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EXAMINING INTERSECTIONALITY THEORY AND ADOLESCENT MOTIVATIONS TO ENGAGE IN RISKY SEXUAL BEHAVIOR

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EXAMINING INTERSECTIONALITY THEORY AND ADOLESCENT MOTIVATIONS TO ENGAGE IN RISKY SEXUAL BEHAVIOR

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ABSTRACT

Intersectionality theory explores the ways in which multiple axes of identity combine to determine one's socio-cultural location and how these intersections contribute to unique experiences of oppression and social privilege. This theory contends that social inequalities by way of marginalized race, gender and socioeconomic statuses (SES) have the potential to uncover and explicate existing health disparities. The primary objective of the current study was to explore the implications of multiple potentially marginalized statuses with relation to sexual behavior motivations. Overall, this study hypothesized that endorsement of multiple statuses would significantly predict an adolescent's motivations to engage in risky sexual behavior. The intersectionality principle of 'multiple jeopardy' is applied to self-reported sexual motivations through exploration of the intersections between race (R), gender (G), and socioeconomic status (SES).

A nationally representative sample was used to examine the research questions. The National Longitudinal Study of Adolescent Health (Add health) data set was limited to respondents that reported ever having had sexual intercourse (N=2,562), between the ages of 15 and 21. This population is of particular interest considering its perpetual involvement in sexual risk-taking behavior and the dearth of research focused on understanding sexual motivation among this age group. Multiple regression and structural modeling methods were used to assess the relationships between single, 2-way (GxR, GxSES, RxSES), and 3-way interaction (GxRxSES) variables and the latent constructs of social and physical motivation. Regression analyses revealed several significant pathways; although R^2 values were relatively low

for each analysis. Three structural models were compared and Model 2 was found to have the most adequate model fit: $\chi 2$ (13, N=1053) = 33.626, p< .001, CFI = .991, RMSEA = .039, 90%CI [.023, .055], however none of the hypothesized paths were significant. Not all findings were consistent with the predictions of intersectionality theory. This study was limited by the inability to ascertain whether or not individuals who endorsed potentially marginalized statuses, also endorsed a marginalized life experience, experienced discrimination or feelings of powerlessness. Nevertheless, findings from this study can further research on the topic of intersectionality and broaden the discussion of social inequities and oppression as they relate to sexual risk motivation that may lead to risky sexual behavior and negative health outcomes.

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INTRODUCTION

Sexual activity is common practice for adolescents, but high-risk sexual behavior by adolescents carries a significant chance of becoming infected with sexually transmitted infections (STIs), including HIV (CDC, 2009a). Sexual risk behavior resulting in the contraction of HIV/AIDS and other STIs among adolescents has led to the implementation of numerous intervention programs within schools and throughout communities (Advocates for Youth, 2010; Catania, et al., 1992; Child Trends, 2010; Collins, et. al., 2008; Cooper, Shapiro, & Powers, 1998; Koniak- Griffin & Stein, 2006). Nevertheless, this increase in awareness and availability of resources has not produced a significant decrease in risky sexual behavior (Arnold, Fletcher & Farrow, 2002). There is a need for better understanding of the factors that influence the decision to engage in risk behavior that may lead to the contraction of HIV and STIs within this population.

Previous research indicates that young people's sexual risk taking behavior differs on the basis of gender, ethnicity and class (Advocates for Youth, 2010; Voison & Bird, 2012). Therefore, the need has arisen to explore this issue from an intersectional perspective focusing on how intersections of race/ethnicity, gender, and socioeconomic status shape an adolescent's sexual risk taking motivations. The connections between varying dynamics of oppression and the sexual and reproductive health of young people are important to evaluate and understand when considering methods of sexual risk reduction (Advocates for Youth, 2010). Intersectionality theory

(Crenshaw, 1989) provides a means of understanding social inequalities through the socially and culturally constructed categories of gender, race, and socioeconomic status. This theory delineates these categories as interconnected components of the self that collaborate with one another on multiple and often simultaneous levels (Crenshaw, 1991; McCall, 2005). Each category jointly contributes to issues of social inequality and oppression that place members of multiple marginalized statuses at a greater risk of unhealthy behavior outcomes (Veenstra, 2010).

According to the Centers for Disease Control and Prevention (CDC), persons from the ages of 15 to 24 years are at higher risk of acquiring STIs "for a combination of behavioral and cultural reasons" (2009a). Sexual motivation is an important concept to consider because an individual's perceptions of consequences as either pleasant or unpleasant are expected to be associated with their behaviors (Moore & Gullone, 1996). Better understanding of underlying sexual motivations, which have yet to be examined with an intersectional framework, will provide valuable insights for health promotion and risk prevention (Patrick, Maggs, Cooper, & Lee, 2011).

The present study examines the motivation to engage in risky sexual behavior across the interactions among the personal identity variables of gender, race and socioeconomic status (SES). Utilizing a sub-set of the National Longitudinal Study of Adolescent Health (Add Health) public data-set (Harris, Halpern, Whitsel, Hussey, Tabor, Entzel & Udry, 2009), the sexual motivations of adolescents between the ages of 15 and 21 are observed.

This study attempts to shed light on the importance of examining intersecting axes of inequality among potentially at-risk adolescents. Through investigation of the

interactions between multiple potentially marginalized identities, this study offers both a theoretical and quantitative assessment of social position as predictor of sexual motivation that may eventually lead to risky sexual behavior and potentially the contraction of HIV/AIDS and STI incidence among youth.

HYPOTHESES

In order to test the association between the motivations to engage in risky sexual behavior and different axes of intersectional identity, interactions between the identity axes were created and the following hypotheses were examined.

Two-Way Interactions:

1. Individuals who report being female and a racial/ethnic minority will be associated with greater sexual risk. (Gender x Race)
2. Individuals who report being a low SES female will be associated with greater sexual risk. (Gender x SES)
3. Individuals who report low SES and a racial/ethnic minority will be associated with greater sexual risk. (Race x SES)

Three-Way Interaction:

4. Individuals who report being a low SES female and a racial/ethnic minority will be associated with greater sexual risk. (Gender x Race x SES)

CHAPTER 2

REVIEW OF LITERATURE

ADOLESCENT SEXUAL RISK

The Centers for Disease Control and Prevention report that while persons from the ages of 15 to 24 make up only 25% of the sexually active population, they account for over 50% of the new cases of STIs each year (CDC, 2009b). Young adults currently account for a relatively small percentage of the diagnosed AIDS cases in the United States, but rates of HIV infection are currently on the rise among young people (CDC, 2010a). Of the 50,000 new diagnoses of HIV in the U.S. each year, approximately 1 in 4 will be between the ages of 13 and 24 (CDC, 2010a). Despite exposure to numerous safe sex campaigns, previous sexual education, and acute awareness of the possibility of transmission and dangers associated with HIV and other sexually transmitted diseases, young adults throughout the United States continue to engage in sexual behaviors that place them at an elevated risk for contracting these diseases (Cooper, Shapiro, & Powers, 1998). The bulk of research findings suggest that sexual risk behavior is associated with inconsistent or lack of condom use, multiple lifetime sex partners, and alcohol and other drug use in combination with sexual activity (Catania, et al., 1992; Harlow, Quina, Morokoff, Rose, Grimley, 1993). These behaviors inherently lead to the contraction of an STI, which if gone untreated, could potentially lead to numerous consequences concerning sexual and reproductive health. It should be noted that the presence of an STI greatly increases the risk of HIV/AIDS contraction (CDC, 2009a).

