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Effect of a Multimedia Intervention on Outcomes Expectations and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males

Carmon V.N. Weekes

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by

CARMON V.N. WEEKES

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Barbara K. Haas, Ph.D., Committee Chair

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This is to certify that the Doctoral Dissertation of

CARMON V.N. WEEKES

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For the degree of Doctor of Philosophy in Nursing.

Approvals:

Barbara K Haas
Dissertation Chair: (Barbara K. Haas, Ph.D., R.N.)

Kevin P. Gosselin
Member: (Kevin P. Gosselin, Ph.D.)

Cheryl M Cooper
Member: (Cheryl M. Cooper, Ph.D., R.N.)

Feleta Wilson
Member: (Feleta L. Wilson, Ph.D., R.N.)

Susan Yarbrough
Chair, Department of Nursing

Linda Klatz
Dean, College of Nursing and Health Sciences

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Carmon V.N. Weekes, PhD(c), RN

Dissertation Chair: Barbara K. Haas, PhD, RN

The University of Texas at Tyler
May 2012

Risky sexual behavior among youth is a national concern and places adolescents at high risk for undesirable health outcomes. According to the Youth Risk Behavior Surveillance System, African American males are more likely to engage in intercourse before age 13 than other racial groups. Research reporting positive impact of parent-adolescent sex communication on influencing risky behaviors has rarely included parents of African American adolescent males. A systematic review of the literature examining health literacy in African Americans supported the importance of including non-print sources of information for this population. The purpose of this study was to test the effect of a multimedia intervention on outcome expectations and self-efficacy for the sex educator role among parents of African American adolescents. A quasi-experimental design, guided by Bandura's Social Cognitive Theory, was used to test the effect of the multimedia intervention in a sample of 61 African American parents with adolescent sons. Paired samples t-test revealed significant ($p<.001$) improvement in parent outcome expectations and self- efficacy for talking about sex. Although health literacy was not significantly related to parent perceived self-efficacy for the sex educator role, content analysis of open ended questions revealed that parents found use of a compact disk and research packet activities facilitated communication about sex with their sons. These findings suggest health care providers should assess health literacy prior to planning

teaching interventions and consider using non-print media to facilitate health communication.

Key Words: Sex education, African American parents, outcome expectation, self-efficacy, adolescent males, health literacy.

Chapter One

Introduction

Adolescents engaging in risky behaviors have been a national concern for many years. This behavior puts them at risk for current and future sex related health consequences. Realizing the need to monitor these behaviors the Centers for Disease Control developed the Youth Risk Behavior Surveillance System (YRBSS) in 1990 (CDC, 2011a). The YRBSS has monitored risky behaviors in six categories, one of which is sex, since its inception. From 1991 to 2009 there has been a downward trend in the prevalence of risky sexual behaviors among youth (CDC, 2011b). Although risky sexual behaviors are decreasing, the incidence of African American males engaging in sexual intercourse before the age of 13 has remained constant. In 2009 African American adolescent males in the United States were more likely to report intercourse before the age of thirteen (24.9%) than were Caucasian (4.4%) or Hispanic (9.8%) males of the same age (CDC, 2011c). This represented a significant difference (p=0.00) between the groups (CDC, 2011c)

Early engagement in sexual activities by African American males puts them and their partners at greater risk for sexually transmitted diseases, adolescent parenthood, and the potential psychological distress associated with these conditions (CDC, 2009; Cuffee, Hallfors, & Waller, 2007; O'Donnell et al, 2003; Shacham, Basta, & Reece, 2007). According to Cuffee, Hallfors and Waller (2007), initiation of sex at a very early age is associated with more sex partners and an increased likelihood of having unprotected

intercourse. In addition, health consequences are more severe for very young adolescents due to physical immaturity (Haglund, 2006).

One consequence for the young female sex partners of African American males is infection with types 16 and 18 of the sexually transmitted human papillomavirus virus (HPV) which is known to cause more than half of all cervical cancers (Tiffen & Mahon , 2006). Transmission of this virus is known to be associated with first intercourse at a very young age (Gerend & Magloire, 2008, p.23). As the number of sexual partners increases, so does the risk of infection with HPV types 16 and 18. Although the female may have had only one partner, if her one partner has had multiple partners, she is exposed to sexually transmitted infections of all. Therefore reducing the number of African American males that engage in sex before the age of 13 may impact this critical health risk among African American females as well.

Parents that communicate with their children about sex have the "potential to shape sexual decision-making during adolescence" (DiIorio, Pluhar and Belcher, 2003, p. 7). Increased parent-adolescent communication about sex was shown to influence delayed onset of sexual debut making parents a valuable resource to improve adolescent sex related health outcomes (Akers, Schwarz, Borrero, & Corbie-Smith, 2010; Fasula & Miller, 2006; Yang et al., 2007). As with the aforementioned studies, many previous research studies have focused primarily on parent-daughter communication about sex topics. This research trend neglects the at-risk African American male population and their parents representing a gap in the literature that needs further exploration.

Addressing this gap in the literature was the focus of the current study, *Effect of a Multimedia Intervention on Outcome Expectations and Perceived Self-Efficacy for the*

Sex Educator Role for Parents/Caregivers of African American Adolescent Male, also known as the Parents Addressing Sexuality with their Sons (PASS) Project. The PASS Project was designed to influence African American parent-son communication about sex.

Social Cognitive Theory

Social Cognitive Theory (SCT), a theory often used in research focusing on health promotion activities, guided this study (Bandura, 1986). The three major concepts of SCT are person (individual personal factors), environment (environmental factors), and behavior. The interaction among environment, person and behavior is theorized to be dynamic and reciprocal and is called triadic reciprocation. It is postulated that the constant interaction between environment, person, and behavior causes continuous human adaptation that impacts personal behavior and perceptions (Bandura, 1986).

Personal Factors

Three personal factors that may influence parent confidence for communicating about sex with their adolescent son are health literacy, self-efficacy, and outcome expectations. These personal factors were explored in the PASS project.

Health Literacy. Health literacy is defined as "a patient's ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (American Medical Association, 2004, p.1). According to Kutner, Greenberg, Jin, & Paulsen, (2006) about 2% of African Americans have proficient health literacy. This was important relative to the PASS Project as parent participants were limited to African Americans. If parents in the African American population have limited health literacy it could potentially limit their understanding of

health information related to adolescent sexuality and affect their ability to effectively communicate with their adolescent sons about sex. Therefore, investigating the impact of health literacy on health outcomes among African Americans was deemed essential prior to designing a research study focusing on this population. As a result, a systematic review of the literature (SROL) was conducted. The findings from the SROL are reported in manuscript one, titled *African Americans and Health Literacy: A Systematic Review*, and submitted to *The ABNF Journal* following the journal guidelines (Appendix A).

Self-Efficacy and Outcome Expectations. Self-efficacy is "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Outcome expectation is the belief that a behavior will lead to a desired outcome (Bandura, 1997). These factors are closely related. An individual that perceives they are competent in a given situation is more likely to have positive outcome expectations from their actions in that situation.

O'Donnell and colleagues (2005) found that parents did not feel as effective guiding the sexual behavior of their son. This finding suggested it was important to measure the personal factors of self-efficacy and outcome expectations in the PASS Project as they could potentially impact parents communicating with their sons about sex.

Environment

The concept of environment, as defined in SCT, includes social influences such as role, social status, physical characteristics (race, sex, and age) and the external physical environment (Bandura, 1989). The dynamic relationship of triadic reciprocation leads to the expectation that changes in the environment will interact with personal factors and

influence behavior changes (Bandura, 1997). The environment was manipulated by using an intervention designed for the PASS Project. The intervention was designed to improve African American parent confidence in the sex educator role for their adolescent sons.

Behavior

Behavior refers to the action taken by the individual and is influenced by the influences personal and environmental influences. The desired behavior change resulting from the PASS Project was parents reporting they engaged in discussions about sex with their sons and also reporting improved self-efficacy and outcome expectations for talking about sex after the intervention.

The PASS Project

Multiple factors influenced development of the PASS Project. Not knowing how to approach the subject of sex with their children and fear they would not have adequate knowledge to answer specific questions were two barriers parents have reported, which prevent them from talking with their children about sex (Wilson, et al., 2010). Additional findings from the literature that report the impact of parents and adolescents talking about sex on adolescent sexual behavior, along with data from the YRBSS, suggested the need for an intervention aimed at parents of adolescent African American males. Findings from the SROL supported the use of a multiple media format to positively affect health outcomes of low literate individuals (Ross et al., 2010). This led to development of a multi-media intervention framed within the context of Social Cognitive Theory that was used in the PASS project.

Key community organizations and leaders were contacted to determine interest in the project and generate support for recruitment. Several letters of support from community organizations are found in Appendix B. Following dissertation committee and The University of Texas at Tyler Institutional Review Board approval (Appendix C), the study was initiated. Flyers (Appendix D) were distributed to participating organizations. Interested participants met with the principal investigator to learn more about the study. After written informed consent (Appendix E) was obtained, a packet of questionnaires was distributed to establish baseline measures. The packet included a Demographic Data Sheet (Appendix F), the Newest Vital Sign assessment of health literacy (Appendix G), a measure of outcome expectations (Appendix H), and a measure of self-efficacy for the sex educator role (Appendix I). Open ended questions were included to identify parents' perceived challenges to initiating a conversation about sex with their adolescent son (Appendix J). A reminder letter was sent one week after the packets were distributed (Appendix K). At the end of three weeks, outcome expectations and self-efficacy were again measured. Additional open-ended questions were asked to determine if the actual challenges were the same as those parents anticipated (Appendix L). Following receipt of the post-intervention questionnaires, a thank you letter was sent to all participants (Appendix M).

The intent of the PASS Project intervention was to impact the outcome expectations and self-efficacy of African American parents in the sex educator role. Results of this study, titled *Effect of a Multimedia Intervention on Outcome Expectations and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Male,* are reported in manuscript two in Chapter 3. The manuscript

is prepared for submission to *The Western Journal of Nursing Research*, using the journal guidelines (Appendix N). A supplemental compilation of open-ended responses obtained during the study and summarized in Chapter 3 are found in Appendix O.

Chapter Two: **African Americans and Health Literacy: A Systematic Review**

Abstract

Assessing health literacy is important as it is known to impact health including health behavior, health outcomes, communication with providers, adherence to treatment regimens, and health care costs. African Americans in the United States have lower health literacy than their Caucasian counterparts making a review of current research on this population important. A systematic review of the literature was conducted assessing studies which examined health literacy in African Americans. All articles were original research measuring health literacy using the Test of Functional Health Literacy in Adults, short-form Test of Functional Health Literacy in Adults, Rapid Estimate of Adult Literacy in Medicine, and the Newest Vital Sign. A number of databases were searched and yielded a scarcity of health literacy studies that included a majority of African American subjects. Studies addressing this population would potentially lead to interventions aimed at improving health outcomes of the African American population.

Key Words: Health Literacy, African American, Black

Manuscript

Health literacy, defined as "a patient's ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions", (American Medical Association (2004, p.1), impacts consumers' ability to make appropriate health care decisions (National Network of Libraries of Medicine, 2010). Bauman (2007) reported that in 2003, two of five adults in the United States exhibited low health literacy; and if this remains unchanged in the next 30 to 50 years, the cost to the U.S. would be in the $1.6 trillion to $3.6 trillion range. The World Health Organization notes health literacy is a set of social and cognitive skills that impacts one's ability to use information for health promotion, health maintenance, and for access to health care (Department of Health, 2009).

It also impacts self-efficacy for health management of children and adults (Sakar, Fisher, & Schillinger, 2006; Wilson et al., 2008; Wood, Price, Dake, Telljohann, & Kuder, 2010). For example, poor glycemic control and poor blood pressure control were correlated with low health literacy in subjects that were mostly African American or Latino (Pandit et al, 2009; Schillinger et al., 2002).

Addressing solutions to this problem is one of the national health objectives in the newly released Healthy People 2020 (U.S. Department of Health and Human Services, n.d.). It is important to assess health literacy levels in all Americans, but even more so in minority populations. In 2003, 2% of African Americans had proficient health literacy levels as compared to 14% of Caucasians; furthermore, 24% of African Americans were below a basic level of proficiency (Kutner, Greenberg, Jin, & Paulsen, 2006). This may affect health outcomes in the African American population (Agency for Healthcare

Research and Quality, 2004). Given these findings it is important to review the literature that focuses on health literacy in the African American population. This article provides a systematic review of the current literature related to the health literacy of African American adults.

Search of Literature

Methods, Search Parameters, and Sources

The systematic literature review was conducted to identify studies which measured or reported the health literacy status in African Americans adults. An electronic search was conducted using the gender/sexuality, health sciences, education, and psychology/sociology data bases. These databases include: ERIC, Teacher Reference Center, Professional Development Collection, Vocational and Career Collection, SocINDEX with Full Text, Education Research Complete, SPORTDiscus with Full Text, Psychology and Behavioral Sciences Collection, Alt HealthWatch, MedicLatina, Health Source: Nursing/Academic Edition, Agricola, Health Business Fulltext Elite, Health Source - Consumer Edition, Science & Technology Collection, MEDLINE, CINAHL Plus with Full Text, PsycINFO, PsycARTICLES, Fuente Académica, Academic Search Complete, PsycCRITIQUES, Health and Psychosocial Instruments, and European Views of the Americas: 1493 to 1750. Smart texting was used with the search terms “Literacy” and “African American” OR “Black”. The search was limited to articles in peer reviewed journals, written in English, and published between 2005 and 2010 yielding 1093 hits. Many articles were not pertinent to health literacy as evidenced by a review of detailed abstracts.

The search was repeated using the same limiters but replacing the search term "Literacy" with "Health Literacy," and it yielded 207 hits. After electronic removal of duplicates, 176 articles remained. The remaining articles were manually inspected, and 25 additional duplicate articles were discovered leaving 151 articles. The manual inspection also revealed 6 articles that did not include African Americans in the sample, 2 articles that reported health literacy status in relation to a specific disease and not by race, and one article which primarily focused on numeracy. This left 143 articles for the review.

Analysis and Evaluation

Inclusion and Exclusion Criteria

To be included in the final sample, studies had to meet the following inclusion criteria: 1) health literacy as a variable measured using an established tool such as the Rapid Estimate of Adult Literacy in Medicine (REALM) to measure literacy, 2) quantitative or mixed methods research, 3) include African American subjects. Studies were excluded if they 1) focused primarily on the elderly, adolescents, or children, 2) were qualitative studies, 3) focused on general literacy, disease specific literacy, numeracy, or did not include health literacy as a variable, 4) African American subjects were not included in the sample, 5) were non-research. Based on these criteria, an additional 120 articles did not meet the inclusion criteria leaving 23 articles for the systematic review. A summary of the article selection process is depicted in Figure 1(Appendix A).

