In their Public Space: A Qualitative Analysis of Young African American Males' Views of Social Media as a Mode for Condom Use Education

By

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DEDICATION

This dissertation is dedicated to my family, in particular my parents. Thank you for raising and building me into the young woman that I am today and thank you for all the years of support and guidance. To my earthly and heavenly father I know that you are watching up above and I know that you are proud. To my mother, thank you for being my cheerleader and my motivational force. To my husband Robert, I love and adore you. Thank you for being patient with me, believing in me, and pushing me to seek out my true passions in life. I am fearless because of you. To my son thank you for being the joy of my life and last to my mother in-law who introduced me into the field of nursing, I know that I would not be where I am today without you, and for that I am eternally grateful.

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ABSTRACT

African American adolescents, and in particular young African American males (YAAMs), are at the greatest risk for acquiring sexually transmitted infections (STIs) and engaging in risky sexual behavior compared with other minority youth. In some circumstances, these youth do not have access to regular health care or health education. For those reasons, many minority youth lose the ability to receive pertinent information about protecting themselves sexually. Social media has been proposed as a unique way to reach out to this population.

This three manuscript dissertation will: (1) present a synthesis of the existing research on the impact of social media on condom use to influence safer sex behaviors in African American adolescents and more specifically young African American males ages 18-21; (2) examine the current attitudes, norms and perceived controls that are related to the influence of social media on condom use among YAAMs ages 18-21; and (3) determine why social media is useful and how it has influenced the attitude, norms, and perceived control on condom use among YAAMs ages 18-21. In addition, this study examines the potential use of social media as a powerful mechanism to promote sexual health education among this population.

The results of this research indicated that young African American males prefer to use Instagram and Facebook and prefer to learn about sexual health information via YouTube. The participants stated that best way to use social media for this population is for: (1) recruitment; (2) clinical follow up; and (3) for educational and clinical reminders. Overall, participants agreed that social media is a great way to catch their attention and share information (e.g., use of

memes and celebrity postings) about risky topics like sexual health and condom use. However, the participants stated that they would prefer to discuss these subjects among each other and within group settings. The findings from this study are significant for nurses, researchers and health providers, and should be used when designing future interventions for behavior change among adolescent populations like young African American males

CHAPTER 1

Introduction

Poor sexual health outcomes (such as sexually transmitted infections and early sexual initiation) among youth remain a concern within the United States (Bull, Levine, Black, Schmeige & Santelli, 2012). African American adolescents, and in particular young African American males (YAAMs), are at the greatest risk for acquiring sexually transmitted infections (STIs) and engaging in risky sexual behavior in comparison to their adolescent counterparts (Cornelius & Lawrence, 2009). In some circumstances, these youth do not have access to regular health care or health education (Bull et al., 2012). YAAMs face such barriers as transportation and less access to convenient clinic locations (Bull et al., 2012). YAAMs require access to appropriate information to make informed decisions regarding their personal and sexual health (Hanson, West, Thackery, Barnes, & Monture, 2011).

One way to support YAAMs sexual health information needs is to consider how they obtain information about sex. Social media as a platform for information dissemination may be one approach as an estimated 73% of teens currently use social media to access a variety of information including material related to sexual health (Bull, et al., 2012). Social media is defined as a mode of content sharing in virtual communities, with photos, videos, and live updates using electronic devices such as phones, mobile apps, computers, and tablets that are internet based (Boyd & Ellison, 2009; Kim, 2012). Social media is believed to be an effective

way to provide the information that YAAMs need to make sexual health decisions and may help delay behaviors such as early sexual debut, multiple partners, and unprotected sex.

To date, little research has been done to examine the benefits of social media and its relationship to safer sex behaviors, such as condom use. Given that adolescents often feel uncomfortable discussing sensitive topics, using social media may provide an avenue to facilitate and empower YAAMs to discuss these sexual matters and potentially promote behavior change surrounding condom use (Sznitman, et al., 2011). Moreover, with the high expectations for youth to maintain in contact with one another online, social media may be an optimal mechanism for evidence-based information sharing about condom use (Dune, McIntosh, & Mallory, 2014).

Statement of the Problem

Accordingly, more research needs to take place on the utility of social media and its ability to be used in the form of condom use education and skill building. More specifically, this research aims to answer the following research questions: (1) What is the relationship between social media and its influence on condom use in African American adolescents; and (2) How can social media be used to influence condom use among YAAMs. It is important to understand the gap in knowledge that exists among YAAMs from a theoretical and cultural view. Therefore, a qualitative study using group-depth interviews was chosen to explore YAAMs needs and preferences about social media and its relationship to condom use because it can capture the voices of these youth. Seeking out the answers to the mechanisms by which social media is helpful and useful to YAAMs in accessing information about safer sex practices (the how and the why) will be very valuable for provider practice and for future research. A deeper understanding of these dimensions can increase the potential for development of future interventions that employ social media to influence safer sex behavior in this group. Increasing

the knowledge base regarding the effects of social media on safer sex practices (particularly condom use) may prove to be useful for not only African American adolescents and YAAMs, but may also strengthen current theory, knowledge, research, and practice about the potential use of social media in other areas of nursing research.

Theoretical Framework

The process for selecting a theory to guide the group-depth interview requires consideration of both the population and problem under investigation (Staton, 1993). The theory of planned behavior (TPB) will be used as a guiding framework. This theory has been successful in predicting a wide range of health behaviors such as health service utilization, substance abuse, and HIV/STD prevention behaviors and contraceptive use (Glanz, 2008). The theory assumes that the best predictor of performing a behavior is a person's intention (Ajzen & Fishbein, 1980, 2005). TPB looks at salient beliefs of a population being studied and measures three constructs for determining the likelihood of performing a behavior: attitude, norms, and perceived control (Ajzen & Fishbein, 1980, 2005). Specifically, TPB is used to assess the following questions: What makes it easy or difficult to use social media for condom use education? Who approves or disapproves of using social media for seeking out health information around condom use? How motivated are individuals to comply with the influences and opinions from respected peers and participate in such behavior (Ajzen & Fishbein, 1980, 2005. In summary, a new opportunity exists to explore social media as a possible platform to change behavior and provide health education for YAAMs. Learning how social media and behaviors around condom use intersect will help formulate new research questions and aid in targeting specific interventions among this

population.

Structure of Dissertation

This is a manuscript style dissertation. Three manuscript-style papers are presented in the next three chapters. Each manuscript answers a specific aim. Chapter 2 aims to describe the existing research on the impact of social media on condom use to influence safer sex behaviors in African American adolescents and more specifically young African American males ages 18-21. Chapter 3 aims to examine the current attitudes, norms and perceived controls that are related to the influence of social media on condom use among YAAMs ages 18-21. Chapter 4 aims to describe why social media is useful and how it has influenced the attitude, norms, and perceived control on condom use among YAAMs ages 18-21. The final chapter concludes with the summary of the main findings, direction, and implications for future research.

CHAPTER 2

Social Media and Adolescent Sexual Behavior: A Review of the Literature

Abstract

Background: African American adolescents and in particular young African Americans males (YAAMs) are at the greatest risk for acquiring sexually transmitted infections (STIs) and engaging in risky sexual behavior compared with other minority youth. In some circumstances, these youth do not have access to regular health care or health education. Social media has been proposed as a unique way to reach out to this population.

Purpose: To describe the existing research on the impact of social media on condom use to influence safer sex behaviors in African American adolescents and more specifically young African American males ages 18-21.

Methods: An electronic literature search was conducted using the following search engines: CINAHL, Google Scholar, Ebsco, Medline PubMed, and Scopus. Keywords used included: African American adolescents ages 13 to 24; social media or social networking; risky sexual behavior; sexual behavior intervention, and black.

Results: The search yielded 120 articles. Thirteen publications met the inclusion criteria. Studies from the review found that social media can affect behavior change, specifically increased condom use. Self-efficacy, knowledge, and favorable attitudes around HIV and sexually transmitted infections (STI) were found to increase with social media use. African American

adolescents seek out information related to STI prevention, teen pregnancy and virginity.

Facebook, Twitter, Pinterest and MySpace were found to be the sites most used within these groups. Conclusion: This review has illustrated that social media can be important in the delivery of sexual health information, as well as interventions aimed to influence sexual behavior among African American youth and YAAMs. With future research, social media may prove to be an platform for reaching diverse populations, especially for those who have minimal access to clinical care

Background

Widespread rates of STIs and HIV among all adolescents and reducing adolescent sexual risk behavior are persistent issues (Hutchinson & Montgomery, 2007; US Department of Health and Human Services, 2013). Overall, adolescents ages 15 to 24 years comprise nearly half of the estimated 19 million new cases of STDs within the United States, with African Americans being most heavily impacted by gonorrhea and chlamydia (Guttmacher, 2013; US Department of Health and Human Services, 2013). In another report, Park and Breland (2007) found the majority (55%) of new HIV infections have occurred in African American males' ages 13 to 24 years. According to the Youth Risk Behavior Surveillance System (YRBSS), 2012 the overall prevalence of ever having sexual intercourse, and having had sex before the age of 13 years, was highest among males and, in particular, YAAMs. In addition, YAAMs received the least amount of information in school regarding HIV and AIDS, as compared with other males (YRBSS 2012). It is clear that increasing rates of HIV and sexually transmitted infections, inadequate health education, and risky sexual behavior pose threats to the health and well-being of African American communities and, in particular, YAAMs.

One way to support the sexual health needs of YAAMs is to consider how they receive their information about sex. Social media is believed to be an effective way to provide the information that YAAMs need to make sexual health decisions and may help delay behaviors such as early sexual debut, multiple partners, and unprotected sex. Currently, an estimated 73% of teens use social media to access a variety of information including material related to sexual health (Bull, et. al., 2012). Little is known about the intersection of social media and its affect around African American youth and in particular YAAMS in terms of knowledge and behavior around condom use. Therefore, the purpose of this review is to critique and synthesize existing

research and to describe: (1) the impact of social media on condom use to influence safer sex behaviors in African American adolescents and, more specifically, young African American males; (2) the types of social media that adolescents find feasible and accessible; and (3) how and what content that can be best transmitted through social media to assist youth to make safer sex decisions and decrease sexual risk behaviors. Based on this review, recommendations for future research and practice implications will be discussed.

Social media: background, characteristics, and types

The use of the Internet has grown exponentially since the first email in 1975 and some reports estimate that more than 500 (+) sites exist today. Facebook, YouTube, Twitter, Google and Instagram are the most prevalent internet based sites (Craig, 2013; Curtis, 2013). Social media generally uses a personal profile created by the owner of the account. The owner can share updates on his or her personal status, or exchange messages either publicly or privately (Jones, Baldwin, Lewis, 2012; Mutka & Sharma, 2013). Unlike traditional media (e.g., television, magazines), social media allows for the rapid transfer of information; messages are not solely created by marketing groups with a specific intent, but rather by individuals of any age, ethnic background or socioeconomic status, and can be about any topic (Jones et al., 2012; Moreno, 2013). Regardless of the validity of the message, the ideas expressed allow individuals to state an opinion, and in turn, may go viral through multiple online channels by way of sharing links or posting messages (Vance, Howe, & Delavalle, 2009; Thackeray, Neiger, &McKenzie, 2008). As seen in Table 2.1, social media can be classified into five different categories that include: collaborative websites, blogs, content communities, social networking sites, and virtual game social worlds (Albarran, 2013; Kapplan & Haenelin, 2010).

Social media and adolescents

Access and time spent using social media. Adolescents are among the top users of social media (Jones, Baldwin, & Lewis, 2012). For the vast majority of teens, social media "is accessible anytime, anywhere, and on any digital device" (p. 208) including cell phones, laptops and tablets (Allison, Bauermeister, Bull, Lightfoot, Mustanski, Shegog, & Levine, 2012). According to one study, adolescents spend around 22% of their time logging onto their favorite social media sites, and may visit those sites as many as ten times per day(O'Keefe & Clarke-Pearson, 2011). Additionally, social media has been identified as one of the most common extracurricular activities of children and adolescents (Jones, Baldwin, & Lewis 2012; O'Keefe & Clarke-Pearson, 2011). Overall, Facebook, which is still the most popular, remains dominant as 71% of teens that are 13 -17 years old use the site (Lenhart, 2015). The toughest competitors of Facebook include Instagram, Snapchat, and Twitter (Lenhart, 2015). Personal preference is an important variable in the popularity of any given social media platform, with use tied to income and gender (Lenhart, 2015). For example, boys admit to using Facebook more, while girls use Instagram and Tumblr social media sites (Lenhart 2015). As social media grows, a teen using one form of social media at a time is less common, and teens enjoy combining these multiple platforms to express their thoughts, ideas, and identities (Boyd, 2014; Lenhart, 2015).

Benefits and risks. Social media may be instrumental in adolescent development. For example, it allows peer group involvement because everyone is welcome; identity exploration; fosters independence; and allows youth to develop all of these tasks simultaneously (Moreno, 2013). Studies show that social media and networking sites play an integral role in the development of a healthy sense of cultural identity, as well as a positive sense of self-identity (Byrne, 2007). The results from an earlier internet study using Black Planet found the most

popular forums for African Americans using social media included: building relationships; heritage and identity; religiosity; and spirituality (Byrne, 2007).

Social media also has the ability to be used for anonymous communication because it creates a safe space that may help reduce stigma by bringing confidentiality to the forefront, which is critical to an adolescent's self expression (Goodman et. al, 2013). Yet despite its benefits, the risks for adolescents must be considered. These risks include privacy concerns, minimal parental supervision, little accountability, as well as adolescents becoming entrapped in a 'time sink,' which refers to losing track of time spent on networking sites (Moreno, 2013; Sheats et al., 2013). Another important risk is inappropriate online contact, illustrating the need for better methods to balance anonymity and safety (Yager & O'Keefe, 2012).

African American adolescents and social media. In one study, nearly all of African Americans ages 18-29 used a social media site (96%) (Smith, 2014). Among African American late adolescents (18-24 years of age), Instagram and Twitter were especially appealing and were more widely used than any other social media sites (Duggan & Brenner, 2012). Younger African Americans (ages 18-29) "have shown high levels of 'tweeting' and comprise 22% of Twitter users as compared to 16% of whites" (Smith, 2014, p.2). Studies have also shown that African American adolescents have had a presence on Pinterest (Albarran, 2013). Topics that were 'pinned' included hair care, hairstyles, and black fashion (Albarran, 2013). In terms of privacy, Madden, Lenhart, Cortesi, Smith& Beaton (2013) found that African American adolescents were less likely to reveal their true identity on their profiles on social media (Madden, et al., 2013). Privacy is important to consider because adolescents are looking for ways to establish their identity among their peers. Therefore, how much they reveal regarding their image online is important to consider when modeling certain behaviors (Moreno et al.,

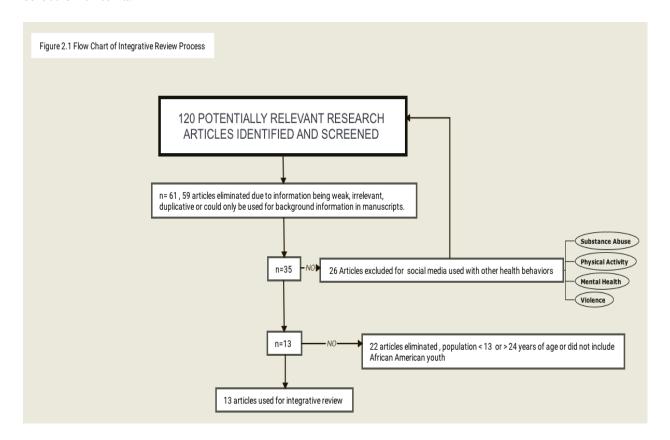
2009). Understanding how a teen may want to be viewed online is complex. Self-presentation may be presented online in multiple identities (i.e., expressing explicit behaviors) not only to protect their privacy but may be used to establish an alter ego (Boyd 2010).

In summary, new opportunities exist to explore social media as a possible platform to change behavior and provide health education to adolescents and especially YAAMs (Jones et al., 2012). A synthesis of the interventions b will describe the impact of social media on condom use to influence safer sex behaviors in African American adolescents and more specifically young African American males. This paper will also describe the most feasible and acceptable forms of social media for this purpose. Lastly, how and what content can be transmitted through social media to help educate African American adolescents about sexual risk behaviors will be explored.

Methods

An electronic literature search was conducted to identify articles on social media and YAAMs sexual behavior between the years of 2005-2015. The search was conducted using the following search engines: CINAHL, Google Scholar, Ebsco, Medline PubMed, and Scopus. Keywords used included: African American adolescents ages 13 to 24; social media or social networking; risky sexual behavior; sexual behavior intervention, and black. Adolescence was defined as "the period from puberty until full adult status has been contained ... and ends comparatively late between twenty-second and twenty- fifth years" (Muuss R., 1996, p.10). Early (11-14), Middle (15-18), and late (19-24) adolescent populations were included in these studies. Inclusion criteria were limited to intervention studies (i.e., randomized control trials) and descriptive studies (i.e. pilot study) within the United States. Articles were also located by reviewing the reference section of articles during the preliminary search. Results from the search

yielded 120 articles. Articles were eliminated if they were non-U.S., or focused on health behaviors other than sexual behavior (i.e., physical activity). A total of thirteen articles met the selection criteria.