Nevertheless, these sexual risk behaviors persist and tend to effect members of certain groups more often than others. Historically, marginalized groups more commonly report participation in sexual risk behaviors and other risky behaviors that many times occur simultaneously. Recent findings suggest that women are two times more likely to report incidence of an STI than men, and are also more likely to partake in risky sexual behaviors (Child Trends, 2010). According to a study of Job Corp applicants, when compared to their White and Latina counterparts African American adolescent girls HIV infection was significantly higher and the prevalence rates among African American girls even exceeded that of White, African American, and Latino adolescent males (Valleroy, Mackellar, Karon, Janseen, & Hayman, 1998). Persons of color, particularly African Americans, also report higher rates of sexually transmitted infection (Collins, P.Y., Von Unger, & Armbrister, 2008). In 2009, African American adolescent females were 20 times more likely than their White and Latina peers to be infected with gonorrhea, and they were 8 times more likely to be infected with chlamydia (CDC, 2010c). In addition, the CDC reports that rates of HIV/AIDS infection are steadily on the rise among young women and persons of racial, ethnic, and sexual minorities (2010c). In 2011, an overwhelming 60% of new HIV infections among youth (13-24) were African American. Incidence rates among Hispanic/Latino (20%) and White (20%) youth were disproportionately smaller (CDC, 2010b).

Intervention and prevention programs in public high schools tend to primarily instruct an abstinence-only curriculum, emphasizing that adolescents abstain from sex, unless they are in a monogamous relationship or ideally until marriage (Jemmott, Jemmott, & Fong, 1998). Although an increase in abstinence would lower the

incidence of HIV infections, that curriculum severely underestimates the complexity of sexual behavior and the factors influencing the decision to engage in such behavior. Given the alarming incidence of HIV and other sexually transmitted infections among this age group, new and innovative prevention/intervention efforts should continue to be a public health priority. In order to improve adolescent HIV/AIDS and STI prevention models it is important to explore the impact of the motivational components that affect a young person's decision to engage in sexual behavior.

SEXUAL MOTIVATION

Despite these staggering trends in STI and HIV infection, few studies have examined the reasons for having or not having sex among minority youth (Voisin & Bird, 2012). The underlying reasons that these differences persist within specific demographics may include the variation of sexual motivations, but have received minimal attention in health research (Diamond, Savin-Williams, & Dube, 1999). Further understanding of the complex motivations for having sex among adolescents is critical to creating effective safer-sex interventions specifically tailored for underrepresented populations (Ozer, Dolcini, & Harper, 2003). If researchers understand the motivation behind engaging in sexual behavior among specific populations, then more efficacious programs can be created that adequately meet the needs of the target population.

The majority of research concerning reasons for engaging in sexual activity has solely focused on adult populations (Hoffman & Bolton, 1997; Maggs, & Abar, 2007). Even fewer studies have examined motivations for sex among adolescents (Eyre & Millstein, 1999; Ozer et al., 2003; Voisin, Salazar, Crosby, DiClemente, & Yarber,

2007). These few studies ascertain that adolescents choose to engage in sexual intercourse for an array of complex and multifaceted reasons, and suggest that sexual motivations are influenced by both gender and race. With regards to gender, Eyre & Millstein (1999) found that reasons such as being "in love", feeling emotional closeness and wanting to get married, and have children were likely motives for female adolescents to have sex. On the other hand, male adolescents would more likely have sex for reasons of sexual arousal or physical pleasure. With reference to ethnic differences in sexual motivation, findings have shown that African American males would more likely state reasons of duty or obligation to have sex, as opposed to their White peers (Voisin et al., 2007).

A qualitative study that comprised of 31 African American adolescent males (16) and females (15) between the ages of 13 and 17, sought to find the most salient motivations to engage in sexual behavior among this particular population (Voisin & Bird, 2012). From their findings, four general themes emerged: psychological motivations, external pressure, physical pleasure, and relationship-related motivation. The study found that sexually active male adolescents were more likely to report external pressure and physical pleasure as reasons for having sex. Contrarily, more female adolescents reported reasons of relationship-related motivation to engage in sexual behavior (Voisin & Bird, 2012). This study provided an alternative insight into the sexual motivations of an exceedingly susceptible adolescent population. By examining sexual behavior motivation through an intersectional lens, the current study sheds light on the implications of adolescent sexual motivation to engage when multiple potential marginalized statuses are present.

Such studies allow for researchers to examine the allocation of sexual motivations across genders and different racial and class groups. If issues of social and health inequality affect the probability of negative health outcomes, then they must also affect the processes that lead up to those outcomes. Sexual motivation in particular has been found to significantly associate with sexual behavior and its consequences (Cooper, Shapiro, & Powers, 1998; Patrick, Maggs, Cooper, & Lee, 2011).

INTERSECTIONALITY THEORY

There is a recognizable association between socio-cultural factors and sexual health outcomes. Feminist scholars would argue that this association stems from the oppressive nature of the societal power structure imbedded within American society (Collins, et. al. 2008; Crenshaw, 1991). This structure would suggest that members of multiple marginalized groups are more motivated to engage in risky sexual behavior, which is likely to be associated with the contraction a sexually transmitted disease. A study comparing the additive and multiplicative interactions between race, class, gender, and sexual orientation, found that multiple marginalized statuses held by an individual increased the odds that that person would report poorer health outcomes (Veenstra, 2010); an intersectionality tenet known as "multiple jeopardy." Intersectionality theory maintains that we cannot accurately forecast health outcomes or social experience solely along individual axes (Warner, 2008). These constructs of identity are not independent of one another, and should be measured as interlocking mechanisms.

Intersectionality theorists claim that the interaction of multiple systems of oppression (i.e., racism, sexism, classism, or heterosexism) creates a distinct life experience and viewpoint for every social group (Collins; 1998, 2000). This concept is especially true for African American girls and women, where the intersection of multiple statuses allows for simultaneous group membership and group detachment (Collins, 1989). Stewart & McDermott (2004) describe that while African American women share a history of racial oppression with African American men their experience of racism is uniquely different. And as they share an understanding of gender discrimination with White women, the impact of sexism takes on a distinct perspective for African American women. These viewpoints help to shape their identity and ultimately their behavior (Townsend, 2008).

Origins of intersectionality theory date back to the 1970s, when American women of color stemming primarily from working class backgrounds, began to critique the patriarchal traditions within gender studies and social research (Shields, 2008; Veenstra, 2010). They argued that varying axes of inequality are in fact methodically inseparable, and societal hierarchies of race, class, and gender are especially salient in the lives of women enduring oppression from multiple sources (Collins, et. al. 2008; Shields, 2008). The term Intersectionality was originally coined by Kimberlé Crenshaw (1989) and is defined by Shields (2008) as the "mutually constitutive relations among social identities" (301). It is known to be a central tenet of feminist thinking and has in many ways transformed the manner in which gender is conceptualized in research (Shields, 2008).

Nevertheless, there is much opposition to the use of this theory considering its complex applicability in quantitative research (Schulz & Mullings, 2006; Syed, 2010). In most empirical explorations of identity, investigators tend to separate the constructs and examine them as individual predictors (Warner, 2008). However this theory offers that these constructs should be examined simultaneously; for instance, an African American lesbian of considerably low socioeconomic status would have to be examined as each of those statuses concurrently, not separately. Research on the growing topic supports the assertion that sexual risk behaviors are more commonly practiced among women belonging to marginalized groups (Advocates for Youth, 2010).

Intersectionality theory has become increasingly popular in the humanities and social sciences. The growing body of research on this topic is exploring the use of both qualitative and quantitative methodologies. However, very few quantitative applications have explicitly evaluated intersectionality theory in health research (Veenstra, 2010). Equally uncommon is the examination of all four identity constructs (race, gender, sexual orientation, and SES) consecutively in the prediction of health outcomes. Sexual orientation was originally a variable of interest for the current study however it was not included as a discrete variable in Wave I of the Add Health data-set that is examined for this research. Nevertheless, gender, race, and socioeconomic status, which are examined in this study, are equally pervasive factors of intersectionality.

The current study offers a comprehensive assessment of identity intersections, as they relate to sexual behavior motivations. Scholars have claimed that

intersectionality is not only a tool for analysis, but also advocacy and policy development (Advocates for Youth, 2010; Shields, 2008; Warner, 2008). By better understanding the implications of multiple discriminations on sexual behavior motivations, improved interventions and sexual health promotion campaigns can be created to successfully target groups that are currently being overlooked (Center for Reproductive Law and Policy, 1998). Overall, this research hypothesizes that multiple potentially marginalized statuses will significantly predict an adolescent's motivations to engage in sexual behavior.

