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Health disparities research has indicated that urban, low-income African-American adolescents experience ecological and contextual factors like community violence, socioeconomic status, and limited sexual health knowledge which contribute to high rates of sexual risk among urban African American adolescents. However, protective factors like parental monitoring and parent-adolescent communication about sex may decrease sexual risk among this urban teen population. A sample of 1,102 African American adolescents aged 13-17 from urban Midwestern high schools were included in this study. The current study hypothesized that: (1) parent-adolescent communication about sex would be positively associated with adolescent sexual health knowledge, (2) there would be a significant negative association between parental monitoring and adolescent sexual risk, (3) both parental monitoring and parent-adolescent communication about sex would be negatively associated with adolescent sexual risk and (4) there would be gender differences in parental monitoring, (5) and parent-adolescent communication about sex. Results indicated no significant association between sexual health knowledge and parent-adolescent communication about sex or parental monitoring. Findings indicated a significant negative association between parental monitoring and adolescent sexual risk, with the association being stronger for boys than girls. There was a significant negative association between sexual health knowledge and adolescent sexual risk. Implications suggest that parental monitoring has

greater influence on sexual risk in African American adolescents and thus, is more of a protective factor than parent-adolescent communication about sex.

AN EXPLORATION OF THE ECOLOGICAL CONTEXT OF LOW-INCOME,  
URBAN AFRICAN-AMERICAN ADOLESCENT SEXUAL RISK

by

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To my grandparents who believed that investing in our family legacy began with education. To my family, friends, mentors, and extended support system, thank you for keeping me lifted.

APPROVAL PAGE

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## **CHAPTER I**

### **INTRODUCTION**

The persistent presence of health disparities among individuals of low socioeconomic status and who also belong to racial minority groups continues to be an unsettling dilemma that plagues the United States. Health disparities and health behaviors are often intergenerational. As such, populations with limited upward mobility may suffer from generational chronic poverty and preventable disease. Chronic poverty in families has been positively associated with minority health disparities (Burton et al., 2010). In the United States, individuals in poverty are more likely to experience health disparities due to lack of the following: access to resources, knowledge about ways to improve health, health screenings, sufficient financial means and limited social supports within their communities and neighborhoods. This ecological isolation and its negative effects are especially poignant for minorities living in impoverished conditions (Williams & Sternthal, 2010). Minority health disparities often include high prevalence of chronic illnesses and negative psychosocial factors and stressors that put these marginalized populations at disproportionate risk (Burton et al., 2010). Psychosocial factors such as exposure to community violence, extreme poverty, isolation, and racism contribute to overrepresentation of preventable disease in urban at-risk minority populations (Williams & Sternthal, 2010). Additionally, there is evidence to support that minority groups residing in urban and impoverished communities experience even higher rates of risk

behaviors and health disparities (Burton et al., 2010; Williams & Sternthall, 2010, Hutchinson, 2007).

Although chronic illnesses such as diabetes, hypertension, and cardiac disease account for a significant portion of the literature on minority health disparities, there continues to be a growing research interest in disparities related to sexual health and more specifically, sexually transmitted infections and HIV/AIDS. This is particularly salient for African-Americans as current health trends indicate that African-Americans account for 40% of all reported AIDS cases and over 50% of new annual infections, which is highly alarming as this group makes up 14% of the US population (Centers for Disease Control, 2010). Additionally, African-American adolescents continue to be among the fastest growing populations at risk for engaging in sexually risky behaviors (Centers for Disease Control, 2010). Sexual health studies have shown that African-American adolescents are disproportionately more at risk for unplanned pregnancy and STI/HIV infections than counterparts of other racial and ethnic groups, specifically White, non-Hispanic teens (Hutchinson & Montgomery, 2007). Furthermore, African-Americans, between the ages of 13 and 24, account for 56 percent of new annual STI/HIV infections (Centers for Disease Control, 2010).

The literature on adolescent sexual risk indicates a heavy emphasis on the impact of perceptions about gender and sex roles in sexual health knowledge attainment, sexual decision making, sexual behaviors and level of parent-adolescent communication about sex (Yang et al., 2007; Mittal & Carey, 2012). In the United States, ideologies of manhood and standards of how boys should behave often include sexual promiscuity and

holding girls responsible for birth control and contraception (Bharmal et. al, 2011). This attitude of ambivalence, typically adopted by boys of low SES regarding responsibility for sexual safety, may be associated with non-use of condoms and having multiple partners, all of which may contribute to the trend of African American girls of reproductive age being one of the main groups with consistent new infections rates of HIV on an annual basis (Centers for Disease Control, 2010).

There is, however, limited research examining underlying individual, familial, and external factors and ecological characteristics that may influence African-American adolescent sexual risk. Due to negative environmental factors, urban, low-income African-American families may be at an especially disproportionate risk for STI infections (Hutchinson & Montgomery, 2007). As such, one could propose that this vulnerable population's specific ecosystem requires a different set of adaptive skills for their unique stressors. The current study sought to explore the complex individual, ecological, and family factors that influence adolescent sexual risk and associated protective factors that decrease risk behaviors among urban, low-income African-American adolescents.