Results

All of the studies targeted sexual risk behaviors and social media (i.e., Facebook, MySpace, websites), reaching a large number of adolescents to promote risk reduction or health promotion methods in efforts to reduce risky sexual behavior. African American adolescents comprised 4%-100% of the total sample. Out of the 13 studies selected, 8 were randomized controlled trials. The review also included one cross sectional study, one longitudinal study and one quasi-experimental study. The last two studies were of a descriptive study design.

Social Cognitive Theory and Theory of Planned Behavior were the most frequently used theories. Types of social media used in the studies included: Black Planet, Mi Gente,

Yahoo, Google, Facebook, MySpace, and Twitter. Study outcomes ranged from HIV/STI knowledge, protective attitudes, testing patterns, and condom use to health information seeking behaviors and cell phone frequency, use and social media type (Bull, Pratte, Whitesell, Reitemeijer, & McFarlane, 2009; Schienke, Pena & Schwinn, 2004; Gilbert, Temby, &Rogers, 2005; Whitely et al., 2011).

Setting and Sample

The setting and sample from the thirteen studies varied. Sample sizes ranged from 40-1,500 participants. Participants were recruited from social service agencies, community organizations, as well as through flyer and/or surveys, and health clinics (Buhi, Klinkenberger, Hughes, Blunt & Reitemeijer, 2013; Cornelius, Dmochowski, Boyer, St. Lawrence, Lightfoot, & Moore, 2013; Divecha, Divney, Ickovics, & Krenshaw, 2012; Guillamos-Ramos, Lee, Kantor, Levine, Baum, Johnsen, 2014; Roberto, Zimmerman, Carlyle, & Abner, 2007; Whitely et al., 2011; Young & Rice, 2011). Seven of the thirteen studies used social media to recruit participants (Bull et al., 2012; Bull et al., 2009; Dowshen, Lee, Lehman, Castillo, & Mollen., 2015; Gilbert et al., 2005; Jones et al 2012; Moreno VanderStoep, Parks, Zimmerman, Kurth, & Christakis, 2009; Moreno, Parks, & Zimmerman, 2009). The majority of the interventions (57%) took place in urban areas (n=7) (Bull et al., 2012; Bull et al., 2009; Cornelius et al., 2013; Dowshen et al., 2015; Moreno et al., 2009; 2004; Young & Rice, 2011).

In terms of age, one study consisted of adolescents ages 11-14 (Dowshen et al., 2015). Seven studies were comprised of middle adolescents ages 15-18 (Buhi et al., 2013; Cornelius et al., 2013; Dowshen et. al., 2015; Gilbert et al., 2005; Jones et al., 2012; Roberto et al., 2007; Whitely et al., 2011). Six studies contained late adolescents ages 19-24 years of age (Bull et al.,

2012; Bull et al., 2009; Divecha et al., 2012; Moreno et al., 2009; Moreno et al., 2009; Young & Rice; 2011).

The percentage of adolescent males in each study ranged from 26%-65%, with 6 of the thirteen studies comprising greater than 40% of adolescent males (Bull et al., 2012; Cornelius et al., 2013; Moreno et al., 2009; Roberto et al., 2007; Whitely et al., 2011; Young & Rice, 2011). Adolescent females comprised 34%-89% of the samples in the studies. Only one study was composed of 100% African American adolescents (Cornelius et al., 2013), while two studies contained 95% of African American adolescents (Dowshen et al., 2015; Whitely et al., 2011). Using the criterion of African Americans in the United States as a marker of generalizability (13.1% of the population), over half of the studies had greater than 13.1% of African Americans in their sample (Buhi et al., 2013; Divecha et al., 2012; Dowshen et al., 2015; Guillamo-Ramos et al., 2014; Moreno, Parks et al., 2009; Moreno, VanderStoep et al., 2009; Whitely et al., 2011; Young & Rice, 2011); four studies reported less than 13.1%; and one study did not disclose the race/ethnicity percentage of its participant sample (Bull et al., 2012; Bull et al., 2009; Cornelius et al., 2013; Gilbert et al., 2005; Jones et al., 2012;

http://quickfacts.census.gov/qfd/index.html)Only two studies stratified by sex/gender and race/ethnicity (Cornelius et al., 2013 & Whitely et al., 2011). In the next section, several themes are centered on social media, adolescent sexual behavior, and YAAMs.

The impact of Social media on safer sex behaviors

Four intervention studies used social media to specifically demonstrate behavior change (Bull et al, 2009; Bull et al, 2012; Jones et al, 2012; Roberto et al., 2007). In these interventions, the most frequent behavior change was increased condom use. For example, the study conducted by Bull et al. (2012) used a Facebook page to test whether the tendency for condom use would

increase or decrease. The population (n=1,578) consisted of late adolescents living in a metropolitan area (mean age 19.7; SD for control = 2.1 and SD for intervention = 2.0), which included 13.9% of African American adolescent males. The Facebook page called $Just\ us$, was created for the intervention group and included 8 general topics related to sexual health such as expectations for healthy relationships and condom negotiation skills (Bull et al., 2012). In contrast, the control group had a Facebook page designed to post general information about the weather and current events. No sexual health education information was displayed on the control page. Results indicated that at 2 months the intervention group was more likely to use condoms at last time of sex than the control group (p=. 004, intervention 68% vs. control 56%) (Bull et al., 2012). Although the study showed significant results at 2 months, there were no significant differences at the 6-month follow up between the control and intervention group (Bull et al., 2012).

Three other studies showed that condom use behaviors increased among adolescent populations. The study done by Bull et al., (2009), demonstrated condom norms were significant (p = .06). While Roberto et al., (2007), revealed that participants had greater condom self-efficacy and negotiation skills (p = .02), and Jones et al., (2012), showed that in their study participants use of condoms improved by 23%. However, the increase in condom use behavior overall was not sustained longer than 3 months in any study.

A longitudinal study (n=40) conducted by Cornelius et al. (2013) examined the feasibility and acceptability of the multimedia mobile cell phone (MCP) used concurrently with a face-to-face prevention curriculum. This study used social media in conjunction with an evidence-based intervention (BART- Become a Responsible Teen). MCP was used to enhance the intervention as a way to reinforce content and maintain communication with the participants during the

downtime before the posttest was administered (Cornelius et al., 2013). Using MCP, the intervention employed blogging, chatting, text messaging, and sending pictures via text (Cornelius et al., 2013). The population in this study was 100% African American from an urban community, and was comprised of 47.5% male with a mean age of 15.4 years old (SD of \pm 1.7 years), (Cornelius et al., 2013). Results showed positive changes in HIV knowledge (p =. 05), attitudes (p =. 007), increased condom use and decreased risk behaviors (Cornelius et al., 2013). Additionally, perceived risk was positively associated with age (p =. 03) and time (p =. 009) (Cornelius et al., 2013). This study demonstrated the utility of social media as an additional way to support behavior change and a way to continue to engage teens. Although the study was 100% African American and included males, the sample size was small and may not be generalizable. There was no control group and only a three-month follow up, therefore, it is difficult to say whether this approach can result in long-term behavior change effects (Cornelius et al., 2013).

A study conducted by Moreno et al. (2009) targeted low-income urban youth with diminished access to clinical care and assessed if a "cautionary" message sent from a healthcare provider via MySpace could reduce adolescent displays of risky behavior. The study randomized and targeted late adolescents (*N*=190), 58.4% male. Only 75% of the entire sample reported their ethnicity, of which 51.6% were African American. Once a risky behavior was posted (i.e., posting messages about previous sexual experiences) on their MySpace profile, an online email was sent to the subject via their MySpace personal messaging account regarding the nature of the risky behavior. An email with resources was then provided with information about STIs and testing sites. The control group was only observed for risky online postings. Email messages were not sent to the control group. Results showed that at three months, these risky online postings decreased in the intervention group versus the control group (13.7% vs. 5.3%).

Additionally, the odds of removing all sex references/online displays post intervention were 4.2 times higher in the intervention versus the control group. The MySpace study findings indicated that using social media to decrease risky online postings was effective and increased awareness that female youth are considerably more at risk than males for adverse outcomes dealing with sexual solicitation and sexual assault (Moreno et. al., 2009). However, the study lacked clarity on why adolescent females are at greater risk than adolescent males or any other subset adolescent population. The Social Cognitive Theory was referenced but it was unclear as to how it was used in the study because concepts were not sufficiently defined. Future research is needed to assess how theoretical and demographic variables (i.e., gender, age, sexual orientation) contribute to online risk behavior.

Although the remaining six studies did not demonstrate changes in adolescent sexual behavior, the studies did show an increase in the variables predicted to change behavior. The self-efficacy variables included the following: condom negotiation self-efficacy and situational self-efficacy (Roberto et al., 2007). Other studies described sexual risk behavior displayed on social media, decreased rate of STIs with social media use, increased testing for STIs/HIV among YAAMs and perceived risk and self efficacy (Cornelius et al., 2013; Dowshen et al., 2015; Jones et al., 2012; Moreno et al., 2009; Whitely et al., 2011). In the following section the types of social media African American adolescents found to be useful and/ or accessible are presented.

Use of social media in research studies with African American adolescents

Social media is increasingly being used in research studies with African American adolescents. Statistics indicate that 92% of African American teens access the Internet via cell phone and with the increase of cell phone and Smartphone ownership within African American

adolescent communities, marketers and health organizations are now using this as a method to reach to this population (Cornelius et al., 2013, Madden et al., 2013; Smith, 2014). Within this search, seven studies examined specific types of social media with African American adolescents. Four studies found that adolescents were frequently using MySpace (Divecha et al., 2012; Moreno et al., 2009; Whitely et al., 2011; Young & Rice, 2011). For example, findings in an intervention done by Whitely et al., (2011), comprised of a 96% (N=1,518) African American middle adolescent population (mean age 15.31, SD=1.2), of whom were 38% male. This study, also stratified by race and gender, found that 90% of the participants used cell phones, 60% of these youth accessed social media sites via cell phone, and that MySpace was the most popular. Results indicate that greater use of these technologies (cell phone and social media/networking sites) may be associated with higher risk behaviors in regards to HIV/STIs among teenagers (Whitely et al., 2011). The study also found that adolescent males who used the Internet were associated with greater impulsivity (p<. 001), higher history of sexual intercourse (oral/anal/vaginal) (p=. 007), higher depression (p<. 001), and higher sensation seeking (p<. 001) (Whitely et al., 2011). This study concluded that using the Internet along with cell phones might be a useful medium to target health promotion and risk reduction efforts among African American adolescent youth, including those at risk for diagnosis and treatment of STIs (Whitely et al., 2011). One strength of this study was that the measures used were strong with a Cronbach alpha ranging from .66 -.90 (4 of 5 were above .70). Another strength was the large number of African American youth in the study, from predominantly African American regions (e.g., Macon, GA, 67.9% African American). Limitations of this study included a sample bias of students that were selected from the Parent Study Project, a group proactive in educating their

children about HIV. Another limitation was the lack of a theoretical framework that might help predict behavior change.

Facebook was used in four studies (Bull et al., 2012; Divecha et al., 2013; Dowshen et al., 2015; Young & Rice, 2013) and was found to be very popular among African American adolescents. Youth in the Dowshen et al., (2015) study (N=1,500) were ages 13-17, 95% African American and living in West Philadelphia. The main purpose of the campaign was to improve knowledge and increase STI/HIV testing behaviors among adolescents (Dowshen et al., 2015). The study wanted to recruit individuals to get tested and post another campaign for follow-up and treatment. The campaign used focus groups of youth between 13-17 years to pick the social media used and to design the website to address privacy concerns, parents, fears/stigma, and the importance of getting tested (Dowshen et al., 2015). The website designed used Google Analytics to keep track of users and website views (Dowshen et al., 2015). Basic sexual health information, surveys, and other important directives could be found on the site. Facebook, Twitter, Instagram, and YouTube were all used for promotion and linked to the website (Dowshen et al., 2015). Results found that 46% of these youth had never received any type of STI testing and 70% had committed to testing again within the next 6 months (Dowshen et al., 2015). There was a large increase in testing for HIV and Syphilis testing. (p = .01), both pre and post campaign. The strength of this study was meeting the youth at their level and reaching out to them in a creative way designed by youth. Also post-campaign 39.5% of YAAMs (vs. 22.8% of YAAMS pre-campaign) were reached (Dowshen et al., 2015). A challenge again, like in the other studies, included the use of STI testing patterns and the lack of follow up beyond 6 months.

In another study, Divecha et al., 2013 found both Facebook and MySpace were common social media sites used by African American youth. In a sample composed of late adolescent

pregnant females and their romantically involved and biologically parent partners (46% African American, N=94). Findings indicated that more than 70% of participants were African American, pregnant, and were romantically involved, used these sites mostly, and were found the sites easy to use particularly via cell phone (Divecha et al., 2012). African American adolescents were the largest portion (59%) of participants willing to communicate about general sexual health via social media (Divecha et al., 2012). Overall, 71% of the participants stated they would rather communicate about sex privately with close friends or family members (Divecha et al., 2012). It was concluded that media technologies could help to increase access to services and information among teenagers (Divecha et al., 2012). Strengths of this study included strong measures (with Cronbach alpha reliability values ranging from .71-.90), and the use of a twelvemonth post survey, which showed promise for long-term effects and accessibility. Limitations of this study included lack of theoretical grounding, self-reported data, and unrepresentative population of adolescents or young adults.

The remaining three studies showed mixed results. Blogging, chatting online (through AOL, Google, and Yahoo), and videos were all used among African American adolescents (Buhi et al., 2013; Cornelius et al., 2013; Whitely et al., 2011). For example, Buhi et al., (2013) found text messaging to be the most popular method to communicate about STI prevention among AA adolescents, followed by instant messaging. Using social media sites was the third most popular method to communicate about STI prevention among adolescents (Buhi et al., 2013). While this study focused on text messaging, Buhi et al. (2013) found that text messaging and social media were an acceptable and useful way for teenagers to receive sexual health information (p=. 004). The authors concluded that the next generation of STI prevention and sexual health programs

and/or studies must take advantage of newer technologies like texting, instant messaging and social media to maximize effectiveness in reaching adolescents (Buhi et al., 2013).

Content best transmitted via social media

Being informed about STIs can assist adolescents in making healthy decisions about their sexual health. Of the four studies that discussed content (Gilbert et al., 2005; Guillamo-Ramos, 2014, Moreno 2009; Young &Rice 2013) two of which provided evidence specifically on the type of sexual content that African American adolescents are seeking out (Gilbert et al., 2005; and Guillamo-Ramos, 2014). Sexual health information topics sought out by adolescents on websites and social media included: puberty (physical and emotional changes) p = 0.00, virginity, p = .001, and general STI information (statistics, definitions), p = .002 (Gilbert et al., 2005). Males were more likely to seek out content about puberty, and teen sexuality overall, however, this behavior varied by age, with younger males more interested in puberty, and older males more interested in contraception (Gilbert et al., 2005). African American teens were more interested in content about a STI prevention, teen pregnancy, and virginity, and were less likely to seek out specific STI information (e.g., HPV) than Caucasian adolescents. Results from this study were stratified by age and gender, but not by ethnicity or race. Strengths of this study were that the data revealed information about preferences around sensitive information for teens. The study also showed that age is significant as health information choice may change with age. Limitations included a lack of discussion about how race, gender, and age were linked in terms of best content, venue, or dissemination of information. Moreover, the African American adolescent population represented 10.7% in the study and, consequently may not be generalizable to this population.

In a qualitative study, which included both parent and adolescents, Guillamo-Ramos et

al., (2014) sought to expand the knowledge of African American and Latino families using online and mobile technologies for sexual health interventions. The study was comprised of 106 youth ages 13-17 (mean age 15), of which 52.8% were African American and 34.5% YAAMS (Guillamo-Ramos et al., 2014). While the results from this study described themes around use of digital media and online tools and distinct components of creating a family intervention, the study also suggested how the content from these sites could be shaped. Participants described positive aspects of content such as convenience and immediacy of information (Guillamo-Ramos et al., 2014). Suggestions for content for an intervention included: tailored information; anonymity; creating a comfortable space to promote conversation; and making sure that content is both generational and culturally specific (Guillamo-Ramos et al., 2014). Additionally, participants recommended that information may be used as a secondary source of information, and that a parent, friend, or close relative should be the primary source sexual health information (Guillamo-Ramos et al., 2014). This qualitative study highlighted a better way for adolescents and their parents to communicate about sexual health via technology. Further, it highlighted that parents are perceived by teens as the trusted support figure. However, this study did not followup with teens or parents, and did not clearly include theoretical components. Although family interventions are needed, separate interventions, using technology like social media, need to be designed for youth to take charge of their own health as they emerge into adulthood.

The remaining two studies examined which sexual behaviors were displayed most frequently and which were associated with positive and negative behaviors (Moreno et al. 2009), and general conversations discussed online related to sexual health (Young & Rice 2011).

Young and Rice (2011) discovered by that those who met a sexual partner online using various types of social media were found to exchange sex for food, shelter and other items with these

partners to survive on the streets p<.05)at the three month follow up. On the other hand, those who used social media to talk about love and/or safe sex may have been more aware of their risks (Young & Rice, 2011) (p<.01). Understanding the types of sexual behaviors were displayed, or how African American adolescents discuss sex, will be helpful in developing content and or curriculum for future research interventions.

