Elephant in the Room: A Content Analysis of Unplanned Parenthood and Subsequent Drop-Out for Black Community College Students

Leah P. Hollis, EdD

Assistant Professor Community College Leadership Doctoral Program Morgan State University

Abstract

Few studies examine the association between community college students' risky sexual behavior, unplanned pregnancy, and the subsequent withdrawal from school. Further, students' nonchalant attitudes and lacking access to health care and information about contraceptive use may exacerbate the problem. Hence, comprehensive sexuality education can assist Black community college students to make sound contraceptive decisions and to avoid unplanned consequences. Given the lack of empirical research on the connection between unplanned pregnancy and student retention for Black community college students, this content analysis using Krippendorff's procedures (1980) develops themes from 100 articles and reports on sex education, relationship status, social norms, and contraceptive use. The resulting analysis using social ignorance theory (Ungar, 2008) shows that nonchalant attitudes regarding sexual practices and social norms influence risky sexual behavior for Black community college students and eventually withdrawing from school.

Keywords: Sex education, Community colleges, Student retention, and Black students.

Introduction

Student development theorists have considered various factors that affect college student retention. Financial aid, work hours, commuting time, parents' educational background, high school preparation, academic advising, faculty involvement, orientation, and identity development have been the focus of such theorists studying college student persistence (Astin, 1996; Chickering, 1969; Pascarella, Terenzini & Wolfle, 1986; Tinto, 1993). Other student development theorists consider Black students' socio-economic status, high school preparedness, campus social connections, and developmental education (Grier-Reed, Madyun & Buckley, 2008; Harris & Wood, 2014; Quaye & Harper, 2014). However, an overlooked element is sex, one of the major human drives, along with eating and sleeping (Freud, 1923; Reiss & Havercamp, 1998). Despite sex being one of the major human drives, student development theorists do not typically consider sexual behavior and contraceptive practices in their analysis of student persistence and student retention.

Resultantly, sexually transmitted infections (STIs) and unplanned pregnancy have not been the focus of much research in relationship to college student retention at the four-year or the two-year level. Notably, community colleges host the age group of students who are in the highest risk age group for unplanned pregnancy. According to 2015 information from the American Association of Community Colleges (AACC), the median age of community college students is 24 (AACC, 2015), within the age group most likely to experience unplanned pregnancy (Prentice, Storin & Robinson, 2012). More specifically, 68% of Black college bound students attend community college (Carnevale & Strohl, 2013) and emerge from communities, which historically host disenfranchised neighborhoods and lacking education. In turn, they have disproportionately more unplanned pregnancies (Bryant, 2009; Ispa, Sable, Porter & Csizmadia, 2007).

Problem Statement

The American Association of Community Colleges (AACC), which advocates nationally for over 1,100 community colleges, worked in concert with the National Campaign to Prevent Teen and Unplanned Pregnancy to conduct primary research linking unplanned pregnancy with community college student drop-out rates.

The findings reveal that 55% of unplanned pregnancies occur with women in their 20s (Prentice et al., 2012). Within this context, one in 10 unmarried women aged 20 - 29 years had unplanned pregnancies; however, one in six Black women in this age group had unplanned pregnancies (Antonishak & Connolly, 2014). Consequently, births resulting from an unplanned pregnancy disproportionally affect Black students because Blacks were 40% of respondents and Caucasians were only 30% of respondents within the Antonishak and Connolly study (2014). Further, the AACC reported that 6,865,992 students enrolled in community college full-time and part-time. Whites were 68% (4,668,874) and Blacks were 27% (1,853,817) of the community college student population respectively. The problem reported in the Make It Personal Report (Antonishak & Connolly, 2014), showed that 7% of community college students drop-out due to unplanned pregnancy. Consequently, 480,619 community college students drop-out due to unplanned pregnancy; potentially 129,767 (7% of the Black community college student population) leave school annually because of unplanned pregnancy.

Purpose Statement

Based on the AACC report findings (Antonishak & Connolly, 2014), Black community college students are more likely to make uninformed contraception decisions, resulting in unplanned pregnancy. In addition, an in-depth search in Ebsco Host, ProQuest, ERIC, and Google Scholar databases returned over 5,100 articles on sex education for college students, sex education for global students, attitudes about contraceptive use and sex education, alcohol use and sexually transmitted infections (STIs), and sexual victimization. However, no researchers or theorists, outside of the AACC study (Prentice, Storin and Robinson, 2010) have empirically linked unplanned pregnancy and community college student retention. Therefore, the purpose of this content analysis of 100 articles and reports is to reflect on students' attitudes regarding sexual practices, social norms, sex education, and the respective sexual behaviors of college-aged adults. By examining information on analogous populations, four-year college-aged adults, Black four-year college-aged adults, college-aged adults in the community, and Black college-aged adults in the community, this content analysis could reveal issues which influence Black community college student unplanned pregnancy and subsequent drop-out rates.

Significance to higher education and community colleges

The rationale for concentrating on community colleges is the United States' focus on the degree completion pathway; this information is particularly pertinent to the community college population because two-year colleges educate close to 52% of all publically educated college students (National Center for Educational Statistics, 2013). Also, the Obama Administration recommended that 60% of Americans have some college degree by 2020 (Department of Education, 2011). In turn, 5 million more students are expected to access community colleges to complete their degrees (American Association of Community Colleges [AACC], 2015). Regarding Black students at two-year colleges, a 2013 study from Georgetown University, confirmed that Black students disproportionately attend the two-year open-access schools. Since 1995, "82 percent of new white enrollments have gone to the 468 most selective colleges, ... [while] 68 percent of new African-American enrollments have gone to the two-year schools" (Carnevale & Strohl, 2013, p.9). In short, because Black students are more likely to have less financial support from home, they have less opportunity to attend more expensive senior institutions that have more resources; therefore, they are more likely to attend community colleges, which have fewer resources to support students (Carnevale & Strohl, 2013).

Literature Review

Several researchers focus on the risky combination of alcohol, sexual intercourse, and resulting STIs (Ahern & Sole, 2010; Attin, 2012; Calderia, Singer, O'Grady, Vincent & Arria, 2012; McNair, 2011; Scott-Sheldon, Carey & Carey, 2010). However, research typically does not reflect on how uninformed or nonchalant sexual decisions and resulting unplanned pregnancy have an impact on a student's ability to focus on academic progress. Further, information from Sexuality Information and Education Council of the United States, [SIEUS] (2015) and the Office of the Surgeon General (2001) showed that comprehensive sex education can have a positive effect on young adults' sexual behaviors. Comprehensive sex education presents facts and consequences, beyond preaching a just-say-no stance to pre-marital sex. The following sex education definitions and history on sex education provide insight to how the American culture has laid the groundwork for uninformed college-aged students.