### **Ecology of Adolescent Risk**

**Bronfenbrenner's PPCT Framework.** An ecological theoretical framework can be useful in examining individual, familial and extrafamilial factors that impact adolescent risk behaviors. Bronfenbrenner's (2001) *Person-Process-Context-Time (PPCT)* framework, derived from his revised bioecological model, is useful in evaluating ecological influences of socioeconomic status and chronic poverty as contributing factors

for at risk adolescent populations. The PPCT framework of the bioecological model emphasizes the importance of proximal processes in positive developmental outcomes in children. Proximal processes such as family interactions are interdependent and exist in multiple layers. Families (a microsystem) are their own adaptive ecosystem that is biologically and socially based. Ultimately, children's developmental and social adaptation can be understood as embedded within multiple relationships and contexts, including home, school, peers, family, and communities. Thus, stressors that negatively impact proximal processes in the larger macrosystem will potentially negatively impact proximal processes within the microsystem of families and be linked to lower developmental potential and negative outcomes in those affected children.

In the current study, the *Person* component of the PPCT framework refers to individual characteristics such as age, race, gender, personality, and identity, all of which cultivate unique adolescent experiences. Bronfenbrenner (2001) suggests that an individual's own beliefs will diminish or amplify the power of proximal processes to influence behavior and development. Therefore, an adolescent's decision to engage in risky behavior is heavily influenced by their own thoughts, beliefs, and ideas. This also suggests that individual characteristics of the adolescent can trigger nuanced reactions and interactions from parents or peers who might be part of the exchange in proximal processes. The *Process* component of the PPCT framework refers to proximal processes, which are complex and reciprocal interactions between an individual and objects, people and symbols that exist within their environment. The protective factors discussed in the current study, which include parent-child communication and parental monitoring, are

proximal processes that likely impact adolescent risk behaviors. These proximal processes may differ based on personal characteristics like the gender of the adolescent child and their knowledge of sexual health. This variation of interactions between adolescent and parents can also lead to variations in developmental behaviors and outcomes. According to the PPCT framework, if proximal processes and interactions are not reciprocal or if the exchange is negative, then negative outcomes are likely to be the result.

The *Context* component of the PPCT framework describes the point at which interaction with the environment takes place. There are a multitude of contextual and environmental considerations that urban low-income African-American families are more likely to be exposed to such as community violence and chronic poverty. Understanding the environmental influences that are shaped by contextual differences within the family (microsystem), the neighborhood/community (mesosystem) and cultural environment (macrosystem) is critical to decrease negative adolescent developmental outcomes and risk behaviors. Williams and Sternthal (2010) suggested that the urbanization and segregation experienced by individuals living in racial enclaves of the low-income inner city also contributes to health disparities among different racial groups. Sexual health behaviors and decision making about sexual health practices may be prioritized differently for families suffering from chronic poverty and who deal with additional environmental stressors.

The *Time* component of Bronfenbrenner's PPCT model can be used to describe the developmental stage of the adolescent child. Considerations are made by the parent's

evaluation of age appropriate communication about sex. This is likely to occur using the PPCT framework as parents make and guide decisions about healthcare and lifestyle, while children adopt and model those practices. When utilizing a contextual lens to explain sexual health disparities, the PPCT framework is a valuable resource for studying racially and economically diverse families and contextual factors that contribute to health disparities in these vulnerable populations (Burton et al., 2010).

### **Purpose of Study**

There is evidence to support that parental monitoring and parent-adolescent communication about sexual health may be protective against adolescents engaging in sexual risk behaviors: parental involvement/monitoring and parent-adolescent communication about sexual health (Hutchinson & Montgomery, 2007; Thorburn-Bird & Harvey, 2001; Miller & Silverman, 2010). Previous studies have found that positive messages instilling self-esteem building, primarily through parenting behaviors, can serve as a buffering factor to decrease engagement in risky sexual behaviors such as negotiated condom use (Mittal & Carey, 2012). The current study was designed to evaluate the influence of familial factors and adolescent sexual health knowledge on adolescent sexual risk behaviors among an urban, low socioeconomic status population. This study examined the influence of both individual (adolescent sexual health knowledge) and familial factors (parental monitoring, parent-adolescent communication about sex) on adolescent sexual risk behaviors. This study also examined the ability of adolescent gender to moderate the relationships between parental monitoring and parent-adolescent

communication about sex and adolescent sexual health knowledge and adolescent sexual risk behaviors.

## **CHAPTER II**

### **OVERVIEW OF THE LITERATURE**

#### **African-American Adolescent Sexual Risk**

A major priority of the Centers for Disease Control is reduction of teen STI/HIV infection rates. African-American adolescents continue to be at high risk for sexually transmitted infections (STIs) when compared to Caucasian, non-Hispanic adolescents (CDC, 2010). In the current study, sexual risk was classified as engaging in sex while under the influence of substances (recreational drugs and/or alcohol), engaging in sex with unfamiliar partners, and/or having over four lifetime sexual partners. Number of lifetime sexual partners is a key indicator of sexual risk due to the target population's age demographic. Reporting a higher number of sexual partners may indicate that adolescents engage in risk behaviors more frequently. A contributing cultural factor of adolescent engagement in risk behaviors could also be the cultural phenomenon of "hooking up."