CHAPTER 3

METHODOLOGY

RESEARCH DESIGN

This study analyzed data from Wave I of the public in-home sample of the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative probability-based survey of adolescents. The first wave of Add Health data was collected from 80 high schools and 52 middle schools throughout the United States between 1994 and 1995 (Harris, et. al. 2009). More than 12,000 adolescents were selected from these schools to participate in an in-home survey, yielding a national sample of students in grades 7 to 12. Pertinent information collected during the in-home survey included questions regarding motivations to engage in sexual behaviors (Harris, et. al. 2009).

PARTICIPANTS

The Wave I public dataset includes 6,504 adolescent respondents that successfully completed In-Home interviews. This investigation focuses on respondents over the age of 15, the required age to answer items concerning sexual attitudes and behaviors (Harris, et. al. 2009); none of the participants were older than 22 years of age. The analysis only includes respondents that report ever having had sexual intercourse. This specification limits the study to 2,562 subjects, all between the ages of 15 and 21. The mean age of participants was 17.5 years. The sample included 1293 males (50.5%) and 1269 females (49.5%); although women are of primary interest in accordance with

intersectionality theory [considering the traditionally socialized power structure between males and females (Crenshaw, 1991)], this study will also examine motivation among male respondents; particularly those of underrepresented racial, ethnic, or socioeconomic status. Both genders must be examined in order to test the hypothesis that women, particularly those with concurrent marginalized identities (e.g. minority, low SES), may be more motivated to engage in risky sexual behavior than men.

The sample comprised of 1877 (73.8%) White adolescents, while 437 (17.1%) classified themselves as Black, 130 (5.1%) as Hispanic, and 103 (4%) as Asian (Table 1). Add health researchers oversampled black adolescents with parents that were considered to have higher education (Harris, et. al. 2009). Thus, this sub-sample of participants is considered to have high SES, with parents' education used as the measure of socioeconomic status. When interpreting results of this study, this factor must be taken into consideration.

Table 1
Frequency Distribution of Demographic Variables

Variable	Frequency (n=2562)
Mean age	17.5 (SD=.985)
Gender	
Male	1,293 (50.5%)
Female	1,269 (49.5%)
Race/Ethnicity	
White (Non-Hispanic)	1,877 (73.8%)
Black (Non-Hispanic)	437 (17.1%)
Hispanic	130 (5.1%)
Asian	103 (4%)
Mother's Education	
8^{th} grade or less	130 (5.1%)
Passed 8^{th} grade but didn't graduate high school	206 (8%)
Business/trade/vocational school instead of high school	15 (.6%)
High school graduate/Completed GED	874 (34.1%)
Business/trade/vocational school after high school	172 (6.7%)
College didn't graduate	351 (13.7%)
Graduated from college/university	555 (21.7%)
Professional training beyond 4-year college	259 (10.1%)

Notes: SD = Standard Deviation

MEASURES

Independent and dependent variables were derived from the following measures:

Gender (IV). Self-reported dichotomous variable (male=0, female=1).

Race (IV). Self-reported item that involves four dichotomous race/ethnicity variables: White (1=White, 0=not White), Black (1=Black, 0=not Black), Asian (1=Asian, 0=not Asian), Hispanic (1=Hispanic, 0=not Hispanic). For the purposes of creating the interaction variables, the identity variable of race was simplified as Minority vs. Non-Minority (with values of 1 and 0 respectively). White participants

are coded as non-minority, while Black, Hispanic and Asian participants were coded as minority.

Socioeconomic status (SES) (IV) is solely comprised of the reported educational attainment of the adolescent's mother. Haveman and Wolfe (1995) conclude from their survey of US evidence that the educational attainment of the mother is usually more closely related to the educational attainment of the child than the educational attainment of the father. Behrman (1997) takes a more detailed look at this question, focusing on studies from both the US and a range of developing countries, where a priori the importance of mother's education is expected to be greater. He also finds that mother's education tends to be somewhat more important than father's education. Perhaps most notably, he found that mother-daughter associations, in general appear to be stronger than those for mother-son. Therefore, when assessing the sexual motivation of adolescent females, incorporating the relationship between mother and daughter is vitally important.

Responses ranged from participants' mothers that had not graduated high school, to participants' mothers that graduated high school, received a GED, or attended a business or trade school after high school, respondents whose mothers had earned a college degree, and lastly those that had earned a professional degree (See Table 1for frequencies). Limitations to the measurement of SES are of particular concern throughout social science and health research. Investigators grapple with the inclusion or exclusion of possible indicators, and which most accurately explain the construct. The rationale for focusing on mother's education to explicate the current SES variable coincides with findings from current literature on the subject (Behrman,

1997; Beller, 2008; Bravemen, et. al. 2005; Korupp, et. al. 2002). For the purposes of this study the SES variable was reverse coded so that lower SES (theoretically higher risk) had a higher score and higher SES (theoretically lower risk) was given a lower score.

Identity Interaction Variables (IVs): In order to test the theory of "multiple jeopardy", the previously mentioned independent variables will be used to create interaction variables that will also serve as predictors in the statistical analyses. The four interactions were created and labeled as *Gender by Race* (GxR), *Gender by SES* (GxSES), *Race by SES* (RxSES) and *Gender by Race by SES* (GxRxSES). Three 2-way interactions and one 3-way interaction serve as the "identity interaction" variables.

Motivation to Engage (DVs). Pertinent items concerning motivation to engage in risky sexual behavior were selected to develop a latent dependent variable of Motivation to Engage in Risky Behavior. Based on previous studies' use of this construct, five separate items were selected as indicators of the perceived benefits of sexual activity (Resnick, Bearman, Blum, Bauman, Harris, et al., 1997). Responses to the five Likert scale items ranged from 1(strongly agree) to 5 (strongly disagree). These survey items were recoded as 1 (strongly disagree) to 5 (strongly agree), in order to help facilitate statistical calculations and interpretation. The survey questions that loaded on each factor are shown in Table 2. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were both used to assess the viability of the latent construct. Please see Table 3 for summary statistics of interaction variables and sexual motivation factors.

Table 2
Indicators of Latent Motivation to Engage in Risky Sexual Behavior

Single-item Indicator	Latent Construct of Motivation
If you had sexual intercourse, your friends would respect you more.	Social
If you had sexual intercourse, it would make you more attractive to women/men.	Social
If you had sexual intercourse, you would feel less lonely.	Social
If you had sexual intercourse, it would give you a great deal of physical pleasure.	Physical
If you had sexual intercourse, it would relax you.	Physical

Notes: Questions derive from the Wave 1 in-home sample of the National Longitudinal Study of Adolescent Health (Add Health) 1994-1995.

Table 3
Summary Statistics for Interaction Variables and Social and Physical Motivation Factors

	Gender	Race	SES	GxR	GxSES	RxSES	GxRxSES	Social Motivation	Physical Motivation
N	789	789	789	789	789	789	789	789	789
Mean	.51	.299	5.64	.152	2.92	1.72	.89	5.53	4.95
Standard Deviation	.5	.458	2.03	.359	3.32	3.00	2.35	1.87	1.34
Skewness	-.058	.879	-.229	1.94	.586	1.45	2.53	.156	-.333
Std Error of Skewness	.087	.087	.087	.087	.087	.087	.087	.087	.087
Kurtosis	-2.002	-1.23	-1.13	1.77	-1.24	.436	4.87	-.087	.214
Std Error of Kurtosis	.174	.174	.174	.174	.174	.174	.174	.174	.174

CHAPTER 4

RESULTS

The primary goal of this study was to examine the association between adolescent motivation to engage in risky sexual behavior and the self-reported assignment to multiple marginalized statuses. A series of multiple linear regression analyses and structural equation models were used to test the hypothesis, performed solely on the responses of those who considered themselves to be sexually active. The sample size (N=2,562) was separated by random selection into a calibration sample (N=789) and a validation sample (N=1,508). This process allows for one sample to calibrate the model and the other is used to test the predictive ability of the model (Kerlinger & Pedhazur, 1973). Typically, the data is split into halves (Kerlinger & Pedhazur, 1973), however because SEM analyses require a larger sample size the validation sample is larger than the calibration sample. No missing data were reported for the calibration sample; however, 455 cases were excluded from the validation sample. These individuals did not provide valid answers to the questions regarding motivation to engage in risky sexual behavior (i.e. refuse to answer, "don't know", or not applicable).

