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EXPLORING THE ROLE OF SOCIAL SUPPORT, ETHNIC IDENTITY, AND

PSYCHOLOGICAL EMPOWERMENT ON DRUG USE AND SEXUAL RISK BEHAVIOR

AMONG BLACK & HISPANIC FEMALE ADOLESCENTS

A DISSERTATION

Submitted to the Faculty of

Montclair State University in partial fulfillment

of the requirements

for the degree of Doctor of Philosophy

by

IJEOMA OPARA

Montclair State University

Upper Montclair, NJ

May 2019

Dissertation Chair: Dr. Robert J. Reid

MONTCLAIR STATE UNIVERSITY

THE GRADUATE SCHOOL

DISSERTATION APPROVAL

We hereby approve the Dissertation

EXPLORING THE ROLE OF SOCIAL SUPPORT, ETHNIC IDENTITY, AND

PSYCHOLOGICAL EMPOWERMENT ON DRUG USE AND SEXUAL RISK BEHAVIOR

AMONG BLACK & HISPANIC FEMALE ADOLESCENTS

of

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Doctor of Philosophy

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Dr. Pauline Garcia-Reid

2-14-19

Date

Dr. Elizabeth Rivera Rodas

Abstract

EXPLORING THE ROLE OF SOCIAL SUPPORT, ETHNIC IDENTITY, AND

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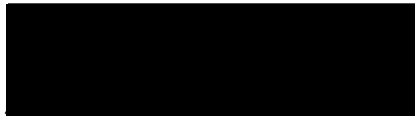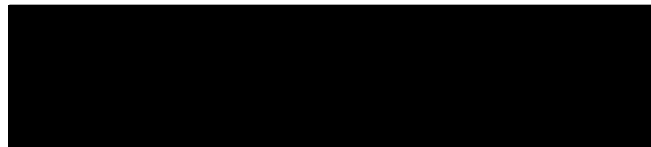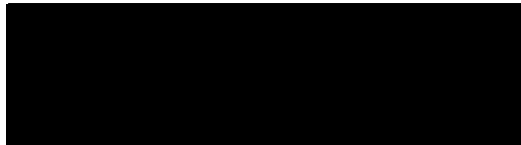AMONG BLACK & HISPANIC FEMALE ADOLESCENTS

by Ijeoma Opara

Adolescent females of color, particularly Black and Hispanic adolescents, are often

viewed as a homogenous group with adolescent boys of color, thus ignoring unique gender-racial

specific risk and protective factors to drug use and HIV/AIDS that may be present. Such an

absence can lead to flawed outcomes in HIV, STIs (sexually transmitted infections), and

substance abuse prevention work that may continue to marginalize girls of color. Using

empowerment theory and intersectionality as a framework, this study examines the extent to

which ethnic identity, social support, and psychological empowerment is on drug use and sexual

risk behavior. The study uses a sample of ($N = 830$) female adolescents who identify as being

Black only or Non-White Hispanic only. All participants resided in a northeastern urban

community in New Jersey. A majority of the participants (90%) were between the ages of 15–17

years of age. Confirmatory factor analysis was employed to test the factor structure of the scale

used to measure psychological empowerment and structural equation modeling was used to test

the hypothesized model of the mediating role of drug use on sexual risk behavior. Findings

revealed that 30-day drug use significantly mediated the relationship between social support,

ethnic identity, and psychological empowerment on sexual risk behavior. By highlighting the

strengths of Black and Hispanic girls, researchers can attempt to learn from those who are not

engaging in risky behaviors as a way to incorporate a strengths-based view in prevention.

Keywords: Empowerment, Urban Girls, Prevention, Strengths-Based

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Dedication

I dedicate this dissertation to the memory of my parents, Mary and Isaiah Ugochukwu Opara, who taught me the value of education. Mom, thank you for being my guardian angel. I know you are happy where you are, and I pray that I have made you proud. I promised you that I will take care of Ike and I am doing my best to make sure he never suffers or lacks. Wherever academia or life takes me, I will bring Ike along. We will always be together, I promise I won't let you down. Thank you for sacrificing so much for me and Ike and showing me what a mother's love is like. I'm grateful to have that memory. Daddy, you showed me what hard work was. You worked night and day and barely slept, just to make sure we were taken care of. You always told me to pursue a PhD, the highest degree possible. You wanted me to choose a field I love and be the best at it. Well, I hope you are proud of me. I did it!

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"With God, ALL things are possible"-Matthew 19:26

Table of Contents

List of Tables

List of Figures

List of Abbreviations

ACE adverse childhood experiences
AGFI adjusted goodness of fit
AIC Akaike information criterion
AIDS acquired immune deficiency syndrome
BIC Bayesian information criterion
CDC Centers for Disease Control & Prevention
CFA confirmatory-factor-analysis
CFI comparative fit index
CMIN minimum discrepancy
CRF critical race feminism
CRT critical race theory
DOE Department of Education
EFA exploratory factor analysis
ELL English-language learners
GFI comparative fit index
HIV human immunodeficiency virus
MEIM Multigroup Ethnic Identity Measure
MI multiple imputation
ML maximum likelihood
PE psychological empowerment
RMSEA root mean square error of approximation
SAMHSA Substance Abuse and Mental Health Services Administration
SEM structural equation modeling
SPC sociopolitical control
SPCS Sociopolitical Control Scale
SPCS-Y Sociopolitical Control Scale for Youth
SSRS Social Support Rating Scale
STI sexually transmitted infection
TLI Tucker–Lewis Index
YRBSS Youth Risk Behavioral Surveillance Survey

Chapter 1: Introduction

Despite substantive literature on the relationship between adolescent drug use and sexual

risk behavior, gaps in prevention research may continue to place adolescent girls of color at risk.

Research on adolescent drug use and abuse has been largely examined among White adolescents

(Paiva, Amoyal, Johnson, & Prochaska, 2014). In addition, research on substance use and abuse

among girls has been limited in the literature because teen girls have historically had low rates of

drug usage compared to boys. However, in the past decade, girls of color are slowly beginning to

engage in substance use at a rate similar to their male counterparts (Murphey et al., 2014). Drug

use among adolescent females have been associated with numerous risk characteristics including

engaging in sexual risk behaviors (Anderson & Mueller, 2008; Jackson et al., 2015). In regard to

sexual risk behavior outcomes, the human immunodeficiency virus (HIV)/acquired immune

deficiency syndrome (AIDS) epidemic has continued to disproportionately affect African

American girls and women (Centers for Disease Control & Prevention [CDC], 2017),

accompanied by high rates of sexually transmitted infections (STIs), and high teenage pregnancy

rates that are currently impacting Black and Hispanic/Latina girls (Collins, Baiardi, Tate, &

Rouen, 2015; Respress, Amutah-Onukagha, & Opara, 2018). Innovative methods are needed to

resolve such disparities.

Black and Hispanic female adolescents in the United States face unique risks in

contracting HIV/AIDS and other STIs and using and abusing illicit substances. Black and

Hispanic female adolescents are more likely to engage in high sexual risk behavior such as

drinking alcohol or using drugs before having sex, have sex without a condom, and have

multiple sexual partners than their White counterparts (Raiford, Seth, & DiClemente, 2013).

These behaviors may be the direct consequence of belonging to multiple marginalized groups

(e.g., race, ethnicity, class, and gender), resulting in intersecting multiple levels of oppression. Such behaviors may arise from the historical and contextual factors of trauma, gendered racism, and sexual exploitation that are present in the lives of Black and Hispanic girls and women (M. L. Collins et al., 2015; P. Collins, 1991; May 2015).