Hooking up or hook-up culture involves engaging in sexually risky behaviors typically classified as one time sexual encounters that do not involve intimacy or existing relationships with partners (Stinson, 2010). Research has suggested that the increased engagement of adolescents and young adults in hook-ups, casual sex and unsafe sex behaviors is often fueled by and linked to recreational drug use. Johnson & Chen (2015)



conducted a study examining the predictive influence of alcohol consumption on one time hookups across various developmental stages. Data was taken from the National Longitudinal Study of Adolescent Health. Utilizing structural equation modeling, they found that alcohol consumption (binge drinking, alcohol use,) was predictive of one time sexual hookups in adolescence and young adulthood (Johnson & Chen, 2015).

Johnson & Chen's (2005) findings about the positive correlation between underage drinking and hookups has implications for both parental monitoring and parent-adolescent communication about sex having the ability to influence sexual risk behaviors. Parents engaging in higher levels of monitoring were more likely to restrict access of alcohol to adolescents and be knowledgeable about peer/social circles of their teens. Moreover, these same parents would also be expected to more likely to discuss the dangers of drugs and alcohol in impacting sexual decision making. The relevance of substance use and impaired judgment could easily be integrated into parent-adolescent communication about sex and should especially be considered when thinking of future intervention efforts targeting adolescent sexual risk.

Studies examining condom use and STI risk in African American adolescents have often taken an ecological approach to explain the disproportionate rates of STI prevalence among these youth. Mandara, Murray, and Bangi (2003) utilized an ecological framework to examine predictive factors that impact African-American adolescent sexual activity. Their study findings indicated that both family-related risk factors (parental monitoring, parental religiosity) and extrafamilial risk factors (peers' drug use, gang involvement) were equally impactful and predictive of adolescent STI risk

behaviors. An important consideration to account for increased risk in certain populations is that ecological stressors can influence levels of parental monitoring which has typically been found to decrease risk behaviors. Families living in communities of high violence prevalence may demonstrate higher levels of parental monitoring if there is extended social and kinship support. Other families living within the same context of low SES and high crime environments may exhibit low levels of monitoring due to financial constraints which force one or both parents to be employed with multiple low paying jobs to provide for their families while leaving teens with minimal supervision.

Lee, Cintron, & Kocher (2014) conducted an integrative literature review which evaluated factors that were found to be related to risky sexual behaviors among African American adolescents. This review of 18 articles identified five major contributing factors: substance use, gender roles, and knowledge about sex and STIs, peer influence, and parental involvement. This highlighted the potential impact that parents can have on reducing adolescent risk behaviors. Facilitating parent-adolescent communication about sex could holistically incorporate discussing the influence of substances on sexual decision making, which involves negotiating condom use and preparedness (having condoms on accessible). This comprehensive approach to addressing sex-based topics and adolescent issues like peer influence and substance use may prove more effective for developing future interventions.

### **African-American Parent-Adolescent Communication about Sex**

Prior research on sexual risk among vulnerable inner city youth has indicated that there are two protective, familial factors: parental attitudes about gender/sex role

socialization and parent-adolescent communication about sexual health (Hutchinson & Montgomery, 2007; Thorburn-Bird & Harvey, 2001). Urban African-American families who live in low socioeconomic status (SES) neighborhoods may have attitudes about gender roles which originate from cultural scripts that are transmitted intergenerationally, which is of great import if considering the historical context of African-American sexual behaviors and reproductive trends. Among this population, endorsement of sexual health and reproductive responsibility being a girl's expected burden or concern most likely impacts if parent-adolescent communication about sex takes place, the frequency of the actual communication, and the age at which communication is initiated. As a result, this study hypothesized that girl adolescents would report more frequent parent-adolescent communication about sex overall and specifically more messages about birth control and pregnancy prevention than boy adolescents. For purposes of the current study, parent-adolescent communication about sexual health was conceptualized as the frequency of talk about sex-based topics in the previous twelve months.

Understanding parent-adolescent communication about sexual health is critical to develop strategies to lower prevalence of sexually risky behaviors in African American adolescents. Prior research has indicated that parent-adolescent communication has been effective in modifying adverse health outcomes among heterosexual youth (Hutchinson & Montgomery, 2007). However, there is limited evidence to support if this finding remains consistent within African American families. Hutchinson & Montgomery (2007) conducted a study on 488 African-American students attending a historically black, college/university, which examined the influence of parent-adolescent communication

about sexual risk on their sexual behaviors. Participants were administered the Parent-Teen Sexual Risk Communication Scale (PTSRC-III). The PTSRC-III has items worded beginning with the phrase “Between the ages of 10 to 18, how much information did your mother/ father give you about . . . (a) birth control, (b) STDs, (c) HIV/AIDS, (d) condoms, (e) how to protect yourself from HIV/AIDS, (f) postponing or not having sex, (g) peer pressure to have sex, and (h) how to handle sexual pressure” (Hutchinson & Montgomery, 2007). Their findings indicated that adolescents who reported higher frequency of communication about sex with parents were less likely to report having engaged in sex in the previous three months (Hutchinson & Montgomery, 2007).