Definitions of Sex Education

Sex education has several approaches such as comprehensive programming which is "medically accurate" and "relates to human development, relationships, decision making, abstinence, and contraception and disease prevention" (Sexuality Information and Education Council of the United States, [SIEUS] para. 10, 2015). The following definitions inform the discussion on sex education.

Type of Sex Education

Comprehensive sexuality education-Medically accurate information that relates to human development, relationships, decision-making, abstinence, contraception, and disease prevention.

Abstinence-based- Focuses on abstinence and sexual behavior other than intercourse and offers disease prevention information.

Abstinence-only- Only focuses on abstinence with no information on contraceptives or disease prevention.

Abstinence-only-until-marriage- Sexual activity inside marriage is the only morally correct sex. Emphasizes abstaining from all sexual behavior outside of marriage.

Fear-based- Abstinence-only and abstinence-only-til-marriage programs that offer scare tactics and negative messages to control sexual behavior.

According to SIECUS (2008), abstinence-based, abstinence-only, abstinence-until-marriage, and fear-based sex education have proven to be less effective in altering young peoples' sexual behavior. "Two-thirds of comprehensive programs had positive sexual behavioral effects....Nearly 30% of comprehensive programs reduced the frequency of sex [and] more than 60% reduced the incidence of unprotected sex" (SIECUS, para. 6, 2008). Nonetheless, according to the Guttmacher Institute (2015) only 22 states and the District of Columbia require any sex education. Of those 22 states, only 13 require that the education be medically accurate. Further, only eight states require that sex education eliminate race or gender driven bias.

Brief History of Sex Education

American sex education historically was designed to prohibit sexual activity. Sex outside of marriage was deemed immoral; therefore, society had little need to understand contraceptive use. As a result, information about safe sex or contraceptive use was not explored because sex education focused instead on totally avoiding intercourse (Carter, 2001). In the early 1900s, the American sex education mission encouraged family life and protected birth rates within the family structure. Consequently, abstinence-only sex education only focused on hygiene and preventing venereal disease. However, society feared that sex education would be vulgar and commercial, potentially encouraging prostitution and promiscuity (Carter, 2001). Sex often was believed to be a man's issue; in turn, many military units had sexual education for the enlisted to "prevent contagion and vice" (Carter, 2001, p. 220). Nonetheless, for this fear-based approach to scare men away from venereal disease, sex education also had to discuss scurrilous topics such as adultery, prostitution, intercourse, and prophylactics. With sex education's roots based in disease prevention through fear or abstinence, other topics such as contraceptive use and other safe sex strategies remained taboo (Carter, 2001).

Freeman (2008) also noted that sex education was about immorality and hygiene in the 1930s. Her study included interviews with men and women who attended American high schools in the 1940s and 1950s to reveal common themes about sex education. A major focus about sex education was to find a mate, a theme that aligns with Carter's discussion (2001) on preserving childbirth in families. The late 1960s brought sexual freedom through the pill and other advancements in birth control. However, Irvine (2002) also noted this freedom that put sex education to focus on hygiene and abstinence. In response, religious groups intensified fear-based education associating sex education with teen pregnancy and suicide (Irvine, 2002). Even through the late 1980s, pregnancy outside marriage was considered a result of sexual immorality; therefore, comprehensive sex education typically was not a viable classroom subject. Often adults and teachers skittish about the topic misrepresented the information if such information was ever offered. Stanger-Hall and Hall (2011) reported that the United States of all developed countries has the highest incidents of unplanned pregnancies and sexually transmitted infections. Through their study, which used the Education Commission on the States data and policies from 48 states, the researchers considered the sex education policy, wealth of each state, socioeconomic status, and educational attainment.

Through a multi-regression analysis, they found that abstinence-only state policies were ineffective and a contributing factor to the high teen pregnancy rate. The state of Mississippi would be a prime example. In 2011, Mississippi passed legislation, House Bill 999, for only providing abstinence-based sex education. However, the state of Mississippi has the second highest teen birth rate in the United States (Mississippi First, 2015). Regardless of the delivery and the intended audience, historically, sex education tended to focus on the physiology of the birds and the bees, followed by a one-dimensional message of abstinence. According to Franklin and Dotger (2011), abstinence-only sex education is the only federally funded sex education program in the United States. Despite findings that abstinence-only programs have little impact on young people's sexual behavior (Freedman-Doan, Fortunato, Henshaw & Titus, 2013), comprehensive sex education continues to be a contentious topic that pits knowledge of sexual behavior against morality (Lamb, 2013). In contrast, other industrialized nations have infused comprehensive sex education into the curriculum. Informing young people with accurate contraceptive information has been successful. The result of comprehensive sex education resulted in lower conception rates and lower rates of STI (Portier-LeCocq, 2014). In turn, lower conception rates mean fewer distractions to students' academic progress.

Theoretical Framework

Social scientists and philosophers have considered the role of ignorance, or a lack of knowledge, in relationship to reasoning, decision-making, and morality (Guerrero, 2011; Harman, 2011; Howell & Shepperd, 2013; Kelsey & Quiggin, 1992). Ignorance can exist outside the realm of information that is attainable. For example, one might be ignorant regarding another solar system or galaxy because collecting data from such environments is beyond the scope of most human capacity. Ignorance can also exist with those who do not have access to knowledge; the knowledge is available, but given a person's station in society, the knowledge may be unobtainable. This example might consider how one is ignorant about different cultures or social mores because one's station in society has excluded him or her from those experiences or access to those cultures. Ignorance can also reside in the middle of these extremes, emerging from a lack of knowledge; yet this knowledge is available and obtainable (Ungar, 2008).

The ignorance in relation to the obtainable knowledge, the knowledge that one chooses to ignore or not pursue despite its availability, potentially applies to both college-aged adults and college administrators. By not seeking knowledge, the knowledge receiver makes the psyche unaware or oblivious to the true consequence of knowing. This theoretical ignorance serves as the framework for this content analysis on three levels. First, for college-aged adults who choose not to seek proper education regarding the consequences of risky sexual behavior, the choice to remain ignorant keeps them from critical knowledge regarding STIs, unplanned pregnancy and the potential long-term effects of these consequences. The knowledge of perceived sexual pleasure overrides the motivation to reduce their ignorance or lack of knowledge. Second, many college-aged adults who come from disenfranchised areas may not have access to health care and the education that comes through regular doctors' visits. While this group may also choose ignorance, lacking access to health care for socioeconomic reasons contributes to ignorance if such accurate health information is unobtainable.