EXPLORATORY FACTOR ANALYSIS and CONFIRMATORY FACTOR ANALYSIS

Prior to conducting the primary statistical analyses, both exploratory factor analysis and confirmatory factor analysis were use create the latent construct motivation to engage in risky sexual behavior. Latent variables are defined by Bentler

(2004) as hypothesized underlying constructs that explain shared variance and relationships among a number of measured indicators. Child (1990) plainly describes exploratory factor analysis (EFA) as orderly simplification of interrelated measures. EFA allows for exploration of the potential underlying factor structure among a set of observed variables (Steiger & Lind, 1980). Initially, the exploratory factor analysis revealed that all five items loaded on a single factor. With only one eigenvalue greater than 1, the analysis suggested one latent construct of motivation to engage. Confirmatory factor analysis (CFA) was then performed on the latent construct, predicting its hypothesized measured indicators. This analysis tests the sufficiency of the measurement model and provides associations among the latent variables (Bentler, 2004). The CFA revealed that while the factor loadings were significant, the model fit was relatively poor: $\chi 2$ (5, N=1,053) = 496.226, p< .001, CFI = .817, RMSEA = .234, 90%CI [.217, .252].

Conceptually, the items were then split into two separate factors, two items indicating physical motivation to engage in sexual behavior and three items indicating social motivation to engage in sexual behavior (Table 2). EFA revealed high loadings for each indicator on their respective latent factors (Table 3). A subsequent CFA revealed the two factors to be slightly correlated (0.58), but all factor loadings were substantial and significant (p <.001) (See Table 4 for standardized and unstandardized coefficients) and all fit indices were acceptable: $\chi 2$ (4, N=1,053) = 32.876, p< .001, CFI = .989, RMSEA = .064, 90%CI [.045, .0874] (Figure 1). This analysis reveals that the proposed model is sufficient and the latent construct significantly relates to its hypothesized indicators (Kline, 2011). Reliability coefficients for both scales were

moderate; physical motivation scale consisted of 2 items (α=.773) and social motivation of 3 items (α=.724). Cronbach's alpha is likely smaller as a result of the limited amount of indicators for each scale.

Table 4
Means, Standard Deviations and Factor Loadings of 2-factor EFA

	Means (SD)	FL*
Social Motivation (α=.724)		
Gain respect	2.36 (.97)	.635
More attractive	2.37 (.96)	.843
Feel less lonely	2.45 (1.01)	.823
Physical Motivation (α=.773)		
Physical pleasure	3.41 (1.02)	.925
Relaxing	3.05 (.97)	.828

Notes: EFA = exploratory factor analysis; SD = standard deviation; FL = factor loading.
*All factor loadings significant, p<.001.

Table 5
Standardized and Unstandardized Coefficients for 2-Factor CFA

Observed Variable	Latent Construct	β	B	SE
Gain respect	Social	.53	1.00	
More attractive	Social	.78	1.44	.099
Feel less lonely	Social	.72	1.41	.098
Physical pleasure	Physical	.67	1.00	
Relaxing	Physical	.99	1.41	.097

Notes: CFA = Confirmatory factor analysis; β = standardized coefficient; B = unstandardized coefficient; SE = standard error.
*p<.001.

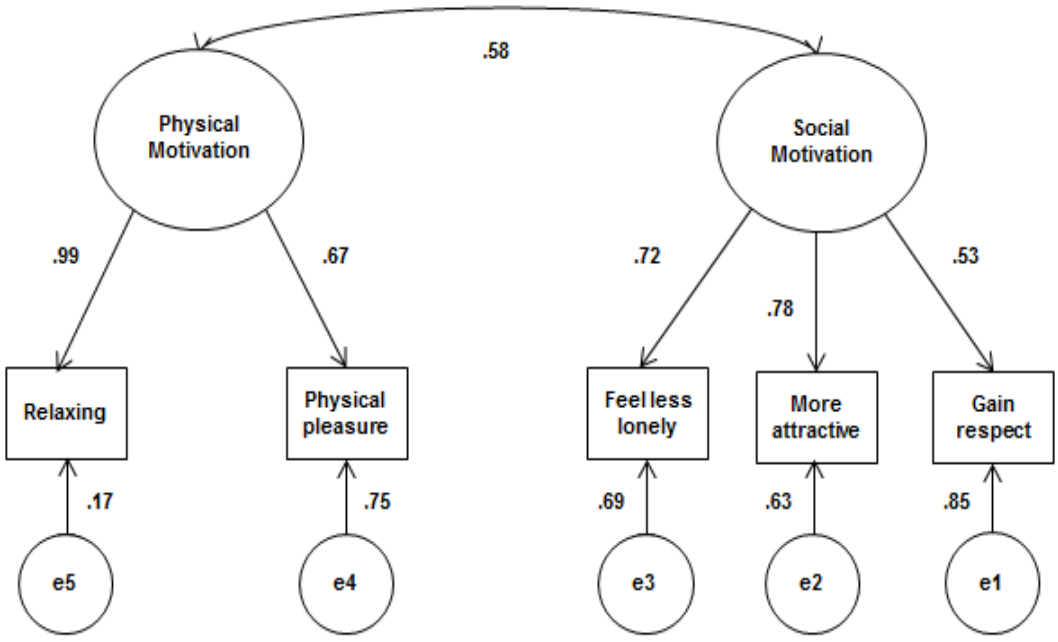

Figure 1. Confirmatory factor analysis of latent dependent variables. Standardized regression coefficients and error terms are provided. Large circles, latent variables; rectangles, single indicator items; small circles, error terms; double-headed arrows, correlations; single-headed arrows, regressions. $\chi 2$ (4, N=2552) = 32.876, p< .001, CFI = .989, RMSEA = .064, 90%CI [.045, .0874].

MULTIPLE REGRESSION

Multiple regression analyses were performed in three steps to assess the predictability of the multiple independent variables. Use of this analytic method revealed a relationship that improved accuracy in predicting values for the dependent variable by using the information within the independent variables. First, the individual identity variables (gender, race, and SES) were analyzed to test how well they predicted the two dependent composite variables, physical and social motivation to engage in sexual behavior. Second, the three 2-way interactions were placed into a multiple regression analysis to assess their predictability of the two composite variables assessing motivation to engage in risky sexual behavior. Lastly, the three-

way interaction was placed into a regression analysis. These tests were performed to assess how well the separate identity variables and the various identity interactions related to participants' ratings of motivation to engage in risky sexual behavior.

The results of the initial regression analysis indicated that the predictors (gender, race, and SES) explained 12.3% of the variance (R^2=.123, F(3,785)=36.407, p<.001) when predicting social motivation to engage in sexual behavior. It was found that gender (β = -.34, p<.001) and socioeconomic status (β = .068, p=.043). were significant predictors of social motivation. With respect to physical motivation to engage, the predictors explained 9.9% of the variance (R^2=.099, F(3,785)=47.470, p<.001). Both gender (β = -.304, p<.001) and SES (β = -.083, p=.015) were found to be significant predictors of physical motivation. These findings indicate that male adolescents were more likely to engage in sexual behavior for both social and physical motivations. Lower SES was associated with increased social motivation, while higher SES was associated with increased physical motivation. As an individual predictor minority status was not significantly associated with either social or physical motivation to engage in risky sexual behavior.