Health disparity research has suggested that parents and adolescents with the greatest sexual health disparities are difficult to reach and engage in preventative interventions (Jones, Berkman, Ellerson, Browne, Poulton, & Wechsberg, 2011). The existing research has focused on how parent–child communication influences youth’s high-risk behaviors (DiIorio, Pluhar, & Belcher, 2003; Levine, 2011). Previous research has demonstrated that parent–child communication is associated with consistent contraceptive use, fewer sexual partners, and fewer reported incidents of unprotected sexual intercourse (Hutchinson & Montgomery, 2007). Parent-adolescent communication about sexual health has also been associated with greater condom use self-efficacy, more sexual communication with the boy partner, and more consistent condom use (Hutchinson & Montgomery, 2007). Parent communication about sex can encourage adolescents to adopt responsible sexual behaviors and behaviors. However, many African

American parents delay talking to their children about health and especially sexual health (U.S. Department of Health and Human Services, 2009).

Although there are numerous advantages to parents openly discussing sexual health with children, African-American parents (mothers and fathers) are less likely to have open dialogue with their children about sexual risks and behaviors (Dilorio et al., 2003). Moreover, research has emphasized a “double standard” in the amount of importance placed on discussions about sexual health as it relates to the gender of the child (Dilorio et al., 2003). In a study by Wilson and Koo (2010), parents were more likely to consider sexual activity to be more harmful (i.e., psychological and physical effects) for their daughters than sons. This highlights the significance of gender-specific socialization messages that are communicated from parent to child. Findings from the Wilson & Koo (2010) study also indicated that parental communication reduced the likelihood of adolescents engaging in sexually risky behaviors.

### **African-American Parental Monitoring of Adolescents**

In addition to the influence of parent communication about sex on adolescent sexual behaviors and STI knowledge, parental monitoring has also been linked to adolescent sexual behaviors. In the current study, parental monitoring refers to the parent’s knowledge of the adolescent’s whereabouts and establishment of boundaries and rules which the adolescent must adhere to. There has been substantial research to support that parental monitoring is related to reducing risk behaviors in African American adolescents (Yang et al., 2007; Nappi et al., 2008; DiClemente, Crosby & Salzar, 2006).

Moreover, parental monitoring is strongly associated with decreased adolescent sexual risk involvement.

Nappi et al. (2008) conducted a study examining parental monitoring as a moderator of the effect of parent sexual communication and adolescent risky sexual behaviors. Nappi and colleagues (2008) found that adolescents who reported higher levels of parental monitoring were more likely to have lower levels of sexual risk behaviors. Additionally, prior longitudinal research studies have indicated that parental monitoring is associated with lower rates of teen pregnancy, increased condom use, fewer sex partners, delay in engaging in first sexual encounter, and less frequent sexual activity (DiClemente, Crosby & Salzar, 2006). Thus, there is evidence to support that parenting processes can act as extrinsic influences of adolescents' behavioral beliefs, normative beliefs, and/or control beliefs toward engaging in sexual risk or safer sex behaviors.

Parental monitoring has not only been linked to reduction of risk behaviors in adolescents, but monitoring when combined with social supports for low income African-American families has proven even more impactful on decreasing risk behaviors. A 2007 study conducted by Miller, McKay, and Baptiste examined parental monitoring and social support of low income African-American mothers and the interrelated influence of preadolescents' risk behavior. Miller and colleagues (2007) highlighted the significance of engagement in parental monitoring prior to adolescent's initiation to risk behaviors. Research findings have suggested that parental monitoring may be a protective factor for adolescents, particularly for African-American adolescents growing up in a low socioeconomic context. As a result, parental monitoring could be a helpful parental

strategy or practice to combat adolescent engagement in risky sexual behaviors. Parental monitoring has been linked to healthy adolescent development and safer sex behaviors in at-risk populations (Lee, Cintron & Kocher, 2014).

### **African-American Adolescent Sexual Health Knowledge**

Oftentimes, boys are not as informed but encouraged to engage in early sexual activity, while girls are more informed but discouraged from sexual activity (Udell & Donenberg, 2011; Dilorio et al., 2003). Prior research examining ethnic and racial differences in progression of sexual activities among adolescents have found that experiences like petting, kissing, and hugging are more likely to lead directly to sexual intercourse among African-American adolescents (Kapungu, Holmbeck & Paikoff, 2006). Kapungu and colleagues (2006) assessed adolescent AIDS knowledge by asking adolescents to signify their comprehension of ways that human immunodeficiency virus (HIV) is transmitted, prevented and initially discovered. This study was part of a larger longitudinal project, the Chicago HIV Prevention and Adolescent Mental Health Project (CHAMP), examining the role of family factors on adolescent HIV risk exposure. Findings from the Kapungu et al. (2006) study indicated that boys were more likely than girls to play hugging and kisses games, play touching games, and engage in sexual intercourse.