Sample Description

The included articles publication dates ranged from 2005 thru 2010. The number of participants in the studies ranged from 25 to 1,190 and included from 24% to 100% African Americans. Three studies limited recruitment of study subjects to males while two limited recruitment to females. Most articles reported use of quantitative research methods with three studies reporting mixed methods.

Health literacy was measured using three of the most widely used measurement tools: The Test of Functional Health Literacy in Adults (TOFHLA), short-form Test of Functional Health Literacy in Adults (s-TOFHLA), or the Rapid Estimate of Adult Literacy in Medicine (REALM) in 22 of the 23 studies. One study used the Newest Vital Sign (NVS) which is relatively new instrument based on the TOFHLA. Twenty two of the articles were original research and one (Ayoette, Allaire, & Bosworth, 2009) was a secondary data analysis.

Results and Conclusions

Themes

The 23 studies included in the systematic review all incorporated an assessment of the subjects' health literacy in the research design. Five themes emerged from the analysis of the literature that relates health literacy: 1) comprehension of disease and adherence to treatment regimen, 2) communication with providers, 3) perception of health, 4) methods to improve patient comprehension, and 5) cognition.

Comprehension of disease/Adherence to treatment. Nine studies addressed patient comprehension and/or adherence to treatment regimen (Davis et al., 2006; Drainoni et al., 2008; Friedman, Corwin, Dominic & Rose, 2009; Gatti, Jacobson,

Gazmararian, Schmotzer, & Kripalani, 2009; Kennen et al., 2005; Miller Jr., Brownlee, McCoy, & Pigone, 2007; Persell et al., 2007; Sarkar, Fisher,& Schillinger, 2006; Wilson et al., 2008). The studies measured health literacy using the REALM with 4 exceptions (Friedman et al., 2009; Persell et al., 2007; Sarkar, Fisher, & Schillinger, 2006) used the S-TOFHLA and Drainoni et al., 2008 used the TOFHLA. Inadequate health literacy ranged from 66% of study subjects (Friedman et al., 2009, n=210) to 0% of study subjects (Friedman, 2009, n=24). Friedman and colleagues 2009 study was a small and participants were purposively recruited which may explain why all study subjects were reported to have adequate health literacy.

Low health literacy was correlated with decreased knowledge of risks of obesity, benefits of exercise, and benefits of colorectal screening (Kennen et al.2005; Miller, Jr, et al., 2007; Wilson et al., 2008). Although the S-TOFHLA assessment indicated adequate health literacy, follow up interviews with subjects in a mixed methods study revealed that subjects lacked necessary health literacy skills as evidenced by a limited understanding of prostate cancer risk factors and preventive behaviors (Friedman et al., 2009). Subjects in the Friedman and colleagues (2009) study indicated a preference for verbal communication versus print material, although they had adequate reading ability.

Medication knowledge and adherence is also associated with health literacy. Low health literacy was associated with the inability to correctly name medications being taken for hypertension (Persell et al., 2007) or state the action and risks of oral contraceptives (Davis et al., 2006). Interestingly, health literacy was found to have no relationship to medication adherence in persons taking oral contraceptives (Davis et al, 2006) or general adherence to prescribed medications (Gatti et al., 2009). Among

persons with complicated treatment regimens such as those with HIV, it is critical that they are able to comply with the treatment plan. Drainoni and colleagues (2008), found that race, education, sexual orientation, and the primary language of the participant had significant associations with health literacy with African Americans about three times more likely to have low health literacy (p=.01) putting them at higher risk for inability to adhere to the HIV treatment plan including medication adherence. However, Gatti and colleagues (2009) did find a significant relationship between self-efficacy and medication adherence (p=.04) but not between health literacy and medication adherence. Improved self-efficacy was reported across all literacy levels after an oral contraceptive educational intervention (Davis et al., 2006) but Sakar, Fisher, & Schillinger, 2006 found a non significant interaction between self-efficacy, race, and health literacy on diabetes self-management.

Communication with providers. Method of communication, provider perception, and the association with health literacy was the focus of six articles (Arthur et al., 2009; Bennett et al., 2006; Davis et al., 2008; Kelly & Haidet, 2007; Ohl et al.,2010; Yang et al., 2010). Health literacy was measured using the REALM by Arthur, et al. (2009), Bennett et al. (2006), Davis et al., (2008) and Kelly & Haidet, (2007). The S-TOFHLA was used to measure health literacy in the other two studies (Ohl et al, 2010; Yang et al., (2010). Preferred communication between client and clinician was identified as one that was mutual and provided for an equal exchange between client and provider (Bennett et al., 2006); however, the style of communication was often physician dominated or "paternalistic" with clients of low literacy (Arthur et al., 2009). Poor client-provider communication, across all literacy levels, was associated with non-

compliance in keeping appointments for care (Bennett, et al., 2006). An intervention with physicians aimed at improving their communication skills with low literacy clients did not show significant improvement post intervention but did show an improved rapport with clients after the intervention (Davis et al., 2008). In this same study, low literacy clients were significantly more likely to report increased motivation to lose weight (p=.05), have a positive attitude related to weight loss (p=.04), and report improved confidence in their ability to lose weight (p=.01). This was reported to be related to small group counseling efforts by physicians and clinic staff which were designed specifically to address the needs of low literate clients (Davis et al., 2008).

Communication is also affected by provider perception of the client's literacy level. Providers have a tendency to overestimate client's health literacy level (Kelley & Haidet, 2010; Ohl et al, 2007). The studies had 28 (Kelley & Haidet, 2010) and 46 percent (Ohl et al., 2007) African American subjects. Ohl and colleagues (2010) found that providers identified 53% of clients as having adequate health literacy when in fact they were low health literate. Similarly Kelley and Haidet (2007) found that physicians overestimated the literacy level of 54% of the African American clients in the study. This has implications for health outcomes in the African American population putting them at risk for poor health outcome and health disparities.

Using video may also be an effective tool to address the needs of low literate clients. Although health literacy was not the primary variable in Yang and colleagues (2010), study of direct-to-consumer advertising, the researchers reported clients with low or marginal health literacy, who believed that others controlled their health, and who had previous experience with the drug Lipitor were influenced to ask their physicians for a

prescription for the drug after viewing a Direct to Consumer Advertising video. While advertising drugs to patients in this manner is controversial and raises ethical questions, there are positive implications for the use of videos as a method of delivering health information that will enable low literate clients to make informed health decisions (Yang et al., 2010).

Perception of health. Statistically significant relationships were found between perceived self-efficacy, perceived susceptibility, and health literacy in two studies (Boulware et al., 2009; Wood et al., 2010). As African American parent's health literacy scores increased using the NVS, so did their perceived self-efficacy to manage their child's asthma (r^2=.02) (Wood et al., 2010). Similarly, in a study with 63% African American participants, perceived likelihood of development or progression of chronic kidney disease was positively correlated with health literacy (p< .01) as measured using the REALM and African American race (p< .01) (Boulware et al., 2009).

Methods to improve patient comprehension. Although health literacy affects clients' ability to comprehend written health instructions, two articles presented alternative methods to use when working with the low literacy population (Kripalani et al., 2008; Ross et al., 2010) and one that validated the need consider health literacy when obtaining informed consent (Sudore et al., 2006). Health literacy was measured using the TOFHLA (Ross et al., 2010), REALM (Kripalani et al., 2008) and the s-TOFHLA (Sudore et al., 2006). A video was presented to African American men which contained prostate cancer information and was found to increase their knowledge and while all knowledge gains were significant (p<.01), the most notable knowledge increase was among men with inadequate health literacy scores (Ross et al., 2010). Another method

found to improve comprehension was to evaluate client understanding of health teaching using the Teach Back method. This is accomplished by having the client confirm understanding of the current health communication by "teaching back" the information to the provider (Kripalani et al., 2008). This method was used to assess understanding of informed consent. The Teach Back method was reported to allow "real time" clarification of any unclear information with clients of low literacy (Kripalani et al., 2008). Kripalani and colleagues (2008) further suggest, based on their results with persons who had signed informed consents but had inadequate knowledge of the study in which they were participating, that clients with low literacy should be viewed as a vulnerable population with special human subjects' protection. A modified consent process was found to be beneficial to understanding information contained on consent forms. Sudore and colleagues (2006) found that using consent forms written at a sixth grade level was still not understood on the first reading. Participants were quizzed regarding the content of the consent forms and if they answered any of the questions incorrectly the information they did not understand was repeated by the researchers. African American ($p \leq .01$) and less than adequate literate ($p=.02$) subjects were among the groups that were more likely to need additional instruction to obtain truly informed consent (Sudore et al., 2006). Sudore and colleagues suggest that this method of informed consent be used with these vulnerable populations.

Cognition. The remaining three studies examine the association between health literacy educational level, sensory, and cognitive variables (Ayotte et al., 2009; Levinthal et al., 2008; Morrow et al., 2006). It was found that cognitive variables in the regression models (letter and pattern comparison and listening span) explained more variance in the

S-TOFHLA (24.5%) than did level of education (12.4%) (Levinthal et al., 2008). Slower processing speed ($p<.001$), limited working memory ($p<.001$), decreased ability to recall health information ($p<.05$) and increasing age ($p<.05$) were also related to lower health literacy (Ayotte et al., 2009; Morrow et al., 2006). The three studies all reported race as a significant predictor of health literacy ($p< .01$ and $p<.001$) with African Americans having lower levels of health literacy.

Critique of Methods

Health literacy is now recognized as a variable that should be assessed in health care consumers as it affects client comprehension and health outcomes. The studies in this review included health literacy as at least one variable for consideration of patient outcomes. All articles used valid and accepted tools to measure health literacy in original research. These included the TOFHLA, S-TOFHLA, REALM, and NVS. Health literacy measurements were clearly reported in all of the articles, and the research methods appeared to be sound.

While health literacy is different than literacy, persons with literacy below the basic level have been found to have difficulty understanding health information as well (Friedman et al., 2009). Friedman and colleagues (2009) also report that "67% of AA's have basic or below basic literacy skills" (p.450). This finding motivated this systematic review of health literacy in African American adults. It was surprising to discover the scarcity of health literacy studies which include a majority of African Americans. Studies addressing this population could potentially lead to interventions that will improve health outcomes in an acknowledged health-vulnerable group.

Weaknesses in the Systematic Review

In searching for articles to review, the limiter of peer reviewed articles may have limited some findings related to health literacy in African American's. Also limiting articles to those using established health literacy assessment tools may have excluded some articles that could have potentially contributed to the findings.

Conclusion

This systematic review demonstrates that health literacy influences African American health consumers understanding of informed consent, understanding of diseases, self-efficacy, perceived susceptibility, adherence to medical protocols, and medication administration. While the effect of health literacy is not limited to these specific influences, it is clear from the literature review that it has an impact on health outcomes and contributes to health disparities. Future research studies are needed which focus exclusively on African Americans with marginal to low health literacy. The research should test effective non print methods of communicating with this vulnerable population.

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Appendix A

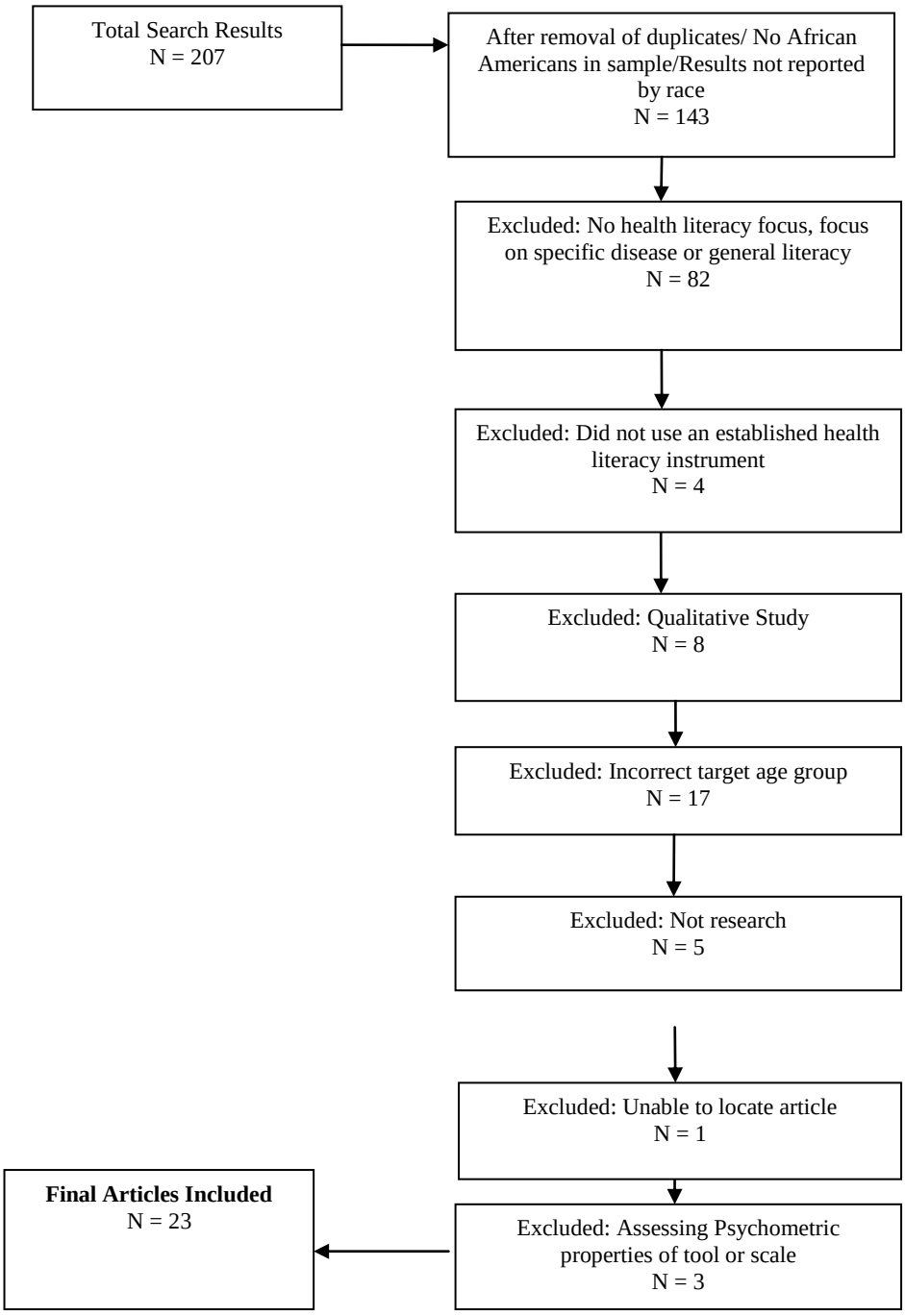

Figure1. Article Exclusion Process

Chapter 3: Effect of a Multimedia Intervention on Outcome Expectations and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males

Abstract

A quasi-experimental, mixed-methods study was conducted in a large metropolitan Michigan community to examine the impact of a 3-week media based teaching intervention on the outcome expectations and self-efficacy for the sex educator role for parents of African American Adolescent males (n=61). Guided by Bandura's Social Cognitive Theory, health literacy and parent's ability to identify and develop effective strategies to overcome barriers to sex communication with their sons were also measured. Results included: 1) outcome expectations and self-efficacy both significantly improved after a media based intervention (p<.001); 2) health literacy, measured using the Newest Vital Sign, was not significantly related to parent self-efficacy (p=.293); 3) Parents with high and low health literacy scores were equally able to identify barriers and develop strategies for engaging in sex discussions with their sons. These findings indicate the intervention was effective to improve parent's outcome expectancy and self-efficacy for talking about sex.