In the neighborhoods and environments where Black and Hispanic female adolescents primarily live, they are overly exposed to drug usage and have extreme access to illicit and licit drugs (Floyd & Brown, 2013; Leventhal & Brooks-Gunn, 2000). In addition, the pervasive negative imagery of Black and Hispanic girls in the media can perpetuate the oversexualization of adolescent girls of color (Collins et al., 2015; Faulkner, 2003; French, 2013; Stokes, 2007). Repeated exposure to these images can contribute to cultural norms, averring that women and girls of color undertake and normalize risky sexual behaviors (Merskin, 2007; Wallace, Townsend, Glasgow, & Ojie, 2011). Such norms may lead Black and Hispanic girls to internalize risky behaviors involving drug use and sexual risk, allowing dangerous behaviors to become normalized and acceptable for this group, demeaning their ethnic identity, and contributing to poor health outcomes (Guzmán & Stritto, 2012; Respress et al., 2018). Knowledge and lack of discussion on HIV/AIDS, community-based preventive resources, drug abuse education, and gender–racial-specific behavioral interventions are unavailable in urban communities and can significantly contribute to the engagement in risky behaviors (DiClemente & Wingood, 1995; Gentry, Elifson, & Sterk, 2005; Lopez, Dustman, & Williams, 2016; Metzger, Cooper, Zarrett, & Flory, 2013; Wallace et al., 2011). Sexual health disparities and drug abuse that affect girls of color not only produce poor health outcomes but can also contribute to educational inequities (Basch, 2011; Mann, 2016), increases in school-suspension rates (Clark, Kassenboehmer, Le, McVicar, & Zhang, 2016; American Academy of Pediatrics

Committee on School Health, 2003; Tucker, Martinez, Ellickson, & Edelen, 2008), criminal involvement (Ruglass et al., 2016), income inequality, and sexual victimization (Testa, Hoffman, & Livingston, 2010).

Despite challenges present in such complex environments, researchers tend to ignore the resiliency skills of those who live in under-resourced communities while focusing primarily on risk factors. It is important to understand how urban girls of color are able to navigate low-income communities and challenge the norms society has placed on their group. Ignoring the work of urban adolescent girls of color who remain abstinent from drug use and do not engage in sexual risky behaviors may serve as a disadvantage to the prevention field by focusing on the etiology of risky behaviors rather than learning from those who are able to succeed. Studies that examine sexual health and drug usage among Black and Hispanic girls often highlight risk factors that are commonly present in urban communities. The presence of risk factors does not necessarily equate to an influx of risky behaviors in girls of color. Yet, very few studies have examined the protective factors that can guard Black and Hispanic girls in urban communities against risky sexual behavior and drug usage.

Empowerment theory, methods, and approaches provide a promising framework to examine and understand factors to reduce drug use and sexual risk behavior among adolescent girls of color in urban communities (Christens & Peterson, 2012). Empowerment theory focuses on how to encourage and mobilize individuals toward change and action, as well as reduce negative behaviors (Beeker, Guenther-Grey, & Raj, 1998; Christens & Peterson, 2012). In the context of ethnic-minority girls, limited research has focused on how one's ethnic identity as a female (e.g. cultural/racial pride) may impact sexual risk and drug abuse intervention strategies (e.g., Corneille & Belgrave, 2007; Sanchez, Hamilton, Gilbert, & Vandewater, 2018). In

consideration of these limitations, a need persists in adolescent substance use and sexual health literature to understand the processes and outcomes resulting in drug use and sexual behavior among urban girls of color whose backgrounds have been minoritized; particularly, those processes that move away from deficits and focus on strengths (Christens & Peterson, 2012).

Intersectionality theory, derived from critical race and feminist theories, emphasizes the value of examining multiple intersecting systems that shape one's identity including racial and ethnic identities (Andersen & Collins, 2014; Collins, 1991). When examining the lived unique experiences of girls of color and their susceptibility to engage in substances and sexual risk behavior, it is important to place their social identities on the forefront. As urban Black and Hispanic girls belong to multiple marginalized and oppressed groups, their risk for engaging in risky behaviors increases (Wing, 1997). Thus, understanding their ability to portray strength and resiliency despite being placed in environments that nurture negative behavior is crucial for prevention research (Clonan-Roy, Jacobs, & Ndukka, 2016). In studying Black and Hispanic adolescent girls in context, empowerment theory can serve as an overarching theory, whereas intersectionality can serve as the framework of the study to emphasize the need to examine gender- and race-based protective factors on a critical level.

To discuss the importance of studying adolescent girls of color through a strengths-based lens, the next section introduces the significance and impact of drug use and sexual risk behavior on Black and Hispanic adolescent girls. First, this study acknowledges the recent shift in substance abuse trends that has placed a new focus on adolescent girls in drug abuse research, as they have been largely ignored due to their lower drug use rates in the past. Next, racial and ethnic differences in risk behaviors among Black and Hispanic girls and how cultural factors and norms may play a role in the etiology of their behaviors are further described. Further, the

relationship between substance abuse and sexual risk behavior is emphasized to highlight the relevance of examining both behaviors, particularly examining drug use as a mediator between protective factors and sexual risk behavior. Racial/ethnic terms such as African American or Black and Hispanic or Latina will be used interchangeably, due to the nature of their similarity of origin and how both groups are described in the recent literature.

The term "African American" refers to individuals or persons born in the United States and are direct descendants of slaves living in the United States and are also referred to as identifying as "Black". Other Black individuals in the United States and abroad include persons born in Africa, the Caribbean basin, and parts of Central and South America. The term "Hispanic" or "Latino/a" refers to individuals who were born or have direct lineage to descendants of Latin America, Central and South America, specifically countries that are Spanish speaking, countries, or territories that were historically under Spaniard control and possession (e.g. Dominican Republic, Mexico).

This study does not attempt to portray the experiences of girls of color as falling under one homogeneous umbrella; rather, the goal is to acknowledge the commonality of shared factors among girls of color that have contributed to their marginalization. Although the historical realities of Hispanic and Black girls diverge, the social reality of living in disenfranchised and under-resourced communities that expose them to drug use and access is shared. Exposure to discrimination and the internalization of negative stereotypes and gendered roles permeates between and among Black and Hispanic girls in the United States. Although variations exist in the experiences of racial and ethnic groups of girls of color, this study provides a strengths-based view of Black and Hispanic girls and their families to highlight culturally based protective factors that are nurtured within ethnic minority families.

Substance-Abuse Trends

Substance use has become a public health concern for girls and women in the United States. Historically, adolescent girls of all racial and ethnic groups in the United States have had lower drug usage rates than boys (Guthrie & Flinchbaugh, 2001). However, over the past decade, adolescent girls are smoking cigarettes, drinking alcohol, and using illicit drugs such as marijuana at higher rates (Kahn, 2016; Wallace et al., 2003). The sudden rise of substance abuse among adolescent girls has become alarming and is now at almost the same level as adolescent boys in the United States (Kahn, 2016, Tareen, 2015). The next section presents a discussion of licit (e.g., alcohol and tobacco) and illicit (e.g., marijuana, prescription drugs, and cocaine) substances, describing prevalence rates of use among teen girls of color compared to White girls and adolescent boys of color.