Studies examining sexual communication in families have identified gender differences in the ways parents communicate with their sons and daughters. DiLorio, Kelly, & Hockenberry-Eaton (1999) conducted a study among African American adolescents age 13-15 and found that adolescents reported being more likely to engage in

discussion about sex with mothers in comparison to fathers. In this study, boy adolescents reported feeling more comfortable talking about sex-based topics with fathers, while daughters felt more comfortable discussing sex-based topics with mothers (DiLorio et al., 1999). This directly impacts the sexual health knowledge of adolescents and also highlights the saliency of parents being equipped with accurate sexual health knowledge to pass on.

In addressing how to increase adolescent sexual health knowledge and STI/pregnancy prevention, it is paramount to evaluate the source of the sexual health information they do receive. Prior research has indicated that a large portion of knowledge is acquired not from intrafamilial communication but from peers and media (Epstein & Ward, 2006). Epstein & Ward (2006) found that adolescent boys reported receiving more parental communication focused on abstinence and contraception. Adversely, the messages received from peers and media were considered to be endorsing of sexual activity (Epstein & Ward, 2006). Whitaker & Miller (2000) found that peer influence was significantly related to adolescent sexual risk behaviors and knowledge when adolescents had not had prior communication with parents about sex or condom use. This suggests that adolescents are more likely to seek knowledge about sex from external sources when not provided with knowledge from parents or other relatives. Oftentimes, these external sources include television programming, popular music, the internet, or peers who may have less knowledge than the teen or may provide information that is inaccurate or out of date.



### **Rationale for Present Study**

The purpose of the current study was to examine the impact of parental monitoring and parent-adolescent communication about sexual health on sexual health knowledge and sexual risk among urban, low-income African-American adolescents. This study also identified if there were frequency differences in African-American parents' transmitted sexual communication messages by adolescent gender, which may impact the at risk population of teens receiving those messages. Research questions and hypotheses are as follows:

Research Question 1: Does parental communication about sex influence adolescent sexual knowledge?

Hypothesis 1: There will be a statistically significant positive relationship between parent-adolescent communication about sexual health and adolescent sexual knowledge.

Adolescents who report more parent communication about sex will report higher levels of sexual health knowledge.

Research Question 2: Does parental monitoring influence adolescent sexual risk behaviors? Hypothesis 2: There will be a statistically significant negative relationship between parental monitoring and adolescent sexual risk. Adolescents that report higher levels of parental monitoring will be less likely to have engaged in sexual risk.

Research Question 3: Does parent-adolescent communication about sex influence adolescent sexual risk?

Hypothesis 3: There will be a statistically significant negative relationship between parent-adolescent communication about sex and adolescent sexual risk.

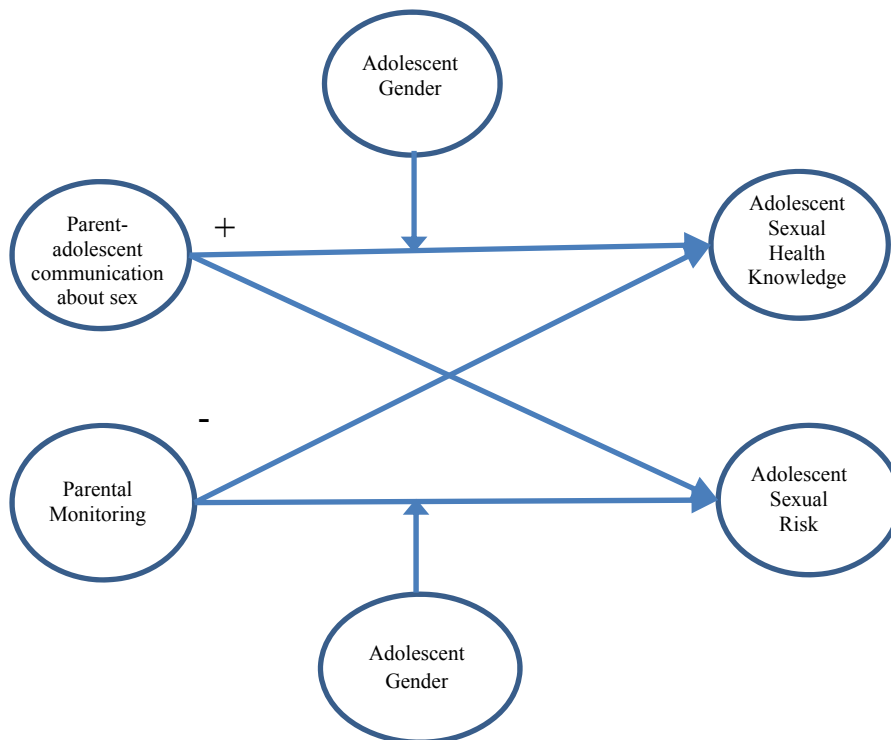
Research Question 4: Are there differences in levels of parental monitoring across adolescent gender?