Third, for college administrators, potential ignorance to the need for comprehensive sex education for students alleviates them from the responsibility to consider comprehensive sex education and the accompanying costs. By choosing the unknown, which is choosing ignorance, educators have one less conundrum with which to grapple. Further, administrators potentially remain ignorant to how comprehensive sex education could bolster student retention rates. The aforementioned history on sex education establishes a culture where comprehensive education about sex was shunned for decades in the United States. The culture's past and present collective ignorance misinforms young people creating a void without the specificity required to make truly insightful decisions regarding contraceptive use. This collective ignorance also sets the stage for administrators to maintain that status of ignorance because sex education has been very controversial in a culture where abstinence-only sex education is the only type of education to receive federal funding (Franklin & Dotger, 2011). Given the history, the state of ignorance has created a perceived safe yet uninformed space for all parties.

The Study

Research Method

In an attempt to bridge the gap of information regarding Black community college students and sexual behavior that may lead to unplanned pregnancy and potential drop-out, a content analysis was conducted on 100 articles regarding college-aged adults and their attitudes and understandings about contraceptives. In the summer of 2015, extensive searches on ProQuest, Ebsco Host, ERIC, and Google Scholar did not reveal any research articles specifically addressing Black community college student sexual behavior, unplanned pregnancy and the potential effect on student retention. In fact, only seven articles have been published since 1995 that address community college student sexual behavior (Hannon, Hall, & Kuntz, 1995; Hannon, Hall, & Nash, 2000; Marchand, Glenn & Bastani, 2012; Marchand, Glenn, & Bastani, 2013; Shapiro & Radecki, 1999; Smith, 2003; Trieu, Bratton, & Hopp-Marshak, 2011). None of these articles address unplanned pregnancy or college retention, but instead primarily focus on STIs. Therefore, information regarding four-year college students, and college-aged adults in the community was used in this analysis to better understand the association between contraceptive use, unplanned pregnancy, and student retention. From the literature, Black college-aged adult behaviors were also a central focus. As community college students by definition emerge from the community, findings from analogous populations can provide insight to the behaviors of community college students in the absence of articles specifically examining Black community college sexual behavior and the unplanned outcomes.

Research Questions

In an effort to understand Black community college students' sexual behavior, its association with unplanned pregnancy, and the impact on Black community college student retention, these research questions were designed. The absence of data on this issue led to the content analysis that considered information from college-aged adults and Black college-aged adults to answer the following questions:

RQ1 What behaviors and attitudes do Black college-aged adults have about sex and contraceptive use?

RQ2 What factors influence Black college-aged adults' behaviors and attitudes about sex and contraceptive use?

RQ3 How is Black community college student drop-out rates affected by student behavior, student attitudes, and social factors related to contraceptive use?

Limitations

The limitations of this study emerge from the fact that no empirical studies, with the exception of the AACC's *Make It Personal Report*, connect Black community college student sexual behaviors, their attitudes to unplanned pregnancy, and potential drop-out rates. Sex education researchers and student development researchers have not considered these issues in concert. Therefore, the content analysis was based on Black college-aged adults' and college-aged adults' behaviors and attitudes regarding risky sexual behavior, contraceptive use, and the potential outcome.

Data Collection

Ninety-five articles were collected from ProQuest, Ebsco Host, ERIC, and Google Scholar. Five reports from Georgetown, AACC and the National Campaign were also included in this analysis for a total of 100 documents subject to the content analysis. Publication dates range from 1995-2015. Keywords used to garner the articles and reports were contraceptive use, college student sexual behavior, Black college student sexual behavior, risky sexual behavior in college, college unplanned pregnancy, college drop-out. Articles focusing on college-aged adults or Black college-aged adults were chosen for this content analysis.

Validity

The researcher is a seasoned qualitative researcher who guides dissertation studies using qualitative methods. In turn, a skilled researcher conducted this content analysis that relied on qualitative coding procedures. Consistent with Creswell (2014), the maturity and experience of the researcher supports validity.

Data Analysis

This study used Krippendorff's (1980) procedures for the content analysis. These procedures were utilized to create knowledge and represent previously defined facts to determine potentially new courses of action. The procedures for this study encompassed three steps that included data sampling, data reduction, and data analysis.

Data sampling is the purposeful collection of written work for the content analysis. In this study, 100 articles were chosen by specific keywords in order to create a sample for further analysis. Data reduction required omission of information in the respective articles that were outside the scope of the purpose. For example, in this study, information that focused on the LGBT community, international students attending non-American universities, and information on assault were omitted from the analysis. Data analysis included and organization of data to create themes (Creswell, 2014). Common phrases regarding college-aged adults guided the organization. Articles were read and reviewed several times to distil information. After the review, open coding allowed for the emergence of central themes to answer the posed research questions.

Results

Inconsistent attitudes and behaviors about condom use and oral contraceptives is a precursor to unplanned pregnancies and STIs. College-aged adults 20-29 may not be properly educated about contraceptive use, do not choose the proper application of contraceptives, or have mixed perceptions about condom use. The miseducation and mixed perceptions contribute to this age group being the most likely to have unplanned pregnancies. Whether the populations in the respective studies were four-year college students, Black four-year college students, college-aged adults in the community, or Black college-aged adults in the community, common themes emerged regarding contraceptive use.

Table 1 Category from Content Analysis		
Themes	Number of articles/% of total	
Contraceptive use	76	
STI	64	
Risky Behavior	57	
Black college students	27	
Social Norms	16	
Hook up behavior	11	
Attitudes/Communication	on 11	
Relationship status	10	
Community College	7	
Alcohol Use	7	
Pregnancy	7	
Religiosity	6	
Sexual Knowledge	6	
College Retention	2	

Articles for content analysis were assigned respective categories if that category was the focus of the abstract, in the article's purpose statement, or a significant finding of the research. Contraceptive use (76% of articles), Sexually Transmitted Infections (STIs) (64% of articles), and risky behavior (57% of articles) were anticipated categories given the analysis on the sexual behavior of college-aged adults. Specifically, as the analysis sought to understand Black college-aged adults, 27% of articles specifically considered Black students or Black adults. Other categories included: alcohol use, 7%; attitudes/communication, 11%; hook up behavior, 11%; pregnancy, 7%; relationship status, 10 %; religiosity, 6 %; sexual knowledge, 6%; and social norms, 16%. The following themes emerged to address the specific research questions.

- Theme #1 Relationship Status
- Theme #2 College-aged adults are uninformed
- Theme #3 Attitudes and subsequent communication on contraceptive use
- Theme #4 Black college-aged students are influenced by media
- Theme #5 Impact on student retention

RQ1 what behaviors and attitudes do Black college-aged adults have about sex and contraceptive use? *Theme #1- Relationship Status*

For college-aged adults and Black college-aged adults, their perceived relationship status informed how they used contraceptives. If the sexual partner was the monogamous partner in a perceived committed relationship, college-aged adults were less likely to engage in condom use. For casual partners, condoms were more likely to be part of the negotiation before sexual intercourse.