Alcohol

Alcohol is the most used substance among all adolescents (Merianos et al., 2017; National Institute on Drug Abuse, 2014). Initiation of alcohol use generally occurs in adolescence and earlier drinking experiences during adolescence can link to alcohol dependence in adulthood (Hodder et al., 2011). Alcohol use among youth is also associated with the use of illicit drugs such as marijuana (Barry et al., 2016; Kirby & Barry, 2012). Alcohol use during adolescence aligns with numerous negative outcomes such as poor academic performance (Purcell, 2009), lowered educational aspirations (Barry, Chaney, & Chaney, 2011), sexual risk behavior (Peterson, Buser, & Westburg, 2010), and criminal behavior (Walters, 2017). Results from the Youth Risk Behavioral Surveillance Survey (YRBSS) indicated that, across all racial and ethnic groups, high school-aged adolescent girls are reporting higher rates of alcohol usage than adolescent boys (Kann et al., 2016). Among adolescent high school aged girls surveyed,

65.6% reported ever drinking alcohol. The rates were higher among Hispanic (68.6%) and Black girls (57.9%) than among Hispanic (63.4%) and Black boys (51.0%; Kahn et al., 2016). Hispanic adolescent girls also had higher current 30-day alcohol use (35.6%) than Black adolescent (25.9%) and White (35.2%) adolescent girls (Kann et al., 2016). The prevalence of the ability to obtain alcohol from someone they knew was higher among adolescent girls overall (48.5%) than boys (39.9%) overall and higher among White girls (50.7%), followed by Hispanic girls (45.9%). According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2018), 24.7% of Hispanics or Latinos aged 12 years and older admitted to binge alcohol use. Alcohol use in the last year among people aged 12 to 17 was 23.9% for Hispanic youth; the highest ever for this group historically (SAMHSA, 2018).

Tobacco

Adolescent girls continue to report lower rates of tobacco use than adolescent boys, although the gap is closing. Results from the YRBSS indicated that the prevalence of current cigarette use, for example, was higher among adolescent boys (11.8%) than adolescent girls (9.7%; Kann et al., 2016). Among racial/ethnic groups, cigarette use has continued to be higher among Whites, with 12.4% of White adolescents reporting current use of cigarettes followed by Hispanics with 9.2% and Blacks, 6.5% (Kann et al., 2016). Current cigarette use is higher among White girls, with 12.2% partaking, followed by Hispanic girls at 7.1% and Black girls at 3.7% (Kahn et al., 2016). Of Hispanic girls, 4.9% reported smoking a cigarette before 13 years of age compared 3.8% of Black girls. Cigarette use before 13 years links to nicotine dependency in high school and adulthood (National Center for Chronic Disease Prevention and Health Promotion, 2012). Similar to alcohol use, cigarette use during adolescence is a gateway drug and predicts the

likelihood of substance abuse in adulthood (Meyers & Kelly, 2006; Nkansah-Amankra & Minelli, 2016).

The United States has made significant strides in tobacco control by reducing the prevalence of cigarette smoking among adults and youth since the 1960s (Li et al., 2015). This achievement was accomplished through public-health initiatives such as tobacco-retailer training programs and youth-led initiatives (U.S. Department of Health and Human Services, 2014). However, an increase in youth cigar and cigarillo (e.g., Black & Milds, White Owl) use threatens to undo these public-health achievements (Li et al., 2015). The U.S. Food and Drug Administration prohibited candy, fruit, and other flavored cigarettes largely based on significant evidence that such products intentionally were marketed to attract youth users (Ding, 2005; Farley & Johns, 2015). Despite recent tobacco initiatives that aim to reduce youth use, the prevalence of cigar use has become higher for youth (SAMHSA, 2015). Adolescents, especially in urban neighborhoods, commonly use cigars or cigarillos (little cigars) as they are less expensive than cigarettes and are available in a variety of flavors (e.g., cherry, grape; Nyman, Sterling, Weaver, Majeed, & Eriksen, 2016). Brands such as Dutch Masters, White Owl, and Black & Milds have become popular among youth due to increased access in urban neighborhoods (Corey et al., 2014). Cigar use rates were higher among Black and Hispanic adolescents compared to White adolescents (Corey et al., 2014). Results from the YRBSS showed that although boys continue to report higher use rates than girls, among girls who smoke cigarillos, Black adolescent girls had higher rates, with 8.5% surveyed admitting to smoking cigars/cigarillos compared to 6.5% of Hispanic and 6% of White adolescents girls (Kann et al., 2016). Compared to cigarettes, cigarillo use is rising and impacting adolescents.

Marijuana

Marijuana is the most commonly used illicit drug in the country (National Institute on Drug Abuse, 2018). Marijuana use aligns with several negative consequences such as memory loss, brain impairment, reduction in cognitive functioning, and increased risk of cardiovascular disease (Hadland & Harris, 2014; Winward, Hanson, Tapert, & Brown, 2014). The prevalence of having ever used marijuana was higher among Black high school-aged students nationwide than their White and Latino counterparts (Kann et al., 2016). Results from the YRBSS showed that the prevalence of having ever used marijuana was higher among Black (45.5%) and Hispanic (45.6%) than White adolescent (35.2%) students (Kann et al., 2016). Among female adolescents, Hispanic girls reported higher rates of ever using marijuana (45.3%) compared to Black (40.5%) and White female students (34.3%; Kann et al., 2016). The high rates of marijuana use among youth may be explained by their perceived risk of harm from the drug. Due to the recent liberalization of marijuana policies around the nation, youth are beginning to have a lowered perceived risk from using the drug (Volkow, Baler, Compton, & Weiss, 2014). Drug abuse research consistently has revealed that individuals who have a lowered perceived risk of marijuana are more likely to use marijuana than their peers who perceive marijuana as riskier (Johnston et al., 2018). In regard to the gender and racial disparity in marijuana outcomes, low-income African American girls face a "gender paradox" where although they are less likely to use substances like marijuana than boys and other ethnic-minority girls, they tend to face more negative health consequences from use (Wilson & Widom, 2009). For example, cigarette and marijuana smoke contain carcinogens that can have significantly worse reproductive consequences (e.g., infertility and infant mortality; Mathews & MacDorman, 2006; Nasim, Corona, Belgrave, Utsey, & Fallah, 2007; Sanchez et al., 2017) for African American girls than

those from other ethnic groups (i.e., Asian, Latina, and Caucasian girls). Thus, addressing drug use prevention among minority girls, should be a more aggressive approach in order to reduce gender-based health disparities that can negatively impact this group.

The high rates of drug use among Black and Hispanic female adolescents is concerning. Discrimination, sexism, acculturation, stress, family and peer influences, access to illicit substance in neighborhoods, and lack of sexual negotiation strategies can explain rising trends for both groups (Clark, Belgrave, & Abell, 2012; M. L. Collins et al., 2015; Gentry et al., 2005; Nasim, Belgrave, Jagers, Wilson, & Owens, 2007; Schinke, Di Noia, Schwinn, & Cole, 2006; Wahl & Eitle, 2010). Without prevention programming to teach adolescent girls of color strategies on how to refuse such drugs, as they are more likely to be offered or have access to drugs than their White counterparts, their rates of usage may continue to rise and continue to have adverse effects. Despite the large number of Black and Hispanic girls who are not using substances in adolescence, for girls of color who do engage in drug use, outcomes are more harmful than those of their White counterparts. Given such a disparity, it is appropriate to begin investigating different drug use prevention strategies for urban adolescent girls of color.

Sexual Risk Behavior

Sexual risk behavior during adolescence is defined in literature as early age of sexual initiation (i.e., vaginal intercourse before age 15 years; Dittus et al., 2015), lack of contraceptive use (e.g., condoms or birth control), and greater numbers of sexual partners (Pfilieger et al., 2015). STI diagnoses has been declared an epidemic in the United States. Among adolescents and young adults, STI diagnoses are on the rise with chlamydia and gonorrhea being reported as the most commonly contracted STIs (Pflieger, Cook, Niccolai, & Connell, 2013). According to the CDC (2017), close to 25% of adolescent and young adult girls and women are diagnosed

with an STI each year, and nearly half of newly reported cases are found in Black girls and women aged 15 to 24 years. The disparity in STI diagnoses greatly impacts Black girls as they are 8.7 times more likely to contract chlamydia and 20.5 times more likely to contract gonorrhea than are White girls (CDC, 2016). The rates of STI diagnoses among Hispanic girls is also rising, with Hispanic adolescent girls being twice as likely to acquire chlamydia and gonorrhea compared to White teen girls (Pflieger, Cook, Niccolai, & Connell, 2013). According to the YRBSS (2015), only 52% of female adolescents surveyed in the YRBSS who were sexually active admitted to having used a condom during last sexual intercourse; 46.7% of girls were Black and 48.3% Hispanic girls (Kann et al., 2016).