Hypothesis 4: There will be significant mean differences across gender in levels of parental monitoring. The association between parental monitoring and sexual risk will be moderated by adolescent gender.

Research Question 5: Are there differences in levels of parent-adolescent communication about sex moderated by adolescent gender?

Hypothesis 5: There will be significant mean differences across gender in parent-adolescent communication about sex. Girl adolescents will report higher levels of parent-adolescent communication about sex than boy adolescents.

**Figure 1. Direct Effect Conceptual Model of Hypotheses 1-5**



## **CHAPTER III**

### **METHODS**

#### **Design**

Participants in the larger study included 14,346 adolescents who participated in the 2009 Dane County (Wisconsin) Youth Assessment (DCYA), a county-wide survey of students in grades 7 through 12 across 34 schools. Application of statistical post-survey weights indicated these data represented 21,109 adolescents. The sample for the current study was restricted to include students who identified as African-American or Black in the ethnic/racial demographic category ( $N=1,102$ ). The mean age of respondents was 14.70 years ( $SD = 1.60$ ) and the sample was 51% girl. Of the selected sample of African-American/Black students, 21.8% reported having lived in foster care, 12% had lived in a group home or residential facility, 24.7% have been in juvenile corrections/prison, 22.2% have been homeless, and 10% have run away from home.

#### **Procedure**

For the current study, the data collection was conducted by the Dane County Youth Commission (DCYC), an organization that partners with schools and community agencies to address youth health. DCYC conducts the survey of all middle and high school students (every five years) across 32 schools in 14 county school districts. A census survey strategy was implemented in smaller schools; random sampling was implemented in larger schools in the one metropolitan area.

In the fall 2008 semesters, students received an electronic survey completed in school. Students who were not present on the original survey administration date were assessed in a follow-up electronic survey. Parental informed consent was obtained in advance of the survey and rights to voluntarily withdraw (by parents) or refuse participation (by adolescents) were both explained.

### **Measures**

**Adolescent sexual risk behaviors.** Adolescent sexual practice and risk behavior was assessed via adolescent self-report with 2 items assessing number of partners they had voluntarily engaged in sex with and indicating number of partners they engaged in casual sex with whom they did not know well. The risk behavior and practice items included, “have you ever had sex with someone while under the influence of alcohol, marijuana or other drugs,” “how many times have you voluntarily had sex during your life” and “how many people have you had sex with that you just met or didn’t know very well?” Response options ranged from “I’ve never had sex” to “10 or more.” Alpha reliability for this scale was .82. The mean item score for this scale was .69 (SD=1.97).

**Parent-adolescent sexual communication items.** Parent-adolescent sexual communication was assessed via adolescent self-report assessing frequency of engaged sex talk with parent within the previous 12 months. Items about parent-adolescent communication about sex included: “how many times in the past 12 months have you talked to your parent/guardian about postponing sex” and “how many times in the past 12 months have you had a good talk with your parent/guardian about birth control and sexually transmitted infections?” Response options ranged from 0 to 4, with 0=never,

1=1 or 2 times, 2=3 to 4 times, and 3=more than 4 times. Alpha reliability for this scale was .74. This scale had a mean item score of 1.01 (SD=1.406).

**Parental monitoring items.** Parental monitoring was also assessed via adolescent self-report. Items about parental monitoring included, “my parents usually know where I am when I go out,” “my parents set clear rules about what I can and cannot do” and “my parents have clear consequences when I break rules.” Response options ranged from 0 (*strongly agree*) to 3 (*strongly disagree*). Alpha reliability was .76.

**Adolescent sexual health knowledge.** Adolescent sexual health knowledge was assessed via adolescent self-report with 5 items assessing general knowledge about pregnancy and STI prevention. The mean item score for this scale was 5.03 (SD=2.05). Alpha reliability was .75. Sexual health knowledge items included questions like, “birth control pills can protect a woman against a sexually transmitted infection,” “if a person has a sexually transmitted disease and doesn’t receive treatment, eventually it will go away” and “using condoms can reduce the chance of getting a sexually transmitted infection.” Response options for sexual health knowledge questions were “yes,” “no,” or “not sure.”

## CHAPTER IV

### RESULTS

#### Preliminary Analysis

M Plus was used to estimate structural equation models for multiple groups within this study. Regressions were run on latent variables along with Chi-square analysis and confidence interval testing. There were a total of 48 free parameters in the current study. The overall fit of the measurement model was good,  $\chi^2=192.15$ ,  $df=77$ , 90 percent CI=.030 (.044). As shown in Table 1, the association between adolescent sexual health knowledge and parent-adolescent communication about sex was insignificant, parameter estimate=.024. The association between sexual knowledge and parental monitoring was also found to be insignificant, parameter estimate=.055. There was a significant negative relationship between adolescent sexual risk and parental monitoring, parameter estimate =-.847. A significant negative relationship was also found between adolescent sexual risk and sexual health knowledge, parameter estimate =-.267. There was no significant relationship found between adolescent sexual risk and parent-adolescent communication about sex, parameter estimate=.028.