For example, in a qualitative study of 19 Black men attending HBCUs, study participants had vastly different experiences from "the men did not express any apprehension when female partners introduced condoms," to "... a lot of unprotected sex which led to a lot of Plan B pills" and the subsequent worry about unplanned pregnancy (Younge et al., 2014, p.78). These findings are similar to other studies (Gillmore et al., 2003; Noar et al., 2011; Seal, Wagner-Raphael, & Ehrad, 2000) in which condoms were less than a priority in presumably monogamous relationships. Consistent with the theme on relationship status, condom usage was the focus of another study where some college men believed that condoms should be used to avoid contracting disease when they stray outside of their monogamous relationship (Seal, Wagner-Raphael, & Ehrad, 2000). In a similar study of 223 undergraduate college students conducted 14 years later, Goldman, Martin, Bryan, DiClemente, and Ditrinco (2014), confirmed that communication apprehension yields negative views in discussing condom use with perceived monogamous partners.

Noar's 2011 qualitative study of 38 Black students corroborates the theme that relationship status is a significant consideration in condom use where participants were less likely to introduce the topic of condom use to a 'main partner.' Men and women alike explained negotiated condom use was extremely difficult with their main partners. In fact, for participants, "this was described as impossible... especially if other forms of birth control were being used" (Noar et al., 2011, p. 965). However, for both female and male participants, "condom negotiation was often used in casual relationships..." (p. 965) with the woman bearing the responsibility to open the discussion on condoms.

Theme #2- College-aged students are uninformed about contraceptive use

In regard to sex, miseducation can be just as detrimental as no education at all. Young adults who do not know proper contraceptive use can contract a sexually transmitted infection or conceive an unplanned pregnancy. Studies on college-aged adults in the community also provide insight to young adults' perceptions regarding sexual behavior and contraceptive use for Black community college students. To support theme #2, a study of 1800 unmarried men and women, many women had prescriptions for oral contraceptives; however, lacking knowledge of their appropriate use led to a 50% failure rate. Among those who used birth control pills, nearly half (44%) incorrectly believed that it was necessary to take a break from the pill every few years (Kaye et al., 2009). Other elements have an impact on young adult's sexual beliefs. Some young people believed that pregnancy was less likely if sex was performed while standing (Kaye et al., 2009). Others believed the old wives' tale that a woman cannot get pregnant if she was breastfeeding (Kaye et al., 2009).

The Toews and Yazedjian (2012) study also supported the second theme as their study of 1004 college students found that the population had limited knowledge about contraceptive use. Their perspective considered Frost, Signer and Fine (2007) that claimed the unintended pregnancies were a result of improper contraceptive use. The Toews and Yazedjian (2012) findings stated that 82.4% incorrectly answered regarding birth control and pregnancy; 79.5% missed the question about when women were most likely to become pregnant and 79.3% were unaware of how birth control pills work. Their conclusions suggested that higher education needs to reconsider the implementation of sex education and information about proper contraceptive use (2012). The theme of misinformation in relation to the community college population affects more Black students given the concentration of Black students attending community college.

In regard to birth control, the following passage highlights the issue: "For example, 94% of unmarried young adults ages 18-29 say they have all the information they need to avoid having or causing an unplanned pregnancy; however, 11% say they know 'little or nothing' about condoms, 42% say they know 'little or nothing' about intrauterine devices (IUDs)" (Prentice et al., 2012, p. 8). As community college students by definition are of the community and not in college housing, *The Fog Zone*, (Kaye, Suellentrop, and Sloup, 2009) specifically provided insight to young people's behavior and was adopted by the AACC to inform their support of comprehensive sex education. Kaye, Suellentrop, and Sloup (2009) found that students' low income contributed to the misnomers regarding contraceptive use. Those without stable health care were uninformed or under-informed about pregnancy and disease prevention. Other students also believed that it did not matter if contraceptives were used or not. They believed fate produced or prevented pregnancy, not accurate reliance on contraceptives. Women's misinformation and biases about contraceptives also created unwanted pregnancy and disease. Some found it "unreasonable to use contraception every time [they have] sex" (Prentice et al., 2012, p. 18).

RO2 what factors influence Black college-aged adults' attitudes about sex and contraceptive use?

Theme #3- Attitudes and subsequent communication on contraceptive use

College-aged adults and Black college-aged adults comment on their strategies regarding contraceptive use. For example, Davis et.al (2014) conducted a qualitative study of 60 heterosexual men, ages 21-35. The participants' attitudes regarding condom use revealed that while all acknowledged the benefits of condom use in preventing STIs and pregnancy, some saw condom discussions with a partner as a mood killer, giving her time to say "no." Another study with college students revealed that some men were apprehensive to introduce condom use, because they did not want to be associated with disease or infidelity (Gillmore et al., 2003). Men were willing to consider abstinence as a method to prevent STIs. However, they thought it would be frustrating to use condoms, even though it built trust with a partner. Oral contraceptive use also appeared to have a negative effect on condom use for some women of color. In a study of 1281 women under the age of 25 across three cities, Atlanta, Dallas, and New York City, researchers analyzed the introduction of oral contraception and its association with continuing condom use. The women using the health clinics in the study tended to be African American and Hispanic. Before oral contraceptive use, 28% of women reported they used condoms regularly. However, six months after taking oral contraceptives, only 14% always used condoms (Morroni, Heartwel, Edward, Zieman, & Westhoff, 2014). Previous information on failed oral contraceptive use (Kaye, et al., 2009), when coupled with discontinued condom use, can lead to unplanned pregnancy.

Also, contributing to theme #3 is the nonchalance and non-committal attitudes that reinforce a "hook up" culture for Black and white college-aged adults. In turn, sexual encounters can be quick and anonymous. While "hook up" behavior does not always include intercourse, "a typical hook-up most often involved anonymous partners and no expectations of future commitment" (Barriger & Velez-Blasini, 2013, p. 84). Such attitudes highlight some young people's flippant attitude about sex. This flippancy also appeared in partners' attitudes regarding contraception when males push for unprotected sex. Smith (2003) studied 247 anonymous questionnaires from community college students to find that 46.7 % had unwanted no condom intercourse. The respondents reported that influence from the male partner was a major reason for no condom use. Such attitudes diminished the urgency for safe and protected sex, which increased the chance of unplanned pregnancy.

