/10: 5:30-7:00 p.m.
- Other: ________________
- If none, are dates the problem, or are times the problem? ________________

Please return completed form to Stephanie Casway at scasway@gmail.com
Appendix C: Focus Group Information E-mail (University of Maryland location)

Dear Focus Group Participant,

Thank you again for volunteering to participate in this focus group. Below you will find specifics regarding your focus group participation. Please arrive a few minutes early, as the focus group cannot begin until all participants have arrived.

**Study Name:**

Contraception Myths and Their Influences: A Focus Group Approach

**Group Time and Location:**

Sunday, March 10, 2013
5:30-7:00 p.m.
University of Maryland, College Park
McKeldin Library
Study Room 2113

If you have any questions or concerns before or after the study, please feel free to contact me.

Thank you again for your participation,

Stephanie Casway
Johns Hopkins University, M.A. in Communication Candidate
Cell: (804) 241-2913
E-Mail: scasway@gmail.com
Fax: (202) 863-2010
Appendix D: Focus Group Information E-mail (Johns Hopkins location)

Dear Focus Group Participant,

Thank you again for volunteering to participate in this focus group. Below you will find specifics regarding your focus group participation. Please arrive a few minutes early, as the focus group cannot begin until all participants have arrived. Upon arriving, you will need to sign in with the security guard.

**Study Name:**

Contraception Myths and Their Influences: A Focus Group Approach

**Group Time and Location:**

Wednesday, March 13, 2013
7:30-9:00 p.m.
Johns Hopkins University, Washington, DC Center
1717 Massachusetts Avenue, NW
Washington, DC 20036
Suite: 100C

If you have any questions or concerns before or after the study, please feel free to contact me.

Thank you again for your participation,

Stephanie Casway
Johns Hopkins University, M.A. in Communication Candidate
Cell: (804) 241-2913
E-Mail: scasway@gmail.com
Fax: (202) 863-2010
Appendix E: Consent Form

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

Informed Consent Form

<table>
<thead>
<tr>
<th>Title:</th>
<th>Contraception Myths and Their Influences: A Focus Group Approach</th>
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<tbody>
<tr>
<td>Principal Investigator:</td>
<td>Chan Le Thai- Adjunct Faculty, JHU</td>
</tr>
<tr>
<td>Date:</td>
<td>January 22, 2013</td>
</tr>
</tbody>
</table>

PURPOSE OF RESEARCH STUDY:
The purpose of this research study is to examine the prevailing myths concerning contraception, how young women make decisions regarding contraception, which communication channels young women prefer for information on contraception, and what types of interventions young women would prefer to increase contraception knowledge and/or decrease contraception myth. Explaining the source of contraception myths, how young women make decisions regarding contraception, what communication channels young women turn to for contraception information, and how young women would like to see myth dispelled will allow health communication professionals to plan strategies that change perceptions, fight contraception myths, and reduce unplanned pregnancies.

We anticipate that approximately 12-16 people will participate in this study.

PROCEDURES:
Participants will engage in focus group discussion with the moderator and the rest of the focus group for approximately 90 minutes. Participants will be asked to elaborate on questions regarding contraception and possible contraception interventions posed by both the moderator and other focus group participants.

RISKS/DISCOMFORTS:
Participation in this study may involve the risk of some discomfort in the form of embarrassment, as participants will be asked to discuss contraception. However, the risks associated with participation in this study are no greater than those encountered in daily life.

BENEFITS:
There are no direct benefits to you from participating in this study.

This study may benefit society if the results lead to a better understanding of how young women make decisions about contraception.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:
Your participation in this study is entirely voluntary. You choose whether to participate.
If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please contact the student researcher, Stephanie Casway, at 804-241-2913 or scasway@gmail.com.

CONFIDENTIALITY:

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Audio of the focus group will be recorded. Only the student investigator, Stephanie Casway, will listen to the audio. Once the student investigator has transcribed the audio, the audio file will be destroyed. During this process, the audio file will be protected with two different computer passwords. No participant names will be used in the transcription of the focus group or the study write-up. During the focus group, participants will be reminded to respect the confidentiality of other participants by refraining from discussing the focus group following its completion.