As reported in Table 2, there were some gender differences found between reported levels of parental monitoring and parent-adolescent communication about sex. Girls reported less adolescent sexual risk than boys. Girls reported higher levels of parent communication about sex than boys, parameter estimate=.033. Girls also reported more

sexual health knowledge than boys, parameter estimate=.074 for girls and -.501 for boys. Both parental monitoring and adolescent sexual health knowledge were significantly and negatively associated with adolescent sexual risk. Adolescents who reported higher levels of communication about sex and higher levels of parental monitoring reported lower levels of adolescent sexual risk. Gender differences were not indicated in associations between sexual knowledge and adolescent sexual risk. Parental monitoring was significantly related to adolescent sexual risk for both girls and boys. This negative association was more strongly correlated for boys than girls. Thus, parental monitoring had a stronger relationship to decreased adolescent sexual risk among boys than girls, parameter estimate=-1.027 for boys and -.487 for girls. Age also had a moderating effect on sexual knowledge and parental monitoring. Older adolescents reported more communication about sexual health and less parental monitoring. Older adolescents also reported more sexual risk than younger adolescents.

## **CHAPTER V**

### **DISCUSSION**

The present study examined the relationships between parental monitoring, parent-adolescent communication about sex, adolescent sexual health knowledge, and adolescent sexual risk behaviors. This study provided clarity to our understanding of processes that impact adolescent sexual health knowledge and adolescent sexual risk behaviors. Moreover, the current study will provide insight about the specific ways African-American parental practices impact adolescent sexual health.

Hypothesis 1 posited that there would be a significant relationship between parent-adolescent communication about sex and adolescent sexual health knowledge. Additionally, it was expected that adolescents who reported higher level of sexual health knowledge would also report having higher levels of parent communication about sex. Results of the analysis indicated that parent-adolescent communication about sex was not significantly related to adolescent sexual health knowledge. This suggests that parents' ability to transmit accurate sexual health information does not have a strong influence on adolescent sexual health knowledge. This could be explained by prior research indicating that adolescents receive sexual health information from various extrafamilial sources like peers and media.

Hypothesis 2 predicted that there would be a significant relationship found between parental monitoring and adolescent sexual risk. To assess this relationship, the item scale



measured parent's use of rules, control, and awareness of adolescents' whereabouts. Results in the current study found a significant relationship between parental monitoring and adolescent sexual risk behaviors. A negative association was found; adolescents with higher levels of parental monitoring reported lower levels of adolescent sexual risk behaviors. These findings are supported by prior research conducted by Lee et al. (2014) and Nappi et al. (2008), both of which emphasized the significant moderating impact of parental monitoring on sexual risk in adolescence.

Hypothesis 3 speculated that there would be gender differences in parent-adolescent communication about sex. Furthermore, hypothesis one suggested that girl adolescents would report higher levels of parent-adolescent communication about sex. Findings of the current study were congruent with the original hypothesis and girls did report higher frequency of parent communication about sex. This may be largely due to differences in African-American parental attitudes about early sex initiation being more detrimentally impactful to girls than to boys. Dilorio and colleagues (2003) proposed that differences in messages about sex transmitted to adolescents are most likely attributed to parental attitudes about gender role expectations.

Hypothesis 4 suggested that there would be gender differences in parental monitoring and that adolescent gender would moderate the association between parental monitoring and sexual risk. Gender did have a moderating effect on the association between monitoring and sexual risk. Boy adolescents reported significantly higher levels of parental monitoring in comparison to girls. Thus, the negative association between monitoring and sexual risk was stronger for boys than girls. African-American parents in

urban, low SES communities may engage in more monitoring for boys because there is greater concern about perceived external threats within and outside the community and family ecosystems. Research indicates that the increased monitoring of boys has a spillover effect which decreases engagement in sexual risk behaviors.

Hypothesis 5 posited that there would be gender differences in parent adolescent communication about sex and that adolescent gender would moderate the association between communication and sexual risk. This was supported. Girl adolescents reported more parent-adolescent communication than boy adolescents. This is supported by prior research which confirms that in low-income, urban communities, there is more concern about providing girl adolescents with sexual health knowledge. One explanation for this is that research has suggested that sexual health, including STI and pregnancy prevention, are typically viewed as a women's responsibility among low SES populations.

### **Implications**

The findings of this study highlight the significant impact parental monitoring has on African-American adolescent sexual risk. Though communication about sex can provide a base foundation of knowledge for adolescents to choose safer practices, sexual risk was more impacted by parents' actual supervision and knowledge of adolescent behavior. Thus, the current study findings are consistent with prior research which suggests parents' monitoring and involvement has major implications for adolescent risk behaviors. Current study findings validate prior research which emphasized the potential positive impact that parental and familial processes can make to increase adolescent pro-social health behaviors and reducing engagement in sexually risky behaviors.