Due to their unique social position—belonging to marginalized and historically oppressed groups—risk factors in engaging in unhealthy sexual practices for Black and Hispanic girls can be similar. However, significant differences emerged in types of risky behavior by various racial and ethnic groups. In the next section, the discussion of the potential impact that historical occurrences and sociocultural values and norms may have on the engagement of risky behaviors among Hispanic and Black female adolescents is incorporated. In addition, this section uncovers crucial differences in sexual behavior between the two groups.

Hispanic Female Adolescents and Sexual Risk Behavior

High-risk sexual behavior among Latina girls has consistently demonstrated that Latina/Hispanic girls have fewer sexual partners, are more likely to be in a monogamous relationship, and engage in sexual intercourse at later ages than Black and White girls. However, they are still disproportionately diagnosed with high rates of STIs (Pflieger et al., 2014; Upchurch et al., 1998). In addition, Latina adolescents in the United States are 2.8 times more likely to have an early pregnancy between the ages of 15-19 years old than non-Latina White

adolescent females (Deardorff, Tschann, Flores, & Ozer, 2010; Rocca, Doherty, Padian, Hubbard, & Minnis, 2010). Other studies have noted that one in two Latina adolescents will become pregnant at least once before turning age 20, compared to one in five White female adolescents (Martin et al. 2008; Romo et al., 2010). The factor contributing to this phenomena lies with the lack of condom use among this group, as they are less likely to use contraceptives once they begin having sex, although they have sex at later ages than their counterparts (Brady, Tschann, Ellen, & Flores, 2009).

Gender roles embedded in Hispanic/Latino culture can also contribute to sexual health disparities among this group. Cultural gender norms such as *marianismo* (i.e., submissive females) and *machismo* (i.e., men in a position of authority) can influence sexual values and affect sexual behavior among Latino adults (Alvarez et al., 2009; Faulkner, 2003; Galanti, 2003). These norms suggest various assumptions. First, Hispanic/Latina women are expected to maintain their virginity until marriage, be submissive to their male partners, and satisfy their male partner's needs (Galanti, 2003). Latino/Hispanic men are assumed to have little control over their sexual impulses, thereby making it socially acceptable for men to demand sex at their leisure and have multiple sexual partners (Deardoff et al., 2011). Third, Hispanic/Latino men are often seen as the dominant partner in their relationships; therefore, they are expected to be in control and make rules that benefit their sexual needs in their heterosexual relationships (Deardoff et al., 2011; Galanti, 2003). Last, due to norms that place men in dominant positions, women are expected to abide by their partner's wishes, even if it means placing their own health at risk (Deardoff et al., 2011; Faulkner, 2003).

All these norms and values can directly impact and influence adolescent behaviors. For instance, placing virginity as a core value can have protective effects for young girls as it may

delay sexual intercourse (Faulkner, 2003). However, once a young girl engages in sexual intercourse, she may fail to use condoms due to lack of knowledge of safe sexual practices or an inability to offer safe alternatives to her male partner. Youth and young adults who believe that having sex before marriage is unacceptable are less likely to use contraceptives when they engage in sexual intercourse before marriage (Brückner & Bearman, 2005; Villarruel, 1998). In regard to Hispanic males, if a young man accepts the belief that he has low impulse control over his sexual needs and priority over his sexual satisfaction, he may refuse to use condoms. Sexual communication may also reflect cultural values. Among adult Latinas, acculturation positively relates to sexual communication with partners, which positively aligns with condom use; because Latina women are expected to be naive, sexual communication between men and women often can be limited (Deardorrf et al., 2011).

Overall, adolescent girls, regardless of race/ethnicity, report lower initiation of condom use than boys and often have less decision-making power regarding the use of condoms, increasing their risk for STI exposure. This is present and explained in theories such as the theory of gender and power (Connell, 1987), which examines the power differentials between men and women in society that places women and adolescents from vulnerable backgrounds especially at risk. Within Hispanic culture, there remains such a power differential in condom use whereby Hispanic boys/men may be less likely to use condoms and girls/women are expected to defer to their partner's decisions about contraception use (Deardorff, Tschann, & Flores, 2008).

African American/Black Female Adolescents and Sexual Risk Behavior

High risk sexual behavior is the leading cause of morbidity and mortality among African American female adolescents (CDC, 2014). Although teenage pregnancy rates have diminished

in the past decade, African American female adolescents still have higher rates of teenage pregnancy than other ethnic-minority female adolescents and White female adolescents (Raiford et al., 2013). In addition, African American female adolescents between the ages of 14 and 19 years old are more likely to have an early sexual debut, defined as having sex at or before the age of 14, have sex without a condom, have multiple sexual partners, and be sexually abused, all of which are risk factors for contracting HIV and STIs (Baumgartner et al., 2009; Collins et al., 2015).

It is important for prevention researchers to acknowledge the unique risk in HIV/AIDS diagnoses among African American/Black female adolescents and women. Their exposure is unique primarily due to their shared experience of belonging to multiple marginalized groups, increasing their vulnerability to contract HIV (e.g., race, gender, and class; Crenshaw, 1989). African American female adolescents often face double or even triple jeopardy due to their social locations, which affects the way they are viewed and treated. The shared historical and sociocultural factors of African American girls and women can contribute to the development of African American female adolescents (Stephens & Phillips, 2003). Such contextual factors influence sexual identity and increase the likelihood of Black girls to engage in risky behaviors (Collins et al., 2015). African American female adolescents are often oversexualized in society and viewed as promiscuous, which becomes normalized in media and society and thereby shapes their identity and behavior (Aronowitz, Rennells, & Todd, 2006; Collins, 2015). Such views place African American female adolescents in vulnerable positions, as they often lack the ability to negate such imagery and navigate through multiple systems of oppression and marginalization as a group (Kapungu et al., 2010).

   As a group, African American female adolescents are not only more likely to contract HIV than other adolescent girls but are more likely to be diagnosed with other STDs as well (e.g., gonorrhea and chlamydia; Collins et al., 2015). Among African American female adolescents who are sexually active, 44% were diagnosed with at least one STD (Raiford et al., 2013). African American female adolescents are 15 times more likely to contract gonorrhea than Caucasian female adolescents and six times more likely to contract chlamydia than Caucasian female adolescents (Collins et al., 2015).

   African American adolescents often learn about sexual behaviors from peers, their community, and their families (Aronowitz et al., 2006). Because they tend to live in under resourced neighborhoods and are more likely to obtain sexual partners from their direct environment (Floyd & Brown, 2013; Opara, 2018). Such environments lack resources necessary to combat the spread of STIs and HIV including lack of sexual education, access to health care, and engrained community values (Aral, 2006; Collins et al., 2015), which leaves African American girls at a heightened disadvantage and at greater risk of contracting HIV (Collins, Baiardi, Tate, & Rouen, 2015). By virtue of where African American/Black girls primarily reside, their risk of contracting HIV increases due to their social networks and environmental factors (Adimora & Schoenbach, 2005; Floyd & Brown, 2013; Respress et al., 2018). One study using data from the National Longitudinal Study of Adolescents to Adult Health data found that, when compared to Hispanics and Whites, Black adolescent girls engaged in oral and anal sex less often than their counterparts, yet rates for STI diagnoses were five times higher than those for Whites and three times greater than those for Hispanics (Pflieger et al., 2013). This finding appeared to be driven most by risky partner characteristics. Thus, Black female adolescents who have sex with men in their immediate environments are less likely to negotiate condom use with

their partners or negotiate strategies to refuse sex and are more likely to have sex with men who are living with an STI or HIV (Townsend, 2013). These findings contribute to the phenomena that suggests that although Black girls may engage in risky behaviors at a lower rate, due to their restrictive environments, the pool of partners is more likely to have an STI, contributing to high rates of STI and HIV among Black girls and women.