Theme #4- Black college-aged students are influenced by media

Theoretically, Lapinski and Rimal (2005) highlight how the media contributes to social norms. Social norm theory, originally introduced in the 1980s, was used to explore college student alcohol use (Berkowitz & Perkins 1986; Berkowitz & Perkins, 1987). Researchers found that college students had a misperception of alcohol abuse on campus, and in turn perceived such behavior as normal. The perception of normalcy then heightened the inappropriate behavior. The application of social norms to Black college-aged adults' sexual behavior includes the media saturation of sexual images marketed to the young population. "People use the preponderance of behavior depicted in the media to form their perceptions of the prevalence of the behavior..." and further such perceptions inform people's actions regarding that behavior (Lapinski & Rimal, 2005, p.127). In short, "human behavior is guided by perceptions of popularity of the behavior" (p. 129). For example, the over-sexualized images of Black men and women in the media influence Black men and women's acceptance and engagement in casual or oversexed behavior (Staples & Johnson, 1993).

While social norms and peer perceptions were discussed in articles about both Black and white students, researchers showed media driven social norms had a greater impact on college-aged Black adults than on collegeaged white adults. Some researchers (Brown & Keller, 2000; Chandler et al., 2013; Collins, 2005; Hall, 2012) also reflected on the association between the media driven social scripts and Black college student sexual behavior. Chandler et al. (2013) considered the impact of the media on Black college females, mean age of 20. In a sample of 776 college women at a four-year public university, 51% of Black youth felt pressured to have sex from society, and 48% felt pressure from the media. "On television, Black males are portrayed as nonchalant about sex, and females depend on sex appeal rather than intelligence for their livelihood" (p. 2). Lacking or hesitant communication with parents normalizes avoidance on the topic of sex for young Black adults. Consequently, in the absence of such conversations with parents, Black youth will seek out the media, songs, television, and videos for information on sex (Brown & Keller, 2000). Oversexed and inappropriate sexual scripts that flood the media have a significant influence on Black culture (Stephens & Phillips, 2003). Historically, and in contemporary media, Black womanhood is often presented in caricatures, as the sapphire, mammie, or mannish workhorse (Collins, 2005).

Such pervasive images proliferating the media influence young Black women who are crafting their own sexual behavior and sexual identity. It's a "bad bitch" that can slay a man, not get tripped up in love, and handle her business (Collins, 2005, p. 125). Mammies are asexual, tending to children; but as an asexual figure, she, too, is denied access to accurate sex education. Such historical scripts and media images overlook the need for accurate and informed decisions about sex and seldom reflect on the consequences of risky sexual decisions (Collins, 2005). Further, Hall (2012) conducted a multiple regression study of 110 Black college women to consider how the stereotypes of mammie, Jezebel, superwoman, and sapphire affected women's sexual choices that may lead to HIV. Those roles associated with mammy, Jezebel, and superwoman were significantly and positively related to risky sexual behavior. Hall's findings report a statistical relationship between stereotypical belief systems and Black college women's sexual behavior. These findings when considered in concert with the normalizing of such stereotypes through the media, contribute to decisions that yield risky sexual behavior for Black college-aged adults. The media driven social norms (Brown & Keller, 2000; Chandler et al., 2013; Lapinski & Rimal, 2005; Staples & Johnson, 1993), when compounded with lacking transportation to health care, reliance on friends, or fear that contraceptives had side effects, have deterred Black women from seeking birth control (Sable, Libbus & Chiu, 2000). Within this context, Singh, Damrosch, Blastoff and Nadeau (2009) found that Black women who did not want to displease their partners were often persuaded to engage in intercourse without contraceptives.

RQ3 how are Black community college student drop-out rates affected by student behavior, student attitudes, and social factors related to contraceptive use?

Theme #5- Impact on student retention

As Porr and Acar (2010) noted, four-year college students' risky sexual decisions negatively affect their academic progress. Students often become distressed in the midst of dealing with unexpected conception or STIs. Despite confirmed risky sexual behavior in the "hook up" culture of college, students who maintain ignorance about the consequences are often surprised by the results, possibly leading to absenteeism, repeated courses and the corresponding need for additional financial aid, or dropping out of school altogether (Porr & Acar, 2010). Unfortunately, these numbers increase annually with the proliferation of STIs and unwanted pregnancy in the four-year college student population (Adefuye, Abiona, Balogu & Lukobo-Durrell, 2009). In a cohort study in which Blacks persisted at higher rates than the general population of the study, Baker and Robnett (2012) confirmed that Black students who socialized and connected with the institution were more likely to persist. However, if a student is struggling to balance childcare issues, his/her connection is with their children's needs of health, school, and supervision; connecting with the college experience can be a tertiary priority for single parents.

Seventy-five percent of community college students surveyed for the *Make It Personal Report* stated that pregnancy prevention was a priority (Prentice et al., 2012), as conflicts attributed to childcare lead students to drop-out or take reduced course loads. Further, research revealed that community college students are often misinformed about the proper application of contraceptives (Prentice et al., 2012). Education at the post-secondary level can help them delay parenthood, avoid STIs, and instead focus on education. The *Make It Personal Report* from American Association of Community Colleges confirms that uninformed sexual decisions can adversely affect student persistence. "Twenty-seven percent of female students with children report reducing their course load or quitting" because of child care issues (Prentice et al., 2012, p. 4). As "61 % of those who subsequently had children left college ... compared with 37 % of those who never had children" (Bradburn, 2002, p. VI), community college students are still interested in the topic despite the controversy associated with sex education. Within an American focus that maintains a level of ignorance through abstinence-only education; many young people without comprehensive sex education make poor decisions regarding contraceptive use. The students in the community college sector are more vulnerable with the myriad of competing interests (jobs, commuting, family responsibility) that are more likely to affect the two-year college population (Powell & Agnew, 2007; Rodriguez-Kiino, 2013).

Discussion

The lacking information on contraceptive use and student retention creates a state of ignorance and a substantial knowledge gap in relation to Black community college students. The problematic gap in knowledge leaves this potentially disenfranchised population without representative data to guide community college administration regarding a critical element and its impact on student retention.

The five themes that emerged from the content analysis revealed a culture that chooses or is inadvertently ignorant to the need for comprehensive sex education at the post-secondary level. Specifically, community college educators can consider the culture of sexual ignorance constructed through media influenced social norms when developing sex education. The primary focus of comprehensive sex education could dissolve some misconceptions that Black students harbor regarding proper contraceptive use. As a result, sex education that acknowledges social norms and includes accurate information about contraception use can help students be more knowledgeable and avoid unplanned pregnancy. The resulting sex education that would align with the Office of the Surgeon General's recommendation for culturally sensitive sex education (2001) can in turn bolster degree completion at the community college level.

A growing number of community colleges are emerging as minority serving institutions. "Nearly 22 % of the nation's community colleges are minority-serving institutions and are responsible for enrolling about 55 % of college-going minorities" (Watson, 2015, para. 1). As the American demographic shift reflects that people of color under 15 years of age are in the majority, these students of color, in potentially varying stages of ignorance, matriculate disproportionately at the community college level. Empirically studying comprehensive sex education and its association with degree completion for community college students could positively affect poor degree completion rates in the two-year college sector.