In summary, the limited studies included in this integrative review illustrated that social media could be important for delivery of sexual health information, as well as interventions aimed to influence sexual behavior. It is feasible and it is used by African American adolescents and, in particular, YAAMs. First, despite the limited number of studies reviewed, social media was found to affect behavior change, specifically, increased condom use (Bull et al., 2009; Bull et al., 2012; Jones et al., 2012; Roberto et al., 2007). Second, studies demonstrated that selfefficacy, knowledge, and favorable attitudes around HIV/STI prevention could increase through the use of social media (Cornelius et al., 2013; Roberto et al., 2007). Studies also demonstrated that social media could decrease adolescents' display of risky sexual behavior and sexual reference postings online when monitored by a healthcare provider (Moreno et al., 2009). Furthermore, it was found that African American teens sought out information related to STI prevention, teen pregnancy, and virginity (Gilbert et al., 2005). Last, MySpace and Facebook were found to be the most widely used social media sites for interventions with African American teenagers and YAAMs (Bull et al., 2012; Divecha et al., 2013; Moreno et al., 2007; Whitely et al., 2011; Young & Rice, 2011).

Discussion

Studies from the review showed that social media is an agent in promoting behavior change in the area of condom use (Bull et al., 2009; Bull et al., 2012; Jones et al., 2012; Roberto

et al., 2007). As indicated in the *Just Us* study (Bull et al., 2012), significant results were identified for increased condom use at 2 months. There were no significant differences, however at the six-month follow-up between the control and intervention group and no follow up thereafter (Bull et al., 2012). While the approach of using social media was successful in changing behavior, addressing how to sustain this behavior over time must be better understood. Similarly, in the Cornelius (2011) study, messages were sent weekly in a multimedia format (i.e., text, social media) to the teens to reinforce the evidence-based curriculum being taught in the program. Although the study was 100% African American and included males, the sample size was small and it is inconclusive whether it would be generalizable to other African American youth. There was no control group and they only had a three-month follow-up. Therefore, again, it is difficult to say whether this approach could result in long-term behavior change effects (Cornelius et al., 2013). It has been found in research using social media and other forms of technology, particularly in the clinical trial format, that only short-term behavior exists within these types of studies (Allison, S., Bauermeister, J., Bull, S., Lightfoot, M., Mustanski, B., Shegog, R. & Levine, D., 2012). Reasons for lack of sustained behavior varied in this review. However, examples like such as attention span, lack of increased incentives to promote continued social media use, and mismatch of interventions have been listed in other studies with youth as possible reasons for unsuccessful follow-up (Allison et al., 2012). These are items that should be taken into consideration for staying in contact with YAAMS, and addressed prior to initiating the study, as technology and speed at which youth use and engagement in social media continue to change rapidly.

Results from this review also showed that theoretical clarity may be necessary to understand how the study and variables can predict behavior change. In the MySpace study

(Moreno et al., 2009) the Social Cognitive Theory was referenced, but it was unclear as to how the theory was used in the study because concepts were not sufficiently defined. Similarly, in the Guillamos–Ramos (2014) study, the theoretical components were not clearly indicated. Theories help with understanding in greater detail as to why certain communities and populations are at higher risk for certain health behaviors (Allison et al., 2012). A clearly defined theory is important because it helps the researcher to construct appropriate interventions that address these disparities that need to be understood from the beginning (Allison et al., 2012). With respect to the aforementioned studies, future research is needed to assess theoretical and demographic variables (i.e., gender, age, sexual orientation) that may contribute to risk behavior along with their mechanism of action (Allison et al., 2012).

Current research on African American adolescent suggests that Facebook and Twitter continue to dominate as the social media of choice among African American adolescents (Albarran, 2013; Madden, et al., 2013; Smith, 2014). The social media sites utilized the in these interventions with adolescents were MySpace and Facebook (Bull et al., 2012; Buhi et al., 2013; Divecha et al., 2013; Dowshen et al., 2013; Moreno et al., 2009; Whitely et al., 2011; Young & Rice, 2011). Current platforms need to reach out to these youth using newer types of social media. This is important not only for getting a rich and diverse sample, but also for follow-up and response, as well as advertising information, direction, and incentives (Allison et al., 2012).

Content is crucial in developing interventions. As seen in the Young and Rice (2011) study, understanding the types of sexual behaviors that were displayed, or how African American adolescents discuss sex, can be helpful in developing content and/or curriculum for future research interventions. Content must be tailored, accessible, and frequently updated, which may be useful for any adolescent group.

Limitations in this review include articles that did not always clearly explicate which social media platform was used and the mechanism in which the intervention used social media. Definitions of social media were not congruent with each program. Although articles continue to publish in a rapid rate as social media changes, there were less articles available pertaining to risk behavior and more involving behaviors such as physical activity or depression. Significant results with short-term outcomes were noted in most studies.

Despite these limitations, youth in these studies were without a doubt engaged. Social media brought a new dimension to addressing the concerns that circulate around sexual risk behavior in unique populations like young African American males. If used appropriately, social media will be a powerful tool that will create more opportunities to address disparities in health among specific populations, including our youth.

Implications for future research

The findings of these studies have several implications that could improve research practice on YAAMs and sexual behavior. There have been few studies that focus solely on young African American males and their sexual risk taking behaviors. One reason is research efforts have been directed more towards women and adolescent girls in creating prevention and intervention programs to reduce their sexual risk behaviors (Jemmott, Jemmott, & Fong 1998; Smith, Guthrie, &Oakley, 2005). As a result, sexual behavior in adolescent boys continues to be poorly understood (Smith, Guthrie & Oakley, 2005). Thus, researchers must try to recruit and improve enrollment of YAAMs in research studies to be more reflective of the US Census and their community.

Successful recruitment must come from a strong community base to address the populations need. Opinion leaders can promote the benefits of such prevention programs and

improve recruitment. Qualitative studies using focus groups need to be established from these recruitment efforts so that we better understand what youth want and need from these programs. Larger studies that are more generalizable are needed to help advance the science in this area.

Psychometric evaluation for measures must be included in research studies. Measures selected should be valid and reliable. Furthermore, when measuring outcomes it would be helpful if results included gender-based information. Analyzing findings by race and gender can help determine appropriate venues for getting health information disseminated (Gilbert et al., 2005). Using these standardized approaches will help find reliable methods to evaluate long-term behavior effects with social media in this population. Understanding long-term behavior change and its preservation may lead to more suitable interventions that can improve health outcomes for young African American males.

While Facebook and MySpace have been reported to be popular to use in research studies with African Americans, more research is needed to explore newer media types such as Twitter and Snapchat. It should be noted that all roads lead back to Facebook, so while it has been suggested that other media types be explored, Facebook still remains a safe option to use in research studies. Likewise, linking social media sites together with Facebook can broaden the reach for recruiting and marketing efforts.

In conclusion, these studies indicate that social media can assist African American adolescents and, in particular, YAAMs in making safer sex decisions and decrease sexual risk. These studies also show the relationship between social media and sexual risk behavior, content, and types of social media used by this population. Using social media may be a great mechanism for reaching diverse populations, especially those who have minimal access to clinical care (Moreno et. al., 2009). Gilbert et al. (2005) states that social media may hold the key to knowing

the how, when, why and what type of sexual health information needed by adolescents. Bull et al. (2012) states that there are few settings solely devoted to educating youth about sexual health thus social media provides a safe space for youth to express themselves. It may provide salient information about understanding adolescent sexual behaviors, decision-making, and identity formation and therefore should be used to reach a population like YAAMs that face such a health disparity.

Table 2.1

Classification of Social Media

	Blogging	Content	Social	Virtual Social/
Websites	(µblog)	Communities	Networking Sites	Game/ World
Wikipedia/ Wikia	*Twitter	YouTube	*Facebook	Second Life
*AskFm	*Tumblr	TED	Yelp	Smeet
answer.com	WordPress	Vimeo	The new MySpace	InWorldz
About.com	Blogger (Google)	*Snapchat	Linkedin	IMVu
Encarta	Quora	*Vine	Academia.edu	
	Facebook Notes	Pheed	*Instagram	
	Square Space	Flickr	Pinterest	
	LinkedIn	Slideshare	*Kik	
		TrendSpottr	Meetup	

Note. * Bold - Preferred adolescent sites as of 10/15 (Lenhart, 2015; Stern, 2013) * Not inclusive of all social media sites that exist today

Table 2.2

Summary of Included 13 Studies

Author, Year	Design	Purpose	Sample	Social Media/ Technology	Theory	Findings
Evaluating a teen STD prevention website. Gilbert, K., Temby, J., Rogers, B.A (2005). Journal of Adolescent Health	Pilot Study, RCT	Assess health information seeking behaviors, measuring STD prevention information needs and respondents' org.	N=1242, 26.2 % male, 73.8% female, middle adolescents 13- 17, 10.7% African American	Google, Yahoo, MSN, Chartrooms	No Theory	Most frequent topic of interests was (1) sexual expression (2) teen sexuality (3) virginity (4) relationships (5) contraception, (6) STD information. These varied by age and gender. Males were more likely to seek out information about puberty and teen sexuality. Younger male teens were more interested in puberty; older male teens were more interested in contraception. AA teens were more likely to seek STD prevention, teen pregnancy, and virginity information and less likely information about specific STDs than white teens.

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose S	PROTECTION OF THE PERSONS AND A SECOND SECON	l Media/ Theory nology	у	Findings
A computer-based approach to preventing pregnancy, STD, and HIV in rural adolescents. Roberto, A., Zimmerman, R., Carlyle, K., Abner, E. (2007). Journal of Health Communication, 12, 53-76.	RCT	To evaluate a computer- and Internet-based health communication intervention designed to prevent pregnancy, STDs, 1 and HIV in rural adolescents	N=149, 58.3% female, 41.7% male, middle adolescent age group mean age 15.5 <4% AA, rural adolescents	Computer program with 6 online activities and CD-ROM provided in 2 randomly assigned rural school settings	Extended Parallel Process Theory	Intervention indicated significant results for experiment had greater knowlege: H1: Condom Negotiation (.02), H2: More favorable attitudes toward waiting to have sex (.01) and H4: greater situational self-efficacy (.01). No difference between experiment and control for: H3: Condom self efficacy (.00), Control scored higher for: Susceptibility (.01) Other: 18% of the control vs. 8% of the experimental group initiated sex between pre/post test. Those who were not exposed to the intervention were three times more likely to initiate sex between the pre/post tests. 90% of the students completed at least 1/6 module. Reported that they learned something new.

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose S	SECURITY CONTRACTOR	l Media/ Theory mology	y	Findings
Effects of an internet based intervention for HIV Prevention. Bull, S., Pratte, K., Whitsell, N., Reitemijer, C., McFarlane, M., (2009). AIDS Behavior, 13,474-487	RCT	To reach a large number of individuals about HIV prevention using a theoretically driven interactive computer program	N = 574 285 (23.5% male, 4.2% AA) intervention, 289 (21.5% male, 4.5% AA) control, Late adolescents (18-24), Mean age = 21,	Computer program administered through the Internet on a kiosk in a clinic setting	Social Cognitive Theory, Theory of Reasoned Action	The condom norms construct wa the only factor that had a direct impact on the proportion of protected acts for this sample. The clinic sample: 59% of this model explained condom use behaviors. The only factor with an effect on the outcome of protected acts was condom norms. " (P =0.06)

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose S		al Media/ chnology	Theory	Findings
Reducing at-risk adolescents' display of risk behavior on a social networking web site. Moreno, M., VanderStoep, A. Parks, M., Zimmerman, F., Kurth, A., & Christakis, D. (2009) Archives Pediatric, Adolescent Medicine, 163, 35-44	RCT	The purpose of this study was to (1) assess the intervention's ability to affect an at-risk population with diminished access to clinical care owing to lack of resources or confidentiality concerns. H1: that a cautionary online message from a physician could reduce older at-risk adolescents 'displays of risk behavior on a social networking site.	N= 190, late adolescent population. 18- 20 year olds, 58.4% male, only 75% of th 190 reported their ethnicity and of that 75%, 51.6% were AA, sample Population randomly selected from US. Census from 10 urban areas	MySpace	Social Cognitive Theory	At Baseline: 54.2% of subject's referenced sex and 85.3% referenced substance use on their social networking site profiles. Post intervention: The proportion of profiles in which references decreased to 0 was 13.7% in the intervention group vs. 5.3% in the control group for sex (P = .05) and 26.0% vs. 22% for substance use (P = .61)

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose	and the second of the second o	cial Media/ echnology	Theory	Findings
Display of Health Risk Behaviors on MySpace by Adolescents. Moreno, M., Parks, M. Zimmerman, F. (2009). Archives of Pediatric and Adolescent Medicine, 1, 35-41	Cross Sectional Study	To determine the prevalence and associations among displayed information that suggests sexual behavior, substance use, and violence on a random sample of the self-reported 18-year-old adolescents' publicly accessible MySpace			No theory. Used the Media Practice Model	A total of 270 (54%) of profiles contained risk behavior information: 120 (24.0%) referenced sexual behaviors, 205 (41%) referenced substance abus and 72 (14.4%) referenced violence. Female adolescents were less likely to display violence references. Reporting sexual orientation other that "straight" was associated with increased references to sexual behavior. Displaying church or religious involvement was associated with decreased display of all outcomes Displaying a sport or hobby was associated with decrease reference to violence.

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose Sa	(A)	Media/ Theory nology		Findings
African American adolescents and new media: Associations with HIV/STI risk behavior and psychosocial variables. Whitely, L., Brown, K., Swenson, R., Runner, D., DiClemente, R., Salazar, L., Vanable, P., Carey, M., Valios, R., (2011). Ethnicity & Disease, 21, 216-22	RCT	To (1) Investigate if frequency of cell phone and internet use relates to psychological constructs (depression, life satisfaction and impulsivity. (2) To examine if the frequency of cell phone use r/t HIV/STI risk behaviors	N =1,518 AA, middle adolescent, ages 13-18, Mean age 15.31 years 96% AA, 4% Latino, 588 males, 930 females. From two northeast cities and two southeast US cities	Participants completed assessment measures using a laptop, computer assisted self-interview (ACASI) used a variety of scales to assess new media use among teens i.e. Internet frequency scale	No Theory	Over 90% of AA adolescents used cell phones everyday or most days and 60% used social networking sites everyday or most days (in this study 96% use MySpace). Greater frequency of cell phone use was associated with sexual sensation seeking (p=. 000) risker peer sexual norms (p=. 000), and impulsivity (p=. 106). Greater frequency of internet use was associated with a history of oral/vaginal/anal sex and sexual sensation seeking (p=.000). More specifically poorer school performance (Grades C's and below) was associated with greater sexual sensation seeking, risker peer sexual norms, greater impulsivity and decreased life satisfaction but not history of depression and history of oral/vaginal/anal sex.

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose S	erroral and a second	l Media/ Theor mology	У	Findings
Online Social Network Technologies, HIV knowledge, and sexual risk and testing behaviors among homeless youth, Young & Rice (2011) AIDS Behavior, 15,253-260	Quasi- Experimental	Intervention looks at relationship between online social network usage and HIV risk behaviors, knowledge about HIV, and STI testing among urban homeless youth.	N= 201, 34% female, 65%male, and 1.4% transgender, 45% AA, ages 13-24, Average age 21.4 years, homeless, living in Los Angeles, urban	ACASI survey pertaining to social networking technology use, demographics, sex and drug risk-taking, living situation, service utilization.	No Theory	Findings: online networks are popular among homeless youth (2) most widely used networks = Facebook an MySpace, Conversations = videos, drinking, drugs and parties, sex, love and relationships, being homeless and school (3) Sex behaviors - 77% did not meet sex partner online in 3m, 87% did not exchange money, drugs, sex etc for a place to stay within the last 3m. 79% of the sample had been tested for and STD. From 1-22, most scored about 15, unsure of avg. (4) 60% of the heterosexual male population had an STI test

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose S	servered Terrores accessions	Media/ nology	Theory		Findings
Social media-delivered sexual health intervention. A cluster randomized controlled trial. Bull, S., Levine, D., Black, S., Schimeige, S. & Santelli, J., (2012). American Journal of Preventative Medicine, 43, 467-474	Cluster RCT	To determine whether STI prevention messages delivered via Facebook are efficacious in promoting condom use at 2 and 6 months.	n=652 enrolled in study. Ages 16-25, average age 19.7,. In the study 35% were African- American. 108 AA males in the intervention 112 AA males in the control study.	Facebook	P	heory of lanned sehavior	Findings: Time by treatment effects were observed at 2months for condom use (intervention 68% vs. control 56%, p=0.04) and proportion of sex acts protected by condoms (intervention 63% vs. control 57%, p=0.03) where intervention participation reduced the tendency for condom use to decrease over time. No effects were seen at 6 months.