HIV/AIDS

Overall, 1.2 million people live with HIV/AIDS in the United States (CDC, 2014). Almost 80% of women living with HIV/AIDS in the United States are either African American/Black or Hispanic/Latina and the likelihood of contracting HIV/AIDS increases once an individual is diagnosed with an STI (CDC, 2017). Unprotected heterosexual intercourse is cited as the most common mode of HIV transmission among girls and women, with 87% reporting heterosexual sex as their exposure to the virus (CDC, 2017). Currently, adolescents in the United States represent 22% of all newly diagnosed HIV cases (Neilan et al., 2018). Among adolescents living with HIV/AIDS, African American and Hispanic adolescents represent more than 70% of all cases (CDC, 2013). African Americans are disproportionately impacted by the virus, representing 12% of the population but almost half of all HIV/AIDS cases (CDC, 2017). The HIV rate for Black women is 16 times higher than for White women and five times higher than for Hispanic women (CDC, 2017). Similarly, Latinos represent 21% of new HIV infections in the United States, with the rate of new HIV infections among Latinas being four times greater than among White girls and women (Davidson et al., 2014). African American/Black women represent 61% of women living with HIV/AIDS in the United States. CDC (2014b) predicts that one of 48 Black women will be diagnosed with HIV in their lifetime.

The HIV/AIDS epidemic has greatly impacted African American and Latino communities, especially women, as the disparity continues to widen. HIV/AIDS is the fifth leading cause of death in African American women age 25 to 34, and among adults who have contracted HIV, many engaged in sexually risky behaviors as adolescents (CDC, 2014b). Often, adults living with HIV may have contracted the virus during their adolescent years and were unaware of their status until symptoms began to manifest in the chronic stage of HIV (El-Bassel, Caldeiram, Ruglass, & Gilbert, 2009). Heterosexual sex was the route of acquisition for 88% of HIV/AIDS cases among all girls aged 13 to 19 years, and 87% among women aged 20 to 24 years (CDC, 2008). Due to the stigma of discussing HIV/AIDS in Black and Latino communities, many are unaware of their status, thereby spreading the virus to others (Galvan, David, Banks, & Bing, 2008). Thus, it is important for HIV/AIDS prevention initiatives to target adolescents of color to alleviate risk.

Relationship Between Drug Use and Sexual Risk Behavior

The literature clearly outlines the relationship between drug/substance use and sexual risk behavior among girls and the associated increase in risk for HIV from these behaviors (Anderson & Mueller, 2008; Rodger, Nichols, & Botvin, 2011). Compared to their nonminority counterparts, Black and Hispanic adolescent girls are also more likely to drink alcohol or use drugs before having sexual intercourse, leaving them at heightened risk of sexual assault, rape, and exposure to STDs (Jackson, Seth, DiClemente, & Lin, 2015). According to the YRBSS, among New Jersey high school-aged adolescent girls who were sexually active, 50% reported not using a condom the last time they had sex (Kann et al., 2016). About 16.4% of adolescent girls reported using drugs or alcohol the last time they had sex. Using drugs and alcohol is a key

risk factor and a significant mediator of sexual risk behavior due to the drug's ability to lower inhibitions and leave an individual unaware of their immediate surroundings.

Alcohol has been cited as the most used substance associated with risky sexual behavior, followed by marijuana (Andrade, Carroll, & Petry, 2013; Weinhardt & Carey, 2000). Due to the nature of alcohol, its ability to impair judgment and lower inhibitions, adolescents are often unable to make safe decisions while intoxicated, leaving them at risk of not using a condom. Acute and higher levels intoxication can impair an individual's ability to recognize sexual assault risk, increase an individual's ability to commit a sexual assault act, and increases willingness to engage in risk-enhancing behaviors (Jackson et al., 2015). In addition, because young people typically consume alcohol in social settings, such as parties and bars, where others are drinking such settings poses risks for sexual victimization independent of alcohol consumption (Testa & Livingston, 2009; Pflieger et al., 2013).

Due to the racist, sexist, and classist views that impact vulnerable groups in the United States, such as girls of color, they continue to be at a significant disadvantage of achieving positive health outcomes compared to their White female counterparts (Collins et al., 2015; Opara, 2018). Multiple contextual and individual interpersonal factors can increase substance use and sexual risk behavior during adolescence such as peer and familial substance use (Clark et al., 2012; Peterson, Buser, & Westburg, 2010), neighborhood disorganization (Peterson & Reid, 2003), alcohol-outlet density (Chen, Grube, & Gruenewald, 2010), gender-based violence/victimization (Alleyne-Green, Coleman-Cowger, & Henry, 2012), and mental illness (Brown et al., 2010). These risk factors can disproportionately affect African American and Hispanic girls, thereby impacting future income level (Sipsma, Ickovics, Lin, & Kershaw, 2015), educational outcomes (Basch, 2011), poor mental health (Woods-Jaeger, Jaeger, Donenberg, &

Wilson, 2013), unintended pregnancy, sexually transmitted infections/HIV/AIDS (Helfrich &

McWey, 2014; Stueve & O'Donnell, 2005), and physical health (Elkington, Bauermeister, &

Zimmerman, 2011; Mustanski et al., 2013). As a result of the phenomena presented, federal

funding for drug and alcohol, HIV/AIDS, and sexual risk prevention programs has increased

among urban youth and their communities. However, prevention continues to yield less than

favorable results, particularly for girls and women of color. This may be due to using narrow

ecologically based theories without considering historical and sociocultural factors, in addition to

deficit-model programming and lack of gender-specific models (Gentry et al., 2005).

Emerging evidence shows the role of protective factors that can aid in reducing risky

behaviors among female adolescents. Social support—a three-dimensional construct that

includes family, peers, and school support—is extremely beneficial in improving the likelihood

of positive developmental outcomes in adolescent girls of color. In a cultural context, the concept

of *family* is a crucial part of Black and Hispanics families. The contribution of positive family

support is invaluable in the lives of Hispanic teens (Garcia-Reid, Lardier, Reid, & Opara, 2018;

Guilamo-Ramos et al., 2009) and Black teens (Collins & DeRigne, 2017; Hutchinson &

Cederbaum, 2011; Hutchinson et al., 2012). Because adolescent girls tend to appreciate and

respond to supportive networks to their ability to form close-knit friendships due to societal and

gender norms and expectations placed on girls at an early age, social support is a key factor in

their positive development (Garcia-Reid, Lardier, Reid, & Opara, 2018). When compared to

adolescent boys of color who may adapt to masculine roles that prohibit them from forming

intimate bonds with their peers, supportive networks appear to work favorably for girls (Rose &

Rudolph, 2006; Way, 2012).