COMPENSATION:

If you satisfactorily complete the study, you will receive a $10.00 Starbucks gift card to compensate you for your participation. If you end your participation before completing the study, you will still receive full compensation. Gift cards will be distributed at the end of each focus group session.

IF YOU HAVE QUESTIONS OR CONCERNS:

You can ask questions about this research at any time during the study, by contacting the student researcher, Stephanie Casway, at (804) 241-2913; or the principal investigator, Chan Le Thai, at (510) 853-0083.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study.
Title: Contraception Myths and Their Influences: A Focus Group Approach  
PI: Chan Le Thai- Adjunct Faculty, JHU  
Date: January 22, 2013

By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

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Appendix F: Moderator Guide

Research Questions

RQ1: What are the prevailing myths regarding contraception among young women?

RQ2: What factors do young women take into account when making contraception choices?

RQ3: How do young women perceive different communication channels for information on contraception?

RQ4: How do young women perceive different methods of intervention for decreasing contraception myth?

Study Overview

This study uses focus groups to examine the prevailing myths concerning contraception, how young women make decisions regarding contraception, how young women perceive different communication channels for information on contraception, and how young women perceive different methods of intervention for decreasing contraception myth. For this study, the researcher defines young women as unmarried females living in the United States aged 19-29 years. This study considers all methods of contraception including barrier methods, hormonal methods, and fertility awareness methods.

Focus Group Details

The study consists of two focus groups, each containing six to eight participants. Participants for this study include young women living in the Washington, DC, metropolitan area. The definition for young women, described in the study overview, combines the definitions used by previous literature and the Guttmacher Institute. The organization, a well-respected reproductive health non-profit, conducts research on the use of contraception among young women. The researcher plans approximately 90 minutes for each focus group.
Moderator Guide

Attention moderator: The information in italics provides you with instructions; do not read italic text to participants. Read all regular text to participants, with the exception of probes, which may be used at your discretion.

Opening

Hi everyone and thank you for taking the time to participate in this focus group. My name is Stephanie Casway and I will serve as your moderator. The purpose of this study is to gain an understanding of how unmarried, young women make decisions about contraception. I am currently a graduate student at Johns Hopkins University, studying health communication. This discussion will last approximately 90 minutes.

Ground Rules

Before we begin, I would like to review a few ground rules.

- Please know that there are no right or wrong answers. I am interested to hear what you think and feel.
- I would like everyone to participate in the discussion. Please speak up, even if you disagree with what others have to say.
- This focus group will function as a group discussion. There is no need to wait to be called on to speak; however, please try to speak one at a time.

Confidentiality

Everything that you say here will remain confidential. Your actual names will not appear in any document related to this research. Please respect the other participants’ confidentiality and refrain from discussing our conversation outside this focus group. I will record the audio of this focus group. Only I will listen to the audio file. Once I have transcribed our conversation, I will destroy the audio file. Please read the consent form I am about to hand you. If you agree please sign the document and hand it to me. If you have any questions about confidentiality or the agreement, please let me know. (Pass out
consent forms and pens. Once participants have signed the agreements collect the documents individually.)

**Ice Breaker** (10 minutes)

Okay, let’s get started. Please take a moment to briefly introduce yourself by stating your first name and what you like to do in your free time. I will go first. My name is Stephanie and I enjoy baking and reading.

**Focus Group Questions**

**Myths Regarding Contraception** (20 minutes)

We will begin our discussion by exploring what we know about contraception. Please know that when I say “young women,” I am referring to unmarried females, aged 19-29 years. Also, when I say “contraception,” I am referring to any method used to prevent pregnancy.

1. What can you tell me about contraception?
   a. (probe) Which forms of contraception prevent pregnancy in the most reliable fashion? Why?
   b. (probe) Why might a young woman become pregnant while using contraception?

2. Please name any misconceptions you have heard about contraception. A misconception, or myth, refers to a commonly held belief that is untrue.
   a. (probe) Some young women do not use contraception because they believe they are infertile. What do you think about this?
   b. (probe) Some young women use withdrawal, or pulling out, as a form of contraception. What do you think about this?
   c. (probe) Some young women who use birth control pills do not take their pill at the same time each day or miss a pill from time to time. What do you think about this?