The next set of multiple regression analyses involved prediction of both motivation variables from the three 2-way identity interaction variables (GxR, GxSES and RxSES). These variables were found to explain 8.8% of the variance (R^2=.088, F(3,785)=32.788, p<.001) when predicting social motivation to engage. Each of the 2-way interaction predictors was significantly associated with social motivation: GxR ((β = -.146, p=.005), GxSES ((β = -.223, p<.001), and RxSES (β = -.144, p<.001). These variables accounted for less variance when predicting physical motivation to

engage: 7.3% (R^2=.073, F(3,785)=19.161, p<.001), and only one of the interaction variables was a significant predictor of physical motivation GxSES (β = -.256, p<.001). Results from the interaction of gender and race (GxR) suggested that non-minority (White) males were more likely to be more socially motivated to have sex when compared to minority females. The interaction between gender and SES (GxSES) showed that males of higher SES were more likely to engage in sexual behavior for a combination of both social and physical motivations. These findings suggest that males of either a minority or non-minority, belonging to a higher socioeconomic level, are more likely than their female counterparts to be motivated by social and physical reasons to have sex. The interaction of race and SES (RxSES) showed an increase in social motivation by higher SES minorities.

A final multiple regression analysis utilized the single 3-way identity interaction variable (GxRxSES) as the predictor of social and physical motivation to engage. In the first analysis, the interaction variable accounted for only 1.6% of the explained variance (R^2=.016, F(3,787)=12.483, p<.001) when predicting social motivation. The association was significant at the .01 level (β = -.128, p<.001). The analysis of physical motivation was similar (R^2=.011, F(3,787)=8.426, p<.001) and the 3-way interaction was shown to have a significant association (β = -.105, p=.003) with physical motivation. These findings indicated that White males of higher SES were more motivated by both physical and social reasons to engage in risky sexual behavior than all other groups. Table 5 and Table 6 list the complete findings from each of the multiple regression analyses conducted to predict both social and physical motivation to engage in risky sexual behavior.

Table 6
Regression Coefficients and Adjusted R-squared values for Predicting Social Motivation to Engage in Risky Sexual Behavior

Model/Predictor Variable	β	T value	Pr> |t|	Adjusted R^2
Model 1				.123
Gender	-.34	-10.17	.001	
Race/Ethnicity	.048	1.44	NS	
SES	.068	2.02	.043	
Model 2				.088
GxR	-.146	-3.42	.005	
GxSES	-.223	-6.39	.001	
RxSES	-.144	3.54	.001	
Model 3				.016
GxRxSES	-.128	-3.63	.001	

Notes: NS= Not significant.

Table 7
Regression Coefficients and Adjusted R-squared values for Predicting Physical Motivation to Engage in Risky Sexual Behavior

Model/Predictor Variable	β	T value	Pr> |t|	Adjusted R^2
Model 1				.099
Gender	-.304	-8.97	.001	
Race/Ethnicity	-.009	-.279	NS	
SES	-.083	-2.44	.015	
Model 2				.073
GxR	-.037	-.854	NS	
GxSES	-.256	-7.04	.001	
RxSES	-.003	.068	NS	
Model 3				.011
GxRxSES	-.105	-2.95	.003	

Notes: NS= Not significant.

STRUCTURAL EQUATION MODELING

Structural equation modeling was used to detect associations among the latent variables and the theorized identity interaction predictors. EQS 6.1 statistical program (Bentler, 1989; 2004) was used to perform all SEM analyses. The use of structural modeling requires a theory-driven data analytical approach in order to evaluate specified hypotheses about key relations between measured and latent variables. Hancock and Mueller (2006) affirm that "SEM [should] not be viewed as a mere statistical technique but rather as an analytical process involving model conceptualization, parameter identification and estimation, [and] data-model fit assessment (p.371). For the purposes of this study, SEM is used to specify and test alternative models that predict the latent constructs of motivation to engage.

SEM analyses utilized the validation sample of 1,508 participants; 455 cases were excluded due to missing data and 1,053 participants remained to be analyzed. The cases excluded from these analyses are comprised of respondents that refused or chose not answer questions regarding sexual motivation. Three separate models were tested to address the research question of how well the interactions between gender, race, and SES predict motivation to engage in risky sexual behavior. The initial model (Model 1) tested the links between the single identity indicators and the two latent dependent constructs. There were two motivation outcomes, physical and social. Model fit was assessed by examining the comparative fit index (CFI; Bentler, 1990) and the root mean square error of approximation (RMSEA; Steiger & Lind, 1980) of each model. The CFI should ideally be at least .95; and the RMSEA should be <.08. Results depicted overall model fit as acceptable: ($\chi 2$ (16, N=1,053) = 41.55, p< .001,

CFI = .983, RMSEA = .039, 90%CI [.025, .054]. Figure 2 includes the standardized parameter estimates; circles represent latent variables and squares represent measured variables. There were no links (i.e., significant paths from predictor to outcome) established between the single identity indicators and the latent outcomes. Subsequent models examine the hypotheses that multiple marginalized statuses would better predict that outcomes of social and physical motivation.

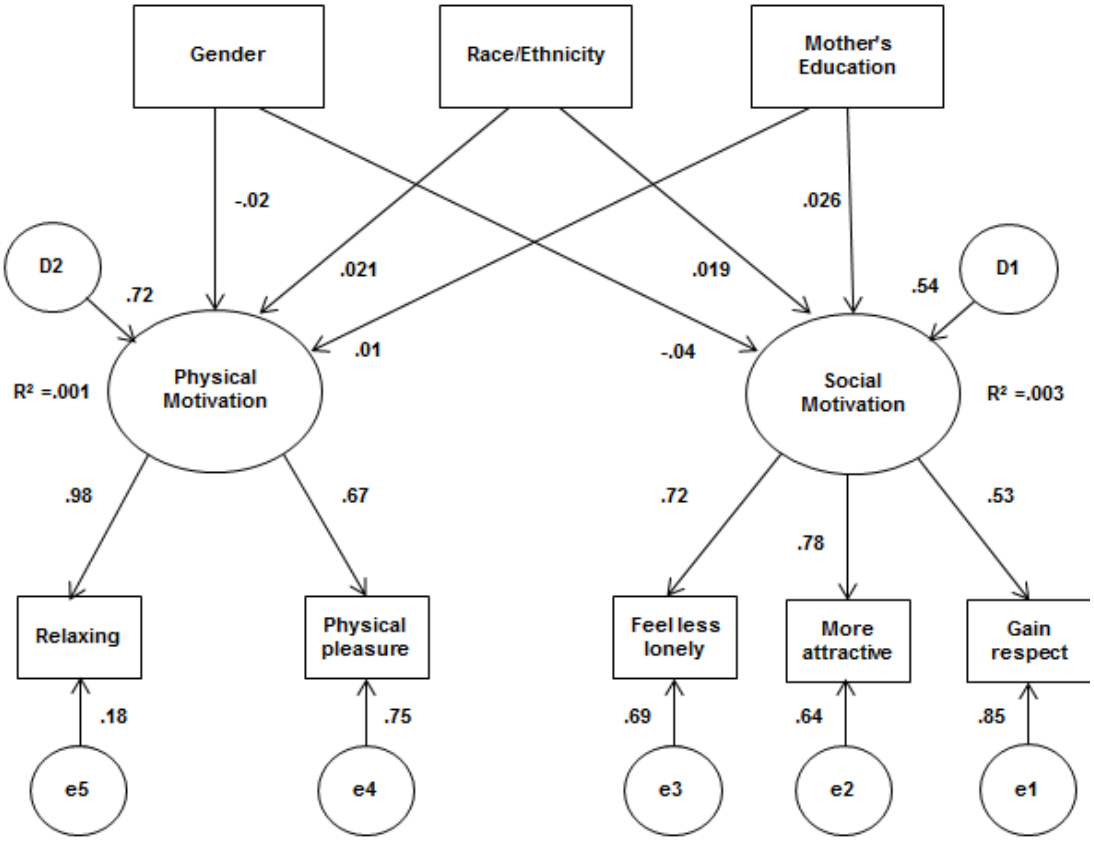

Figure 2. Results of structural model with three single-item predictors. $\chi 2$ (16, N=1053) = 41.55, p< .001, CFI = .983, RMSEA = .039, 90%CI [.025, .054].