Furthermore, limited research has focused on how ethnic identity (e.g., cultural/racial pride) may impact sexual risk and drug abuse intervention strategies among girls of color (Corneille & Belgrave, 2007; Sanchez et al., 2018). Few studies have examined ethnic identity as a protective factor; those few have provided promising results in reducing drug use and sexual risk behaviors among adolescents of color (Belgrave, Brome, & Hampton, 2000; Lardier, Garcia-Reid, & Reid, 2018; Sanchez et al., 2018). In consideration of the limited research on such unique protective factors on adolescent girls of color, a need persists to understand the processes and outcomes of drug use and sexual risk behaviors among girls of color from racially and ethnically minoritized backgrounds in urban communities; particularly, those processes that focus on strengths and move away from deficits (Christens & Peterson, 2012).

This dissertation attempts to fill the gap in prevention research and change the deficit narrative on Black and Hispanic adolescent girls in substance abuse and sexual health research. Furthermore, this study aims to highlight the strengths of urban female adolescents of color and their families by identifying protective factors that can aid in buffering the effects of living in an urban impoverished environment. The gender and racial based stereotypes that plague Black and Hispanic adolescent girls can create a unique lived experience and perspective for this group. By highlighting resiliency and discussing protective factors for adolescent girls of color, this study will focus on a strengths-based approach to present adolescents and families of color in a positive light and inform future prevention efforts.

Using empowerment theory and intersectionality as the theoretical framework, this dissertation study will explore protective factors that support Black and Hispanic adolescent girls' abstinence in engaging in risky behaviors, particularly sexual risk behaviors, with drug use as a mediator. This study will (a) examine the overall impact and benefits of psychological

empowerment (PE) on sexual risk behaviors with drug use as a mediator among a sample of Black and Hispanic female adolescents from an urban community in New Jersey; (b) examine the relationship between protective factors such as social support, ethnic identity, and sexual risk behavior with drug use as a mediator; (c) assess the mediating influence of PE among ethnic identity, social support, and sexual risk behavior, with drug use as a second mediator. (d) Last, the relationship between protective factors and sexual risk behaviors, with drug use as a mediator, will be tested for Hispanic and Black adolescent girls separately, to account for differences between groups.

Chapter 2: Literature Review and Theoretical Framework

Research on drug and substance abuse, STI, and HIV prevention has historically used risk and resiliency models (Hawkins, Catalano, & Miller, 1992), social learning theory (Bandura, 1977), the theory of planned behavior (Ajzen, 1991), and health belief models (Rosenstock, 1974) to guide interventions. However, the deficit focus on minority health and lack of gender and racial/ethnic approaches has resulted in slowly improving rates of positive health outcomes among adolescent girls of color. Interventions that do incorporate these approaches, such as Sisters Informing Sisters about Topics on AIDS (e.g., Wingood & DiClemente, 1995), an HIV/AIDS prevention intervention, use feminist or empowerment theoretical frameworks and have yielded significant results in reduction of risky behaviors. Purveyors of prevention interventions aimed at youth overall have begun to understand the importance of using strengths-based approaches in prevention programming. Empowerment researchers have focused on studying individual and contextual factors to promote and to prevent drug use and sexual risk behaviors among adolescents, unlike previous work that focused heavily on the removal of individual-level risk factors. The next section will present the theoretical framework of this study by introducing and defining empowerment theory and intersectionality theory. In addition, this chapter includes a thorough review of the literature involving empowerment-based approaches, risk factors commonly discussed in the context of girls, and protective factors that have been examined by researchers.

Empowerment Theory

Grounded in public health, empowerment theory focuses on engaging community members to improve health outcomes in disadvantaged communities (Beeker, Guenther-Grey, & Raj, 1998) and has been a major theory used in multiple areas including community-based health

education (Hughey, Peterson, Lowe, & Oprescu, 2007), community interventions (Speer, Jackson, & Peterson, 2001), substance-abuse prevention (Peterson, Peterson, Agre, Christens, & Morton, 2011; Peterson & Reid, 2003), community psychology (Rappaport, 1987), HIV/AIDS prevention (Reid, Yu, & Garcia Reid, 2014; Zimmerman, 1995), and education (Freire, 1968). Empowerment has been affirmed as a conceptual framework, a guide for research methodology, and practice (Christens, Peterson, & Speer, 2011). Empowerment is a process by which individuals gain mastery and gain a critical awareness of their environment (Zimmerman, 1995). In empowerment, having a critical awareness renders an ability to identify and access resources needed to achieve desired goals (Keiffer, 1984). To understand empowerment, examining empowerment processes and outcomes is essential in context (Swift & Levine, 1987): Empowerment processes and outcomes vary in their observed form because no single standard or measure can fully capture their meaning for all people in all contexts (Rappaport, 1987; Zimmerman, 1995). Definitions, conceptualizations, and actions associated with empowerment differ by population context.

Psychological Empowerment

PE is the individual level of analysis of empowerment which represents one's beliefs about their ability to apply control and a critical understanding of their sociopolitical environment (Zimmerman, 1990). PE has been defined as a construct which includes: *intrapersonal, interactional, and behavioral* components (Zimmerman, 1990; 2000). The intrapersonal component includes personality, cognitive, and motivational aspects of perceived control. Intrapersonal refers to how people think and feel about their ability to influence social and political systems that can enact positive social change. This component is also referenced as the *emotional* component and has received the greatest attention in extant research on PE.

Interactional refers to transactions between people and environments that enables one to successfully master social or political systems and describes how people use problem skills to influence their environments through participation in community organizations and activities. More recently, Christens (2012) theorized a fourth dimension, a *relational component*, which refers to the various person-centered relationships that can facilitate empowerment processes and outcomes, through which individuals become advocates in mobilization, and gain understanding about whether people interactions or mentor–mentee relationships can sustain empowerment-based hobbies or activities.

Sociopolitical control. Sociopolitical control (SPC) has been speculated as the key indicator of the intrapersonal component of PE (Peterson et al., 2006; Zimmerman, 1995, 2000). PE includes beliefs about one's capability to exert control and gain a critical understanding of their sociopolitical environment. Understanding one's sociopolitical environment references to the ability to understand and perceive one's social and political situation (Zimmerman, 1995, 2000). Zimmerman (1995) argued that measuring SPC as an intrapersonal component may be an indicator for PE overall in a specific context and PE has been identified as a primary goal and outcome of empowering processes. Due to this notion, a majority of empowerment researchers have focused on the interpersonal component of PE. Therefore, to be consistent with empowerment literature and previous research, PE will be operationalized as interpersonal component/empowerment for this study. Drawing from other established scales, Zimmerman and Zahniser (1991) developed an integrative measure, the Sociopolitical Control Scale (SPCS), originally a 17-item scale, which has been validated as unidimensional (Holden, et al, 2004; Holden et al., 2005) and multidimensional (Christens et al., 2016; Lardier, Garcia-Reid, & Reid, 2018; Peterson et al., 2011; Peterson, Speer, & Hughey, 2006; Smith & Propst, 2001). Two

factors have been identified in the SPCS: leadership competence and policy control (Zimmerman & Zahniser, 1991). *Leadership competence* considers how people perceive their ability to be leaders or organize a group of people (Cheryomukhin & Peterson, 2014). Policy control involves an individual's ability to perceive themselves as successfully influencing policy decisions in their community (Cheryomukhin & Peterson, 2014). Peterson et al. (2006) found that the original two-factor model of the original SPCS was a poor fit to data because of the mixed use of positively and negatively worded items used in the original instruments. The SPCS-Revised (Peterson et al., 2006) included new items that replaced negatively worded items and was then found to support the hypothesized two-factor model of sociopolitical control that was comprised of leadership competence and policy control.