Solutions and Recommendations

The findings confirm an aloof, non-committal, and potentially ignorant college-aged adult and Black college-aged adult population regarding accurate contraceptive use. Further, information also shows that comprehensive sex education, the style of sex education often eliminated from programming, can reduce ignorance and have a positive impact on young adult sexual behavior and proper contraceptive use. As applied to the community college sector, such programming can help community colleges minimize ignorance and bolster degree completion rates. In turn, through the curriculum, community colleges can help students think critically about the media blitz that normalizes promiscuity and unprotected sex. Instead, students can seek knowledge that keeps them informed about sexual practices that will not jeopardize degree completion through unwanted pregnancy. As community colleges continue to face mercurial enrollments and budget cuts from state and local governments, the funding for new programs may not be available for major changes. However, the American Association of Community Colleges has introduced cost-effective programs. Curriculum inclusion and campus-wide programming can help inform these populations. The following solutions and recommendations emerge from the findings and theoretical context to minimize ignorance regarding sex education:

1). Consistent with the Office of the Surgeon General (2001), interventions must be comprehensive and culturally sensitive while considering prevailing social norms in the media. Abstinence-based or abstinence-before-marriage sex education focuses on the mechanics of human interaction without focusing on accurate information on contraceptive use. However, studies have shown that students must be approached from their respective social contexts to truly engage in modifying their social behavior (D'Santiago & Hund, 2012). Interventions should acknowledge the cultural differences in sex education. For the Black community, family support, church support, and peer support are major catalysts. Curriculums that encourage engagement with these support groups can help Black students rationally consider sexual behavior and minimize the effect of sexual archetypes in the media (D'Santiago & Hund, 2012).

2). Curriculum development which includes comprehensive sex education can assist in educating community college students regarding smart sex choices and proper contraceptive use. Choo and Karp (2013) confirmed that community college students who take student success courses in the first academic term are more likely to persist toward the second year. Further, the AACC hosts a grant, Make it Personal: College Completion Plan, which gives grants to community colleges willing to create comprehensive sex education. Curriculum development can be a key intervention with community college students. Faculty support is a critical element because community college students commute and are less likely to engage in student activities outside of class. However, community college students are more likely to modify academic and social behavior through student-faculty interaction (Miller et al., 2005). This solution also relies on a comprehensive approach with faculty who will assuage inappropriate cultural stereotypes. The faculty teaching comprehensive sex education should have certification to provide accurate information. One or two faculty seeking certification can lead a train-the-trainer model to a group of committed faculty to offer medically accurate sex education.

3) Community college researchers should conduct primary research to further explore the connection between comprehensive sex education and community college student retention. Quantitative methods such as correlation studies and multiple regression studies that can consider a range of variables (age, race, educational level of parental income) along with comprehensive sex education can examine if a statistically significant relationship exists. This research could model the national study conducted by Stanger-Hall and Hall (2011), which also utilized a multiple regression to consider comprehensive education along with a number of socio-economic variables to establish a statistical relationship. Qualitative methods could yield data that highlights students' attitudes and perceptions regarding comprehensive sex education, sexual behavior and the impact on their progress to degree.

Conclusion

Regardless of a person's age, sex can make one engage in irrational and uninformed behaviors, which jeopardize other personal goals. Consequently, sexual activity can create outcomes that run counter to the goal of degree completion for college students; a bad sexual encounter can derail a student's academic progress through STIs or pregnancy. While the AACC has presented the empirical research linking unplanned pregnancy and declining college retention, comprehensive sex education that would properly inform young adults is primarily missing from college campuses and the literature on student retention.

References

- Adefuye, A., Abiona, T., Balogun, J., & Lukobo-Durrell, M. (2009). HIV sexual risk behaviors and perception of risk among college students: Implications for planning interventions. *BMC Public Health*, *9*, 281, doi:10.1186/1471-2458-9-281
- Ahern, N., & Sole, M. (2010). Drinking games and college students: Part 1: Problem description. *Journal of Psychosocial Nursing and Mental Health Services*, 48(2), 17-20. doi: 10.3928/02793695-20100302-03.
- American Association of Community Colleges (AACC). (2015). 2015 Community College Fast Facts. Retrieved from http://www.aacc.nche.edu/AboutCC/Pages/fastfactsfactsheet.aspx
- American Association of Community Colleges (AACC). (2015). *Community college enrollment*. Retrieved from http://www.aacc.nche.edu/AboutCC/Trends/Pages/enrollment.aspx
- Antonishak, J., & Connolly, C. (2014). Preventing unplanned pregnancy and completing college: an evaluation of online lessons, 2nd Edition. Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy.
- Astin, A. W. (1996). Involvement in learning revisited: Lessons we have learned. Journal of College Student Development, 37 (2), 123-133.
- Attin, O. M. (2012). Comparing two-year community college and four-year university student social and behavioral sexually transmitted infection risk factors (Order No. 3518537). Available from ProQuest Dissertations & Theses Full Text. (1033782987).
- Baker, C., & Robnett, B. (2012). Race, social support and college student retention: a case study. *Journal of College Student Development*, 53 (2), 325-335.
- Barriger, M. & Velez-Blasini, C. (2013). Descriptive and injunction social norm overestimation in hooking up and their role predictors of hook-up activity in a college student sample. *Journal of Sex Research*, 50 (1), 84-94. doi:10.1080/00224499.2011.607928
- Berkowitz, A. & Perkins, H. (1987). Current issues in effective alcohol education programming. In Joan Sherwood (ed.). *Alcohol policies and practices on college and university campuses*. 69-85. Columbus, OH National Association of Student Personnel Administrators Monograph Series.
- Berkowitz, A. & Perkins, H. (1986). Resident advisors as role models: A comparison of drinking patterns of resident advisors and their peers. *Journal of College Student Personnel*, 27 (2), 146-153.
- Bradburn, E. M. (2002). Short-term enrollment in postsecondary education: student background and institutional differences in reasons for early departure, 1996–98. Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- Brown, J. & Keller, S. (2000). Forum: Can the mass media be healthy sex educators. *Family Planning Perspectives*, 32, (5), 255-258.
- Bryant, K. (2009). Contraceptive use and attitudes among female college students. ABNF Journal, 20(1), 12-16.
- Calderia, K. M., Singer, B., O'Grady, K., Vincent, K., & Arria, A. M. (2012). HIV testing in recent college students: prevalence and correlates. *AIDS Education and Prevention*, 24(4), 363-376.