Key Words: Sex educator, African American, parent, outcome expectancy, self-efficacy, adolescent males, health literacy.

Manuscript

Although an abundance of information exists about the consequences of risky sexual behavior, adolescents continue to engage in sex making themselves vulnerable to a host of negative health consequences. These behaviors are more prevalent among African American male adolescents compared to other ethnic groups; putting them and their partners at higher risk for sexually transmitted diseases, adolescent parenthood, and the potential psychological or emotional distress associated with these conditions (CDC, 2009; Cuffee, Hallfors, & Waller, 2007; O'Donnell et al, 2003; Shacham, Basta, & Reece, 2007). One method to address risky adolescent sexual behavior is through parent adolescent communication about sex. Parent-adolescent communication about sex topics can be affected by parent perceived self-efficacy in the sex educator role. The current study was designed to test the effect of a multimedia intervention, titled Parents Addressing Sexuality with their Sons (PASS) Project, on the outcome expectations and perceived self-efficacy for the sex educator role for parents and caregivers of African American Adolescent males. Throughout this article the term parent will be used to refer to the adult parent or caregiver.

African American Parents as Primary Sex Educators

Parent-adolescent sex communication is important and influences adolescent sexual risk behaviors, but few studies have examined parent perceived self-efficacy as sex educators of their children (Brock & Beazley, 1995; DiIorio et al., 2001; DiIorio et al., 2006 a, 2006 c; DiIorio, McCarty, & Pluhar, 2011). Increased African American parent-adolescent communication about sex has been shown to influence adolescents delaying the onset of sexual debut (Akers, Schwarz, Borrero, & Corbie-Smith, 2010;

Fasula & Miller, 2006; Yang et al., 2007), improve self-efficacy using contraception, and increase ability to refuse unwanted sex (Crosby et al.,2001; DiClemente et al., 2001; Sioǹean et al., 2002). Many of the aforementioned studies focused primarily on parent-daughter communication with the mother as the primary person engaging in conversations about sex with the child. This research trend neglects the at-risk African American adolescent male and their parents, suggesting that more research is needed with this population.

One prior intervention aimed at parent-adolescent communication about sex used an audio compact disc (CD) with parents and caregivers (O'Donnell, et al., 2005). In this study O'Donnell and colleagues (2005) found a significant difference in self-efficacy ($p<.05$) and communication ($p <.001$) between parents or caregivers of fifth and sixth graders in control and intervention groups. Parents in the intervention group received the CD and were less likely to report low communication and low self-efficacy related to communicating with their children. O'Donnell and colleagues also found parents felt "less efficacious guiding their sons' behaviors than their daughters', and that "further exploration of effective ways that parents can oversee, set rules and communicate with their sons as well as daughters is clearly needed" (p.171).

Additional multimedia strategies used by mothers to help them communicate with their children about sexuality included television and videos (Pluhar, Jennings, & DiIorio, 2006). Mothers found that a TV show could put a "comfortable distance between the topic and the family member" allowing the mother to talk indirectly about sex while relating it to the person on TV; not specifically to their child (Pluhar, Jennings, &

DiIorio, 2006, p.21). This finding suggests that providing a multi-media tool for parents to may facilitate discussions about sex with their adolescent sons.

One possible factor influencing the confidence of African American parent's when discussing sex with their adolescent son is health literacy (HL). The American Medical Association (2004) defines health literacy as "a patient's ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (p.1). Although health literacy refers to reading ability, comprehension, and application, it does not necessarily refer to understanding words specific to a given specialty area. Health literacy is an important variable in health care research due to its potential impact on consumer's ability to understand and make appropriate health care decisions (National Network of Libraries of Medicine, 2010). It also impacts self-efficacy for health management and health outcomes of children and adults (Sakar, Fisher, & Schillinger, 2006; Wilson et al., 2008; Wood, Price, Dake, Telljohann, & Kuder, 2010). Using the Newest Vital Sign to measure HL, Wood and colleagues (2010) reported a statistically significant relationship between perceived self-efficacy and HL of African American parents and caregivers when managing their child's asthma ($r = .155$, $r^2 = .02$). As HL scores increased, so did perceived self-efficacy for health management.

Addressing HL is included in the Healthy People 2020 national health objectives (U.S. Department of Health and Human Services, n.d.). While it is important to assess HL of all health care consumers, it is a priority to do so with African Americans. In 2003, only 2% of African Americans had proficient (ability to perform literacy activities that are more abstract and complex) health literacy as compared to 14% of Whites;

furthermore, 24% of African Americans were below the basic level (able to perform simple literacy activities of daily life) of proficiency (Kutner, Greenberg, Jin, & Paulsen, 2006). This affects health outcomes of African Americans (Agency for Healthcare Research and Quality, 2004).

Multimedia presentations may affect health outcomes of low health literate individuals as well. A video presentation of prostate cancer information was found to increase knowledge of prostate cancer with the most notable knowledge increase among men with inadequate health literacy scores (Ross et al., 2010). Likewise, Yang and colleagues (2010) found subjects with low health literacy were more likely to have proactive health behaviors related to blood cholesterol levels after viewing a direct to consumer video for a cholesterol lowering drug. When seen by the physician, patients with low and marginal literacy were significantly more likely to ask for a prescription for the drug after viewing a media presentation (p=0.0027). The significant relationships found among multimedia presentations, self-efficacy, health behavior, and health literacy supported incorporating measurement of health literacy in the current study.

Theoretical Framework

Bandura's (1986) Social Cognitive Theory (SCT) guided this study. Social Cognitive Theory posits that human behavior, personal factors, and environmental factors affect behavior change (Bandura, 1986). The interactions between personal, environmental, and behavioral factors are seen as dynamic and reciprocal although not always of equal strength (Figure 1). These interactions are constantly changing and self regulating behaviors occur in response to the changing personal and environmental factors (Bandura, 1986).

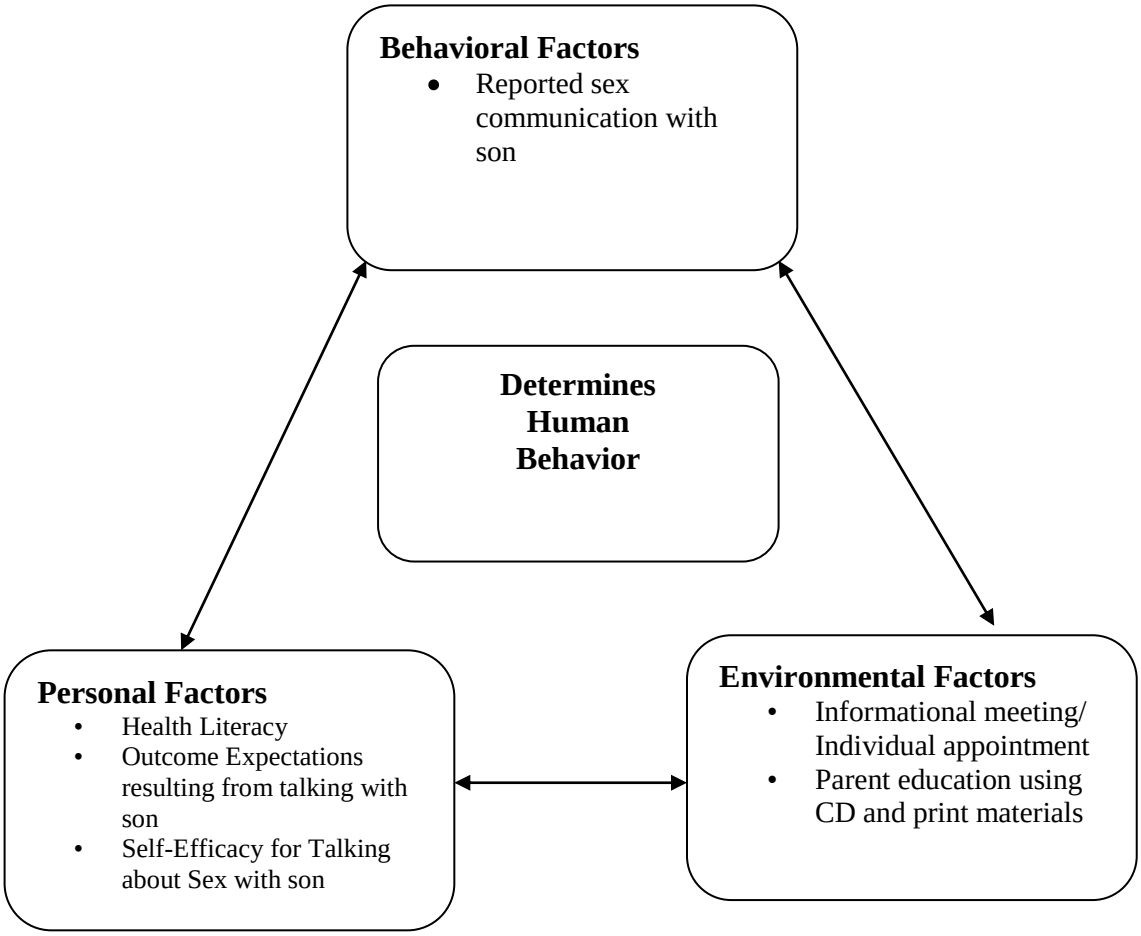

Figure 1. Bandura's Social Cognitive Theory Including Study Variables

Adapted from Bandura's (1986) Social Cognitive Theory

Personal factors include "expectations, beliefs, self-perceptions, goals and intentions" and "beliefs, emotional bents, and cognitive competencies" (Bandura, 1989, p.3). The personal factors included in this study are health literacy, parent reported outcome expectations, and self-efficacy for talking with their sons about sex. Self-efficacy is a particularly important concept of the SCT. It is defined as the "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Bandura theorized that "unless people believe that

their actions will have the desired consequences, they have little incentive to engage in those actions." (Pajares, 2002, p. 6). Based on this theory the best predictor of behavior change is an individual's belief in their capability to accomplish something or self-efficacy beliefs (Bandura, 1997).

Self-efficacy beliefs are influenced by four principle sources of information: enactive mastery, vicarious experiences, verbal persuasion, and physiological and affective states (Bandura, 1997). In the PASS project, parent self-efficacy was influenced by verbal persuasion through use of an audio CD. The intervention was separated into three segments allowing parents to experience enactive mastery as they progressed through the curriculum. The three segment approach provided an opportunity for parents to successfully implement conversations about sex over a period of time.

Outcome expectations relate to self-efficacy. People often anticipate outcomes based on their perceived performance ability in a given situation; believing that their behavior will lead to a desired outcome (Bandura, 1997). Parents need to feel competent as sex educators for them to engage in conversations about sex with their sons. It is possible to have high self-efficacy for a behavior but still have low outcome expectations. Although parents may perceive themselves to be efficacious in the sex educator role they may not expect that talking with their son will affect his risky sexual behaviors.

Environment includes social influences such as role, social status, physical characteristics (race, sex, age) and the physical environment (Bandura, 1989). Environmental factors in this study focused on the physical and social environment and included attendance at group or individual informational meetings and data collection sessions. The informational meetings provided a learning environment which promoted

social acceptance of the role of parent sex educator. Additionally, use of the CD along with print materials promoted engagement in conversations about sex and impacted the physical environment of the participants. Learning activities included in the PASS project were designed to promote conversations between parent and son. These activities were designed to impact the home environment making it conducive to parent-son discussions about sex.

Lastly, behavior refers to the action taken by the individual. The behavioral factor of interest in the study was the parent reporting at least one conversation with their son related to sexual behaviors during the study period (Figure 1).

Purpose

The purposes of this study were to (1) examine the impact of a multimedia teaching intervention on outcome expectations and perceived self-efficacy of parents of African American adolescent males and (2) determine the relationship between health literacy and self-efficacy for the sex educator role. This study also attempts to better explain and interpret the quantitative findings by asking open ended questions to inform the quantitative data.

Research Hypotheses

Based on Bandura's (1986) SCT and the existing literature, the following hypotheses were tested:

Among African American parents of adolescent males:

1. There will be an increase in positive outcome expectations for talking to their sons about sex after a multimedia intervention.

2. Self-efficacy for the sex educator role will increase after a multimedia intervention.
3. There is a positive correlation between health literacy and self-efficacy for the health educator role.
4. Parents exhibiting higher sex educator self-efficacy will be able to identify challenges and develop effective strategies for discussing sex with their adolescent son.

Methods

Design

The research design was a mixed-methods concurrent embedded strategy, quasi-experimental, one group pretest-posttest design with open ended questions (Creswell, 2009). It was guided by Bandura's Social Cognitive Theory addressing environmental, cognitive, and behavioral factors that influence parent-son communication. Parental personal perspective was explored using open-ended questions to examine challenges and barriers to parent-son communication about sex and also to examine self-efficacy as it related to parents ability to identify challenges and develop effective strategies to deal with those challenges. Parents were also asked a question to assess health care provider initiated conversations with parents about their son's sexuality. This study was reviewed and approved by the university Institutional Review Board.