The current study and prior research on African American adolescent risk has provided clear evidence that parental monitoring is a key protective factor in reducing risk among African American teens in low socioeconomic communities. Although prior research on adolescent sexual risk emphasizes the importance of parent-adolescent communication about sex in predicting sexual risk, the current study highlights that monitoring and not communication about sex had the strongest negative association with adolescent sexual risk. In the current sample and ecological context of the community (being in an urban, high crime, part of the city), parental monitoring being high is likely positively associated with parent concern about safety, exposure to violence, and threat of police harassment and discrimination.

### **Limitations**

Although the current study did provide valuable information about processes that impact African American adolescent sexual health knowledge and sexual risk behaviors, it is not without limitations. Collection of data from adolescents about sexual behaviors is often subject to over and under reporting. This is one of the major limitations of self-report by adolescents of sexual activity. Additionally, the measures used were taken from a larger risk assessment scale, which resulted in more than one measure containing only two to three items. Although, alpha reliability was significant for each measure, utilizing a scale designed to specifically measure each construct with more items could increase reliability and validity.

It is also important to note that the sample examined included adolescents in an urban setting who may also already be at risk for engaging in sexually risky behaviors

due to ecological, contextual and environment factors of their upbringing. This study did not examine unique characteristics of adolescents who reported lower levels of adolescent sexual health knowledge and higher levels of engagement in sexually risky behaviors. A typology or latent class analysis would most likely provide insight about within group differences and characteristics that make certain teens more susceptible to sexual risk.

### **Future Directions for Research**

The current study only asked adolescents about sexual communication between parents and adolescents. Adolescents may receive familial communication regarding sex and monitoring from other caregivers, particularly grandparents, as African American adolescents identified as at risk are oftentimes raised by grandparents or other extended kin. Frequency and type of sexual communication transmitted to adolescents may vary based on generational differences and beliefs of the adult delivering the messages. A future study should also include communication about sexual health and monitoring received from extended family members and/or a measure of social support.

Information gathered can be utilized in developing interventions for urban, impoverished African American communities to lower the disparity gap for African-American teens whom may be at higher risk for STI/HIV infections. In their study examining generational differences in sexual communication processes of African American parents and grandparents, Cornelius & Xiong (2015) found that grandparents desired to talk about sex and had open sexual communications with adolescents. This finding was contrary to reports from parents who preferred sexual abstinence and had limited

communications (Cornelius & Xiong, 2015). This may prove vital as interventions are developed to equip caregivers with ways to effectively communicate with adolescents about sex-based topics and could also serve to improve efficacy in delivery of those messages.

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**APPENDIX A****FIGURE CAPTION**

**Figure 1.** Conceptual model illustrating hypotheses 1-5 which suggest correlational and predictive relationship between independent variables (parent adolescent communication about sex and parental monitoring) and outcome variables (adolescent sexual health knowledge and sexual risk behaviors). Model also depicts influence of gender on parent adolescent communication about sex and adolescent sexual health knowledge.

Table 1

*Unstandardized, Standardized and Significance Levels for Model (Standard Error in Parentheses; N=1102)*

<u>Parameter Estimate</u>	<u>Unstandardized (SE)</u>	<u>Standardized</u>	<u>p</u>
<b>Structural Model</b>			
Communication → Sexual Knowledge	.024(.041)	.028	.00
Monitoring → Sexual Knowledge	.055(.10)	.026	.00
Communication → Sexual Risk	.028(.048)	.026	.00
Monitoring → Sexual Risk	-.847(.098)*	-.329	.00
Sexual Knowledge → Sexual Risk	-.267(.053)*	-.217	.00
Monitoring → Communication	.090(.02)	.205	.00

Note.  $\chi^2=192.15$ ,  $p<.001$ , CFI=.961; TLI=.948; RMSEA=.037

Table 2

*Unstandardized, Standardized and Significance Levels Controlling for Age/Gender  
(Standard Error in Parentheses; N=1102)*

<u>Parameter Estimate</u>	<u>Unstandardized (SE)</u>	<u>Standardized</u>	<u>p</u>
<b>Structural Model</b>			
Age → Sexual Knowledge	.060(.025)	.104	.017
Gender → Sexual Knowledge	.375(.078)	.207	.000
Age → Sexual Risk	.132(.035)	.187	.000
Gender → Sexual Risk	-.425(.116)*	-.191	.000
Age → Parental Monitoring	-.030(.011)	-.108	.006
Gender → Parental Monitoring	.045(.035)	.051	.202
Age → Sexual Communication	-.056(.027)	-.084	.039
Gender → Sexual Communication	.287(.088)	.138	.001

Note.  $\chi^2=192.15$ ,  $p<.001$ , CFI=.961; TLI=.948; RMSEA=.037