- Carnevale, A. & Strohl, J. (2013). Separate and unequal: How higher education reinforces the intergenerational reproduction of white racial privilege. Georgetown Public Policy Institute. Georgetown University, Washington, D.C.
- Carter, J. (2001). Birds, bees and venereal disease: Toward and intellectual history of sex education. Journal of the History of Sexuality, 10(2), 213-249.
- Chandler, R., Johnson-Mallard, V., Kip, K., Evans, M. (2013). Media preferences that facilitated interpersonal communication regarding sexual health: Racial differences among college-aged females: Sage Open. doi: 10.1177/2158244013508958
- Chickering, A. W. (1969). Education and identity. San Francisco. Jossey-Bass.
- Choo, S. & Karp, M. (2013). Student success courses in the community college: Early enrollment and educational outcomes. Community College Review, 4 (1), 86-103.
- Collins, P. (2005). Black sexual politics: African Americans, gender and the new racism. Routledge. New York, NY.
- Creswell, J. (2014). Research design: Qualitative, quantitative and mixed methods approaches. (2nd ed.). Sage Publications Inc. Thousand Oaks, CA.
- Davis, K. C., Schraufnagel, T. J., Kajumulo, K. F., Gilmore, A. K., Norris, J., & George, W. H. (2014). A qualitative examination of men's condom use attitudes and resistance: "it's just part of the game." Archives of Sexual Behavior, 43(3), 631-43. doi:http://dx.doi.org/10.1007/s10508-013-0150-9.
- Department of Education. (2011). Meeting the nation's 2020 goal: State targets for increasing the number and percentage of college graduates with degrees. Retrieved from http://www.whitehouse.gov/sites/default/files/completion_state_by_state.pdf. Washington, D.C.
- D'Santiago, V., & Hund, A. (2012). Culturally sensitive practices for sex education programs. Communiqué, 40 (6), 18-20.
- Franklin, R., & Dotger, S. (2011). Sex education knowledge differences between freshmen and senior college undergrads. College Student Journal, 45(1), 199-213.
- Freedman-Doan, C., Fortunato, L., Henshaw, E., & Titus, J. (2013). Faith-based education programs. What they look like and who uses them. Journal Religious Health, 52, 247-262.
- Freeman, S. (2008). Sex goes to school: Girls and sex education before the 1960s. University of Illinois Press.
- Freud, S. (1923). The ego and the id. In J. Strachey (Ed & Trans.), The standard edition of the complete psychology works of Sigmund Freud. London: Hogarth Press.
- Frost, J., Singh, S., & Finer, L. (2007). Factors associated with contraceptive use and nonuse, United States, 2004. Perspectives on Sexual and Reproductive Health, 39(2), 90–99.
- Gillmore, M., Stielstra, S., Huang, B., & Baker, S. (2003). Heterosexually active men's beliefs about methods for preventing sexually transmitted diseases. Perspectives on sexual and reproductive health, 35(3), 121-129.
- Goldman, Z. W., Martin, M. M., Bryand, M. C., DiClemente, R. K., & Ditrinco, E. A. (2014). College students' communication apprehension, receiver apprehension, and views about discussing condom use. North American Journal of Psychology, 16(2), 277-284.
- Grier-Reed, T., Madyun, N. H., & Buckley, C. G. (2008). Low black student retention on a predominantly white campus: Two faculty respond with the African American student network. Journal of College Student Development, 49(5), 476-485.
- Guerrero, A. (2007). Don't know, don't kill: Moral ignorance, culpability, and caution. Philosophical Studies, 136(1), 59-97. doi:10.1007/s11098-007-9143-7.
- Guttmacher Institute. (2015). State Policies in Brief: Sex and HIV Education. Washington, D.C. Retrieved from https://www.guttmacher.org/statecenter/spibs/spib SE.pdf
- Hannon, R., Hall, D. S., & Kuntz, T. (1995). Dating characteristics leading to unwanted vs. wanted sexual behavior. Sex Roles, 33, 767-783. doi:10.1007/BF01544778
- Hannon, R., Hall, D. S., & Nash, H. (2000). Judgments regarding sexual aggression as a function of sex of aggressor and victim. Sex Roles, 43(5/6), 311-322.
- Irvine, J. (2002). Talk about sex: The battles over sex education in the United States. University of California Press, Berkeley California.
- Hall, E. (2012). How adopting stereotypical roles may impact sexual risk behavior among young African American college women. Dissertations (2 year embargo). Paper 7. http://ecommons.luc.edu/luc diss 2yr/7
- Harman, E. (2011). Does moral ignorance exculpate?. Ratio, 24(4), 443-468. doi:10.1111/j.1467-9329.2011.00511.x
- Harris, F., & Wood, L. (2014). Community college student success inventory (CCSSI) for men of color in community colleges: Content Validation Summary. Community College Journal of Research and Practice, 00, 1-8.
- Howell, J., & Shepperd, J. (2013). Behavioral obligation and information avoidance. Annals Of Behavioral Medicine, 45(2), 258-263. doi:10.1007/s12160-012-9451-9