Sample and Setting

A convenience sample was obtained from a large urban community in Michigan using a combination of convenience and snowball recruitment methods. Recruitment sites included local churches, schools, Boys and Girls club locations, human service

agency sites, and referrals. Flyers were posted in the Clubs, churches, and the local community announcing the study and information was posted in church bulletins and also distributed electronically. Recruitment took place during the months of August through November of 2011.

Inclusion criteria were: Self-identified African American parent with adolescent son in grades 4-9; ability to understand and read English, access to a CD player, and access to a telephone. Exclusion criteria were: hearing or vision impairment precluding the ability to see print materials or hear the audio CD and those who were experienced sex educators by profession.

Measures

The PASS project examined the effect of a multimedia intervention, using a CD, on outcome expectations and self-efficacy for the sex educator role on African American parents. The relationship between health literacy and perceived self-efficacy of parents was also examined. Health literacy was measured using the Newest Vital Sign (NVS), a health literacy assessment tool that asks six questions based on an ice cream label (Weiss et al., 2005). Each question has only one correct answer. The NVS, is reported to be reliable (alpha =.76) and valid (r = 0.59, P <.001), and can be administered in approximately three minutes (Weiss et al., 2005). It is scored based on the number of correct items which can range from 0 – 6. Scores of 4-6 indicate adequate health literacy, scores of 2-3 indicates the possibility of limited health literacy, while scores 0-1 suggests a 50% or more chance that health literacy is limited (Weiss et al., 2005). Readability of the NVS, assessed using the Flesch-Kincaid tool in Microsoft Word 7, was 7.8.

The Theory of Multimedia Learning defines the independent variable, multimedia instruction, as a "presentation involving words and pictures that is intended to foster learning" (Mayer, 2001, p.3). Multimedia instruction was given to parents in the form of an audio CD and print materials developed by the researcher. Participants were also given a parent resource booklet that was donated by a Pennsylvania agency and a handout with tips for talking to your child about sex that was donated by a Michigan agency. The CD was designed for use by the parent sex educator. The CD included an introduction, three separate lessons to facilitate discussions as well as enable participants to assimilate and discuss the information with their sons over a three week time period, and a conclusion, resulting in five tracks. The CD includes information about the male and female reproductive system, risky sexual behaviors including potential consequences, decision making, and encourages parents to share their values relative to adolescent sex with their son. It also explains the in-home activities for the three lessons contained in the research packet.

Outcome Expectancy refers to the outcomes parents expect as a result of talking with their adolescents about sex. It was measured using the Outcome Expectancy for Talking about Sex Scale (OETSS) (DiIorio et al., 2001). The original scale consists of 15 items (alpha = .83) with three subscales; 1) cognitive self-evaluative (alpha = .82) with 3 items, 2) emotional self-evaluative (alpha = .77) comprised of 6 items and 3) social (alpha = .67) outcome expectancies, which includes 6 items (DiIorio et al., 2001). Eight items (alpha = .91) were added to the original scale based on a study of father-son sex communication resulting in the current 23-item scale (C. DiIorio, personal communication, November 9, 2010). The 23-item scale uses a likert-type format with

responses ranging from '1' (strongly disagree) to '5' (strongly agree). Item scores are summed for a total outcome expectancy score that ranges from 23 to 115. Higher scores indicate more positive outcome expectations. Predictive validity was reported for the OETSS instrument as "sex-based discussion *(r* = .325, *p*< .000), general communication (*r* =.371, *p* < .000), parenting *(r* = 314, *p* < .000), and self-esteem *(r* = .220, *p*< 0.000)" (DiIorio et al., 2001, p.145). Readability, assessed using the Flesch-Kincaid tool in Microsoft Word 7, was 7.0.

Perceived self-efficacy is defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997p. 3). In this study parent self-efficacy is their perceived ability to engage in discussions about sex with their sons. It was measured using the Self-Efficacy for Talking about Sex Scale (SETSS) (DiIorio et al., 2001). The original scale consisted of 16 items (= .85) on two subscales; 1) a 10-item basic information self-efficacy measure (=.84) and (2) a 6-item relationship-based information self-efficacy measure (= .67) (DiIorio et al., 2001). One additional item was added based on the results of a father-son sex communication study (= .95) resulting in the current 17 item questionnaire (C. DiIorio, personal communication, November 9, 2010). The current scale uses a likert-type format with responses ranging from '1' (not sure at all) to '7' (completely sure). Summed responses may range from 17 to 119, with higher scores indicating increased self-efficacy. Predictive validity for the SETSS scales were reported as "sex-based discussion *(r* = .325, *p*< .000), general communication (*r* =.371, *p* < .000), parenting *(r* = 314, *p* < .000), and self-esteem *(r* = .220, *p*< 0.000)" (DiIorio et al., 2001, p.145). DiIorio and colleagues (2001) also reported that self-efficacy levels were higher (*t* = 3.43, *p* < .000) and outcome

expectations more positive ($t = 2.18$, $p = < 0.05$) for talking with their daughters about sex as compared to talking with their sons (p. 145).

Three questions on the basic information subscale which were specific to use and knowledge of birth control pills were deemed inappropriate for this study limited to parents of males. These three questions were eliminated from the questionnaire resulting in a 7 item basic information self-efficacy measure subscale ($\alpha = .78$) used in the current study. This resulted in the 14-item scale administered to PASS project participants with summed responses which may range from 14 to 98. Readability, assessed using the Flesch-Kincaid tool in Microsoft Word 7, was 6.9.

Open-ended questions exploring barriers parents anticipated when talking with their sons about sex, the number and nature of health provider initiated conversations regarding their son's sexuality, and the nature of parent communication with their sons regarding general issues not related to sex were included on the pretest questionnaires. Sample questions included items such as "Have you talked with your son about sexuality? Tell me about those talks. How did you feel?" and "What three things will make talking with your son about sexuality most difficult?" On the posttest, open-ended questions were asked about actual barriers and challenges parents experienced when talking with their sons about sex. The posttest questions also explored strategies parents used to facilitate their conversations. Sample questions included "Tell me about your conversations with your son regarding sexuality. What were the most challenging things in having that conversation?" and "What were some of the strategies you used to talk with your son?" In addition, a Demographic Questionnaire was used to gather key

demographic variables. Readability of the questionnaires, assessed using the Flesch-Kincaid tool in Microsoft Word 7, was 6.1.

Intervention Description

The PASS project is a multi-media intervention incorporating verbal instruction, an audio CD, and printed materials. The packet included an instruction sheet regarding use of the packet, an audio CD, three in home activity lessons, a guidebook designed for parents of children age 8 – 13 (supplied by Adagio Health of Western Pennsylvania), a handout with helpful hints about talking with children about sex (supplied by Planned Parenthood of West and Northern Michigan), and a signed copy of the study consent form. The CD contained an introduction, three information segments, and a conclusion with a total run time of 34 minutes. Segment one consists of information about puberty, including reproductive anatomy and physiology. Segment two incorporates information about risky sexual behaviors, including sexually transmitted infections. Segment three includes a discussion of sexual responsibility, including expressing caring and love without intercourse. The three segments are followed by a conclusion encouraging parents to continue to engage in discussions about sex with their sons beyond the time limited PASS project.

The CD also refers the parents to supplemental print material included in booklets and handouts in the research packet. The week one print material included an exercise for parent and son to label male and female reproductive anatomy. In weeks two and three parent and son were to use flash cards provided to engage in conversations about sexually transmitted infections, teen pregnancy, and open ended questions about the consequences of early sex and sexual responsibility. The parent participants were instructed to

complete the activities with their son and were given an answer key designed to guide the conversation and bolster parent confidence in their ability to guide the discussions. Throughout each segment parents were encouraged to share their family values regarding these topics with their sons.

Prior to implementing the intervention, the CD was pilot tested with three parents (female, masters' degree; male, associate degree; female high school diploma) to identify any potential areas of confusion. Feedback from the pilot testing was that the information and instructions on the CD and in the study pack print materials were clear and understandable. No suggestions were offered for change.

Data Collection Procedures

Baseline data was collected at onsite meetings and individual appointments throughout the Detroit Metropolitan area. Following informed consent, baseline SETSS and OETSS questionnaires along with the demographic survey, and NVS were administered. After completing the initial questionnaires, participants were given the PASS packet.

One week after the initial data collection, reminder letters were mailed encouraging parents to use the CD's and print materials to begin discussions with their sons. Four weeks after the initial data were collected the post intervention OETSS, SETSS, and open ended questionnaires were completed by telephone. The PI and two trained research assistants made the phone calls using a script to improve validity and consistency of the collected data. Those that did not wish to complete the questionnaires by telephone were mailed the follow-up questionnaires by US mail or electronically. Pre and post intervention surveys were printed in different colors to differentiate them.

All parents that attended an informational meeting or individual appointment and consented to participate in the study were given a $5.00 token of appreciation. At the conclusion of the study, participants who completed the post intervention surveys were mailed a $20.00 gift card and a thank you letter as a token of appreciation for participating in the study.

Analysis

Quantitative data were analyzed using PASW version 17. Paired samples *t*-tests with Bonferroni correction were performed to identify differences between baseline and follow-up mean scores of outcome expectancy and self-efficacy for talking about sex. The correlation between health literacy and parent self-efficacy for talking about sex was analyzed using spearman's rho. Data from the open ended qualitative questions were analyzed using content analysis. Post hoc power analysis for a one tailed paired samples *t* test was conducted using G*Power, for OETSS and SETSS data (Faul, Erdfelder, Lang, & Buchner, 2007). The demographic characteristics of the sample were analyzed using descriptive statistics. All tests of significance were one tailed at an a priori alpha level of .05 and an adjusted alpha of .025 with the Bonferroni correction.

Results

Participants

A sample of 67 parents was recruited to participate in the study at baseline. Sixty one participants completed data collection at follow-up representing a return rate of 91%. The six participants who did not complete the post intervention survey were dropped from analyses, leaving a final sample of 61. The post hoc power analysis indicated the

sample of 61, with an alpha of .025 and the medium to large effect sizes calculated from study results, provided power of 0.99 (Faul, Erdfelder, Lang, & Buchner, 2007).

The majority of parents (n=58, 95.1%) lived with their son full time, 5-7 days per week (Table 1). Two lived with their son 1- 3 days per week and one participant, who was an aunt, lived with the son 0 days of the week. The mean age of participants was 41(range 28 – 71) with three participants not reporting their age. The majority was married (65.6%), female (65.6%) and had formal education beyond high school (65.6%). Most (60.7%) of the sample had an adequate health literacy score. The mean household income was $59,586 (range $9,999 - $150,000).

Table 1. Demographic Characteristics of PASS Project Participants (N=61)

Parent Characteristics	n	Percentage
Female	40	65.6
Male	21	34.4
Marital Status		
Married	40	65.6
Single	12	19.7
Divorced	6	9.8
Separated	3	4.9
Relationship to Child		
Mother	37	60.7
Father	18	29.5
Grandmother	3	4.9
Grandfather	2	3.3
Other Caregiver	1	1.6
Highest Grade Completed		
Less than High School	4	6.6
High School	17	27.8
Trade School/Some College	23	37.7
Bachelors Degree or Higher	17	27.9
Annual Income		
>$20,000	4	6.6
20,000-39,999	15	24.6
40,000-59,999	8	13.1
≥60,000	19	31.1
No Response	15	24.6
Number of Days Per Week Living with Son		

Table 1 (Continued)

Son Characteristics	n	Percentage
Age		
8	3	4.9
9	2	3.3
10	9	14.8
11	11	18
12	7	11.5
13	7	11.5
14	20	32.8
15	2	3.3
Grade		
Fourth	4	6.6
Fifth	11	18.0
Sixth	10	16.4
Seventh	12	19.7
Eighth	7	11.5
Ninth	17	27.9

Hypotheses Testing

Hypothesis one, which predicted an increase in positive outcome expectations for talking to their sons about sex after a multimedia intervention, was supported (Table 2). Positive outcome expectations increased from pre to post intervention. A paired samples t-test indicated a significant difference between the pre intervention and post intervention outcome expectancy scores (M difference = -4.00, SD = 9.05), t (60) = 3.45, p< .001. Cohen's d = .44 suggests a small to moderate effect size (Cohen, 1988).

Hypothesis two stated self-efficacy for the sex educator role will increase after a multimedia intervention and was supported (Table 2). Self-efficacy scores increased from pre to post intervention, A paired samples t-test indicated a significant difference between the pre intervention and post intervention self-efficacy scores (M = -6.51, SD = 9.64), t (60) = 5.271, p < .001. Cohen's d = .64 suggests a moderate to high effect size (Cohen, 1988).

Table 2. OETSS and SETSS Scores Pre and Post Intervention

	Pre-test Mean (SD)	**Post-test Mean (SD)**	***t***	**Significance**
Outcome Expectancy for Talking about Sex Scale (OETSS) Scores	91.06 (8.52)	95.06 (9.66)	3.45	< .001
Self-efficacy for Talking about Sex Scale (SETSS) Scores	84.60 (11.54)	91.11 (7.63)	5.271	< .001

Hypothesis three, predicting a positive correlation between health literacy and self-efficacy for the health educator role, was not supported. Self-efficacy was not significantly related to health literacy among study participants, r_s=.071, p=.293.

Hypothesis four stated parents exhibiting higher sex educator self-efficacy will be able to identify challenges and develop effective strategies for discussing sex with their adolescent son and was supported. Qualitative data from the open ended questions were analyzed using content analysis. Open ended questions data were collected from the first 43 participants as the data were saturated at this point. Two participants were excluded from the analysis as they did not complete the post intervention survey. The data were compared side by side by parent participant ID number to explore the anticipated challenges to the actual challenges faced when discussing sex with their sons.

The SETSS pre intervention sum scores were separated into quartiles using PASW 17. Sum scores of 78 or below (n=10, lowest 25th percentile) or of 93 or above (n=10, highest 25th percentile) were used for the analysis (Table 3).