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose	ACCOUNT ACCOUNT ACCOUNT	al Media/ hnology	Theory		Findings
The Potential influence of Social media intervention on risky sexual behavior and chlamydia incidence. Jones, K. Baldwin, K., & Lewis, R. (2012), Journal of Community Health Nursing, 2, 106-120	Descriptive pilot study	A descriptive pilot study was to evaluate evidence based social networking intervention aimed at reducing incidence of Chlamydia among 15-24 year olds.	and late adolescents ages 15-24 87% of population between 18-24, 30% male, did not disclose	Facebook		Health Promotion Model	Findings included 23% self reported increase in condom utilization, and 54% reduction in positive Chlamydia cases among 15-17 year olds

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose S	STATE OF THE PERSON STATE	l Media/ Theor nology	У	Findings
Text-message enhanced HIV intervention for African American adolescents: A feasibility study. Cornelius, J., Dmochowski, J., Boyer, C., St. Lawrence, J., Lightfoot, M., & Moore, M.(2013). Journal of Association of nurses in AIDS Care, 24, 256-267	Longitudinal/ One group comparison Study	To examine the feasibility and acceptability of the multimedia MCP (mobile cell phone) approach as an adjunct way to a face-to face prevention curriculum and to determine whether there was suggestive evidence of intervention related changes in the outcome variables	N= 40 African American Adolescents ages 13-18, 52.5% female, 47.5 male. Middle adolescents Mean age 15.4 years 100% AA subjects. From an urban area	Multimedia (picture, text, blog) in conjunction with BART.	Theory of Planned Behavior	Knowledge of HIV was associated with age =p=. 05, older participants (16-18 years of age) had higher HIV knowledge than younger participants. Attitudes towards condoms were associated with gender and age, p=. 007, older participants had more positive attitudes than younger participants, males and females had similar attitudes. Perceived risk, was associated with age p=.03, and time p=.009, participant confidence in avoiding affection increased at 3 months follow-up. No association with perceived risk of getting HIV/AIDs with time. Sexually experienced adolescents on the average were 15 years old

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose S	STATE OF THE PROPERTY OF THE P	Media/ Theory nology	7	Findings
Text-message enhanced HIV intervention for African American adolescents: A feasibility study. Cornelius, J., Dmochowski, J., Boyer, C., St. Lawrence, J., Lightfoot, M., & Moore, M.(2013). Journal of Association of nurses in AIDS Care, 24, 256-267	Longitudinal/ One group comparison Study	To examine the feasibility and acceptability of the multimedia MCP (mobile cell phone) approach as an adjunct way to a face-to face prevention curriculum and to determine whether there was suggestive evidence of intervention related changes in the outcome variables	N= 40 African American Adolescents ages 13-18, 52.5% female, 47.5 male. Middle adolescents Mean age 15.4 years 100% AA subjects. From an urban area	Multimedia (picture, text, blog) in conjunction with BART.	Theory of Planned Behavior	Knowledge of HIV was associated with age =p=. 05, older participants (16-18 years of age) had higher HIV knowledge than younger participants. Attitudes towards condoms were associated with gender and age, p=. 007, older participants had more positive attitudes than younger participants, males and females had similar attitudes. Perceived risk, was associated with age p=.03, and time p=.009, participant confidence in avoiding affection increased at 3 months follow-up. No association with perceived risk of getting HIV/AIDs with time. Sexually experienced adolescents on the average were 15 years old

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose Sa		l Media/ Theory mology	ý	Findings
Teens' use of digital technologies and preferences for receiving STD prevention and Sexual health promotion messages: Implications for the next generation of intervention initiatives. Buhi E., Klinkenberger, N., Hughes, S., Blunt, H. & Rietmeijer, C., (2013). Sexually Transmitted Diseases, 40, 52-54	RCT	To better understand teens' communication technology use and the opportunities it presents for STD prevention/sexual health promotion.	N=273, Female 89.4%, Male 11.6%, African Americans in study (57) or 20.9% Mean age 17.6 Years. Middle adolescents	Used ACASI (audio computer assisted self interview) to assess internet activities and use	Theory Unclear	Compared with teens without an STD, teens with a current STD were more likely/very likely to us a text message service to have questions about sexual health information answered X2 1, N=266)=4.21, p=.004) as compared to other modes of communication such as instant messenger (AIM, Google, Yahoo) or through social networking sites (Facebook, MySpace). Text messages was the #1 mode to communicate with friends/socialize outside of school Social networking was the #3 mode of communication.

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose Sa	entrated account of the contract of the contra	l Media/ nology	Theory	Findings
IknowUshould2- Feasibility of a Youth- Driven Social Media Campaign to Promote STI and HIV Testing Among Adolescents in Philadelphia. Dowshen et al 2015.	Longitudinal	The primary outcome of interest was feasibility as defined by the ability to reach youth in the target age range through various multimedia and engage them in campaign activities. Specifically, we tracked social media use, website traffic, and attendance at campaign-related events. A minimum of bi-weekly meetings was held throughout a 3-month period, during which campaign development occurred in an iterative process.	Youth in Philadelphia between 13 and 17. Over 1,500 unique individuals during first six months. Pre-Campaign: White 2.2, Black 95.0% Asian .3 Multiracial .1 Unknown 2.4, Total 100.0, Ethnicity: Hispanic/Latino 2.0 Non-Hispanic/Latino 80.2 Unknown 17.8 Total 100.0 Male 22.8 Female 77.2 Total 100.0 Post-campaign-White 2.0	Facebook Instagram Twitter, a YouTube	n, and	Over 1,500 youth were reached via social media. Survey results showed 46 % of youth had never been tested, but 70 % intended to test in the next 6 months. While the total number of GC/CT tests con- ducted and positive results were not significantly different pre- and post-campaign, there was a large increase in the proportion of visits at which Syphilis (5.4 vs. 18.8 %; p\0.01) and HIV (5.4 vs. 19.0 %; p\0.01) testing was conducted post-campaign launch.

Table 2.2

Summary of Included 13 Studies (Continued)

Author, Year	Design	Purpose	Sample	Social Media/ Technology	Theory	Findings
			Black 9 Asian .	5		
	Multi-racial .2					
	Unknown 2.4 Total 100.0,					
	Hispanic/Latino					
		2.3 Non-				
		Hispanic/Latino 96.5 Unknown				
				nknown al 100.0		
			Valid	ai 100.0		
			Male 3	9.5		
			Female	60.5		
			Total 1	00.0		

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CHAPTER 3

Examining Attitudes, Norms, and Perceived Control: The Potential for the Use of Social Media as the a Basis for Condom Use Interaction for Young African American Males

Abstract

Background: Gender-based data indicates that within-race STI rate disparities exist both with adolescent and young adult African American males ages 18 to 24 exhibiting higher rates of STIs than African American females. Social media may prove to be a valuable tool for delivering theory-driven messages about sexual health knowledge and behaviors, including condom usage, directly to YAAMs in promoting safer sex behaviors for this population

Purpose: To examine the current attitudes, norms and perceived controls that are related to the influence of social media on condom use among YAAMs ages 18-21

Methods: Group-depth interviews (N=9), participants (N=41) mean age 19, SD + 1.2) were conducted in metro Detroit to understand the "who, what and where" regarding social media for condom use education, and health messages among YAAMs ages 18-21.

Results: The study indicated that most participants had positive attitudes about using social media for condom use education. Participants likes and dislikes about social media being used for sexual health information were revealed, along with important individuals in their life who support or oppose the behavior of using social media for this method. Last, participants identified

characteristics that make social media easy or difficult to use when seeking out sexual health information for condom use.

Conclusion: Social media may prove to be valuable for delivering theory-driven messages directly to YAAMs on sexual health knowledge and behaviors, and on condom usage in particular. With future research, nurses, health care providers, the community, and researchers can better understand the role of social media and be available and present when needed to help youths navigate these channels productively.

Introduction

In spite of promising gains in the availability and utilization of condoms among adolescents in the U.S., African American youths are significantly more likely to engage in risky sexual behaviors and demonstrate persistently higher rates of unintended pregnancies and of sexual transmitted infections (STIs), such as gonorrhea, chlamydia, and syphilis, than their adolescent counterparts in other racial and ethnic groups (Aral, Adimora, & Fenton, 2008; Hamilton and Morris, 2015; Harling et al., 2013; U.S. Department of Health and Human Services, 2015a, 2015b). Rates of gonorrhea among non-Hispanic Black adolescents aged 15 to 19 are roughly four times those of non-Hispanic White adolescents the same age, and rates of chlamydia are more than five times as great. (35,115 compared to 9,327 cases per 100,000 persons for gonorrhea, and 4,151.3 compared to 741.6 cases per 100,000 persons for chlamydia; U.S. Department of Health and Human Services, 2015b).

Gender-based data indicate that within-race STI rate disparities exist as well, with both adolescent and young adult African American males aged 18 to 24 exhibiting higher rates of STIs than African American females and males in other races and ethnicities (U.S. Department of Health and Human Services, 2015a). The reasons for the elevated rates of STIs among African American adolescents are multi-layered and complex; however, lower health literacy and education and limited access to contraceptives and sexual health promotion resources in these and other low socioeconomic status populations are often cited as contributing factors (Aral, Adimora, & Fenton, 2008; Harling et al., 2013; Owusu-Edusei Jr. et al., 2013; Shacham et al., 2015).

Nursing research that addresses the gaps in sexual health within this population and their associated negative outcomes has largely focused on employing theory-based interventions

that target select attitudes and behaviors. These interventions have primarily concentrated on enhancing adolescents' knowledge of the correct and effective use of contraceptives (e.g., how to put on a condom) and limiting their sexual partners (Sales et al., 2012; Morrison-Beedy et al., 2013; Hemmige et al., 2012; Markham et al., 2012). In the past, research on prevention and intervention to reduce people's sexual risk behaviors was more commonly directed toward women and adolescent girls (Jemmott, Jemmott, & Fong, 1998; Smith, Guthrie, & Oakley, 2005). As a result of this lack of research attention, sexual behavior in adolescent males continues to be poorly understood (Smith, Guthrie, & Oakley, 2005).

An additional factor that has altered the sexual health research landscape is the widespread use of social media. Social media platforms, such as Twitter, Facebook, and Instagram, are accessible via virtually any Internet-connected device, including computers, mobile phones, and tablets. Research has shown that adolescents from a broad range of socioeconomic backgrounds use these social media platforms, and indeed rates of usage among Black male adolescents may outpace those of their White and Hispanic counterparts (Lenhart, 2015). Interest in social media for sexual health information has grown because they are a channel through which information about an endless array of issues can be transmitted and received near-instantaneously, making the usage of these and other web-based platforms as tools to communicate and discuss matters of social significance with target populations an attractive and cost-effective option.

Prior research has demonstrated that teens are receptive to the usage of social media to learn about and discuss sexual health and wellness (Bull et al., 2012; Jones et al., 2014; Guse et al., 2012). Most studies have been limited, however, by small sample sizes and a lack of longitudinal analyses to determine whether the effects can be sustained over time. Furthermore,

research on social media has not sufficiently assessed their impact on one of the most vulnerable subgroups of adolescents, young African American males (YAAMs; Jones et al., 2014). Social media may prove to be a valuable tool for delivering theory-driven messages about sexual health knowledge and behaviors, including condom usage, directly to YAAMs. While the theory of planned behavior (TPB) is widely used in sexual health research (Glanz, 2008), there has been limited research on the influence of social media on the attitudes, norms, and perceived control factors of condom usage among YAAMs.

This study was guided by the TPB and used group-depth interviews to investigate these factors among YAAMs ages 18 and 21 recruited primarily from Detroit, Michigan. We chose Detroit as a research site because, as of the most recent census, its population was more than 82% African American, and STI rates there are consistent with the heightened rates seen among African Americans in other states (U.S. Census Bureau, 2015; Michigan Sexually Transmitted Diseases Database, 2015).

The purpose of this study is to contribute to our understanding of YAAMs' experiences with the use of social media and information about condom use. A qualitative design was chosen because YAAMs' needs and preferences regarding social media and their relationships with condom use are unknown, and this method can capture the responses of YAAMs in their own voices. This study also examines the attitudes, norms, and perceived controls that are related to the influence of social media on condom use among YAAMs ages 18 to 21. Answers to these questions should be valuable for future research and potentially for the development of interventions that employ social media to influence safer sexual behavior in this group. Enhancing our knowledge of this phenomenon will not only prove to be useful for African American adolescents, it will strengthen current theory, knowledge, research, and practice about

the usefulness of social media in nursing and other health disciplines, especially in sensitive areas such as safer sex research.

Theory

The process of selecting a theory to guide the group-depth interview requires consideration of both the population and the problem under investigation (Staton, 1993). The TPB was selected as a guiding framework for this research because it has been successful in predicting a wide range of health behaviors, such as health service utilization, substance abuse, HIV/STD prevention behaviors, and contraceptive use (Glanz, 2008). The TPB posits that the best predictor of behavior is a person's intention (Ajzen & Fishbein, 1980, 2005). The TPB looks at the salient beliefs of the population being studied and measures three constructs for determining the likelihood of engaging in a behavior: attitudes, norms, and perceived control (Ajzen & Fishbein, 1980, 2005). This study focused on social media use and condom use. Specifically, the TPB was used to assess these variables through the following questions: What makes it easy or difficult to use social media for condom use education? Who approves or disapproves of this behavior? And how motivated are individuals to comply with important people's opinions and participate in such behavior (Ajzen & Fishbein, 1980, 2005). In addition, the theory examines the salient beliefs or antecedents that may help influence and or motivate YAAMs to use social media for condom use education. In summary, a new opportunity exists to explore social media as a possible platform for changing behavior and providing health education to YAAMs. Learning how social media and behaviors surrounding condom use intersects will help us formulate new research questions and will aid in targeting specific outcomes within this population.

Methods

Participant Recruitment

All study procedures were reviewed and authorized by the appropriate Institutional Review Boards at the University of Michigan and partnering organization. A total of 41 YAAMs from the metropolitan Detroit, Michigan, area with a mean age of 19.5 years (SD = 1.2) participated in nine group-depth interviews between May 2015 and August 2015. Prospective participants were recruited through a non-profit primary care clinic organization located in Detroit. A variety of recruitment methods were employed, including flyers, social media, face-to-face discussions, and snowball sampling. During the study, 81 initial text messages were sent via Google Voice to recruit people to participate in the study. In order to be eligible to participate, individuals had to meet the following inclusion criteria: (1) be male ages 18 and 21; (2) live in metropolitan Detroit; and (3) identify as African American. All participants were given a waiver of documentation and provided oral consent prior to the study. Participants received \$20 gift cards for completing the group-depth interview.

Measures

Demographic Survey

YAAMs completed an online demographic survey in which they provided information including age, education, current zip code, employment, relationship status, and current living situation.

The Group-depth Interview

The data reported here is part of a larger project that used group-depth interviews to understand and describe the "who, what, where, why, and how" of social media use and preferences among YAAMs, and their condom use behaviors. The group-depth interview

involves a type of focus group which, historically, has been used to determine the perceptions and thinking of consumers about certain products (Krueger, 2009). With group-depth interviews, the facilitator is able to choose from thirteen specific steps to elicit various types of information from the group members (Goldman, 1962). The steps available to include: (1) Building rapport; (2) initiating verbal activity; (3) keeping the discussion relevant; (4) asking projective questions; (5) using illustrative case methods; (6) using stereotypical photographs as a stimulus for response; (7) serial association; (8) deprivation questions; (9) use of deception; (10) use of gestures; (11) non-directive comments; (12) sophisticated naiveté; and (13) parrying direct questions (Goldman, 1962). This method was chosen because it offers a more profound way of eliciting information (beyond the interpersonal level) than focus groups (Goldman, 1962). It aims to ensure that every person within the group has a chance to respond. So, whether the participants responds to direct questions from the interview guide or to activities that have been created through the elicitation steps, group depth interviews shed light on unconscious motives that normally would not be noticed with generalized focus group questions.

During the study, each group-depth interview lasted approximately 1.5–2 hours. The facilitator was an African American male who had taken at least some college course work and was trained in group-depth interviewing procedures and the use of the interview guide. The facilitator also had extensive experience with facilitating groups and working with youth in the Detroit area. All groups were recorded. An additional research assistant was present to take notes during the groups sessions.

As initial protocol the facilitator was expected to structure the discussion, establish rapport, determine verbal activity, and keep the conversation relevant among the participants. The facilitator also probed for clarification on statements made within the group (Goldman,

1962). A total of seven out of the thirteen steps were used with each group. For this portion of the group-depth interview two out of the thirteen steps were used to elicit information from the participants. These steps were specifically used to illustrate a deeper meaning of what participants liked or disliked about social media and who supported or opposed the act of seeking out health information related to condom use. The identified steps are presented in Table 3.1

Group Depth Interview Techniques

Technique	Method	Definition			
Verbal					
	Probing Without Leading	Facilitator will keep questions specific and simple, not forcing a response.			
	Relevancy	Facilitator will keep discussion within relevant limits Facilitator must be very careful not to rule out that which is apparently unrelated, but may revea relevant unconscious motives.			

Goldman, 1962

Table 3.1

Thematic Analysis

Transcripts from the group-depth interviews were audio-taped, transcribed manually by the research staff, and finally coded via thematic analysis to discover themes, motives, and personal habits of participants related to the social media use and condom use. Thematic analysis was used to understand the attitudes, norms, and perceived control that were related to the influence of social media on condom use. Thematic analysis is a method for encoding qualitative information in research (Boyatzis, 1998). It requires the researcher to "sense" or search for emerging themes that are important to the description of the phenomenon at hand (Boyatzis, 1998; Fereday, 2008). It is an inductive approach, most often used in the first stages of research (e.g., focus groups or interviews), and allows the researchers to organize and communicate their findings to others who are used to alternative research methods, such as quantitative methods

(Boyatzis, 1998). The steps involve: (1) acquiring familiarity with the data; (2) creating initial codes; (3) searching for themes; (4) reviewing the themes; (5) defining, categorizing, and naming the themes; and (6) constructing the final themes into a thematic map or model (Boyatzis, 1998).