The next model (Model 2) included paths from the three 2-way interaction variables. Paths from the single identity indicators were not included in this model variable and the model yielded good fit. Figure 3 shows standardized parameter estimates of Model 2: $\chi 2$ (13, N=1,053) = 33.626, p< .001, CFI = .991, RMSEA = .039, 90%CI [.023, .055]. The path coefficients for this model were not statistically significant. Model 3 (Figure 4) only included a path from the single 3-way interaction. Again, overall model fit was acceptable: $\chi 2$ (7, N=1,053) = 32.951, p< .001, CFI = .983, RMSEA = .059, 90%CI [.04, .08]. More focused fit tests, including the examination of modification indices and standardized residuals also suggested adequate model fit. Through examination of the standardized residual matrix and the largest standardized residuals, where values less than |.20| were necessary to assume that enough variance was being explained by the proposed models, none of the observed standardized residuals were greater than |.20|.

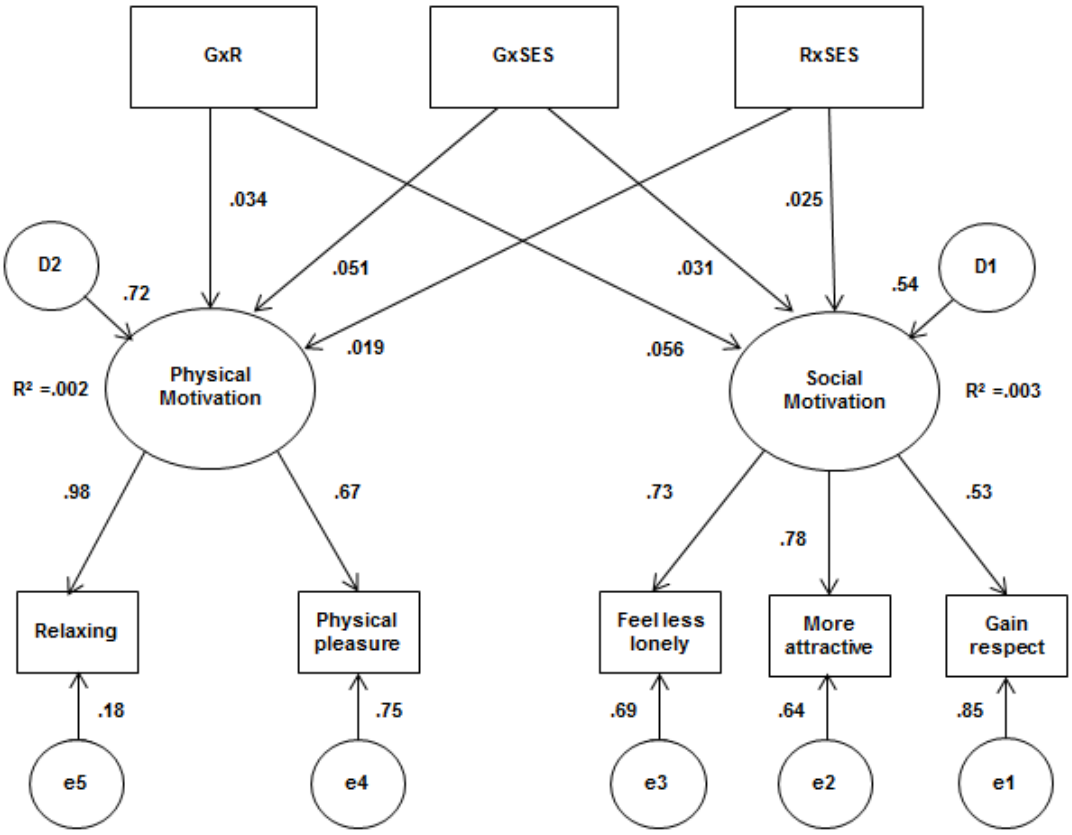

Figure 3. Results of structural model with three 2-way interaction predictors. $\chi 2$ (13 , N=1053) = 33.626, p< .001, CFI = .991, RMSEA = .039, 90%CI [.023, .055].

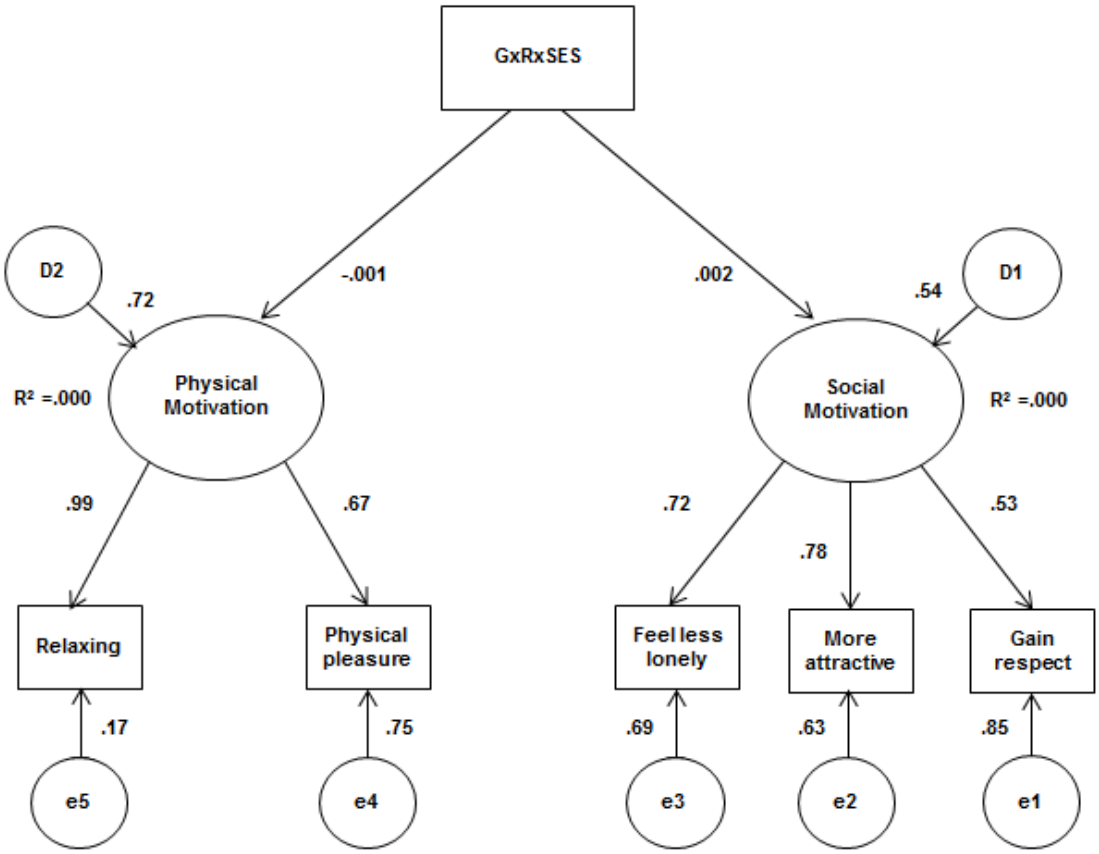

Figure 4. Results of structural model with 3-way interaction predictor. $\chi 2$ (7, N=1053) = 32.951, p< .001, CFI = .983, RMSEA = .059, 90%CI [.04, .08].

Although the models are not nested [Nested models statistically conclude whether a simpler model better explains a phenomenon, or whether a more complex model is required (Steiger, Shapiro, & Browne, 1985)], the study is similarly strengthened through the comparison of model fit and R^2 values. Comparing the three models showed that Model 2 indicated the most sufficient fit and explained for slightly more variance within the dependent outcomes than the other two models. This would suggest that this model best explains the links between the interaction of multiple marginalized statuses and social and physical motivation to engage.