Table 3. Challenges and Strategies Identified by Participants Scoring in Top (shaded) and Bottom Quartile of SETSS Sum Scores

Challenges Anticipated Pre Intervention	Challenges Identified Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
When they don't want to listen; when they are mad; when they are busy	There were no challenges. I explained to my son not to lean on his own understanding and wait for God. Explained the different viruses and how you can die from it. Explained how to say no as heard on the CD. And to do other things other than having sex, such as movies with other people in public places.	Used the CD and pictures. Visual things were good. The open ended questions were good.	96.00	98.00
Imbarrassed [sic]; not knowledgable [sic]; scared	The conversation was smooth and no embarrassing topics. He listen thoroughly and asked questions pertaining to the topic of AIDS, girlfriends, and sex at a young age. There was nothing challenging.	I used the papers given or tools given in the sequences outlined on the CD and handouts. 1. Opened 2. Straight forwardness 3. Honesty	98.00	98.00
Treating as a responsible person	No things were challenging; talk was more technical with using the packet	Used the packet; just straight up talk	98.00	96.00

Table 3 (Continued)

Challenges Anticipated Pre Intervention	Challenges Identified Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
Sex acts	Questions regarding how babies are born; How does it feel to have sex; when should he have sex	Watching the DVD (listening to the CD)	93.00	94.00
blank	Introduction to the proper names of the genitals totally embarrassed my son. He didn't want to look and was upset to the point of tears. There were no other real challenges. His grandmother and I have always been the people he turn to. So he trusts us, so there are no real barriers here.	Discussing everything with my wife prior to bringing him in. Then playing parts of the CD. Then elaborating on them. My wife did most of the talking and I supported her.	94.00	89.00
I really don't have any. One obstacle would be if he shut down communication and no longer participated in open dialogue	How to put on a condom from mom was awkward	Initiation by what's going on with his peers. Conversations and lyrics that are found on social media helps strike up the talk.	98.00	98.00
n/a	See "were not"	See "were not"	93.00	92.00
The experience; hygiene of your sexual partner	Bring up the conversation, son felt awkward initially	Sports, girls liking jocks; sexual orientation post sports; girls cutting their hair off and not being able to tell the difference in sex	95.00	98.00
What the act of sex really is	There really weren't any, due to he had sex ed. Class in school	The materials provided ; life experiences	96.00	94.00

Table 3 (Continued)

Challenges Anticipated Pre Intervention	Challenges Identified Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
If he's in the right frame of mind being silly or serious.	The conversation went very well and was very interesting on both ends. He had a lot of questions. I covered a lot of questions he had and was curious about. He is naturally curious and asks lots of questions anyway. That was a….. as opposed to a child that is just quiet and asks no questions. The only thing that was somewhat challenging was getting him to understand names and functions of female body parts. Probably due to age and maturity level.	Trying to maintain eye contact. Explaining to him that I want him to feel comfortable when he wants to have a discussion or questions about sex. Want him to come to me when he has a question.	94.00	98.00
Keeping the conversation at a level he can understand without being silly; showing how to use a condom; what causes erection	He kind of seemed unsure of conversation. Not sure if it was cause it was me versus his dad; the whole thing about puberty; wet dreams	Well I started by saying I had noticed hair on his arms. I discussed body changes. He was comfortable. I made him feel he had done nothing bad. The CD and handouts really helped. The internet helped too.	66.00	84.00

Table 3 (Continued)

Challenges Anticipated Pre Intervention	Challenges Identified Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
Listening	Explaining private parts; trying to explain how important it is to not have sex and wait; answering questions about how girls get pregnant. The conversation was great. I loved it. I feel it's a good program. I learned a lot too. I wanted to talk to him but didn't know how to get started. The packet really helped.	Have him alone to decrease the embarrassment and make him know the talk is serious.	73.00	95.00
As his age progresses	Not really a challenge. A little embarrassed getting started	The kit helped. I used TV and the internet too.	62.00	95.00
When he think he's ready; errection [sic]	Asking him if he ever had before; talking to him about protection; using a condom	Open communication use	64.00	75.00
Having an open dialogue with him and letting him know if he has a question he can be comfortable in asking without feeling ashame [sic].	The concept of what sex is; My son felt like it was a nasty thing; He felt comfortable asking me questions	I tried to explain to him what made sex a bad thing and also explain the beauty of it because it was authorized by God for married people	75.00	79.00

Table 3 (Continued)

Challenges Anticipated Pre Intervention	Challenges Identified Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
Maturity/Age	He was uncomfortable, he shed tears. After explaining what I hoped to accomplish, he became more comfortable. And was fairly at ease when we reached the last envelope. There was only one challenge. Which was raising his comfort level mostly by stressing our own discomfort and hopes of making him understand why we went there.	I played parts of the CD for him. And then asked questions and asked what his questions were	51.00	86.00
I do no	How girls differ from him; different kinds of sex; age was a factor, he was too young and seem confused	Face to face, and speaking calm	41.00	56.00
He has a one track rigid mind set; when you discuss something, you must drill in the fact that nothing's wrong or happening to him and he's not going to die	Body parts of male and female were very detailed; different disease; most challenging was describing disease and how you get.	Game was helpful; connections into real life; using first person instead of third person	76.00	93.00

Table 3 (Continued)

Challenges Anticipated Pre Intervention	Challenges Identified Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
Coming to me when he is ready; talk to me comfortably about anything; asking for protection	Nothing was challenging; He was not too responsive to games; he was shy about mom talking with him	Talked about mom's experience. Mom was honest in sharing her experiences; talked about moms friends with STD's and it (std's) actually happens to other people	72.00	95.00
Talking about girls body parts.	Most challenging thing was showing him the picture of penis parts; I was not ready to show him the female body parts; I could not talk about anal sex: I did not feel comfortable talking about oral sex or getting very deep into sex acts; I feel he is not ready for that yet	I used info from the booklet to help me talk to him about his body changing; I reassured him that I am his mother and he can talk to me about anything whether I like it or not: I also tell him that his body is nothing to be ashamed of and that sex is ok when HE is ready but he has to be safe. I also tell him the consequences of having sex (disease, being young father, etc…)	78.00	95.00

Parents in the highest and lowest quartile were able to identify potential challenges to sex communication with their sons. However in both groups the majority of the actual challenges identified by parents were not the ones anticipated. Only two participants faced the actual challenges they anticipated which were talking about "sex acts" and "talking about girls body parts". Parents in both quartiles were able to identify strategies to help them to engage in the conversations with their sons. Therefore, while hypothesis four was supported this finding was not exclusive to parents with the highest

SETSS sum scores. One strategy that was often reported was use of the material provided in the research packet.

Discussion

The PASS project was designed to test the effectiveness of a multimedia intervention on parent outcome expectations and self-efficacy for talking with their sons about sex. In addition the project explored the relationship between self-efficacy for talking about sex and health literacy as well as potential barriers to parent-son communication about sex.

Outcome Expectations and Self-Efficacy

The findings from this study indicate the PASS project media-based intervention was effective. Mean scores on both the OETSS and the SETSS increased significantly over the four-week study period. These findings are indicative of parents having higher outcome expectations and self-efficacy for engaging in conversations with their sons about sex topics after using the CD and print materials in the research packet. This was the expected outcome based on the tenets of Social Cognitive Theory. It appears that verbal persuasion, included in the CD, and enactive mastery, supported by the three-segment teaching and learning approach, promoted the increase in the parents' self-efficacy scores. Outcome expectations were also positively confirmed based on the increased post-intervention OETSS scores. The open-ended questions answered by parents also informed this finding. The overwhelming majority of parents expected their conversations, guided by the PASS project, to influence their sons' decision to delay sex or use protection if they decided to engage in it. The findings are consistent with previous studies measuring the outcome expectations and self-efficacy of parents using the OETSS and SETSS (DiIoria, et al., 2006a; DiIoria, et al., 2006b; DiIoria, et al.,

2006c; DiIorio, McCarty, & Pluhar, 2011; Forehand, et al., 2007; O'Donnell, et al.,2005). The findings suggest that the use of a CD, along with print material and structured exercises, was effective. This finding is supported by previous findings that parents were interested in being educated in advance of talking with their children about sex because it would prepare them for the talk (Haglund, 2006). These parents also indicated that activities created to facilitate at-home discussions were needed (Haglund), such as including the use of CD's for parent education (O'Donnell, et al., 2005).

Health Literacy

The non-significant correlation between health literacy and self-efficacy was not expected given that health literacy was found to be related to self-efficacy among parents and guardians regarding their child's asthma control (Wood, Price, Dake, Telljohann, & Kuder, 2010). No studies were found that reported measuring the relationship between health literacy and parent self-efficacy in the sex educator role. The difference in the current study may be due to the nature of its focus, i.e., parents engaging their sons in discussions about sex. Parents have previously reported a concern about engaging in conversations about sex with their children because they lacked knowledge or had a fear they could not answer specific sex-related questions (Wilson, et al., 2010). These data were reported in a qualitative study where the majority of participants were educated above grade 12, as in the current study.

The lack of significant findings in the current study has several possibilities. First these findings may imply that self-efficacy for talking about sex topics may be more related to discomfort with sex topics than lack of knowledge or health literacy. It is also possible that current health literacy assessment tools are unable to adequately measure

literacy in this content area. Another possibility may be that over 60% of the study sample had adequate health literacy which was not consistent with the reported population norm (Kutner, Greenberg, Jin, & Paulsen, 2006). This sample does not appear to be representative of African Americans and may account for the non-significant relationship between health literacy and self-efficacy.

Challenges and Strategies

Parent participants with the lowest and highest self-efficacy scores were able to identify anticipated and actual challenges to engaging in conversations about sex with their son. Parents in both the highest and lowest score groups were equally able to use effective strategies to promote those conversations as well. One potential reason that there was little difference in the groups may be related to the research methodology. The PASS Project provided a packet of material designed for use by parents in this single group design. In doing so, participants were provided with a method to overcome potential barriers to engaging in discussions about sex with their son; limiting their need to develop strategies. Another possibility may be that by using a convenience sample, the parents who agreed to participate in the study, were motivated to remove barriers and develop strategies to talk with their sons.

Study Limitations

There were several limitations in this study. First, a convenience sample with snowball strategy was used. This may have lead to a sample that was not representative of parents of African American adolescent males. Second, data were collected from one group and there was not a true control group to compare the effectiveness of the intervention. Third, all data was self reported which makes it subject to bias. Future

studies should include both intervention and control groups to measure the impact of the intervention. A longitudinal study would also determine if the PASS project encouraged ongoing parent-son conversations about sexual issues.

Implications for Practice

The success of the PASS Project suggests that nurses working with African American adolescent males should include parents in interventions aimed at delaying the age of first intercourse and the associated health problems in this at risk population. Parent education about sexual matters should be of primary concern and should incorporate non print media to facilitate their learning. Planned and guided activities to be used in the home will allow enactive mastery experiences and promote self-efficacy for the sex educator role.

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Chapter 4: Summary and Conclusion

Summary of the Program of Research

This dissertation reports on the introductory work conducted in a program of research aimed at improving the health of African American adolescents using Bandura's (1986) Social Cognitive Theory. This research is of interest because while there has been a downward trend in risky sexual behaviors among youth in the past 18 years, the incidence of African American males engaging in intercourse before age 13 has remained constant (CDC, 2011b). African American males are nearly 5 times more likely than Caucasians and nearly 2.5 times more likely Hispanics to engage in sex before the age of 13 (CDC, 2011c). Early engagement in sex exposes adolescent males and their partners to a host of negative health and psychological conditions.

Immersion in the literature led to the question of the impact of health literacy on parent communication with their adolescent sons. The systematic review of literature (SROL) reported in Manuscript 1, titled *African Americans and Health Literacy: A Systematic Review*, suggested that health literacy is a major issue for African-Americans, with only 2% functioning at a proficient level (Kutner, Greenberg, Jin, & Paulsen, 2006). Knowing that health literacy can impact health outcomes it was clearly indicated that it should be incorporated in the research designed to recruit participants exclusively from the African American community (Agency for Healthcare Research and Quality, 2004).

Based on the SROL and need to create an intervention that addressed health literacy concerns, the Parents Addressing Sexuality with their Sons (PASS) Project was developed within the context of Social Cognitive Theory (Bandura, 1986). According to Mayer (2001) "learners can better understand an explanation when it is presented in words and pictures than when it is presented in words alone" (p.1). Care was taken to

incorporate the principles of multimedia learning by using words contained in an audio compact disc (CD) and pictures contained in the printed materials and lessons in the research packet and were described in detail in Chapter 3. The intervention was designed to facilitate learning and enhance parent comfort and ease when addressing the subject of sex with their adolescent sons, thus providing an "environment" favorable to addressing potential health literacy issues, outcome expectations, and self-efficacy – all part of "person" in SCT.

The study titled *Effect of a Multimedia Intervention on Outcome Expectations and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males,* and reported in Manuscript 2, also measured health literacy. The multimedia intervention utilized was the PASS Project. The study was designed to test the effect of the PASS Project on outcome expectations and self-efficacy in the sex educator role among a sample of African American parents and caregivers of adolescent males. The study also examined the relationship between health literacy and self-efficacy. Open ended questions explored parental ability to identify challenges and develop strategies for discussing sex with their adolescent son.

Sixty one African American parents of varying health literacy levels and formal education completed all requirements for inclusion in the final data analysis. Based on the significant findings it appears that the PASS project was successful for improving parent outcome expectations and self-efficacy for talking about sex with their sons. This finding supports developing interventions for African American parents which include multiple media formats. This is particularly meaningful for African Americans as they are known to have lower levels of health literacy than other groups (Kutner, Greenberg,

Jin, & Paulsen, 2006). Supplementing print media with non print media facilitates learning among persons with low health literacy scores (Ross et al., 2010).

Although the PASS Project was designed for use with low literacy participants, health literacy was not correlated with parent self-efficacy scores nor did it appear to impede participants' ability to identify barriers and develop strategies for discussing sex with their sons. This finding may be related to the generally high scores in the study sample but also suggests the possibility that using the Newest Vital Sign to measure health literacy does not adequately measure literacy related specifically to sexual health topics. Development of a specific tool to address literacy on sex topics may be warranted.

Parents' ability to develop strategies to overcome barriers to talking about sex with their adolescent sons, regardless of perceived self-efficacy, suggests that providing parents with tools to facilitate this important discussion is recommended. As stated in Social Cognitive Theory, self-efficacy is influenced by verbal persuasion and enactive mastery (Bandura, 1997). Tools in the PASS Project provided verbal cues in the CD and allowed for mastery of the subject over a three week time period which appears to have positively influenced their belief in their capability in the sex educators. Findings from this study suggest that providing parents with tools is an important element to facilitate them talking with their sons about sex topics.

Next Steps in the Program of Research

Results of the intervention study suggest several avenues for continued research. The next steps include additional analysis of the qualitative findings of this study for publication and presenting the current research findings to lay and professional

audiences. Future studies will focus on: 1) developing and testing additional multimedia interventions designed to improve parent confidence in their capability as primary sex educators for their children; 2) developing a tool that measures health literacy specific to sexual health; 3) conducting a study with parents of adolescent males that includes parents of other racial and ethnic groups; and 4) conducting a randomized controlled trial to allow for a between groups comparison of outcome expectancy and self-efficacy; Following publications in the field, external grant funding will be sought to further my program of research.