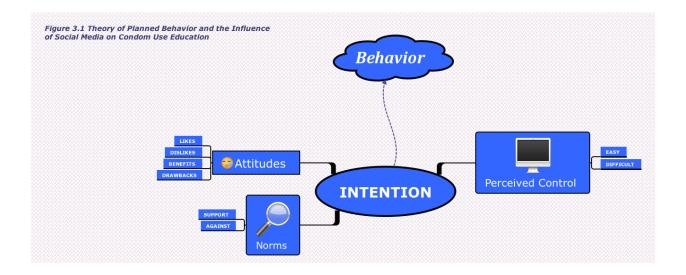
During this research process, interviews were first transcribed and then uploaded into the ATLAS Ti 7 qualitative data analysis program and research software. Open codes were developed by using a ground-up design that included rereading the transcript documents and highlighting blocks of text, with each code containing no more than six words (Watkins, 2012). Next, using the Atlas code manager, 109 codes were developed with operational definitions. These codes were compared and contrasted to ensure that they each represented distinct phenomena. During the initial coding phase and thereafter, the content of the codes was reviewed, the chair of the dissertation committee provided feedback, and any conflicting results and errors were reconciled (Ibrahim, 2012). Sub-themes were then abstracted using pattern recognition and reduced to 16 themes. Overlapping sub-themes were merged and idiosyncratic sub-themes were eliminated. Finally, sub-themes were reduced to a single concept each, grouped into themes, and then organized into thematic networks of the theoretical constructs of the TPB model. Audit trails and field notes were maintained to ensure integrity and trustworthiness.

Results

A total of 41 participants with a mean age of 19.5 (SD + 1.2) and an age range of 18 to 21 were included in the analysis. The majority of the participants had acquired either a high school diploma (n = 15, 36.6%) or some college credit (n = 13, 31.7%). Slightly less than half reported working part-time (n = 18, 43.9%) for employment, 34.1% (n = 14) were unemployed, and 19.5% (n = 8) were students. Most of the respondents indicated that they were not currently in a relationship (n = 26, 63.4%). However, 68.3% (n = 28) of the respondents reported having had

sex (vaginal, anal, or oral) in the preceding six months, and 75.6% (n = 31) reported having used some method or form of protection.

Figure 3.1 shows the linkages between the sub-themes, which consist of the themes discovered in this study and the constructs of the TPB. Because this paper focuses on improving our understanding of experiences involving social media and how they may relate to condom use among YAAMs, the eight thematic codes most relevant to that question were selected here. Attitudes, norms, and perceived control served as the three parent codes for the constructed themes. Four themes were connected to the TPB construct of attitudes about using social media to educate oneself about condom use: likes, dislikes, benefits, and drawbacks. One theme was connected to the TPB norms construct. It consisted of those who opposed or supported the use of social media to educate oneself about condom use. Two themes were connected to the TPB construct of perceived control: factors that motivate the individual and factors that make it easy or difficult to use social media to educate oneself about condom use.



Attitudes

Participants were asked to discuss the items that they liked or disliked about using social media as a way to educate themselves about condom use and that were linked to the attitudes

construct of the TPB: likes, dislikes, benefits, and drawbacks. The results showed that participants liked social media because it was educational (n = 9) and for its creative advertisements (n = 7). Several participants felt that social media could educate youth about currently existing diseases and the consequences of unprotected sex. One participant said, "Aside from getting the info out there, getting them better educated for their own safety and protection. It lessens African Americans becoming a statistic."

Table 3.2

Results for Attitudinal Factors

Theme	
Likes	Dislikes
Educational n=9	Negative Comments n=6
Creative Advertisements n=7	Being misinformed n=5
Popular n=5	Pop-up advertisements n=4
Reach n=5	Other: Information is uninteresting (n=1), Internet too crowded (n=2), hard to measure success unless people "like it" Feeling of space invaded (n=1), people might ignore messages (n=1)
Benefits	Drawbacks
Reach n=9	Risky (referring to content and exposure for early adolescent youth) n=3
Prevention (understanding the role of prevention against STIs) n=5	

Other participants stated that social media is frequently used for advertising and is very resourceful, as it targets specific commercials at certain audiences, similarly to how they are displayed on television. YAAMs stated that the use of pop-up ads was ideal because each ad was displayed for a minimum of six seconds and they were in a very efficient format, allowing viewers to decide whether they wanted to continue watching or skip the ad. Several respondents in different group-depth interviews had similar responses: "Even when you are posting things to

educate people, there are still those other groups and individuals that may take it in another way." Another respondent stated,

Sometimes people get educated on the wrong things. Like some people be like, "My pullout game strong." Other people be like, "I'm staying straight, I be using a condom, this, that, and the other," so I feel like, that it may not be the place you should go for that type of stuff.

One YAAM commented,

I think it's a very effective way, especially in our community and our culture of being an African American. The main thing that we use now in 2015 is social media . . . It's how a lot of people get their information, that's a valuable source they use besides going on Google and typing it up. You're actually getting the information right then and there. Everything about social media is great, and I think it is a great tool for promoting ideas in general. If you're creative with it . . . and I think there a number of creative approaches one can take with that. I think it's definitely feasible but I think it just a matter on how you go about doing that.

Participants were also asked to identify what they disliked about social media being used as a form of education about condom use. There were a range of responses, which included feelings of their space being invaded, the belief that people might ignore the messages posted, and the feeling that the information might be uninteresting. In addition, they agreed that the Internet in general seems very crowded and that therefore it may be hard to measure the success of using social media, unless people "like it" on sites such as Facebook. The results indicated that the most frequent reasons given for disliking social media as a form of education on condom use included being misinformed (n = 5), the negative comments posted on the site (n = 5), and

the advertisements (n = 4).

Some YAAMS had mixed feelings about acquiring information about condom use via social media. One participant stated, "I use it, but what I dislike about it is that people may misinterpret the reason for the condoms on the Internet. They may get it and take it the wrong way because of their mindset." Another said,

What I dislike the most is, it gets people with a lot of followers to say whatever, and a lot of people would follow whether it is right or wrong. So if rapper Future tweeted that using condoms was not cool, a lot of African American males would look at him like "It's Future," so. I mean, he has a lot of clout in the black community right now, so a lot of people would listen and follow without really researching like that.

Other items of discussion related to attitudes about social media for condom education included the benefits and drawbacks. The benefits included understanding the role of prevention in sexual health (n = 5) and the fact that social media can easily reach adolescents and young adults (n=9).

Three participants' described the benefits or social media this way:

The benefits is that it does have, yes, getting the information out there so people won't make mistakes over and over again, so not catching a disease like HIV and having children.

The benefit is, if it is carried out well, is greater education or greater awareness that is made positive as you spread that type of information through the Internet.

It can reach the younger environment, because young people are involved more on social media . . . so there is no restrictions.

An example of a drawback was the view that using this form of technology for self-education or to educate other YAAMs may be risky (n = 3). One participant stated,

Some younger teenagers may think they can go ahead and start being more sexual, and it may not be good for them because they are too young. At the same time, younger youth shouldn't be knowing about it right now and should stay in the kid range.

Normative beliefs

When asked about who would support or oppose them using social media as a form of sexual health education, many agreed that their friends (n = 12) would support them and that this support would affect their decision to use social media for these purposes. The results also indicated that companies and organizations (e.g., teen pregnancy organizations) would support them. Other supporters included pro athletes, celebrities, other family members (e.g., aunts, uncles, and mothers), significant others, coaches, the research team, and themselves.

One participant said, "You guys [the research team], my coach, because he is always talking about it and he always tells us to get checked up, but also my uncle too because he tells me to look stuff up."

On the other hand, the YAAMS identified several groups who would be against using social media for condom use education; these individuals included no one, haters, family members, the church and those who did not use condoms. Several of these individuals like haters were mentioned throughout each group. See table 3.3 for the complete list of important individuals who support or oppose of YAAMS using social media to seek out condom use information.

Table 3.3

Results for Normative Belief Factors

Theme	
Support	Oppose
Friends n=12	No one n=10
Family members (aunts and uncles) n=12	Haters n=9
Themselves n=5	Family members (e.g. grandparents, mom, dad) n=5
The Research Team n=5	The Church n=4
Pro Athletes/ Celebrities n=4	Those who do not use condoms n=3
Companies n=1	
Significant other n=1	
-	

Perceived Control

We asked participants to describe the factors that would make it easy or difficult to obtain this type of information through social media. In the case of young African American males, obtaining this type of information can be easily facilitated by using the following sites: YouTube (n = 12), Facebook (n = 10), Twitter (n = 10), and Instagram (n = 9). Participants explained these sites were easy to use, saying things like, "I would say YouTube because a lot of people would look up videos and how to use it . . . and they can see other videos if they need more," "YouTube, because the videos can be watched longer than on other social media sites like Vine or Snapchat," and "You can repost more on Twitter." One participant elaborated, saying,

Facebook . . . because that is what teens use the most, because you can enter a phrase and something will pop up, the "likes" show you who is really on your page. It also shows that you are actively liking what I am doing. If you post it and get lots of likes everyone is going to see it.

Finally, another youth explained, "Instagram, because that is what teens use the most, you can DM [direct message] a person and then post the picture, you can tag people and let them

post it to their contacts."

Other salient factors that YAAMS said would motivate or facilitate the use of social media as a form of education included the following: the sites had to be engaging, accessible, and popular among youth about condom use; the sites must have information about prevention; and the information must be accurate. In addition, participants thought that messages should clearly state that they are intended to be used as part of a larger set of information to be discussed in person with other YAAMs. Participants also expressed the view that using *memes* to promote condom use, or having someone who is famous or who has status in the community endorse the messages online, would be helpful in catching their attention.

Examples of memes included: "When the clinic calls and has your STD results," "I feel it's good because it's a message in it, because if you would have strapped up, you wouldn't have had to come in and get your results," and "I would say yes, it's appropriate. I think in general memes, like—I think that's, like, a good platform for promoting anything like this."

One youth stated, "This would actually help, because it shows young people to use condoms more. You got a clinic calling you back for your STD results, you got a problem."

One participant said, "A lot of people would think that is a joke and like somebody is trying to go in on somebody, so it would be like, uhmm, for laughs."

In contrast, factors that would make it difficult for YAAMS to use social media sites for education included putting information on sites that they have never heard of or that they do not use (e.g., Pinterest). Participants stated that putting information on sites where posts are non-stop or on sites that are crowded would make it difficult for them. Participants stated that they would not read the messages if they were too long or if they were on sites that did not promote privacy. While memes were indicated as a factor to motivate use, YAAMs would not take the messages

seriously if they were inappropriate, stereotypical, and lacked educational content. For example, one participant said,

I think it really depends on what demographic you are trying to reach. So if it is younger black teens, so if it is, Twitter, IG, or Snapchat would be better to reach people. I think if you are trying to reach old people, or older than we are, then FB. I think they would see it better than we do. And getting a lot of people who have a lot of clout in the community, like rappers or players, to cosign, not necessarily talking to them but posting something out there or on their own website.

Table 3.4 below indicates results for perceived control factors with using social media.

Table 3.4

Results for Perceived Control Factors

Theme	
Easy	Difficult
Sites: YouTube n=13, Facebook n=10, Twitter n=10, Instagram n=9	Social media sites
Educational n=12	Putting information on sites they have never heard of (e.g. Pinterest) n=4
Engaging n=5 Accessible n=9	Messages too long n=2
Message clearly state intention (e.g. for group discussion) n=1	On sites that did not promote privacy n=1
Memes n =3	Would not take memes seriously if it were: inappropriate n=18 stereotypical n=5 and lacked educational content n=3

Discussion

The purpose of this study was to examine the attitudes, norms, and perceived controls that were related to the influence of social media on condom use among YAAMs ages 18 to 21. To date, few studies have examined solely YAAMs' patterns of obtaining sexual health information using social media. Since research on adolescent populations and social media remains in its infancy, the findings of this study may be among the first to have captured the attitudes of YAAMs (Yonker, Zan, Scirica, Jethwani, & Kinane, 2015). Moreover, the findings provided here explored the reasons YAAMs like or dislike social media as a tool for condom use education and the benefits and drawbacks of using social media for sexual health information. These findings can clarify the best ways to use these media for this purpose. The results of this study also indicated reference to individuals who support or who oppose YAAMs seeking out information about condom use on these sites, and can help potential interventions garner support while mitigating resistance to this kind of health promotion. Factors that make it easy or difficult to use social media for condom use education were also included, again contributing to the design of effective interventions.

Overall, the participants liked social media because they could be used for educational purposes. Participants felt positive about the potential of social media to provide factual information about the prevention of sexually transmitted infections and the consequences that might arise if they were unprotected. Previous literature has suggested that adolescents and young adults are interested in receiving and seeking out health information via social media and other forms of technology on sensitive topics like sexual health (Wong, Merchang, & Moreno, 2014). Participants affirmed that social media platforms are places that provide information, such

as news, facts, and other data. They believed that social media could successfully be used to inform those who navigate to sites about personal opinions and beliefs on controversial topics.

This study revealed that social media platforms are places where YAAMs absorb information daily. This is consistent with current Internet research, which finds that 93% of teens and young adults ages 18 to 29 in the United States admit to going to these sites daily (Lenhart, 2015). However, what was surprising was that many of the YAAMs stated that social media were educational in a way similar to the way parents educate their children. During adolescence, especially middle and late adolescent development (13–17 and 18–24, respectively), there is a dramatic drop in the time that these youths spend with their parents, while their time spent alone increases (Steinberg & Morris, 2001). This access to authoritative information was viewed positively among YAAMs in our study. Social media does not necessarily replace discussions between parents and children, but they may offer an alternative method for YAAMs to reinforce teachings about risky subjects that were learned earlier in adolescence.

The privacy or confidentiality of social media was also found to make it easy for YAAMs to access information about condom use. Research shows that social media provides the consumer with education in a judgment free setting, that is anonymous and uninterrupted (Wong et. al, 2014). Therefore, it makes it easier for youth to seek out information on stigmatized topics like mental health, sexual health and other risk behaviors (Wong et al., 2014). Using social media may address barriers in receiving sexual health information, may improve access to care, enhance patient engagement, and, with future research, may potentially promote adherence to condom use (Fordis, Street, Volk & Smith, 2011).

YAAMs in this study discussed how some of their dislikes of social media are often reasons that make it difficult for them to use social media as a place to seek out information.

Social media were perceived as being too "crowded," and as insufficiently private. These responses of YAAMs were found to mirror information in the literature about the use of social media for other stigmatized topics. Adolescents prefer to seek out information anonymously (Yonker et al., 2015). Privacy and confidentiality remain a concern for youth, particularly when they are discussing risky healthy topics in non-secure formats (Yonker, et al., 2015). It is critical for interventions to attend to this dimension.

In summary, this research revealed that YAAMs use social media and feel positively about using it (n = 25). Despite certain barriers, and the existence of individuals who do not support the idea of using it as a form of condom use education, we found that social media education may be an opportunity for better engaging this population in their health. However, challenges remain in understanding how the use of this mode of communication for sexual health information can aid in better STI prevention. Looking ahead, research would need to strategically design unique interventions to measure these potential outcomes (Wong et al., 2014). Future interventions would need to ask youths directly to design the correct online platform.

Theory

The theory of planned behavior (TPB) was used as a guiding framework for this study. It was valuable in guiding the exploration of motivations among YAAMs. At the same time, several limitations of TPB should be noted, such as the fact that important and other aspects of the environment in the lives of YAAMs may change, which would in turn influence their motivations. The TPB does not account for environment, so referent individuals and supporting factors may change depending on the environment (e.g., job, neighborhood, or life events). As time goes by, individuals vary in importance in response to developmental and social trends, and

people who may be against this process may come to be more influential factors over time. Changing referent individuals may influence individuals' chances of achieving or sustaining the intended behavior. Thus the result presented in this study may fluctuate overtime as life experiences occur among these individuals. Another point to consider is that very little research has applied this theory to contemporary forms of social media such as Instagram or Snapchat. Moreover, the theory used in guiding interventions must include up-to-date concepts as social media continues to advance. This research advances the application of the TPB to social media for sexual health education.

Nursing Implications

The study provides evidence that social media can be useful in promoting healthy behaviors and facilitating healthy lifestyle changes among young African American males. The findings here provide a platform for nurses at any level (baccalaureate-prepared, advanced practice nurses, and nurse researchers) to educate and interact with youths, including YAAMs, at their own level, using a platform with which they will engage. The trustworthiness of this data is increased because our inquiry was grounded in the lived experiences of the identified population (Minkler and Wallerstein, 2008). The actual realities of this population, rather than an experimental study, have added value because members of the community (YAAMs) were involved in the entire process (Minkler & Wallerstein, 2008). As nurses, part of our ability to care is "knowing" our patients and their surroundings.

This study was able to move beyond the surface to sense the meaning of what YAAMs need, to connect with their personal experience, and to identify significant factors that are needed to design interventions for improving their sexual health (Chinn & Kramer, 2008). The study answered critical questions from a nursing perspective, thereby providing emancipatory

knowing, which is being aware and being able to critically examine the inequities that may exist within society (Chinn & Kramer, 2008). This research also aimed at understanding the cultural values within the system that could help change these inequities by identifying the influencing factors that could promote equality and favorable health outcomes in the care of YAAMs (Chinn & Kramer, 2008).