Potential problems in the interpretation of this data should be taken into consideration. There was a substantial amount of missing data, 455 cases were excluded from each analysis. However, given the very large sample size, concerns surrounding estimation with missing information were slim. Problems with convergence were solved by specifying covariances between latent variable disturbances, as well as covariances among independent measured variables. Modification indices (Wald test; predicted increase in χ^2 if parameters are added and Lagrange multiplier test; estimated decrease in χ^2 if parameters are excluded) were examined but no substantial respecifications were made to the models.

SUPPLEMENTAL POST HOC ANALYSES

Supplemental regression analyses examined the associations between identity interaction variables, perceived prejudice at school, emotional distress and sexual motivation. Perceived prejudice was significantly associated with emotional distress ($\beta = .109$, $p<.001$), which could generally be described as feelings of sadness, depression, and social isolation, which in turn was significantly related to social motivation to engage in risky sexual behavior ($\beta = -.091$, $p<.01$). However a significant relationship was not observed between perceived prejudice nor emotional distress with relation to the identity interactions. This may be a result of the unspecified measurement of the prejudice variable. The type of prejudice (i.e. prejudice based upon race, gender, sexual orientation, etc.) was not specified and it did not measure individual experience of prejudice. These results decline the possibility of a mediational model for these data, but provide additional insight into oppressive experience as it relates to sexual motivation.

CHAPTER 5

CONCLUSIONS

This study examined the predictability of social and physical motivation to engage in sexual behavior by individual identity variables (gender, race, SES) and statistically computed identity interactions among these variables. In accordance with the intersectionality tenet of "multiple jeopardy", this study hypothesized that multiple marginalized statuses would have a greater association with the motivation to engage in risky sexual behavior. The relationship between the multiple identity interactions and the motivational constructs was tested using both multiple regression and structural equation modeling.

Analyses were performed using a nationally representative sample of adolescent males and females that reported having had vaginal intercourse with someone of the opposite sex. Focusing on the sexual motivations of adolescents who are currently sexually active allows for the specific analysis of a potentially at-risk population. Research shows that the earlier teens make the decision to engage in sexual activity, the greater the risk of negative outcomes such as unplanned pregnancy, STIs, and HIV/AIDS infection (Sneed, 2009). The younger adolescents begin having sex the more likely they are to have multiple partners (Smith, 1997). Black adolescents become sexually active at earlier ages and report higher numbers of sexual partners compared with their white or Hispanic peers (CDC, 2009a), thus increasing their risk of contracting HIV and other STIs.

Many teens prescribe to cultural norms that likely influence the divide among gender motivations to have sex. The common assumption is that male adolescents are inclined by social pressures and pleasure seeking motivations to have sex; while female adolescents are motivated to engage for reasons concerning emotional attachment and other relationship quandaries. Voisin et al. (2007) found that adolescent females more so than adolescent males, indicated that sexual activity was mostly motivated by emotional reasons such as "being in love" and the desire to have children. Male adolescents more readily reported physical pleasure as the major motivation for having sex. These gender differences are expected, given that gender socialization, male privilege, and biological factors play a substantive role in the development of sexuality. Gender roles and ideals have the ability to impact and shape an individual's identity and self-concept and in turn, influence sexual motivation and decision making.

Overall the series of multiple regression analyses concluded that male adolescents were more likely than female adolescents, to engage in risky sexual behavior when motivated by physical and social reasons. These analyses concluded that gender, more so than SES and minority status, accounted for more variance within both social and physical motivation factors. These results support findings from a number of prior quantitative studies related to youth motivations to engage in sexual activity (Eyre & Millstein, 1999; Ozer et al., 2003; Voisin et al., 2007). These studies consistently found differences in sexual motivation based upon gender. These findings opt for a greater understanding of adolescent sexual motivation and gender differences.

Recent findings aim to challenge the assumption of gendered adolescent sexual motivation. In a study of African-American adolescents between the ages of 14 and 20, both males and females primary motivations for engaging in sexual intercourse were physical pleasure and emotional satisfaction (Ozer, et al., 2003). The researchers propose that dividing sexual motivation along gender lines creates an "artificial dichotomy". The investigators emphasize that "intervention approaches that do not address both males' and females' emotional and physical desires for sex may fail to respond to the diversity of motivations for sex" (p.318). Dichotomizing the motives for engagement in sexual behavior along gender lines further perpetuates current social dynamics and limits the success of STI and HIV/AIDS prevention efforts. For that reason it is important to consider gender inequality and other social dynamics that may have a profound influence on sexual motivation and health motivations and behaviors.

Intersectionality theory supports the concept that socio-cultural forces such as racial discrimination, sexism, and deprivation of economic opportunities are capable of inhibiting the development of positive sexual behaviors and relationships. Socioeconomic factors can also limit the access to educational and reproductive health services, which could influence sexual behavior and motivation. For example, studies have found that residents of rural areas generally had worsened health outcomes than residents of more urbanized areas (Eberhardt & Pamuk, 2004).A similar perception can be drawn from the CDC's (2010c) report that African-American's of lower socioeconomic status have some of the highest HIV incidence rates of any population in the United States.

Although the intersections between race, gender, and SES were associated with social and physical motivation to engage, they were not all consistent with the predictions shaped by intersectionality theory. The current study more closely aligned with research findings suggesting societal influences as having the strongest impact on sexual risk motivation, as opposed to intersectional status endorsement. Limitations relating to research design, sample specifications, intersectional methodology and secondary data analysis may have caused theoretical inconsistencies and analytic issues.

LIMITATIONS

There are several limitations to the current study. These findings are preliminary and warrant further exploration to better understand the relationship between intersectional identity axes and risky sexual motivation. Multiple potentially marginalized statuses were hypothesized to predict social and physical motivation to engage in risky sexual behavior. That would assume females, minority females, and minority females of low socioeconomic status to be more likely to engage in risky sexual behavior by influence of social and physical motivations. However, the statistical analyses did not verify all of these hypotheses. Sample design issues should be taken into consideration when interpreting all results. For instance, the interaction of race and SES (RxSES) showed an increase in physical and social motivation among higher SES minorities. This finding may be a result of the Add Health study design, which oversampled high-SES Blacks. The parents of Black participants had each obtained a college degree. Thus, the nature of the sampling may have limited the results as it appears that there was a significant link between minority status and

motivation to engage in sexual risk, although with high SES minorities (albeit due to sampling approach). The 3-way interaction variable (GxRxSES) was theoretically hypothesized to be most strongly related to an increase in sexual motivation; but low endorsement of multiple marginalized statuses yielded highly non-normal data, which increased standard errors and made it difficult to find significant associations. In addition, assessing all minority races/ethnicities without distinction among them does not allow for more specified examination of racial differences in adolescent sexual motivation.

Regression analyses found that certain identity interactions were significantly associated with both motivation outcomes. Although each of the regression models were statistically significant, and many of the regression coefficients were found to be significant at the $p<.01$ level, when the interaction variables were placed into the regression models the amount of variance explained by the predictors considerably reduced in comparison to the amount explained by the individual identity variables. The interaction variables only include endorsement of potentially marginalized statuses; therefore the remainder of the variable was homogenized. For example, the GxR variable was coded as 0 for males and non-minority participants, leaving only minority females with scores greater than 0. The lack of variance within the independent variables does not allow for proper explanation of the dependent outcomes. Statistically significant and conceptually meaningful inferences are difficult to ascertain with such a lack of variability.

Structural model assessment was evaluated through the determination of best theoretical fit and empirical significance (Bentler, 1990; Harlow & Rose, 1994).

Model 2 (2-way interactions as predictors of social and physical latent factors) was the most appropriately fit. Unfortunately, no statically significant pathways were observed. These statistically non-significant paths may be the result of one or more factors. One possibility is that that the intersectionality predictors may not be a true indication of the oppressive identities that are central to the theory. A second possible factor could be that a relevant mediator (e.g., feelings of powerlessness or oppression) between the intersectionality predictors and the outcome needed to be included. A third possible problem could be that the outcome examined in this study, motivation to engage in risky sexual behavior, may not be salient enough, particularly in an adolescent sample, to allow true associations to emerge. It may be that a more behavioral measure such as degree of risky sexual behavior (e.g., frequency of unprotected sex) would have revealed more noticeable results. A fourth issue was just hinted at in that the sample, in particular the younger age of the participants, may not have had enough sexual activity to reveal connections between intersectionality variables and the outcome variables. A fifth consideration also mentioned briefly is that the data may have relatively low endorsement of multiple intersectionality factors (i.e., few minority, females from low SES groups), resulting in nonnormal data that limits the ability to find significant relationships.