Conclusion

The success of PASS Project warrants continued use of a multimedia approach to prepare parents to become the primary sex educator for their child. As nurses and health care providers it is important to recognize that intervention with parents is needed. Initiating discussions about sex can be difficult for parents and providing them with a variety of tools to use will facilitate the discussions. It is also important for nurses to recognize that health literacy impacts the ability to analyze and use health information. Therefore, materials intended for parents should be developed for use by all and include multimedia formats; not exclusively print teaching materials. Intervening with parents of African American adolescent males will ultimately impact the health of these young men and their partners.

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Appendix A
ABNF Manuscript Guidelines

Information for Authors

EDITORIAL OBJECTIVES

The ABNF Journal is designed to achieve the following: (a) to publish original research and health-related manuscripts, materials and reviews written by Black nursing faculty members in higher education; (b) to communicate these research and other findings to the membership of **ABNF** and all interested others; (c) to serve as a linchpin for Black nursing faculty members with similar research interests; and (d) to aid Black nursing faculty members to keep current in Black health care issues and research. Unsolicited manuscripts are welcome.

EDITORIAL PROCEDURE

The ABNF Journal is published quarterly. Manuscript submissions are peer reviewed by at least three members of the Editorial Review Board.When submitting manuscripts and other materials with multiple authors, please indicate the primary author to receive all correspondence. In compliance with the Copyright Revision Act of 1976, all manuscripts must be accompanied by the following statement signed by all authors:

> The undersigned author(s) transfer all copyright ownership of the manuscript (title of the manuscript) to Tucker Publications, Inc., in the event the work is published or included in any product that may derive from the published journal, whether print or electronic media. The undersigned author(s) warrant that the article is original, is not under consideration by another journal, and has not been previously published.

When submitting materials, please indicate whether the materials were prepared while the authors(s) were employed by the U.S. government. Accepted manuscripts become the property of Tucker Publications, Inc. Although not required, query letters are welcomed.

MANUSCRIPT FORM

Manuscripts should be typed or printed in standard manuscript form as outlined in the third edition of the *American Psychological Association Publication Manual*, e.g., double–spaced; 1-1/2 inch margins. Abbreviations should be spelled out the first time they are used. Separate pages should be used for the title page, an author(s) biographical sketch page, the abstract, key words page, the text, acknowledgment, references, tables and figures, typed one to a page, and legends. The title page contains the title of the manuscript, which should be short, and the name and address of the author(s), which should appear nowhere else on the manuscript. A brief biographical sketch of the author(s) should be included on a separate page.

A few important notes about your manuscript:

1. The **abstract** should never exceed 100–150 words
2. Up to **five index words** should be listed on the key words page following the abstract.
3. Each page should be **numbered consecutively**, beginning with the title page.
4. Manuscripts **should not exceed 14 pages** (3500 words).
5. **Please DO NOT utilize hard returns at the end of each line** - allow the word processor to perform default word/line wrapping.
6. At the beginning of each paragraph, **please use a preset TABBED INDENT** (vs. spaces).
7. Please **italicize references** in your reference lists and **do not underline**.

Call for Manuscripts

The ABNF Journal, the official journal of the Association of Black Nursing Faculty, Inc. (ABNF), invites members to submit papers, ideas, experiences, case studies and book reviews.
Send query letters or manuscripts to:

Sallie Tucker–Allen, PhD, FAAN
Editor, *The ABNF Journal*
5823 Queens Cove
Lisle, IL 60532
630/969-3809
e-mail: abnfj@tuckerpub.com

PERMISSIONS AND CONSENTS

Letters to the editor are published at the Editor's discretion. A transmittal letter containing copyright assignment should accompany the letter to the editor.

Letters of consent for publication of patient photographs must accompany the manuscript if patient identification is possible. Parental consent or consent of legal guardian must be obtained to permit publication of a photograph of a minor. Illustrations, tables or quotations must be fully identified as to author and source. If text material totalling 200 words or more is borrowed verbatim or if illustrations or tables are borrowed, written permission must be obtained from both the publisher and author. Letters granting this permission should be forwarded with the manuscript.

MANUSCRIPT SUBMISSION

Manuscripts may be submitted electronically via email to: abnfj@tuckerpub.com or by post on a CD-ROM. Submit the original manuscript and two copies with a stamped, self–addressed business size envelope if you wish receipt of your manuscript acknowledged. In addition, if you wish copies returned after review, submit a 9-1/2" x 12-1/2" envelope with sufficient postage to:

Sallie Tucker–Allen, PhD, FAAN
The ABNF Journal
P.O. Box 580
Lisle, IL 60532
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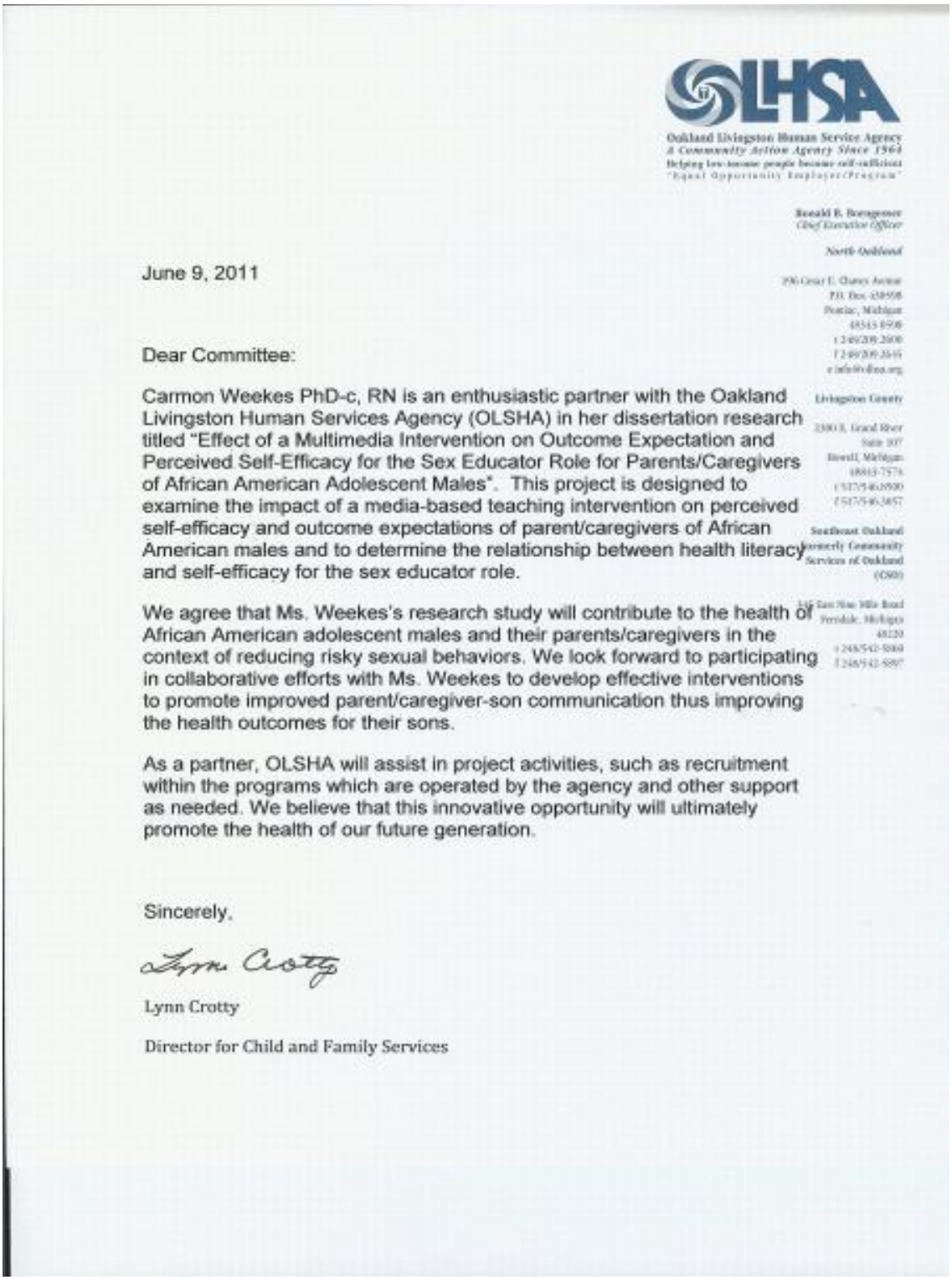
Appendix B
Letters of Support for Study



OLHSA

Oakland Livingston Human Service Agency
A Community Action Agency Since 1964
Helping low-income people become self-sufficient
"Equal Opportunity Employer/Program"

Ronald B. Boregowe
Chief Executive Officer

North Oakland

196 Cesar E. Chavez Avenue
P.O. Box 430598
Pontiac, Michigan
48343-0598
t 248/209.2600
f 248/209.2655
e info@oloa.org

Livingston County

2300 E. Grand River
Suite 107
Howell, Michigan
48843-7574
t 517/546.0900
f 517/546.3857

Southeast Oakland
(formerly Community
Services of Oakland
County)

144 East Nine Mile Road
Ferndale, Michigan
48220
t 248/542-5060
f 248/542-5097

June 9, 2011

Dear Committee:

Carmon Weekes PhD-c, RN is an enthusiastic partner with the Oakland Livingston Human Services Agency (OLSHA) in her dissertation research titled "Effect of a Multimedia Intervention on Outcome Expectation and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males". This project is designed to examine the impact of a media-based teaching intervention on perceived self-efficacy and outcome expectations of parent/caregivers of African American males and to determine the relationship between health literacy and self-efficacy for the sex educator role.

We agree that Ms. Weekes's research study will contribute to the health of African American adolescent males and their parents/caregivers in the context of reducing risky sexual behaviors. We look forward to participating in collaborative efforts with Ms. Weekes to develop effective interventions to promote improved parent/caregiver-son communication thus improving the health outcomes for their sons.

As a partner, OLSHA will assist in project activities, such as recruitment within the programs which are operated by the agency and other support as needed. We believe that this innovative opportunity will ultimately promote the health of our future generation.

Sincerely,

Lynn Crotty

Lynn Crotty

Director for Child and Family Services

Appendix B (Continued)

CHI ETA PHI SORORITY, INCORPORATED
"Professional Nursing Organization"
3029 13th. St., NW Washington, D.C. 20009 (202) 232-3858 FAX (202) 232-3460

June 1, 2011

Dear Committee:

Carmon Weekes PhD-c, RN is an enthusiastic partner with Lambda Chi Chapter of Chi Eta Phi Sorority, Inc. in her dissertation research titled "Effect of a Multimedia Intervention on Outcome Expectation and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males". This project is designed to examine the impact of a media-based teaching intervention on perceived self-efficacy and outcome expectations of parent/caregivers of African American males and to determine the relationship between health literacy and self-efficacy for the sex educator role.
We agree that Ms. Weekes's research study will contribute to the health of African American adolescents in the context of obesity and culture. We look forward to participating in collaborative efforts with Ms. Weekes to develop effective interventions to promote develop effective interventions to promote improved parent/caregiver communication thus improving the health outcomes for their sons.

As a principal partner, Lambda Chi Chapter of Chi Eta Phi Sorority, Inc. will assist in project activities, such as recruitment activities and other support as needed. We believe that this innovative opportunity will ultimately promote the health of our future generation.

Sincerely,

Nutrena Tate PhDc, RN, CPNP-PC
President
Lambda Chi Chapter
Chi Eta Phi Sorority, Inc.

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June 30, 2011

Dear Dissertation Committee:

We have spoken with Ms. Carmon Weekes, PhD(c) and agree that her research study titled "Effect of a Multimodia Intervention on Outcome Expectation and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males" is one that will contribute to the health of African American adolescents. We agree to partner with her toward this goal.

As a partner, Voyageur Academy will assist Ms. Weekes in project activities, such as recruitment of parents to participate in the study. We believe that this project, aimed at parents, will promote the health of African American males as well as their families.

Sincerely,

Red Atkins
School Leader

Hope Of Detroit Academy

4948 N. Campbell St.
Detroit, MI 48210
ph: 313 897 8729
fax: 313 897 5742
www.hopeofdetroit.com

Mission Statement:
It is the mission of Hope of Detroit Academy to promote a multi-cultural community of learners who are college bound, strive for excellence, determination, and achievement.

Vision Statement:
The vision of Hope of Detroit Academy is to produce students who compete in a global world and become successful leaders.

Hope of Detroit Academy is chartered by Central Michigan University and managed by THE LEONA GROUP, L.L.C.

June 29, 2011

Dear Dissertation Committee:

We have spoken with Ms. Carmon Weekes, PhD(c) and agree that her research study titled "Effect of a Multimedia Intervention on Outcome Expectation and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males" is one that will contribute to the health of African American adolescents. We agree to partner with her toward this goal.

As a partner, The Hope of Detroit Academy will assist Ms. Weekes in project activities, such as recruitment of parents to participate in the study. We believe that this project, aimed at parents, will promote the health of African American males as well as their families.

Sincerely,

Appendix C

University of Texas at Tyler Institutional Review Board Approval

The University of Texas at Tyler
Institutional Review Board

July 14, 2011

Dear Ms. Weekes:

Your request to conduct the study *The Effect Of A Multimedia Intervention On Outcome Expectations And Perceived Self-Efficacy For The Sex Educator Role For Parents/Caregivers Of African American Adolescent Males*, IRB #SUM2011-79 by The University of Texas at Tyler Institutional Review Board. This approval includes the written informed consent that is attached to this approval letter. Please use this consent for your participant signatures. Please ensure that any research assistants or co-investigators have completed human protection training, and have forwarded their certificates to the IRB office (G. Duke).

Please review the UT Tyler IRB Principal Investigator Responsibilities, and acknowledge your understanding of these responsibilities and the following through return of this email to the IRB Chair within one week after receipt of this approval letter:

This approval is for one year, as of the date of the approval letter

- Request for Continuing Review must be completed for projects extending past one year
- Prompt reporting to the UT Tyler IRB of any proposed changes to this research activity
- Prompt reporting to the UT Tyler IRB and academic department administration will be done of any unanticipated problems involving risks to subjects or others
- Suspension or termination of approval may be done if there is evidence of any serious or continuing noncompliance with Federal Regulations or any aberrations in original proposal.
- Any change in proposal procedures must be promptly reported to the IRB prior to implementing any changes except when necessary to eliminate apparent immediate hazards to the subject.