Conclusion

Social media may prove to be valuable for delivering theory-driven messaging directly to YAAMs on sexual health knowledge and behaviors, and on condom usage in particular. Given that adolescents and young adults have been turning to social media with increasing frequency for various reasons, which include advice, socialization, and access to other types of information, the time is now to use this opportunity to design interventions that reach out to these populations with more accurate information (Yonker et al., 2015). Social media are tools that adolescents continue to use and offer public places for connection and sharing of information, similar to hangouts and other places where youths have been meeting up for decades (Boyd, 2014). If we become more aware of the information being pushed through these channels and the ways this population feels about being presented with vital information, we may be able to address other issues of concern, such as privacy, peer pressure, and risky behavior.

Despite the challenges that remain in understanding how using this mode of communication for sexual health information can aid in better STI prevention, future research could strategically design unique interventions to measure these potential outcomes (Wong et al., 2014). For example, posting this information during peak times of social media use can be implemented. We caution nurses, health care providers, the community, and researchers to avoid resisting technology and to try not to fear what might happen if youths (and YAAMS in

particular) embrace knowledge provided on these sites that could reinforce some skills related to sexual health knowledge, like condom use. Instead, nurses, health care providers, the community, and researchers can better understand the role of social media and be available and present when needed to help youths navigate these channels productively (Boyd, 2014).

¹ *Hater* is a cultural idiom that refers to person who disapproves of an act of another person. The Urban Dictionary describes a hater as a person who simply cannot be happy for another person's success. Rather than be happy, a hater makes a point of exposing a flaw in that person. Hating, the result of being a hater, is not exactly envy. The hater doesn't really want to be the person he or she hates; rather, the hater wants to knock someone else down a notch (Urban Dictionary, 2005).

²A *meme* is an idea, behavior, style, or usage that spreads from person to person within a culture (Blackmore, S., 2005;Merriam Webster Dictionary, 2003).

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Chapter 4

The Mechanisms of Influence of Social Media and Condom Use Education among Young African American Males

Abstract

Background: African American adolescents and young adults have an increased likelihood of engaging in risky sexual behaviors. With rising rates of sexually transmitted infections (STIs) among this population, deeper consideration is now being focused on the use of social media to engage, educate, and improve sexual behavior in this group.

Purpose: To determine why social media is useful and how it has influenced the attitude,

norms, and perceived control on condom use among YAAMs ages 18-21.

Mathodas Group double interviews (N. 0) portion ages (N. 41) mean ages 10, SD +1.2)

Methods: Group-depth interviews (N=9), participants (N=41) mean age 19, SD+1.2) were conducted in metro Detroit to understand the mechanism and describe the "how and why" regarding social media use and preference among YAAMs ages 18-21, and their condom use behaviors.

Results: The most popular reasons for using social media were for educational purposes, for pure entertainment, to browse the site, for self-expression, to seek out or maintain relationships with friends and family, and for social justice. Although Facebook and Instagram were preferred sites of use, YouTube was stated as the easiest site to promote

condom use education. YAAMs would seek out condom use education on social media sites if a thought leader (someone respected in the community or someone famous) were to promote messages of condom use on the sites, a short advertisement was created, or if it was used to show where condoms were available for free or for purchase.

Conclusion: Social media and sexual health information about condom use can help researchers to design better questions and interventions to address disparities that exist within these youth. Understanding how YAAMs use social media can help health care providers, family, and the community promote healthy behaviors and lifestyle changes among YAAMs.

Introduction

In the past decade, novel interventions, employed through social media and other digital resources (e.g., websites and web-based advertisements), have emerged as a tool to more effectively reach and engage populations of interest in health promotion efforts (Chou, Hunt, Burke-Beckjord, Moser, & Hesse, 2009). These social media-based interventions have addressed a wide range of issues, including physical activity and nutrition, chronic disease management, depression treatment, and sexual health (Alvarez-Jimenez et al., 2014). Social media can be defined as a mode of content-sharing in virtual communities, using photos, videos, and live updates via electronic, internet-based devices such as phones, mobile apps, computers, and tablets (Boyd & Ellison, 2009). The ease of information exchange and open collaboration within social media have been shown to be useful in the creation and maintenance of social networks, which are important for teaching a range of health behaviors (Yonkers, Zan, Scirica, Jethwani, & Kinane, 2015)

Among the most rapidly growing demographics for social media usage is African American youth (Korda, Holly, & Itani, 2013). With an increased likelihood of engaging in risky sexual behaviors and the rising rates of sexually transmitted infections (STIs) among both adolescent and young adult African Americans, deeper consideration is being focused on the use of social media to engage, educate, and improve outcomes in this population (Hamilton, Deven, & Morris, 2015). Social media-based research addressing sexual health has largely focused on observational studies that look at the exposure to sexual content on social media and its effects on subsequent sexual behavior (Mustanski, Greene, Ryan, & Whitton, 2015; Vandenbosch, Van Oosten, & Peter, 2015). Moreover, few studies have addressed issues of sexual health among young racial/ethnic minorities,

including African American adolescent males, who possess a significantly higher burden of chlamydia, syphilis, and gonorrhea in comparison to their White and Hispanic adolescent counterparts (U.S. Department of Health and Human Services, 2015).

Probable causes for this disparity are thought to be limited education on safe sex practices and limited or incorrect usage of condoms during sexual intercourse (Black, Sun, Rohrbach, & Sussman, 2011; Hamilton & Morris, 2015).

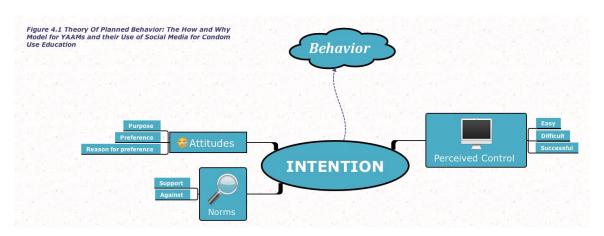
Presently, there is inadequate research focused on understanding the interface between social media and attitudes, norms, and perceived control with condom usage among young African American males (YAAMs). Furthermore, to our knowledge, no study has assessed social media preferences and the feasibility of introducing a social media-based condom usage intervention among YAAMs. This study conducted group-depth interviews with Detroit-area YAAMs ages 18 to 21 in order to identify the themes paper regarding social media use for condom education as well as information on preferences in social media platforms and sexual health promotion.

This study seeks to contribute to our understanding of the experiences of YAAMs regarding the use of social media for information about condom use. A qualitative design was chosen because the cultural and social viewpoints of YAAMs' needs and preferences regarding social media and its relationship to condom use are not available in the literature, and this method captured the responses of YAAMs in their own voices. This information is vital for determining why social media might be a useful intervention platform and how it has influenced the attitude, norms, and perceived control on condom use among the participants in this sample. This knowledge may also prove useful for other African American adolescents. Finally, we believe that this research can also

strengthen current theory, knowledge, research, and practice about the usefulness of social media in nursing especially in sensitive areas such as safer sex research.

Theory

The theory of planned behavior (TPB) was selected here as a guiding framework for this research because it has been successful in predicting a wide range of health behaviors, such as health service utilization, substance abuse, HIV/STD prevention behaviors, and contraceptive use (Glanz, 2008). The TPB posits that intention is the direct antecedent of behavior and is measured in three constructs: attitude, norms, and perceived control (Ajzen, 2011; Ajzen & Fishbein, 1980, 2005). In turn, these determinants follow from a person's beliefs about the behavior's likely consequences as well as normative expectations from referent individuals and certain factors that control individual behavioral performance (Ajzen, 2011). This study focuses on the use of social media and condom use. In summary, this research extends the TPB into the area of social media and condom use education and enables a new opportunity to explore it as a possible platform to provide health education for YAAMs and change behavior patterns.



Methods

The data reported here is part of a larger project that used group-depth interviews to understand the social media use and preferences among YAAMs as well as their condom use behaviors. Previous work has described the "who," "what," and "where" aspects of social media use for condom education. This paper will examine the mechanism by which social media can facilitate accessing condom use education by examining the "why" and "how" of utilizing social media for condom education.

Participant Recruitment

All of the study's procedures were reviewed and authorized by the appropriate Institutional Review Boards at the University of Michigan and partnering organization. A total of 41 YAAMs from the metropolitan Detroit, Michigan area with a mean age of 19.5 years (*SD*=1.2) participated in nine group-depth interviews between May 2015 and August 2015. Prospective participants were recruited through a non-profit primary care clinic organization located in Detroit. A variety of recruitment methods were employed, including flyers, social media, face-face discussions, and snowball sampling. During the study, 81 initial text messages were sent via Google Voice to recruit people to participate. In order to be eligible to participate, individuals had to meet the following inclusion criteria: (1) being a male, ages of 18 and 21; (2) living in metropolitan Detroit; and (3) identifying as African American. All participants provided oral consent prior to the interview. Participants received \$20 gift cards for completing the interview.

Measures

Demographic Survey

YAAMs completed a demographic survey prior to the interview in which they gave information about age, education, current zip code, employment, relationship status, and current living situation.

The Group-Depth Interview

The group-depth interview is a type of focus group that, historically, has been used to determine the perceptions and thinking of consumers about certain products (Krueger, 2009). With group-depth interviews, the facilitator is able to choose from 13 specific steps in order to elicit various types of information from the group members (Goldman, 1962). The steps for the group-depth interview were described in an earlier paper, however, this method was chosen because it is a more profound way of eliciting information beyond the interpersonal level than focus groups (Goldman, 1962). The activities designed for the groups engage and ensure that each individual has a chance to respond.

Each group-depth interview lasted approximately 1.5-2 hours. The facilitator also had extensive experience with facilitating groups and working with youth in the Detroit area. All groups were recorded. An additional research assistant was present to take notes during the groups sessions.

As initial protocol the facilitator was expected to structure the discussion, establish rapport, determine verbal activity, and keep the conversation relevant among the participants. The facilitator also probed for clarification on statements made within the

group (Goldman, 1962). A total of seven out of the thirteen steps were used with each group. For this portion of the group-depth interview five out of the thirteen steps were used to elicit information from the participants that used ranking polls, memes, quotes and card games. These were chosen specifically to actively engage participants to understand the deeper meaning of the mechanism of how and why social media works with this population. The steps used in the study by the facilitator are presented in Table 4.1

Table 4.1

Group Depth Interview Techniques

Technique	Method	Definition
Verbal		
	Deprivation	Facilitator will ask which of the following _types of social media would you miss if it were no longer available?
	Explore Specific Usage	Facilitator will ask when was the last time you used X social media site?
Probing aides/ devices		
	Sorting	Facilitator will give participants four cards from a deck of cards and then ask a question pertaining to social media and condom use education. Participants will then use the cards to answer the following questions e.g. which site would make it "easy" for you to learn about condom use?
	Personification	Facilitator will provide stereotypical photographs to elicit a response - bring a picture of Twitter, Facebook, and Instagram and may ask a question like, "Which of these pictures would be most likely used among your group of friends?"
	Serial Association	Facilitator will show several types of social media posts with condom ads and ask them to rank the pictures in terms of favorites, learning, and opinion.

Goldman, 1962

Thematic Analysis

Transcripts from the group depth interviews were audiotaped, transcribed, and coded via thematic analysis to discover themes, motives, and personal habits of the participants related to the use of social media and condom use. Thematic analysis was used to understand the attitudes, norms, and perceived control that were related to the influence of social media on condom use. Thematic analysis is a method for encoding qualitative information in research (Boyatzis, 1998). The encoding process requires the researcher to "sense" or search for emerging themes that are important to the description of the phenomenon at hand (Boyatzis, 1998; Fereday, 2008). It is an inductive approach, most often used in the first stages of research (e.g., focus groups, interviews), and it allows the researchers to organize and communicate their findings to others who may be more familiar with alternative research methods, such as quantitative methods (Boyatzis, 1998). The steps involve: (1) familiarizing oneself with the data; (2) creating initial codes; (3) searching for themes; (4) reviewing the themes; (5) defining, categorizing, and naming the themes; and (6) constructing final themes into a thematic map or model (Boyatzis, 1998).

During this research process, the interviews were transcribed and then uploaded into the ATLAS Ti 7 qualitative data analysis and research software. Open codes were then developed by using a ground-up approach that included rereading transcript documents and highlighting blocks of text with each code containing no more than six words each (Watkins, 2012). Next, using the Atlas code manager, 109 codes were

developed with operational definitions. These codes were compared and contrasted with each other to ensure that they each represented a distinct phenomenon. During the initial coding phase and thereafter, the content of codes was reviewed, the chair of the committee provided feedback, and any conflicting results and errors were reconciled (Ibrahim, 2012). Subthemes were then abstracted using pattern recognition, resulting in 16 themes. Overlapping subthemes were merged and idiosyncratic subthemes were eliminated. Finally, subthemes were abstracted into single concepts, referred to as themes. Themes were organized into thematic networks and connected to the theoretical constructs of the theory of planned behavior model. Audit trails and field notes were maintained to ensure integrity and trustworthiness.

Results

A total of 41 participants with a mean age of 19.5 (SD + 1.2) and an age range of 18 to 21 were included in the analysis. The majority of the participants had acquired either a high school diploma (n=15, 36.6%) or some college credit (n=13, 31.7%). Slightly less than half reported working part-time (n=18, 43.9%) for employment, while 34.1 % (n=14) were unemployed and 19.5% (n=8) were students. Most of the respondents indicated that they were not currently in a relationship (n=26, 63.4%). However, 68.3% (n=28) of the respondents reported having had sex (vaginal, anal, or oral) in the past 6 months, and 75.6% (n=31) reported having used some method or form of protection.

Figure 1 shows the linkages between the subthemes, themes discovered in this study, and the constructs of the theory of planned behavior. As this paper is focused on understanding the mechanisms of why social media is useful for condom education and

how it may relate to condom use among YAAMs, the eight thematic codes most relevant to that question are presented here. Attitudes, norms, and perceived control served as the three parent codes for the constructed themes. Three themes were connected to the TPB construct of attitudes about condom use education via social media: purpose, preference, and reason for the preference. One theme connected with the TPB norms construct, consisting of those who were against or who supported the use of social media for condom use education. Three themes were connected to the TPB construct of perceived control: factors that make it easy to use social media to educate oneself about condom use, factors that make in difficult to use social media to educate oneself about condom use, and factors that would allow YAAMs to successfully use social media for future endeavors.

Why Do Young African American Males Use Social Media?

During the group-depth interview, the most popular reasons for using social media that YAAMs described were for educational purposes (n=39), for pure entertainment (n=38), to browse the site (n=18), for self-expression (n=9), to seek out or maintain relationships with friends and family (n =4), and for social justice (n=3). Quoted below are descriptions of popular reasons of why YAAMs use social media.

Several youths made comments about education and social media that included: "When I go on Facebook, I use it for an educational outlet to help motivate people. I think that it is very important because we have a lot people on social media. That is the main thing people are using social media [for], so that is the best resource to use." Other comments indicated that, "You can pick healthy things on there and go on and find things to actually become healthy. It [social media] will be a good thing. A lot of teens are lost and look to social media to find this information online."

Other participants described their thoughts about using social media for entertainment and browsing: "I want to check on other people's pages and see what they are doing, see funny things and what they post." Another youth stated, "I observe to see what type of person they are. The last time I was on Instagram was because of a notification. My activity is because someone liked my page or made a notification." As one participant explained,

I am on there just to see what is going on. With Instagram, it's always something new. Most people are obsessed with followers. Me, personally, it's just not about the followers. It's just the entertainment of it. And some people are obsessed with a lot of followers, so that means a whole lot of people are putting up a lot of things, which means new things on their newsfeed that you scroll down and see, and it's a basically a never ending chain of something. Never the same, most of the time.

Some youths spoke about how they used social media for self-expression. For example, one young man said: "I go there for inspirational quotes." The interviewed participants also said that social media helped them to maintain relationships. As one youth explained, "Mainly, I'm on there for entertainment or just to link up with friends. If I ain't seen a friend in a long time, I ain't got his number, I can just inbox him easily. That's why I'm interested."

Finally, some participants described the use of social media for social justice: "I get on there, I like to . . . well, I'm into being an activist . . . social justice stuff, so I like to see what people post, like articles and stuff, and see what people post on those type of topics."

Attitudes

The participants were asked in the group-depth interview about their attitudes regarding social media, particularly their preferences for condom use education.

Instagram (n=16) and Facebook (n=10) were found to be the top sites indicated for these methods. Participants indicated that they preferred using Instagram and Facebook because they could communicate quickly and easily with their friends and families. They also preferred these sites because they could be educated and receive the latest news and updates. Additionally, the sites were described as straightforward and entertaining, and the participants felt that they could easily express themselves online. The participants agreed across all groups that they would use these sites for educating themselves on condom use.

The YAAMS in this study described their preferences for the use of social media with comments such as: "I would only post empowering pictures." Another youth stated:

I feel like, I feel like I prefer Facebook more because most people make statuses about stupid stuff, but I like to make statuses about what's going on in my head. . . . like things that I think about on the daily basis, like my future or what I go through next. I'm not just gonna sit here. . . . I'm going to do something about it. Like I put that in words . . . words are my greatest power, so I feel like that's why I like it so much.