Nonetheless, it was important to retain the selected variables in the analyses as removal from the models could become theoretically misleading (Hancock & Mueller, 2006). The paths remained in the model, as it preserves the original theoretical conception of intersectional identity interactions as predictors of sexual motivation. In total, there non-significance communicates that a hypothesized relation did not

establish itself beyond chance in this study (Hancock & Mueller, 2006). An alternative study that attends to some of the above considerations could find a different pattern of results.

The lack of a defined intersectional methodology (McCall, 2005) has inevitably deterred psychology researchers from explicit use of this theory in health research. While qualitative uses of intersectionality theory have made tremendous contributions in many areas of research, especially feminist research and studies of power relations between groups (Hankivsky, et. al. 2010), quantitative approaches are minimal (Veenstra, 2010). In order to examine sexual health motivations and sex behavior trends of wider and more diverse populations, quantitative methods need to be employed (Syed, 2008). The current study attempted to contribute to the use of Intersectionality within the quantitative realm. Measurement of intersectional identities proved difficult to analyze statistically. Nevertheless other researchers endeavor to create simpler and more statistically sound methods of intersectional analysis. Stirratt, Meyer, Ouellette & Gara (2008) propose an innovative approach for measuring identity multiplicity and intersectionality called Hierarchical Classes Analysis (HICLAS), in order to assess the mental health implications of endorsing multiple identities. This method allows researchers to evaluate characteristics of individual identities and model the interconnected associations between multiple identities held by an individual. They found support for the validity of this approach through analysis of mental health outcomes across sexual, racial, and gender identities among 40 lesbian, gay, or bisexually identified participants.

Nevertheless, a single study cannot capture every aspect of identity. This could perhaps explain the marginal association between the hypothesized identity interactions from the current study as significant to the prediction of social and physical sexual motivations. Other components of the self could be evaluated concurrently with the three axes presented in this study, such as: sexual orientation, religion, marital status, geographical region, migrant status, family structure, cultural norms and influences, occupation, and many more. Many of these constructs have been found to associate with positive and negative health behaviors and outcomes (Veenstra, 2010). According to Collins (1998), categories, such as age, religion, sexual identity and disability are often overshadowed by the focus on gender, race, and SES when observing intersectionality. Examination of alternative facets of identity could provide additional insight into the intersectional experience.

An additional limitation derives from the use of the secondary data analysis of the National Longitudinal Study of Adolescent Health (Add Health). The dataset included pre-determined questions based on the requirements of the Add Health Study. This does not allow for additional questions that could have been asked for the benefit of the current study. An example of this would have been the inclusion of items directly assessing the adolescents' experience of discrimination or feelings of powerlessness within school and home settings; given that this study cannot ascertain whether or not participants endorse feelings of oppression, experiences of discrimination or marginalization. Indicators of such experience would have provided a necessary mediational component between the identity interaction variables and sexual motivation. Also, since this was a secondary analysis, indicators that could

have more closely related to the literature were not available for analysis in this study. In general, the cross-sectional design of the current study greatly limits the ability to infer causality.

Preferably, certain survey measures would have been explained differently to participants. For instance, the survey question assessing sexual activity specifies the occurrence of "vaginal intercourse". Making this distinction automatically excludes persons of different sexual orientations or individuals that do not engage in vaginal intercourse, but still engage in other forms of sexual intercourse. Utilizing this data set does allow for an impressive sample size; however it does not account for all interpersonal aspects of identity or experience of discrimination at an individual level. These are important elements to consider when evaluating health outcomes through an intersectionality lens.

Realistically, survey research can only capture surface level features of the relationship between the intersectional experience and sexual health motivations. Identity and the intersection of multiple identities, as they are experienced at a specific place and time, make it difficult to presume group differences when taking into consideration the ways in which power relations operate daily in the personal lives of participants.

IMPLICATIONS FOR FUTURE RESEARCH

The intersectionality of race/ethnicity, gender, and socioeconomic status inherently shapes the experience and understanding of sexuality among adolescents (Corneille, & Belgrave, 2007; Kapungu, Holmbeck, & Paikoff, 2006; Lee, & Hahm, 2010; Smith, 1997). The current study explored the relationship between several

identity interaction variables and social and physical motivation to engage in risky sexual behavior. The goal was to elucidate significant associations based upon the theoretical concept of "multiple jeopardy"; essentially, increased endorsement of potentially marginalized statuses (i.e. female, minority, lower SES) would indicate increased motivation to engage in risky sexual behavior. This study is justified considering the disproportionate number of STI and HIV diagnoses among adolescents and young adults each year. Specifically, nearly 12,000 Black adolescents were infected with HIV in 2010 and the greatest number of those infections occurring among gay and bisexual youth (CDC, 2010c). Nearly half of all new infections among youth occurred in Black males. In addition, incidence of syphilis among adolescent Black males tripled between 2005 and 2009 (CDC, 2010b). These facts indicate that it is equally important to examine intersections of identity among (both racial and sexual) minority males as it is for minority females. These health disparities illustrate the need for more specialized prevention efforts for both male and female adolescents that endorse multiple marginalized statuses.

Data that better addresses the research question is necessary to enhance the exploration of sexual risk motivation. Add health was designed as a national surveillance tool and, although extensive, does not provide in-depth information related to sexual risk motivation such as peer group information, relationship related motivations, psychological motivations and other influences on sexual decision-making . Specific endorsement of multiple marginalized statuses and discriminatory experience should be assessed in-depth. In addition, there are a number of other elements that would likely influence or motivate the decision to engage in risky sexual

behavior. Substantial evidence supports a positive link between sexual risk behaviors and alcohol consumption, substance use, and juvenile delinquency and criminality among adolescents (Levy, Sherritt, Gabrielli, Shrier, & Knight, 2009; O'Donnell, Stueve, Duran, Myint-U, Agronick, Doval, & Wilson-Simmons, 2008; Stueve, & O'Donnell, 2005; Wallace, Bachman, O'Malley, Schulenberg, Cooper, & Johnston, 2003). Adolescents involved in alcohol and illicit drug use are more likely than their non-using peers to engage in unprotected sex and to have multiple partners (DiClemente, Crosby, Wingood, Lang, Salazar, & Broadwell, 2005; Morrison-Beedy, Carey, Crean, & Jones, 2011; Santelli, Carter, Orr, & Dittus, 2009).These items would likely enhance the predictability of sexual motivation. Also, it would be interesting to examine these behaviors across intersecting identities.

In addition to motivations to engage in risky sexual behavior, motivations to refrain from sexual activity should be examined as well. The reasons for not having sex among adolescents are widely understudied (Stevens-Watkins, Brown-Wright, & Tyler, 2011). Distinguishing specific reasons for and against sexual activity may lead to more precise prediction of sexual behaviors as well as improved comprehension of the ways in which certain types of motivation influence sexual decision making (Cooper, Shapiro, & Powers, 1998). To that end, understanding the role of intersecting identities with respect to differing motivations to engage and refrain from risky sexual behavior is critical in the development of improved intervention and prevention strategies.

Future studies could also explore the longitudinal development of sexual risk motivation and behaviors. Whether using the Add health data-set, or an alternative

data source, measuring across time points could answer many significant questions regarding sexual risk development over time, as it relates to implications of social status. Potential findings from such studies could extend knowledge and information to health research that may influence public health policy, safe sex interventions and programs that target members of underrepresented groups. Long term consequences are probable if adolescents do not obtain the necessary knowledge and skills to recognize their susceptibility to STI and HIV infection. The use of intersectionality theory could also gain increased consideration in the realm of health research, where it would inherently improve traditional means of identity exploration with relation to negative health outcomes among high risk populations.

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