- Ispa, J. M., Sable, M. R., Porter, N., & Csizmadia, A. (2007). Pregnancy acceptance, parenting stress, and toddler attachment in low-income black families. *Journal of Marriage and Family*, 69(1), 1-13.
- Kaye, K., Suellentrop, K., & Sloup, C. (2009). *The fog zone: How misperceptions, magical thinking, and ambivalence put young adults at risk for unplanned pregnancy*. Washington, DC: The National Campaign.
- Kelsey, D., & Quiggin, J. (1992). Theories of choice under ignorance and uncertainty. *Journal Of Economic Surveys*, 6(2), 133-153.
- Krippendorff, K. (1980). Content analysis: An introduction to its methodology. Newbury Park, CA: Sage Publications.
- Lamb, S. (2013). Just the facts? The separation of sex education from moral education. *Educational Theory*, 63(5), 443-460.
- Lapinkski, M. & Rimal, R. (2005). An explication of Social Norms. Communication Theory, 2, 127-147.
- Marchand, E., Glenn, B., & Bastani, R. (2012). Low HPV Vaccine Coverage Among Female Community College Students. *Journal Of Community Health*, 37(6), 1136-1144. doi:10.1007/s10900-012-9572-x
- Marchand, E., Glenn, B., & Bastani, R. (2013). HPV Vaccination and Sexual Behavior in a Community College Sample. Journal Of Community Health, 38(6), 1010-1014. doi:10.1007/s10900-013-9710-0
- McNair, C. M. (2011). Examining media influences on the decisions of sexual risky behaviors of college students who attend a historically black college or university (Order No. 1495391). Available from ProQuest Dissertations & Theses Full Text. (879549983).
- Miller, M., Pope, M., & Steinmann, T. (2005). A profile of contemporary community college student involvement, technology use, and reliance on selected college life skills. *College Student Journal*, *39*(3), 510-517.
- Mississippi First. (2015). Sex education. Jackson, MS. Retrieved from http://www.mississippifirst.org/education-policy/sex-education/
- Morroni, C., Heartwell, S., Edwards, S., Zieman, M., & Westhoff, C. (2014). The impact of oral contraceptive initiation on young women's condom use in 3 American cities: Missed opportunities for intervention. *PLoS One*, *9*(7), doi:http://dx.doi.org/10.1371/journal.pone.0101804
- National Center for Educational Statistics. (2013). Table 303.50 Total fall enrollment in degree-granting postsecondary institutions, by level of enrollment, control and level of institution, attendance status, and age of student: 2011. *Retrieved from* <u>http://nces.ed.gov/programs/digest/d13/tables/dt13_303.50.asp</u>
- National Center for Educational Statistics. (2014). Table 326.20, Graduation rates of first-time, full-time degree/certificate-seeking students at 2-year postsecondary institutions who completed a credential within 150 percent of normal time, by race/ethnicity, sex, and control of institution: Selected cohort entry years, 2000 through 2009. Retrieved from http://nces.ed.gov/programs/digest/d13/tables/dt13_326.20.asp
- Noar, S., Webb, E., Van Stee, S., Feist-Price, S., Crosby, R., Willoughby, J., & Troutman, A. (2012). Sexual partnerships, risk behaviors, and condom use among low income- heterosexual African Americans: A qualitative study. *Archives of* sexual behavior, *41*, 959-970. doi 10.1007/s10508-011-9890-6. Office of the Surgeon General (US)(2001). Office of Population Affairs (US). *The Surgeon General's Call to Action to Promote Sexual Health and Responsible Sexual Behavior*. Rockville, MD. Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK44220/
- Pascarella, E., Terenzini, P., & Wolfle, L. (1986). Orientation to college and freshman year persistence/withdrawal decisions. *Journal of Higher Education*, 57(2), 155-175.
- Porr, D., & Acar, W. (2010). Validating the differences between associate and bachelor students by comparing performances in a combined class setting. *Journal of the Scholarship of Teaching & Learning*, 10(3), 119-127.
- Portier-LeCocq, F. (2014). The sound of silence? Sex education and censorship in Britain. *International Journal of Humanities and Cultural Studies*, 1(3), 1-14.
- Powell, D. V., & Agnew, D. M. (2007). Meeting diverse needs through student leadership organizations: The dilemma of working and commuting students. *NACTA Journal*, *51*(2), 48-54.
- Prentice, M., Storin, C., & Robinson, G. (2012). *Make it personal: How pregnancy planning and prevention help students complete college*. American Association of Community Colleges, Washington, D.C.
- Quaye, S., & Harper, S. (2014). Student engagement in higher Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations. Routledge, New York. NY.
- Reiss, S., & Havercamp, S. M. (1998). Toward a comprehensive assessment of fundamental motivation: Factor structure of the Reiss profiles. *Psychological Assessment*, 10(2), 97-106. doi:http://dx.doi.org/10.1037/1040-3590.10.2.97
- Rodriguez-Kiino, D. (2013). Supporting students in transition: Perspectives and experiences of community college transfer students. *Journal of Applied Research in the Community College*, 20(2), 5-14.
- Sable, M., Libbus, M., & Chiu, J. (2000). Factors affecting contraceptive use in women seeking pregnancy tests: Missouri, 1997. *Family Planning Perspectives*, 32(3), 123-31.

- Scott-Sheldon, L., Carey, M. P., & Carey, K. B. (2010). Alcohol and risky sexual behavior among heavy drinking college students. AIDS and Behavior, 14(4), 845-53. doi:http://dx.doi.org/10.1007/s10461-008-9426-9.
- Seal, D., Wagner-Raphael, L., & Ehrad, A. (2000). Sex, intimacy and HIV and ethnographic study of Puerto Rican social group in New York City. Journal of Psychology and Human Sexuality, 11(4), 51-92.
- Sexuality Information and Education Council of the United States (SIECUS). (2015). Sexuality Education O & A. Retrieved from:

http://www.siecus.org/index.cfm?fuseaction=page.viewpage&pageid=521&grandparentID=477&parentID=51 4

- Sexuality Information and Education Council of the United States (SIECUS). (2008). Report Shows That Comprehensive Sexuality Education Holds the Most Promise For Preventing Teen Pregnancies" Sexually Infections. Retrieved Transmitted from: http://www.siecus.org/index.cfm?fuseaction=Feature.showFeature&featureid=1151&pageid=518&parentid=5 14.
- Shapiro, J., & Radecki, S. (1999). Sexual behavior and AIDS-related knowledge among community college students in Orange County. Journal Of Community Health, 24(1), 29.
- Singh, S., Darroch, J. Vlassoff, M., & Nadeau, J. (2009). Adding it up: The costs and benefits of investing in family planning and maternal and newborn health. New York: Guttmacher Institute and United Nations Population Fund,

Retrieved from https://www.guttmacher.org/pubs/AddingItUp2009.pdf

- Smith, L. A. (2003). Partner Influence on Noncondom Use: Gender and Ethnic Differences. Journal Of Sex Research, 40(4), 346-350.
- Stanger-Hall, K., & Hall, D. W. (2011). Abstinence-only education and teen pregnancy rates: Why we need comprehensive sex education in the U.S. PLoS One, 6(10), doi:http://dx.doi.org/10.1371/journal.pone.0024658 Staples, R., & Johnson, L. (1993). Black families at the crossroads. San Francisco. Jossey-Bass.
- Stephens, D. & Phillips, L. (2003). Freaks, golddiggers, divas and dykes. The socio historical development of adolescent African American women's sexual scripts. Sexuality and Culture, 7, 3-48.
- Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition, 2nd ed. Chicago: University of Chicago Press.
- Toews, M., & Yazedjian, A. (2012). College students' knowledge attitudes and behaviors regarding sex and contraceptive. Journal of Family and Consumer Sciences, 104 (3), 16-23.
- Trieu, S., Bratton, S., & Hopp Marshak, H. (2011). Sexual and Reproductive Health Behaviors of California Community College Students. Journal American Health, 59(8), 744-750. Of College doi:10.1080/07448481.2010.540764
- Ungar, S. (2008). Ignorance as under-identified social problem. The British Journal of Sociology, 58 (2), 301-326.
- Watson, J. (2015). Community colleges' role as MSIs expanding. Diverse Magazine. Retrieved: http://diverseeducation.com/article/70213/
- Younge, S., Boyer, C., Geter, A., Barker, J., & Cornelle, M. (2014). An exploration of the sexual behaviors of emerging adult men attending historical black college/university. Journal of Black Sexual Relationships, 1 (1), 65-96. DOI: 10. 1353/bsr.2014.0012