Best of luck in your research, and do not hesitate to contact me if you need any further assistance.

Sincerely,

Gloria Duke, PhD, RN

Gloria Duke, PhD, RN
Chair, UT Tyler IRB

Appendix D

PASS Project Recruitment Flyer

Volunteers Needed for the PASS Project
Parents Addressing Sexuality with their Son
A Parent / Son Communication Study

Purpose: To help African American parents become sex educators for their sons and help prevent risky sexual behaviors. As a thank you for consenting to participate in the study you will receive a **$5.00 gift card** and a light meal or snacks will be provided at the first meeting. Each person who finishes the study will receive **another $20.00 gift card**.

In order to be in the study you have to:

1. Be African American/Black
2. Be the parent or caregiver of a male who is in 4th-9th grade
3. Able to understand and read English
4. Have a way to listen to a CD
5. Have a telephone that you can use
6. Be able to meet one time for about 1 to 1 ½ hours

Please contact me for more information about participating in this important study!
Carmon Weekes, doctoral candidate at The University of Texas at Tyler and nursing faculty at University of Detroit Mercy /248-872-6406 / sexeducatorstudy@gmail.com

Appendix E

THE UNIVERSITY OF TEXAS AT TYLER
Informed Consent to Participate in Research
Institutional Review Board # Sum2011-79
Approval Date: July 14, 2011

Project Title: Effect of a Multimedia Intervention on Outcome Expectations and Perceived Self-Efficacy for the Sex Educator Role for Parents/Caregivers of African American Adolescent Males

Principal Investigator: Carmon Weekes, RN, MSN, PhD(c)

Participant's Name: _____

To the Participant:

You are being asked to take part in this study at The University of Texas at Tyler (UT Tyler). This consent form explains why this research study is being done. It tells you what your role will be if you choose to participate. This form also tells you the risks that might be connected with being in this study. The person who signs you up should make sure you understand the risks.

4. Description of Project

This study is being done to teach African American parents and caregiver's some things that can make it easier to talk about sex with their son. Talking with your son may lead to him to not have sex at a very early age. This can reduce his risk of becoming a teenage father. It can also help reduce his risk of getting a sex related infection.

5. Research Procedures

If you agree to be in this study, we will ask you to do the following things:

Attend a meeting or schedule and individual or group appointment at the start of the study which will last about 2 hours. You will receive a $5 gift card and food will be provided at the meeting.

- Fill out 4 questionnaires and one information sheet at the meeting.
- Review the material in the folder that is given to you the meeting
- Listen to the CD that is given to you
- Use the CD and material in the folder to talk to your son about sex
- Give answers to 3 follow up questionnaires by phone 4 weeks after the first meeting or if you would like we can mail you the follow up questionnaire and you can return it by mail
- A $20.00 gift card will be mailed to you after the follow up questionnaires are returned

6. Side Effects/Risks

Risks that may result from participation are minimal and may be emotional in nature. You may be uncomfortable when talking with your son about sexual issues. You will

also need to allow an adequate amount of time to look at the material and set aside time to talk with your son.

7. Potential Benefits

Results of this study may make you, the parent/caregiver, feel more comfortable when talking with your son about sex and sexual topics. Talking with your son will help to keep him from having intercourse at a young age, getting a sexually transmitted disease, becoming fathers at a very young age, and have your son become responsible related to sexual issues.

Understanding of Participants

8. I have been given an opportunity to ask any questions concerning this research study and the researcher has been willing to answer my questions.

9. If I sign this consent form I know it means that:

- I am taking part in this study because I want to. I chose to take part in this study after having been told about the study and how it will affect me.
- I know that I am free to not participate in this study and that if I choose to not participate, then nothing will happen to me as a result.
- I know that I have been told if I choose to participate, then I can stop being a part of this study at any time. I know that if I do stop being a part of the study, then nothing will happen to me.
- I will be told about any new information that may affect my willingness to continue participating in this study.
- The study may be changed or stopped at any time by the researcher or by The University of Texas at Tyler.
- The researcher will gain my written consent for any changes that may affect me.

10. I have been assured that that my name will not be revealed in any reports or publications resulting from this study without my expressed written consent.

11. I also understand that any information collected during this study, including any health-related information, may be shared with the following **as long as no identifying information as to my name, address, or other contact information is provided**):

- Organization contributing money to be able to conduct this study
- Information shared through presentations or publications
- Summary only, of study findings, to study participants upon request

12. I understand The UT Tyler Institutional Review Board (the group that makes sure that research is done correctly and that measures are in place to protect the safety of research participants) may review documents that have my identifying information on them as part of their compliance and monitoring process. I also understand that any personal information revealed during this process will be kept strictly confidential.

13. I have been told of and I understand any possible expected risks that are associated with my participation in this research project.

14. I also understand that I will not be compensated for any patents or discoveries that may result from my participation in this research.

15. If I have any questions concerning my participation in this project, I shall contact the principal researcher:
Carmon Weekes, PhD(c), RN sexeducatorstudy@gmail.com, 248-872-6406.
Her dissertation chair is Dr. Barbara K. Haas, PhD, RN, bhaas@uttyler.edu, 903-566-7021

17. If I have any questions concerning my rights as a research subject, I shall contact Dr. Gloria Duke, Chair of the IRB, at (903) 566-7023, gduke@uttyler.edu, or the University's Office of Sponsored Research:
The University of Texas at Tyler
c/o Office of Sponsored Research
3900 University Blvd
Tyler, TX 75799
I understand that I may contact Dr. Duke with questions about research-related injuries.

18. CONSENT/PERMISSION FOR PARTICIPATION IN THIS RESEARCH STUDY

Based upon the above, I consent to taking part in this study as it is described to me. I give the study researcher permission to enroll me in this study. I have received a signed copy of this consent form.

_____ _____
Signature of Participant Date

_____ _____
Signature of Person Responsible (e.g., legal guardian) Relationship to Participant

_____
Witness to Signature

19. I have discussed this project with the participant, using language that is understandable and appropriate. I believe that I have fully informed this participant of the nature of this study and its possible benefits and risks. I believe the participant understood this explanation.

_____ _____
Researcher/Principal Investigator Date

Appendix F

PASS Project Demographic Data Form

Participant ID#_____

1. Your Age Today_____
2. Marital status: Married____ Single_____ Divorced_____ Separated_____
3. Gender: Male:_____ Female: _____
4. Relationship to child _____
5. Age of child_____
6. Grade of the child_____
7. Total number of children in your household_____
8. Ages of other children in household_____
9. Sex of other children in household _____
10. How many days per week does your child live in your household?

    ___ 0

    ___1-3

    ___ 4-7

11. Highest grade of school you completed_____
12. Yearly household income_____
13. Do you work outside the home? No Yes full time Yes part time

Appendix G

Newest Vital Sign Label and Score Sheet

Nutrition Facts

Serving Size	½ cup
Servings per container	4

Amount per serving

Calories	250	Fat Cal	120
			%DV
Total Fat 13g			20%
Sat Fat 9g			40%
Cholesterol 28mg			12%
Sodium 55mg			2%
Total Carbohydrate 30g			12%
Dietary Fiber 2g			
Sugars 23g			
Protein 4g			8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Millet, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

Appendix G (Continued)

Modified Answer Sheet for Newest Vital Sign

Answer these questions based on the ice cream label. Please answer honestly without any help. If you don't know please write you don't know
Thank you!

1. If you eat the entire container, how many calories will you eat? _____

2. If you are allowed to eat 60 grams of carbohydrates as a snack, how much ice cream could you have? _____

How much ice cream would that be if you were to measure it into a bowl_____

3.
Your doctor advises you to reduce the amount of saturated fat in your diet.
You usually have 42 g of saturated fat each day, which includes one serving of ice cream.

If you stop eating ice cream, how many grams of saturated fat would you be consuming each day? _____

4. If you usually eat 2500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving? _____

Pretend that you are allergic to the following substances: Penicillin, peanuts, latex gloves, and bee stings.

5. Is it safe for you to eat this ice cream? Yes No

6. If you answered no to question 5 Why not?

Appendix H

Outcome Expectancy

The following questions will be answered using a 1 – 5 scale with '1' indicating 'strongly disagree' and '7' indicating 'strongly agree'. Respondents can also answer 'don't know' or 'refuse to answer'.

1. If I talk with my son about sex topics, I will feel proud.

2. If I talk with my son about sex topics, I will feel like a responsible parent.

3. If I talk with my son about sex topics, I will feel that I did the right thing.

4. If I talk with my son about sex topics, I will be embarrassed.

5. If I talk with my son about sex topics, I will find some things difficult to talk about.

6. If I talk with my son about sex topics, I think he will listen.

7. If I talk with my son about sex topics, I will feel comfortable.

8. If I talk with my son about sex topics, my son will do what he wants no matter what.

9. If I talk with my son about sex topics, I will feel ashamed.

10. If I talk with my son about sex topics, I think it will do some good.

11. If I talk with my son about sex topics, my son will be less likely to have sexual intercourse as a young teen.

12. If I talk with my son about sex topics, it would be unpleasant.

13. If I talk with my son about sex topics, he will be less likely to get a girl pregnant.

14. If I talk with my son about sex topics, I will find these issues easy to talk about.

15. If I talk with my son about sex topics, I will feel relieved.

16. If I talk with my son about sex topics, he will be embarrassed.

17. If I talk with my son about sex topics, he will not want to talk to me.

18. If I talk with my son about sex topics, I will have done what parents should do.

19. If I talk with my son about sex topics, he will remember the discussion when he is older.

20. If I talk with my son about sex topics, he will appreciate my willingness to provide further information.

21. If I talk with my son about sex topics, he will be uncomfortable during the discussion.

22. If I talk with my son about sex topics, he will be more able to resist peer pressure to have sex.

23. If I talk with my son about sex topics, he will know where I stand on teens having sex.

Appendix I

Self-Efficacy for Talking About Sex

The following questions will be answered using a 1 – 7 scale with '1' indicating 'not sure at all' and '7' indicating 'completely sure'. Respondents can also answer 'don't know', 'refuse to answer', or 'not applicable'.

1. I can always explain to my son what is happening when a girl has her period.

2. I can always explain to my son why a person should use a condom when he has sex.

3. I can always explain to my son ways to have fun without having sexual intercourse.

4. I can always explain to my son why he should wait until he is older to have sexual intercourse.

5. I can always explain to my son that he should use condoms if he decides to have sexual intercourse.

6. I can always explain to my son why wet dreams occur.

7. I can always explain to my son how to put on a condom.

8. I can always explain to my son how to use birth control pills.

9. I can always explain to my son how birth control pills keep girls from getting pregnant.

10. I can always explain to my son what I think about young teens having sex.

11. I can always explain to my son how to tell someone no if he does not want to have sex.

12. I can always explain to my son how to make a partner wait until he is ready to have sex.

13. I can always explain to my son how someone can get AIDS if they don't use a condom.

14. I can always explain to my son where to buy or get condoms.

15. I can always explain to my son where to buy or get birth control pills.

16. I can always explain to my son how to tell if a girl or boy really loves him.

17. I can always explain to my son how to resist peer pressure to have sex.

Appendix J

Pre intervention Open Ended Questions

1. Have you talked with your son about sexuality?
    a. If yes: Tell me about those talks. How did you feel?
    b. If no: What sorts of things have prevented you from talking with your son?
2. What three things (if any) do you think will make talking with your son about sexuality most difficult?
3. What do you hope will happen as a result of talking with your son about sex?
4. How "good' or positive do you feel about your communication with your son - in general- about things other than sex- such as his schoolwork, his friends, etc. ?
5. Did your parent / caregiver talk with you about sex when you were a child? How did that make you feel?
6. Where do you think your son receives most of his information about sex?
7. Has your health care professional talked with you about talking with your son about sexuality?
    a. If Yes: Do you remember what they talked to you about? Or can you describe the content of that discussion? Who initiated the conversation?
    b. If no: Can you describe your expectations of your health care provider in helping you talk to your son about sex?
8. Has your health care professional talked with you about the possible health problems related to your son being sexually active?
    a. If Yes: what did they say were some of the possible health problems related

to sexual activity with your son?

b. If No: What is your understanding of health issues for your son related to sexual activity?

Appendix K

One Week Reminder Letter

P.A.S.S. Project
Parents Addressing Sexuality with their Son
A Parent / Son Communication Study

Dear Parent/Caregiver,

It has been one week since we met. This letter is a reminder for you to use the CD and the packet you got when we met to start talking with your son about sexuality. Don't forget to do the homework.

It may be a little hard to get started but don't forget YOU are your son's best teacher. He will listen to you. Let him know how you feel and what your family values are.

Don't forget we will call you in 3 weeks to fill out the other questionnaires.

Please contact me if you need to. The email address and my phone number are on the consent form.

Sincerely,

Carmon Weekes

Appendix L

Post Intervention: Open Ended Questions

1. If you **were** able to talk to your son about sex since we last met?
    a. Please tell me about your conversation. What (if any) were the three most challenging things in having that conversation?
    b. What were some things or strategies you used that helped you to talk with your son?
    c. How do you feel your conversation with your son will affect his sexual behavior
2. If you **were not** able to talk with your son about sex since we last met, what three things (if any) interfered with you having a talk with your son?

Appendix M

End of Study Thank You Letter

PASS Project
Parents Addressing Sexuality with their Sons
A Parent / Son Communication Study

Dear Parent/Caregiver,

Thank you for taking time to participate in the PASS project. I trust and pray that it helped you to talk about sexuality with your son. Your gift card is enclosed as a token of appreciation for your participation.

If you want to know the findings from the study please feel free to call or email me. I hope that this was just a beginning and you will continue to have conversations with your son for many years to come.

May God bless you.

Sincerely,

Carmon Weekes, RN, PhD(c)

Appendix N

Western Journal of Nursing Manuscript Guidelines

WESTERN JOURNAL OF NURSING RESEARCH

Manuscript Requirements (2011)

Provide a descriptive manuscript title of no more than 12 words.

Number all pages, including references and cover page. Research reports may be 16 pages, review articles generally may be 20 pages, and grantsmanship papers may be 7 pages. (Title page, abstract, references, tables, and figures do not count towards total.)

Do not right-justify, use bold, or italics in the manuscript. Use one inch margins and 12-point typeface. Double space the entire document including tables and references.

Include an abstract in paragraph form without citations. Limit the abstract to 150 words. Include four to five keywords at the bottom of your abstract for indexing. Use MeSH headings if possible.