Beyond SPCS, Peterson et al. (2011) then developed the SPCS for youth (SPCS-Y) by creating new items and incorporating items from existing instruments that measure SPC (e.g. SPCS, the SPCS-Revised). Peterson et al. (2011) validated the factor validity and structure of the SPCS for youth (SPCS-Y) and showed that this measure also encompassed two underlying dimensions (e.g. leadership competence and policy control), similar to the SPCS tested among adults. The SPCS-Y scale has been validated and used among youth populations in the United States (Christens, Krauss, & Zeldin, 2016; Lardier Jr., Garcia-Reid, & Reid, 2018; Peterson et al., 2011; Peterson, Powell, Peterson, & Reid, 2017) and international populations including Italian adolescents, (Vieno, Lenzi, Canale, & Santinello, 2014), Portuguese youth (Rodrigues, Menezes, & Ferreira, 2017), Malaysian adolescents (Cheryomukhin & Peterson, 2014), and adolescents in China (Wang, Chen, & Chen, 2011). Christens et al. (2016) validated an eight-item abbreviated version of SPCS-Y among Malaysian adolescents and found support for the multidimensionality of the abbreviated measure. Elsewhere, Peterson et al. (2017) validated the

abbreviated SPCS-Y and included a phrase completion designed to provide more robust results using a Likert-type approach. The study found that the hypothesized eight-item abbreviated version of SPCS-Y had a better fit to the data than the original 17-item measure and scores from the phrase completion format revealed stronger factor loadings between latent variables (Peterson et al., 2017). Most recently, Lardier Jr., Garcia-Reid, and Reid (2018) found support for the factor structure of the abbreviated eight item scale, when compared to the original 17-item version among urban youth of color. Although there have been substantial contributions based on the continued validations of SPCS-Y in literature, it is important to continue to use the SPCS-Y among various populations of young people especially among diverse groups. Since empowerment is a context specific theory, the validation of the SPCS-Y on multiple populations has been encouraged in order to ensure the measurement is accurate and conveys empowerment outcomes (Christens & Peterson, 2012b). More recently, empowerment researchers have further validated the scale to be abbreviated and adaptable for multiple cultures (Vieno, Lenzi, Canale, & Santinello, 2014) and youth (Lardier, Garcia-Reid, & Reid, 2018; Peterson et al., 2011).

No study, to the authors knowledge, has validated the measure with the population of ethnic minority girls in the United States exclusively. Although empowerment researchers have validated the measure, combining the genders (both adolescent males and females), no study has focused solely on Black and Hispanic girls. This gap in the literature is due to the lack of gender-focused measures and approaches to community prevention work using empowerment theory. Experiences of ethnic minority girls, who have been historically oppressed and marginalized, are unique and should not be entwined with those of ethnic minority boys. Minority girls' empowerment processes and outcomes will be unique and different from those of adolescent

boys, even in the same environmental context, due to racial and gender specific norms and expectations that are placed on young women.

To examine the relationship of empowerment processes and health behaviors among Black and Hispanic female adolescents, this study will incorporate intersectionality as a framework. Intersectionality theory has no core elements or variables to be operationalized and empirically tested (Bowleg, 2012). Due to its inability to have operational constructs, I will use the term *theoretical framework* to describe the use of intersectionality in this study. As a framework, intersectionality provides an additional conceptual understanding, beyond what empowerment theory can offer, to more fully describe and attempt to understand the struggles of Black and Hispanic girls and the processes that (presumably) their families engage in that have a direct impact on girls' outcomes and behaviors. Intersectionality can undergird critical analysis of social locations, context, identity, and historical time while examining marginalization and promoting empowerment for girls and other groups (Allen, 1996; Collins, 1991).

Intersectionality Theory

The concept of intersectionality allows for the examination of multiple dimensions of identities and various social locations, highlighting the manner in which they intersect (Crenshaw, 1991). For the proposed study, I conceptualize intersectionality as a framework that guides methodological considerations and data interpretation rather than a theory (Few-Demo, 2014). To accurately discuss the experiences of adolescent girls of color, it would be a disservice to fail to incorporate a theory that specifically acknowledges the social locations that have placed girls of color at risk. Intersectionality (Crenshaw, 1991) describes how multiple forms of oppression can affect individuals, couples, and families, and lead to barriers to forming healthy relationships and producing negative outcomes (Brooks, Bowleg & Quina, 2009). Researchers

often view salient contextual variables such as race, ethnicity, gender, sexual orientation, socioeconomic status/class, education level, and ability as separate sociocultural demographic variables that rarely influence one another. Yet, intersectionality theorists contend that contextual variables intersect and influence one another, resulting in specific outcomes (Crenshaw, 1991). Although intersectionality has been conceptualized in various ways, researchers suggested an individual's multiple identities interact and intersect to shape personal experiences (Crenshaw, 1991), and at times form "intersecting oppressions … that work together to produce injustice" (Collins, 2000, p. 18). It is important to consider intersectionality in this study, because it aided in the selection of variables such as race, ethnicity, gender, and socioeconomic status/class.

The experiences of young girls of color are often combined with those of boys of color. Even more worrisome is that the lives of these girls are overshadowed and tangled with the lives of their nonminority female counterparts. Their intersections and lives are often deliberately ignored in research. It is critical, then, that the tensions they witness, oppression they experience, and structural contexts that continue to marginalize them be made visible, to gain a clearer understanding of the circumstances that put them at risk and protect them. In spite of recent acknowledgements in family-science literature that highlight the influence of gender in intrapersonal and interpersonal interactions (e.g., micro processes), a gap persists in conducting intersectional analyses regarding how girls (and women) and their families navigate changing systemic sociopolitical and economic obstacles and barriers (Few-Demo, 2014). Consequently, the ways girls and their families respond to historical social injustices remain pathologized instead of being viewed as examples of resourceful beings or highlighting their ability to be resilient (Few-Demo, 2014).

Through an examination of the interactions between social identity and social institutions, intersectionality theory highlights the role of how power and privilege are negotiated at the individual, community, and structural levels. Intersectionality provides the framework to further examine and understand the role of multiple identities and categories, in addition to the interactions of individuals and groups on which public policies, practices, and social institutions have a direct impact (Crenshaw, 1991). In theory, intersectionality is multiplicative in nature as it considers the intersections of multiple identities, categories, and social interactions (Greenwood, 2008).

In the context of adolescent girls of color, as their identities develop from interactions in their social environment, they are also are exposed to the idea of power and privilege and how these are created, maintained, and negotiated in society. Such experiences impact people's identities and perceptions. Intersectionality underscores the need to consider the experience of differences, inequalities, and marginalization. Individuals and groups, situated in specific contexts, negotiate systems of power through the experiences of privilege and oppression. This negotiation accompanies an understanding that conflict may exist among identities, relationships, and social structures. Social changes and individual changes through the life course contribute to fluidity and complexity, thereby leading to outcomes that may or may not be favorable. Using intersectionality as a theoretical framework can guide family scholars in understanding how the concept of disadvantage can exist in multiple identities or social categories (Crenshaw, 1991).

To better understand the theoretical development of intersectionality and how it will be applied in this study, it is critical to first examine the theories that informed intersectionality. This section begins with an overview of feminism as applied to the study of the family, specifically in critically examining gender relations between men and women. I then move on to

the work of Black feminism, as this theory analyzes power in racial and ethnic individuals and groups, specifically Black girls and women. Next, feminist and critical race theories that incorporate the experiences of minority women is discussed.