3. Where do you think misconceptions about contraception come from?
a. (probe) What role do friends and family play in perpetuating misconceptions about contraception?

b. (probe) What role do the media play in perpetuating misconceptions about contraception?

4. How might misconceptions about contraception impact a young woman’s decisions regarding contraception?

   a. (probe) Can you give any real life examples?

**Contraception Choices (20 minutes)**

Now that we have discussed contraception and misconceptions, let’s take a look at the decisions young women make about using or not using contraception.

1. What factors do you think young women take into account when making decisions regarding contraception?

   a. (probe) What about effectiveness?

   b. (probe) What about the opinions of others?

   c. (probe) What about ease of use?

2. Please name some reasons why young women choose to use or not use contraception.

   a. (probe) What about the opinions of others?

   b. (probe) What about side effects?

   c. (probe) What about cost?

   d. (probe) What about religion?

3. If a young woman chooses to use contraception, why might she choose one method over another?

   a. (probe) What about effectiveness?

   b. (probe) What about ease of use?

   c. (probe) What about cost?
d. (probe) What about the opinions of others like significant others, friends, family members, or health care providers?

**Sources of Information** (20 minutes)

Let’s move on and talk about where we get information about contraception.

1. What sources of information do you think young women consider when making a decision regarding contraception.
   a. (probe) What about health care providers?
   b. (probe) What about family and friends?
   c. (probe) What about the media?
   d. (probe) What about the Internet?
   e. (probe) What about a religious advisor?

2. Which of these sources seem trustworthy to provide correct information about contraception?
   a. (probe) What do you think makes a source trustworthy of providing information about contraception?

3. Why do you think young women access certain sources of information over others for information on contraception?
   a. (probe) Could trustworthiness play a role?
   b. (probe) Could expertise play a role?
   c. (probe) Could experience play a role?

**Interventions**

Now that we have discussed what we know about contraception, what factors we take into account when making decisions about contraception, and what sources of information we consider for information on contraception, let’s discuss possible interventions for helping us learn more about contraception. Please know that an intervention is the use of various activities to educate or change behavior. For example,
Michelle Obama is involved with the Let’s Move intervention, aimed at decreasing childhood obesity.

1. Please name some interventions aimed at increasing contraception knowledge and/or decreasing contraception myth.
   a. (probe) Who do you think these interventions were targeted to?
   b. (probe) How effective do you think these interventions were at increasing contraception knowledge and/or decreasing contraception myth?

2. What can be done to help young women access trustworthy information about contraception?
   a. (probe) How could health care providers help?
   b. (probe) How could the media help?
   c. (probe) How could health campaigns help?

3. What type of intervention, targeted to young women your age, would you like to see to increase contraception knowledge and/or decrease contraception myth?
   a. (probe) What types of communication channels would this intervention use?
   b. (probe) What could you or your friends learn from this type of intervention?
   c. (probe) How effective do you think this type of intervention would be at increasing contraception knowledge and/or decreasing contraception myth among young women your age?

Closing (10 minutes)

We are just about finished. Is there anything else that anyone would like to add or clarify? (Wait for any comments before moving on.)

Please remember to respect the confidentiality of other participants and refrain from discussing our conversation with others. Thank you again for your time and insight.
References


Curriculum Vitae

Originally from Richmond, Virginia, Stephanie Casway graduated from the University of Maryland, College Park, with a bachelors of arts in communication in 2007. While in college, Stephanie was inducted into Lambda Pi Eta and Phi Beta Kappa. After graduation, Stephanie worked as an account executive for UPS and later as an assistant editor for the American College of Obstetricians and Gynecologists. While earning a masters of arts in communication from Johns Hopkins University, Stephanie focused on health communication, taking courses on persuasion, behavior change, and qualitative research. In the future, Stephanie hopes to continue working in the field of women’s health, whether conducting research and/or working on health communication campaigns. Stephanie currently lives in Alexandria, Virginia, with her husband Jason.