The organization for *WJNR* research reports is as follows:

- Introduction: No more than one paragraph about the study topic without a heading.
- Description of the Problem: Rationale for the study, any conceptual framework, and literature review. Use a substantive heading which describes the topic.
- Purpose: Include specific research questions or hypotheses.
- Methods: Specify design, participants/sampling, data collection/measures, interventions, procedures, and/or analysis plans as relevant. Intervention reports are welcome and are allowed 4 additional pages over the 16 page limit for detailed description. Please use the CONSORT guidelines (http://www.consort-statement.org/) when developing intervention manuscripts (flow charts are generally not necessary). Provide extensive details regarding any interventions (interventionist, subject preparation for intervention, setting, intervention content specific information, dose, etc.).
- Results: Describe sample attributes then present results by research questions or hypotheses. When statistical tests are performed, provide test statistics and exact p values. Report means and measures of
-

- variability for important variables. Report numbers of subjects included in analyses, if this varies.
- Discussion: Findings interpreted in the context of other research, conceptual frameworks, or design.
- Acknowledgments: Treat as footnotes, title "Notes," and place at the end of the manuscript. Do not state authors' names in acknowledgements. Limit acknowledges to major contributions. Be brief.
- References: Use the most recent APA Manual of Style for citations and reference lists. References for research reports are generally limited to 40 citations, reviews may include more citations.
- Tables and figures are encouraged when they convey information not presented in the text. Produce tables in word processing programs and eliminate any dividing lines within tables. Group tables and figures at the end of the manuscript. Avoid tables longer than one page. Research reports should contain no more than 3 tables or figures total, but exceptions are possible. Review articles may contain additional tables.
- Figures are optional and must be camera-ready. No more than one figure per page.

Review papers should address health problems or nursing practice issues with high significance for many patients or nurses. Reviews should synthesize previous findings as well as suggest future research and practice. Review articles should be organized in a manner consistent with the content area and have appropriate headings and subheadings. The extent of previous research determines the number of references and tables.

Prepare a manuscript file that does not contain any author information. Be sure you do not mention authors in acknowledgments. Do not include a title page in the manuscript file as the online system will generate a title page when the review copy is assembled. Include the abstract in the manuscript file.

Submit manuscripts online at http://mc.manuscriptcentral.com/wjnr

WJNR Editor Vicki Conn or Assistant Sandra Dearlove or may be contacted at WJNR@missouri.edu

WJNR Welcomes Outstanding Review Manuscripts

Appendix O

Pre and Post Intervention Challenges and Strategies with SETSS Sum Scores

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
1. I do no	1. How girls differ from him; different kinds of sex; age was a factor, he was too young and seem confused	1. Face to face, and speaking calm	41.00	56.00
2. He has a one track rigid mind set; when you discuss something, you must drill in the fact that nothing's wrong or happening to him and he's not going to die	2. Body parts of male and female were very detailed; different disease; most challenging was describing disease and how you get.	2. Game was helpful; connections into real life; using first person instead of third person	76.00	93.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
3. I really don't have any. One obstacle would be if he shut down communication and no longer participated in open dialogue	3. How to put on a condom from mom was awkward	3. Initiation by what's going on with his peers. Conversations and lyrics that are found on social media helps strike up the talk.	98.00	98.00
4. The experience; hygiene of your sexual partner	4. Bring up the conversation, son felt awkward initially	4. Sports, girls liking jocks; sexual orientation post sports; girls cutting their hair off and not being able to tell the difference in sex	95.00	98.00
5. When he think he's ready; errection [sic]	5. Asking him if he ever had before; talking to him about protection; using a condom	5. Open communication use	64.00	75.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
6. Having an open dialogue with him and letting him know if he has a question he can be comfortable in asking without feeling ashame [sic].	6. The concept of what sex is; My son felt like it was a nasty thing; He felt comfortable asking me questions	6. I tried to explain to him what made sex a bad thing and also explain the beauty of it because it was authorized by God for married people	75.00	79.00
7. The part about the condom	7. Didn't feel any obstacles	7. Used demonstration of placing condom on microphone	80.00	98.00
8. The make up boys and girls; intercourc e [sic]; STD's	8. Getting him to look at the parts of the male and female anatomy. How he would get embarrassed when I talked about the body parts. Explaining what is oral sex.	8. Just sitting him down across from me, so he could see me face to face. Making him to feel comfortable enough to listen and talk back to me	90.00	94.00
9. None	9. No answer	9. No answer	80.00	95.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
10. What the act of sex really is	10. There really weren't any, due to he had sex ed. Class in school	10. The materials provided ; life experiences	96.00	94.00
11. If he's in the right frame of mind being silly or serious.	11. The conversation went very well and was very interesting on both ends. He had a lot of questions. I covered a lot of questions he had and was curious about. He is naturally curious and asks lots of questions anyway. That was a….. as opposed to a child that is just quiet and asks no questions. The only thing that was somewhat challenging was getting him to understand names and functions of female body parts. Probably due to age and maturity level.	11. Trying to maintain eye contact. Explaining to him that I want him to feel comfortable when he wants to have a discussion or questions about sex. Want him to come to me when he has a question.	94.00	98.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
12. His shyness	12. He was embarrassed; is he willing to talk (timing)	12. Reading materials provided; past experiences of relationships, family stories	87.00	87.00
13. Keeping the conversation at a level he can understand without being silly; showing how to use a condom; what causes erection	13. He kind of seemed unsure of conversation. Not sure if it was cause it was me versus his dad; the whole thing about puberty; wet dreams	13. Well I started by saying I had noticed hair on his arms. I discussed body changes. He was comfortable. I made him feel he had done nothing bad. The CD and handouts really helped. The internet helped too.	66.00	84.00
14. Uncomfortable; He won't talk; Shy	14. It was hard as a woman to explain to development and conversation. He didn't want to talk about it. Hard to approach as a single mom	14. I asked him if he was interested in any girls since he has started to change his behavior such as cologne, showers, haircuts	84.00	83.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
15. blank	15. Why not to have sex	15. Using condoms for protection and letting him know that he can come to me	86.00	80.00
16. Things such as wet dreams, condom use, etc.	16. Um… challenge was discussing having wet dreams, he got embarrassed; Explaining what an erection means; different diseases. Just cause you look at a person can't tell if they are healthy or have disease	16. The different cards in PASS project plus book and pictures. It went well. Dad had to help with things men went through.	91.00	98.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
17. Listening	17. Explaining private parts; trying to explain how important it is to not have sex and wait; answering questions about how girls get pregnant. The conversation was great. I loved it. I feel it's a good program. I learned a lot too. I wanted to talk to him but didn't know how to get started. The packet really helped.	17. Have him alone to decrease the embarrassment and make him know the talk is serious.	73.00	95.00
18. As his age progresses	18. Not really a challenge. A little embarrassed getting started	18. The kit helped. I used TV and the internet too.	62.00	95.00
19. blank	19. He says mom I know. I'm a single parent with two kids. Not difficult	19. Just talked to him. I used the packet and it was helpful. I told him what could happen	82.00	92.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
20. Explaining to him what everything means	20. Me as a mother talking about this to him; other than that it was ok	20. Openness and honesty; the CD and games helped start the talks	85.00	97.00
21. n/a	21. See "were not"	21. See "were not"	93.00	92.00
22. Sex, being gay	22. Did not follow up	22. Did not follow up	Excluded	Excluded
23. I think it's a man job to talk to their sons; to tell him about the female parts; telling him how to use a condom	23. Was he having sex; with who; why	23. Using condoms	92.00	95.00
24. I don't think it will be difficult	24. None (no challenges)	24. The kit	92.00	93.00
25. Sex acts	25. Questions regarding how babies are born; How does it feel to have sex; when should he have sex	25. Watching the DVD (listening to the CD)	93.00	94.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
26. I'm not a boy/man – male perspective he needs both.	26. Refused to follow-up	26. Refused to follow-up	Excluded	Excluded
27. His maturity level, his ability to understand	27. My son just turned 10 but is in the fifth grade. I don't feel that he is ready to discuss certain topics, sexuality being one of them. I have introduced the topic concerning male and female body parts; I was uncomfortable and he was embarrassed. He laughed at hearing the name of certain body parts which made our lesson very difficult to take serious. 1. My comfort level. 2. His maturity level. 3. My religious beliefs.	27. Used the kit to introduce body parts. Did not have sex talk	85.00	98.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
28. Blank	28. Explaining a wet dream in more detail; explaining a girl's menstrual cycle; how to put on a condom	28. Told him this was a open book conversation, and there were no dumb questions, or consequences to answering the questions truthfully	90.00	94.00
29. blank	29. Introduction to the proper names of the genitals totally embarrassed my son. He didn't want to look and was upset to the point of tears. There were no other real challenges. His grandmother and I have always been the people he turn to. So he trusts us, so there are no real barriers here.	29. Discussing everything with my wife prior to bringing him in. Then playing parts of the CD. Then elaborating on them. My wife did most of the talking and I supported her.	94.00	89.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
30. Maturity/ Age	30. He was uncomfortable, he shed tears. After explaining what I hoped to accomplish, he became more comfortable. And was fairly at ease when we reached the last envelope. There was only one challenge. Which was raising his comfort level mostly by stressing our own discomfort and hopes of making him understand why we went there.	30. I played parts of the CD for him. And then asked questions and asked what his questions were	51.00	86.00

Appendix O(Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
31. When they don't want to listen; when they are mad; when they are busy	31. There were no challenges. I explained to my son not to lean on his own understanding and wait for God. Explained the different viruses and how you can die from it. Explained how to say no as heard on the CD. And to do other things other than having sex, such as movies with other people in public places.	31. Used the CD and pictures. Visual things were good. The open ended questions were good.	96.00	98.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
32. Imbarrassed; not knowledgable [sic]; scared	32. The conversation was smooth and no embarrassing topics. He listen thoroughly and asked questions pertaining to the topic of AIDS, girlfriends, and sex at a young age. There was nothing challenging.	32. I used the papers given or tools given in the sequences outlined on the CD and handouts. 1. Opened 2. Straight forwardness 3. Honesty	98.00	98.00
33. Being honest and realizing he's growing up	33. Most of it have been about different STD's and how you can get them; what they look like and how his body is developing.	33. To be honest we research something together via the internet	79.00	89.00
34. Treating as a responsible person	34. No things were challenging; talk was more technical with using the packet	34. Used the packet; just straight up talk	98.00	96.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
35. He want to be an ObGyn, so he ask me how does a woman get examined in the private area. I was a little uneasy explaining	35. No not really; he got a little goofy	35. Used the literature in the kit; he had no questions	88.00	91.00
36. Nothing	36. No Challenges	36. The packet that I got	84.00	90.00
37. The topic can be challenging because it is so personal and private. Expressing it in a way that is understood by a child when it is such a grown up issue is had.	37. Honestly I think the conversation went really well; it was challenging opening the door initially because I was initiating the conversation; kind of odd that nothing prompted it but I started it. Once we got into discussion it was fairly easy. The material helped to facilitate it. He felt the same way.	37. I tried to give my take and use things from when I was a teen; he had not seen it. I used experiences from when I was young and it helped put him at ease that I was willing to tell my own story.	90.00	95.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
38. How sex feels; how to control urges; how to avoid embarrassing moments i.e. erection	38. The conversation was relaxed and informal, I took the time to listen and not do all the talking. 1) keeping him focused 2) answering questions that as a woman I didn't feel comfortable answering i.e. what are the differences in feeling when you do or do not have a condom on	38. Listening and sowing the pictures	85.00	94.00
39. Coming to me when he is ready; talk to me comfortably about anything; asking for protection	39. Nothing was challenging; He was not too responsive to games; he was shy about mom talking with him	39. Talked about mom's experience. Mom was honest in sharing her experiences; talked about moms friends with STD's and it (std's) actually happens to other people	72.00	95.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
40. N/A	40. No challenges; son was open with me	40. Used the kit; used personal life experiences to drive point home	87.00	90.00
41. Getting him to ask additional questions; making sure the discussion is accurate without being clinical; ensuring it always ends guiltless	41. How to use a condom and how to put one on	41. Asked him what he knew; asked him what his friend knew/talked about concerning.	92.00	97.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
42. Being prepared to answer more detailed questions; staying in sync with today's lingo; any questions he might have about my sexual experiences.	42. Making it informational; not preaching; laughing at some of the faces he made	42. The diagrams/pictures provided; talking points in the booklet	84.00	93.00

Appendix O (Continued)

Pre Intervention	Post Intervention	Strategies Used	SETSS Pre Sum Score	SETSS Post Sum Score
43. Talking about girls' body parts.	43. Most challenging thing was showing him the picture of penis parts; I was not ready to show him the female body parts; I could not talk about anal sex: I did not feel comfortable talking about oral sex or getting very deep into sex acts; I feel he is not ready for that yet	43. I used info from the booklet to help me talk to him about his body changing; I reassured him that I am his mother and he can talk to me about anything whether I like it or not: I also tell him that his body is nothing to be ashamed of and that sex is ok when HE is ready but he has to be safe. I also tell him the consequences of having sex (disease, being young father, etc…)	78.00	95.00

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Carmon V. N. Weekes	Assistant Professor of Nursing
weekescv@udmercy.edu	

INSTITUTION AND LOCATION	DEGREE *(if applicable)*		FIELD OF STUDY
Howard University, Washington D.C	BSN	1978	Nursing
Wayne State University, Detroit, MI	MSN	1987	Nursing
University of Texas at Tyler, Tyler, TX	PhD	2012	Nursing

A. Positions and Awards

Positions

Nursing Faculty/ Assistant Professor
University of Detroit Mercy, Detroit, MI 2008-Present

Head Start Health Services Coordinator 1998-2008
Oakland Livingston Human Services Agency (OLHSA), Pontiac, MI

Head Start Health Services Coordinator 1996-1998
Ferndale Head Start, Ferndale, MI

Clinical Nursing Instructor 1986-1995
Oakland University, Rochester, MI

Nursing Instructor, Clinical and Theory 1984-1986
Mercy College of Detroit, Detroit, MI

Varied Acute Care and Public Health Nursing Experiences 1978-1990

Awards

Health Professions Scholarship 1978

Advanced Education Nursing Traineeship 1985

University of Texas at Tyler Graduate Scholarship 2009

Advanced Education Nursing Traineeship 2009

Ella Kate and Wallace Ralston Scholarship	2010
Ella Kate and Wallace Ralston Scholarship	2011

B. Research Support

McNichols Faculty Internal Research Grant for 2011-2012	2011
Association of Black Nursing Faculty Dissertation Award	2011