The participants agreed with him, saying, "Words do have power." One young man, furthermore, stated, "It would be Instagram, because I don't know . . . basically what he said, everything straightforward, you can comment. If it's [a] picture, you like if you like it. If you don't, you don't." Another described a preference for social media because, "Even tho' I like Instagram and all those other sites, Facebook has to be the

most useful. Like he said, you can find articles, and you can actually look stuff up on Facebook and find what people think about."

Normative Beliefs

When asked about who would support or be against them using social media as a form of sexual health education, friends (n=12), family (n=12), and themselves (n=5) were the most frequent answers. Several youth described, "My peers . . . well, people I hang around with, I feel if I am going in the right direction, they would tag along, too." One young man elaborated, saying, "I mean, just friends in general cuz like in college, sex has always been talked about, so it's something they would probably support, and parents because my parents are very frank about sex, like wrap it up and don't come home with no babies."

One participant described that his support was widespread and included his own decisions related to it, saying, "Pretty much everybody that I know. The majority of my friends. All of my family. I think, most of all, myself." Another participant indicated:

I am not trying to sound conceited, but myself. I look at a lot of people and see they have babies and stuff, and they are only in high school and are struggling with the babies and have an STD. . . . That can be a lot .Just by having sex can be a lot. . . . It can even take me away from sports.

Several YAAMS responded that they could not think of anyone who would be against them using social media to educate themselves about condom use (n=10), but some described "haters" (n=9) as against such use. Haters were discussed in every group-depth interview. The participants stated that haters came from places like school as well as within their neighborhood. Other people who were considered possible

individuals who would not support the idea of using social media for condom use education included those who refused to or did not use condoms, other family members (e.g., mom and dad), and those who were misinformed. A small number of the participants responded that they were unsure of who would be against them using social media for sexual health education. One participant defined *hater* in the following way:

A hater is ... those who are not informed about it or ignorant about the situation or who are internet trolls. Those who are childish and just saying stuff because they can. People who don't want you to succeed and do positive things for other people. Like . . . some people in the neighborhood.

One participant described non-supporters this way: "People in my life that are real religious, and they against anything like that, and they preach about abstinence-only."

Another youth talked about his grandparents, saying, "I think probably my grandma because she doesn't know that much about social media or the Internet, period. She just thinks that it's just a bad place. She would probably say, 'Go get a book."

Many YAAMs responded that no one who they could think of would support them. When asked to describe this further, they could not give any explanation. One participant stated, "Nobody really, I don't feel like. As long as you get the accurate information you looking for, can't nobody can really tell you how to look at it [social media]."

Table 4.2 Results of attitude and normative belief factors for social media use and condom use education.

Results for Attitudinal Factors

Table 4.2

Theme	
Preference	Reason for preference
Instagram n= 16	Self expression n=9
Facebook n=10	Could be educated on the latest news n=8
	Sites straightforward n=4

Perceived Control

YAAMs were able to identify aspects of future intervention design what would make the idea of using social media in educating YAAMs about condom use successful. At the end of the group-depth interviews, YouTube became the top contender as the favorite site to use for condom use education. The participants noted that YouTube videos about condom use information would be extremely easy to find because individuals could simply type in any topic and then view a video about it (n=12). They also stated that sites should tell youths where they can access free or discounted condoms and that social media should be used as method to recruit YAAMs to form in-person groups to discuss topics about sexual health, including condom use (n=6). They stated that all sites should be used to promote condom use; advertisements for condom use education should be crafted carefully and be similar to YouTube ads. Messages should be delivered through a thought leader (e.g., athlete) or by someone respected in the community. For example, one participant stated, "If it was a famous person like Stephen Curry, I would stop and look."

The following quote represents how the YAAMs responded about how social media could be successful in helping them to access condoms:

I would say passing out free condoms would trump everything. Because if people got them, and they are too scared to get them or they can't get access to them for some reason, then I feel like . . . it [social media] would work.

Several respondents stated that social media should be used to help form a group discussion: "Form a group like this. Get them all together, they [will] bring a lot of stuff to the table and a lot of new ideas. It can help out a lot of kids." Others stated that social media should be used to market condom use education through online advertisements:

In my opinion, I feel that, if I really wanted to put it out there how to use a condom, I would make an ad like YouTube. It pops up for like 6 seconds and then you skip. If you make an interesting ad for 3 seconds, you probably would want to watch the whole ad. Instagram, they have sponsors on there all the time that you can look at without you following them that can catch someone's attention. You can have ads on Facebook, Google, . . . anywhere.

Finally, many of the participants agreed that it was not just about preference, but that health promoters, if they want to send a larger message, should use all sites. For example, one YAAM stated: "Use Facebook, actually all of them. Because you could YouTube video sessions where people are talking about it and then they can tell people to follow the link on Facebook or Instagram." Another said, "Spread the word by going into all of the social media sites. Use all of your available resources. Only thing, it depends on who you are targeting and be smart about it."

Table 4.3 below indicates the results for perceived control factors for the mechanism of social media and condom use education.

Table 4.3

Results for Perceived Control Factors

Factors that can makeusing social media successful with YAAMs

Deliver messages through a thought leader or someone respected in the community n=17

Use YouTube to promote education on condom use n=13

Form an in-person discussion n=6

Use all sites n=5

Show where condoms are available for purchase or for free

Discussion

The purpose of this study was to determine why social media is useful for condom use education and how it has influenced the attitudes, norms, and perceived control of condom use among YAAMs aged 18-21. To date, few studies have solely examined YAAMs and their patterns of obtaining sexual health information using social media. This study provides an overview of how YAAMS feel about social media, how they use social media, and why they choose to use certain media types. This data is necessary for both interventions and intervention-based research aimed at promoting youth engagement and safer sex behaviors as well as enhancing social support (Yonker et al., 2015).

In this study, we had some significant findings. First, we found that Instagram and Facebook were the preferred sites for YAAMs for social media use and condom use

education. This is somewhat different from other research that indicated that African Americans ages 18-29 had high online Twitter usage rates, as 40% of young African Americans say that they are specifically on Twitter (Smith, 2014). In a previous paper, YAAMs discussion showed that this type of information could be easily facilitated by using the following sites: YouTube (n=13), Facebook (n=10), Twitter (n=10), and Instagram (n=9). However, even if a person has strong intentions to learn and the necessary resources and opportunities, the individual must also be confident and feel that he or she can be successful in performing the specified behavior (Ajzen, 1991). Interestingly enough, at the end of the 1.5-hour group-depth interviews, YouTube was deemed as the favorite social media site for condom use education, with Twitter listed as another potential choice to retrieve this type of information. Personally, the YAAMs in this study liked Instagram and Facebook the best. However, once they understood what social media is and how it is used, their choices changed. They realized that they had more options for social media sites and discussed how they could seek out different sites for different communities or choose to use all of the above sites to seek out health information. The YAAMs agreed that social media could be used as an introduction to broader concepts (like condom use) that could be linked to further in-person discussions with other YAAMs, educators, or health providers.

This research study showed that factors that would promote YAAMs interest in condom use education on social media sites include using a thought leader (someone respected in the community or someone famous) to promote the message of condom use; creating a short advertisement; or using social media to show where condoms are available for free or for purchase. Other recommendations included using the identified

social media sites (as stated above) as a method to recruit YAAMs for an in-person discussion. These factors should be included in any health promotion intervention for this population.

The question about why social media is important to YAAMs' everyday lives may come down to the supportive factors in their lives and the environments in which they live. The data presented here showed that friends and family are extremely important supportive factors. This is similar to findings that show that while social media may serve as a conduit for receiving information, it also plays a significant role in shaping many parts of its users' lives similar to the role played by family and friends (Boyd, 2014). Therefore, it makes sense that families and friends support YAAMs in this behavior because these are the very individuals that are a part of their everyday lives. Friendships are significant sources of support because they offer many rewards in terms of status, prestige, popularity, entertainment, and acceptance (Muuss, 1988). Families are important because they are seen as motivational forces, provide an added layer in terms of learning values and beliefs, and help to build normative behaviors (Bronfenbrenner, 1979; Steinberg, 2002). Families are also the distinct support networks that teach their members what they need to know in order to function and become a part of society (Leventhal & Brooks-Gunn, 2000). These relationships are positive aspects in the lives of YAAMs and should be included in intervention programs.

Many respondents stated that they supported themselves. This theme was reported as positive for YAAMs, who emphasized their self-esteem, self-awareness, and decision-making abilities. This finding is supported by adolescent development research, which indicates that the bulk of identity formation occurs during late adolescence and young

adulthood (Steinberg & Morris, 2000). During this stage, there is more abstract thinking, development of the self, and viewing of oneself in terms of one's own personal beliefs and values. In addition to personal clarity about values, friends were also a strong support system for using social media for condom use education. Again, this is consistent with other research that has shown that peer attitudes and behavior influence teens' own sexual behavior (Sternberg & Morris, 2000). Future interventions can maximize these developmental trends.

As predicted by the TPB, perceived control was also found to be an important aspect in the use of social media for education on condom use. The TPB states that, once a person has strong intentions to learn and the necessary resources, the individual must also be confident and feel that he or she can be successful in performing a specific behavior, thereby demonstrating perceived control (Ajzen, 1991). Within the literature, consistent findings have shown that increasing knowledge alone does not change behavior (Ajzen, Joyce, Sheikh, & Cote, 2011). Therefore, the question remains: If a person is educated about condom use via social media, is it, in fact, effective in changing intentions and behavior? The definition of education (per the study interview guide) refers to teaching skills and being informed (e.g., learning how to put on condoms). Researchers should think about the moderating and mediating effects of social media for use in future sexual health interventions. Other questions that should be addressed in future research include: Does making this type of education available through social media strengthen YAAMs' intention to use condoms because it provides the necessary resources? Does social media remove any barriers? Does social media give YAAMs a greater sense of control to act freely and understand future consequences if they choose

not to be protected? This study shows that social media is a resource for YAAMs and that they think it can be used for multiple purposes (e.g., self-expression, social justice, and entertainment). These results should be used when designing future interventions, as they may be influential to the mediating and moderating effects of posting and reinforcing health information among adolescents and young adults.

Previous research indicates that sites like Facebook and Twitter give adolescents and young adults a platform to share information about their personal lives as well as information about risk behaviors such as violence, substance abuse, and sexual activity (Moreno & Kolb, 2012). The findings in our study also support this conclusion, demonstrating that the YAAMs in our sample did share information on these sites frequently and were interested in using these sites to seek out health information, including condom use information. Researchers may want to explore the effects of social media on the other risk behaviors mentioned above or on mental health issues like depression, as these behaviors may be associated with one another or may be synergistic in their effects.

The limitations of this study include a small sample size (N=41) because it restricts the generalizability of the findings to all young African American males interested in using social media for condom use education. Research indicates that the best time to discuss sexual health prevention (including condom use) may be during the preadolescence phase of development (Burns & Caldwell, 2014). Future research may warrant studying social media and the consistency of condom use or access to obtaining condoms in adolescents aged 18-21. Despite these limitations, future research is needed to address the sexual health needs of young African American males at all ages. Social

media may be an important solution because it is fast, accessible, and relevant in terms of meeting these individuals in their own settings.

Theory

The theory of planned behavior (TPB) was used as a guiding framework for this study. This theory incorporates central concepts in a way that predicts potential behavior in specific contexts (Glanz, Rinner, & Lewis, 2008). While this theory has many components that can direct behavioral changes, the findings of this study suggest that it may be helpful to consider combining or using additional theories with the TPB that look at the context of environment and development, such as the ecological systems theory and identity development theory. First, the ecological systems theory examines not just the person, but how individuals act in their environments. Individuals, in addition to environment, reflect nursing values. The theory of planned behavior does not account for environmental factors (Ajzen, 1991), instead it focuses on perceptions and attitudes. While the TPB does consider environmental variables such as people that favor or disapprove of the behavior, resources, and opportunities that can be provided to reduce barriers so that the individual can have successful behavioral achievement, it does not explain behavioral variability across all situations (Ajzen, 1991). Adding the ecological systems theory approach to this outlook would force the researcher to consider how individual attributes and patterns of being interact with unique environmental contexts in such a way as to result in the full realization of human potential (Brofennbrenner, 1992). Looking at individual attributes (outside of attitudes) across different environments, such as intelligence and spirituality, would also add a very interesting layer to the study.

Second, possibly adding the identity development theory would also make a strong contribution to the study of social media use because TPB does not include the "self" as an important person who can provide motivation to perform a specific behavior. Instead TPB includes about what other people think in terms of opinion and motivation about behavioral achievement. The concept of behavioral achievement is defined by motivation (created by attitude and normative beliefs) and perceived control available (resources and opportunities), thereby increasing an individual's confidence (Ajzen, 1991). This confidence is in person's general disposition and carries from one situation to the next (Ajzen, 1991). Adding the identity development theory could also look at other factors that may increase a person's confidence such as identity achievement. This occurs in the latter stages of adolescence (18-24), in which the adolescent has gone through exploration and has resolved these issues on their own terms (Muuss, 1996). As a result of these explorations, the adolescent feels confident, has a well-defined personal value system, can make good choices and has resolved his or her attitude and values toward sexuality (Muuss, 1996). Exploring the concept of self, identity achievement, and decision-making may also play a role with future behavioral achievement.

Nursing Implications

Nurses, advanced practice registered nurses (APRNs), and healthcare providers and researchers are all valuable resources in disseminating and using this type of information for the YAAM population. This study provides evidence that social media can be useful in promoting healthy behaviors and facilitating healthy lifestyle changes among young African American males. Our findings provide a platform for the abovementioned individuals to educate and interact with youths, including YAAMs, at their

own level and using a platform that they will engage with. The utility of this type of qualitative research enhances our understanding because this inquiry was grounded in the lived experiences of YAAMs (Minkler & Wallerstein, 2008). As a result, the information is more accurate to the actual realities of this population than an experimental study and has added value because the community being studied, YAAMs, was involved in the entire process (Minkler & Wallerstein, 2008).

Understanding the components of social media and how it is used by YAAMs may help providers to identify multiple problem areas (e.g. daily habits that they struggle with) that can be assessed during examinations. This platform can help to structure better anticipatory guidance around sexual health issues and modes of prevention. Social media and sexual health information about condom use can help researchers to design better questions to address disparities that exist within these youth. Understanding how YAAMs engage with social networking sites and how they consume information will allow APRNs and their healthcare systems to make their content and patient-engagement strategies more YAAM-friendly (Yonker, Zan, Scirica, Jethwani, & Kinane, 2015). Moreover, this method of interaction can facilitate better patient-provider information (Yonker et al., 2015). For example, YAAMs could inbox or direct message where to get a test or purchase condoms, with providers responding and then directing them to come into the clinic and schedule appointments for further information. Lastly, understanding more about social media can help researchers, parents, and providers to become privy to the slang and other cultural idioms that are relevant for this population.

Conclusion

Researchers need to consider that traditional research methods for testing and validating future interventions may not be appropriate or sufficient for this population because technology seems to permeate its everyday activities (Wong, Merchant, & Moreno, 2014). Significant attention needs to be paid to the ways that social media is used as well as to the content that is being shared. "Social media often sticks around because these technologies are designed to enable persistence" (Boyd, 2014, p. 11). Researchers, nurses, healthcare providers, parents, and the community need to reach out to this population regarding its health behaviors with the same persistence. Having this type of information available shows that there is a vested interest in this population. Individuals like to feel important. Learning different ways to reach out and address their health concerns would show that we are conscious of the needs of YAAMs and adaptable.

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CHAPTER 5

Conclusion

Summary

The primary purpose of this research was to identify whether social media could be a useful platform for educating young African American males about condom use. The study was conducted through the following three phases:

In the initial phase, an integrative review was conducted to synthesize the existing research on the impact of social media and condom use in African American adolescents more specifically, young African American males. The types of social media that this population engaged in and found accessible was discovered as well as the content that could best be transmitted in designing future interventions to assist these youth with making safer sex decisions. Thirteen studies were reviewed. Strong evidence was found in social media affecting behavior change, specifically condom use, which set the stage for the research study, found in papers 2 and 3. Social media demonstrated that self-efficacy, knowledge and favorable attitudes around HIV/STI prevention could increase through using these sites. African American adolescents were found to use Facebook and MySpace the most in these intervention studies. When monitored on these sites risky behavior and sexual reference posting decreased. Finally, African American adolescents sought out information related to STI prevention, teen pregnancy and virginity. Weak

theoretical clarity and social media definitions was found in these studies. In addition, the articles did not clearly explicate which social media platform was used, or hypothesize the mechanism by which the intervention used might create their advantage. The review in its entirety was beneficial because it illustrated that social media could be important in the delivery of sexual health information.

In the second phase, nine group depth interviews were conducted among 41 participants. In the first half of these interviews, we explored how attitudes, norms and perceived control constructs influenced the use of social media for condom use education among YAAMs. Likes and dislikes about social media and the benefits and drawbacks of using social media for sexual health education were expressed by participants. YAAMs identified important individuals who supported and who opposed them in seeking out condom use information in this format. Social media sites that could easily facilitate or make this process difficult were identified. Overall, 61% of YAAMs felt that using social media for condom use education could positively influence them and that it was a strong platform for sexual health education.

In the third phase, the second half of the group-depth interviews used additional prompts to allow a more critical examination of these constructs further explain the mechanism of how and why of YAAMs use social media. This analysis revealed that preferences, reason for preferences, and purpose of use were linked to YAAMs attitudes. We also found that important referent individuals such as family, friends, and the participants themselves were examined and the normative beliefs and supportive factors that were linked to the how and why they choose to use certain media types (e.g. peer pressure, family beliefs). YAAMs also described what could make the interventions

successful. Modifications to the TPB were proposed. Elements such as environment and development were suggested to enhance or strengthen the current model.

This study found that young African American males ages 18-21 prefer to use Instagram and Facebook for social media, rather than Pinterest and MySpace as the literature indicates. The young African American males in our sample also indicated that they would prefer to learn about sexual health information via YouTube. Likewise, the youth in our samples stated that anonymity in communication and having a safe space to communicate are both critical in self-expression and use for young African American males. Additionally, as stated in the literature, the YAAMs in our study enjoy using multiple social media platforms to express their thoughts and ideas (Lenhart, 2015).

Ultimately, the findings from this research indicate that the best way to use social media with this population is for recruitment, to improve clinic follow up, and for educational and clinical reminders. By using the methods described by YAAMs in this study, getting famous people to post messages or using certain social media sites are just a few innovative ways to capture the attention of young African American males. However, the YAAMs in this study stated that they learn best from each other and desire to be in groups to discuss these sensitive topics. The research groups provided a wealth of information and feedback from the activities designed for the group-depth interviews. In essence, YAAMs provided specific information that would be extremely valuable in designing a future intervention for young African American males at any adolescent age (13-24).

Implications

Nurses, advanced practice registered nurses (APRNs), and healthcare providers and researchers are all valuable resources in disseminating and using this type of information for the YAAM population. This study provides evidence that social media may be useful in promoting healthy behaviors and facilitating healthy lifestyle changes among young African American males. The literature described in the initial phase demonstrates that young African American males are using social media but it may be more valuable to reach out to them using the media types that have suggested in this study. More attention needs to be given to our males and their health needs. Recruitment into clinics and studies need to improve. Understanding that their needs and preference may change based upon environment and circumstance also needs to be considered. Finding creative ways to initiate communication with YAAMs, such as the use of social media, may be helpful and valuable to improve treatment rates, and to provide an opportunity to disseminate accurate information. Using these sites may also reinforce some skills related to sexual health knowledge, like condom use. Finally, understanding what sites YAAMs are using, how they use them, and what factors can motivate them to use this platform for sexual health information may remove barriers and provide an opportunity for them to make safe decisions involving their sexual health.

Conclusion and Future Directions

Overall this study has shown that YAAMs feel that social media is a great place to start gathering information about sexual health education, particularly condom use, but only if they feel safe in their environment, also known as their "public space."

Understanding and interacting YAAMs in these spaces or communities is an optimal time

for important individuals (families, friends, community, practitioners) to be proactive in showing them how to protect themselves. Clinical use of these spaces could potentially provide an avenue for intervention so the recovery period will be reduced. This may include monitoring patients, and being aware of the sites that they navigate. We need to understand that youth, as individuals, have many sides. By exploring adolescent development, contextual influences and health through these channels can help them increasing their competence and learning to make decisions autonomously. We also must remember that it is not only about protecting them as individuals but it is also about reducing the spread of infection to others. Adolescents often try self-help before the reach out to their important individuals like parents. If we can make sure that they are guided with accurate information and intervene at key times, we are not only helping them be safe, but also protecting the individuals who are around them.

In conclusion, persistence needs to be stressed when providing interventions for youth. We need to reach out to YAAMs in any possible safe format. Despite the challenges that remain in understanding how using this mode of communication for sexual health information can aid in better STI prevention, future research needs strategically design unique interventions to measure these potential outcomes. As adolescents, and more specifically young African American males, navigate through these sites, they are challenged daily by what they experience in their social and media contexts. They need to be prepared to handle risky situations both in person and online. Understanding how they navigate these systems will not only give us a view into what they may struggle with, but it can also help supportive influences like nurses, health care providers, the community, and researchers to better understand the role of social media.

This insight will ultimately help us be available and present when needed to help them navigate through these channels productively.

APPENDICES

APPENDIX A

INTERVIEW SCRIPT:

Getting to Know Each Other/ Building Rapport

Introduce yourself. You may use an activity such as an icebreaker, find something that the two of you have in common, or stick to the script. (5 minutes)

Hi, and thank you for participating today. My name is Jade and I am a nurse and graduate student at the University Of Michigan School Of Nursing. The study/ group discussions that you are participating are apart of my research project. You may frame this intro differently. A little information about me, I have a lot of experience working with teenagers and young adults. I have worked with several high schools and sports teams and am excited to be here today and I am very excited that you are able participate in this project. I would like to introduce your facilitators Male A and Observer Male B who will be the main people working with all of you during this session. Male A & B please tell us a little bit more about you. Facilitator A and Observer B describe briefly the capacity in which you have worked with teens to build rapport and then proceed with starting the session and describing your roles Male A (main facilitator) Male B (recorder, note taker). Can each one of you please state your initials (for confidentiality purposes) and tell me a little bit about yourself such as if you had three words to describe yourself, which three would you choose? Briefly discuss why the participant chose these words then move on, you may also pick another ice-breaker. Great! Now that we know more information about each other I would like to tell you more about the group session process and what things we will be talking about today.

Purpose:

(Facilitator takes over from here: Explain a brief overview of what lies ahead. Discuss questions and mention that you will go into further explanation if any of the questions are unclear.)

The purpose of this group interview is to understand your experiences around social media and how it may relate to condom use among young African American males (YAAMs). We want to know how you use social media and what you like about it. We also want your opinion related to using social media and if it can help encourage condoms use among young African American males. Sometimes in research people create new programs without asking the population. Many

think it is important to make sure that when creating a program or tool that it addresses the needs of that specific population. But first we want to see if the idea will even work. Therefore what you have to say will be very important to the study. Your experiences may be very different and we want to capture that. You have already taken a brief survey asking background information about yourself. The next step is to make sure you feel comfortable answering and asking questions in this group. Therefore the sessions will be interactive so there will be multiple ways to respond to the questions that we ask you. Additionally we will prompt more discussion with various games and summarize your thoughts around each topic. If at any time you do not understand the questions or activities that I will be asking/ introducing to you, please stop me as so I can make sure that you understand, and that we are all on the same page.

Consent & Audio tape

Remind the participants that they have signed a written consent form about taping the group depth interviews. Ask the participants do they understand the purpose of the project. Discuss that you will be audio taping this interview. Next, discuss confidentiality from a different perspective (other than consent) once more this time by incorporating it into the ground rules.

Set Ground Rules:

Tell the participants that it is important to establish ground rules as so they can feel safe and comfortable about discussing sensitive topics. Discuss confidentiality. Reassure the participants that they have full control in this interview and that they may stop at any time.

Before we get started what ground rules would you like to set? Here you can give other examples like respecting each other's opinion or the "Vegas Rule" what is said in the room stays in the room. Write these rules on the board or a piece of paper where they can see and be reminded of the rules during the session. Great, now that we have these in place we can move on.

Finding a Common Language:

Throughout the interview there may be explicit language used. Discussing sex/condom use can be uncomfortable at times. It is normal for both parties to feel uncomfortable or embarrassed when discussing such sensitive topics. Ask the participants if there are any code words that they would like to use that would make them feel more comfortable expressing how they feel about discussing sex.

Throughout this interview I will be using some explicit language. Are there any code words or slang that you would like to use that would make you feel more comfortable during this process? Give an example i.e. condom = rubber, jimmy hat, glove (don't laugh but these are from the late 1990's, please give some examples that you know).

Sharing Stories

Encourage the participants to share their personal stories (if applicable to topic).

Lastly, as we go through the questions I would like to encourage you to share with the group stories or examples from your life. I am really excited about this so let's get started! You may frame this last sentence differently but show enthusiasm. Let the teens know in some format that this process is really all about them and that you are interested in them

APPENDIX B

Social Media & Young African American Males' Condom Use - INTERVIEW GUIDE QUESTIONS

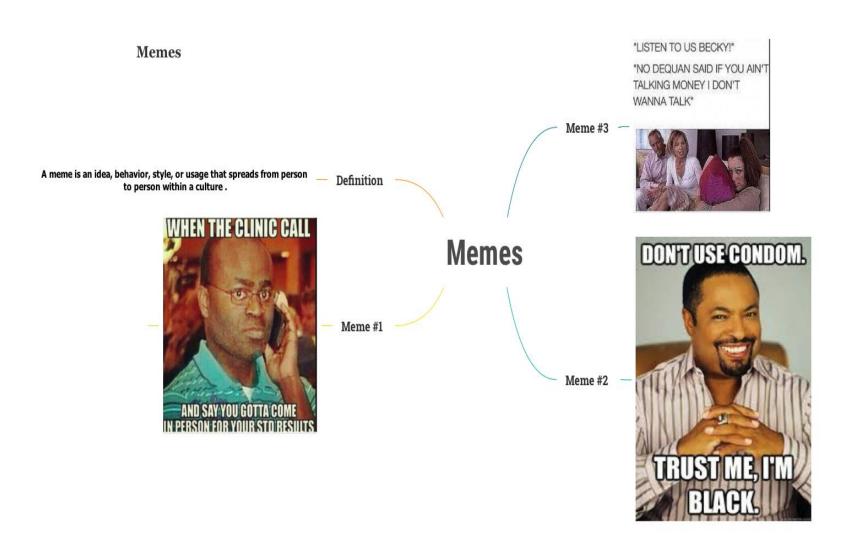
SECTION 1		
Question	Activity	Follow-up Questions /Comments
	Explore Usage (how often do they use the product and why)	
1) How do you feel about the idea of using social media (insert favorite types = Twitter, IG, YouTube) to educate teens on condom use? Educate can refer to information or teaching skills. (WAIT FOR THE PARTICIPANTS TO ANSWER BEFORE GOING TO THE ACTIVITY)	Explore Usage (how often do they use the product and why?) 1) When was the last time that you used a social media site? 2) Do you have social media site that you prefer (if person states that "it depends" ask them what does it depend on?) 3) When would say that you are usually on these sites? 4) What were you on the site for?	For question #3 under activity " Exploring Usage". Please ask the participants why they use social media during that specific time of day.
	Serial Association (Using Rating Scales)	
	Now tell the participants to look at the screen and Rank 1 (most favorite) to 7 (least favorite) types of social media that you use. Make sure the participants have paper and pencil to write down their answers.	
.6	Look at results from the survey	
What do you like/dislike about using social media as a resource to educate teens on condom use?	Review the results from the Qualtrics from the following questions: (1) Which of the following social media sites would you say you use the most? (2) Please indicate how much you enjoy using each social media site listed below. Compare and contrast the survey results with the rating scales (see follow up questons)	Ask the participants why the answers from survey vs. the rating scales differ?
What are some of the benefits /drawbacks about using social media to educate teens on condom use		
4)How does social media make it easy/difficult for you to learn about sexual health information		
SECTION 2		
Question	Activity	Follow-up Questions/ Comments
1)Who would support you using social media as a way to educate yourself on condom use?		Think cognitive authority here – Give examples like: Parents, peers, Pro athletes, famous people, significant other, coaches. Really ask them about these particular indivduals separately about who would support them using social media to educate themselves and why?

2) Who would be against you using social media as a way to educate yourself on condom use?

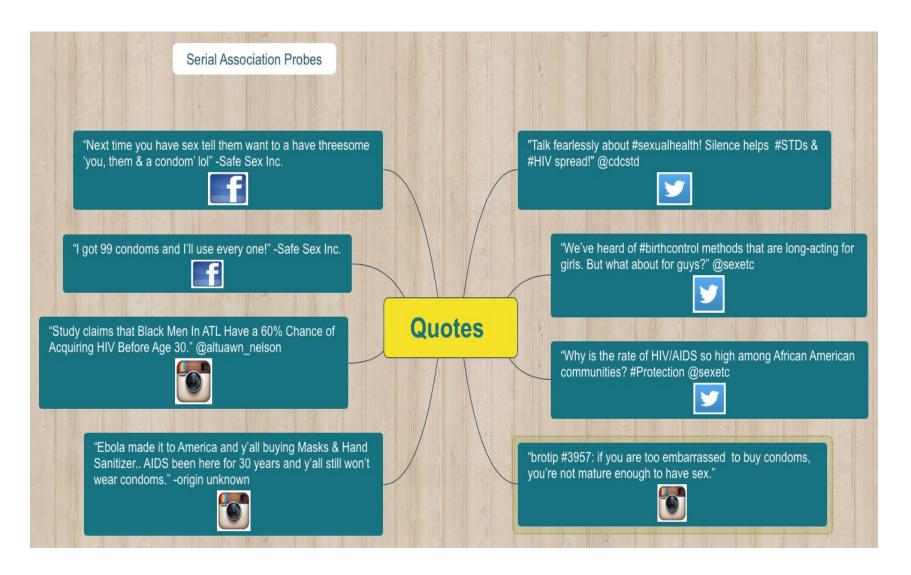
Same .. parents, peers etc. Think cognitive authority here – Give examples like : Parents, peers, Pro athletes, famous people, significant other , coaches. Really ask them about these particular indivduals separately about who would not support them using social media to educate themselves and why?

SECTION 3		
Question	Activity	Follow-up Questions/ Comments
	Personification (stereotypical drawings to prompt conversation)	
What types of social media would make it easy/diffcult to learn about condom use?	Please look at the screen: These popular pictures are from a social media sites. Which of these pictures would make it easy or difficult for learning about social media and condom use?	Please look at the screen: These popular pictures are from a social media site. Which of these pictures would make it easy or difficult for learning about social media and condom use?
	Deprivation Technique (Sorting - use a deck of cards or note cards to rank priority of a topic)	For questions 1-3 below please ask which is "easy" to use then follow up and ask which is "difficult" to use
	Please look at the screen or card key - Participants will be able to choose four cards from a deck of cards provided by the facilitator. Participants will not be able to turn the card over until the facilitator tells them which card suit (e.g. Hearts, Spades) correspond to which social media site. Participants will then use the cards to answer the follow questions:	1) Which site would make it easy to learn about condom use and why? 2) Which social media site would make it difficult to learn about condom use and why? 3) Which of the following types of social media would you miss if it were no longer available?

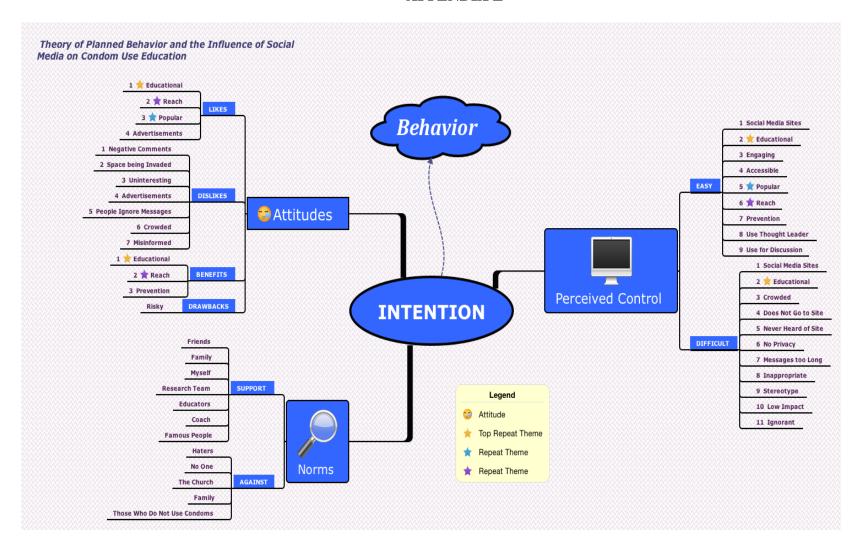
APPENDIX C



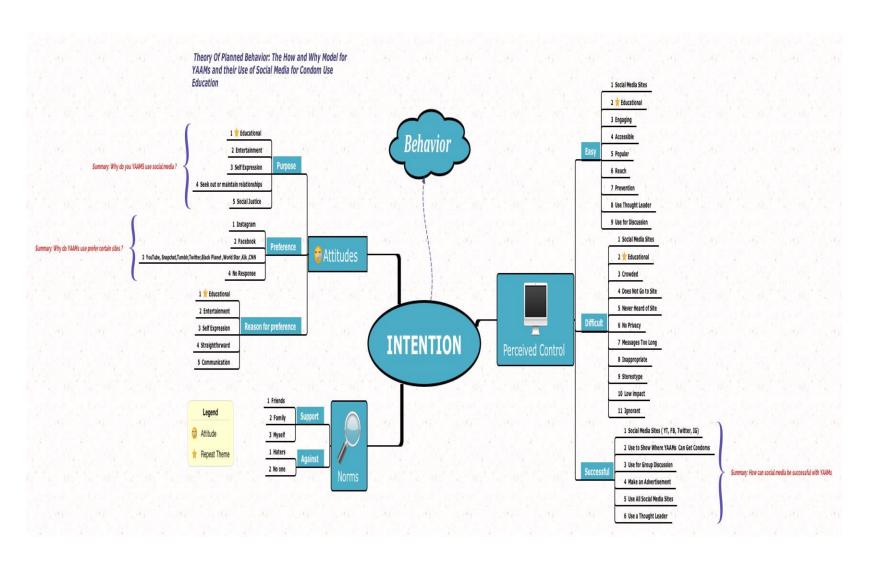
APPENDIX D



APPENDIX E



APPENDIX F



APPENDIX G