Feminist Theory

Feminist theorists have explored theoretical frameworks commonly used in the field of family science and highlight that such frameworks often ignore or distort women's experiences in families (Acker, 1973; Bengtson, Acock, Allen, Dilworth-Anderson, & Klein, 2004). Feminist theorists have discussed two main points: mainstream theoretical approaches either ignore or put forth incomplete analysis on power dynamics, and family science often negates the role of sociocultural and historical contexts in regard to specific outcomes (Bengtson et al., 2004; Opara, 2018). Feminist theory consists of the following elements and constructs: (a) emphasizing women and girls and their gender-based experiences; (b) recognizing that under existing social conditions, women and girls are marginalized or oppressed; and (c) ending unjust subordination (Davidson, Gordon, Kramer, Huck, & Heim, 1979). Turner and Maschi (2015) posit that similar to the concept of empowerment, feminist theoretical analysis helps women and girls understand how they are oppressed and marginalized through a critical awareness of power structures, to inspire women and girls to engage in efforts that challenge sociopolitical environments (Collins, 1991). Feminist theory implores a social-justice focus with the goal of information, empowerment, and change in society. Multiple waves of feminism and different types of feminist theories contributed to a theory that continues to answer to critiques to better focus on empowerment and social justice (Allen, 2016; Few-Demo, Lloyd, & Allen, 2014).

The history of feminist theory has had many evolutions that can be complex to understand and explain, as various perspectives describe the origin of feminist theory, including

the acknowledgement of which group of women were deserving of equal rights. Feminist thought began with the premise that women's experiences should be valued and recognized (Bengtson et al., 2004; Collins, 1991). Three forms of feminism emerged over multiple generations: liberal feminism, radical feminism, and socialist feminism. Liberal feminism, which originated in the 17th century, argued that women and men are endowed with the same rational and spiritual capacities and therefore, should be treated as equal beings (Wollstonecraft, 1975). Later, the first wave of feminism, as a political movement, emerged in the late 19th century and was primarily a white middle-class movement concerned with women's right to vote (Kemp & Brandwein, 2010). The second wave of feminism involved the emergence of radical and socialist feminism, which occurred between the 1950s and 1970s; feminists such as Betty Friedan (1963) publicly expressed outrage about the lack of attention to women's rights and issues. Second-wave feminists began to look at the patriarchal structure of society and saw domination and subordination in gender and emphasized that everyone has the right to be free from discrimination and oppression (Reichert, 2006). Socialist feminism, which draws on a Marxist theoretical framework, stresses power relations from the view of the oppressed (Hartmann, 1971; Mitchell, 1971). Socialist feminism emphasized the internal contradictory nature of social structures and the need for historical analyses. This era led to the development of Black feminism, as Black women felt their issues were being ignored and disregarded by White feminists during the feminist movements (Collins, 1991; Combahee River Collective, 1979; Davis, 1981; hooks, 1984). The adversities that plagued White women were very different from what marginalized Black women experienced and were not being rightfully acknowledged in the feminist movement (hooks, 1984). Feminists who were Black faced the addition of racism and discrimination, often perpetuated by White feminists who were unwilling to view Black women

as worthy of being part of the feminist movement (Davis, 1981; hooks, 1984). Because of the

lack of acknowledgment of the lived experiences of Black women, who felt they could not

separate themselves from the discrimination they faced from being both Black and a woman,

Black feminism was born (Collins, 1991; Combahee River Collective, 1979; Crenshaw, 1991;

Davis, 1981; hooks, 1984).

Black Feminism

Black feminism (Collins, 2000; Davis, 1981; hooks, 1984) emerged from the need to

acknowledge and examine intersecting identities that include race, class, and gender, as a way to

validate the lived experiences of Black women that could not fit into a single categorical axis

(Crenshaw, 1989; Opara, 2018). An aim of Black feminist theory was to increase consciousness,

empowerment, and social justice for Black women (Collins, 2000). Black-feminist theory

challenges hegemonic notions of Western patriarchy by highlighting the exploitation and

oppression that African American women and their families have experienced (Collins, 2000).

This theoretical framework provides the space for the examination of power, privilege, and

oppression in society. This power analysis is evident in the work of Collins (1991) in theorizing

about the labor of Black women and mothers. Collins (1991) conceptualized the term

Motherwork, which has three features: survival, empowerment, and identity. Black women reach

the goal of survival through the use of identity politics, defined as acknowledging the balance of

gender and race (Few, 2007). In this context, empowerment fostered by resilience can exist

individually and in the community. The term, "Motherwork" focuses on empowerment against

institutions that contribute to oppression and considers the ability to control choices to enable

empowerment (Collins, 1991). Identity politics in Black feminist theory, centers on providing

children and communities with the ability to face oppressions. Black feminist theory is an

analytical tool that provides the framework to analyze power structures in society. Such concepts overlap with PE theoretical constructs.

Critical Race Theory

Critical race theory (CRT) examines social inequalities from the view of the interaction of racial-minority groups and social institutions (Delgado, 2007; Few, 2007). This theory aims to aid in explaining social systems and groups, with the understanding that racism is institutionalized and sustained through social practices (Burton, Bonilla-Silva, Ray, Buckelew, & Freeman, 2010). Researchers examine the role of identities that are salient as a result of a social context when employing CRT (Few, 2007). The role of socialized systems in family processes, as well as social inequalities at the institutional level, provides the basis for a cultural standpoint of research (Few, 2007). Delgado (2000) asserts that "CRT acknowledges the position of race and ethnicity and recognizes that racial and ethnic minorities often experience subtle forms of racism or microaggressions in everyday life that frequently go unnoticed by others, primarily due to their race". A major component of CRT is that it validates the importance of people's lived experiences as a group due to classism, racism, and sexism; how their experiences shape the ways they view society; and how they see themselves in relation to others around them (Bernal, 2002).

Critical-Race Feminism

Similar to CRT, critical race feminism (CRF) also acknowledges that racism is a fundamental part of U.S. history and the current climate (Clonan-Roy, Jacobs, & Nakkulla, 2016); however, highlights the notion that girls and women of color hold powerful positions due to the ability to endure adversity and describe their own personal experiences of their own continued marginalized in society (Wing, 1997). CRF's conceptual roots, which include

borrowing from tenets of CRT and Black feminism, also arise from the idea that women and girls perceive themselves based on how society views them and how others are treated, bringing critical consciousness (Freire, 1968). Through this process, a reflective analysis and awareness arises of individual experiences to understand power dynamics that are present in structural relationships (Clonan-Roy, Jacobs, & Nakkula, 2016; Freire, 1968). Adolescent girls of color in the United States experience instances of "double jeopardy," and even "triple jeopardy," which refers to multiplicative instances of oppression due to their race, gender, and class, and other oppressive identities to which they may belong. Such a plight can prevent the development of a admirable sense of self, especially pertaining to their racial/ethnic identity. Resilience is a construct in CRF because it is unavoidable that adolescent girls of color will experience situations of adversity, racism, and sexism, and it is important for them to develop attitudes and exhibit behaviors that prevent them from internalizing these experiences (Clonan-Roy, Jacobs, & Nakkula, 2016).

Latina/o Critical-Race Theory

Latina/o critical race theory (LatCrit) is an extension of CRT that explores and identifies experiences that are unique to the Latinx and Hispanic community such as immigration status in the United States and other Western countries, language, ethnicity, and culture (Perez Huber, 2006; Solorano & Delgado, & Bernal, 2001). LatCrit highlights the intersection of nativism, xenophobia, and racism and acknowledges that Latinx will experience discriminatory acts due to their identities in Westernized cultures (Pérez Huber et. al., 2008). LatCrit is commonly used in education, where it allows for the examination of Latinx student's experiences in navigating U.S. educational systems (Bernal, 2002; Villalpando, 2004). LatCrit encourages scholars to focus on the experiences of Latinx through an examination and acknowledgement of the unique and

ethnic-specific forms of discrimination that Latinx in the United States encounter (Solorzano &

Delgado, & Bernal, 2001).

From the tenets and constructs of critical race and feminist theories arises

intersectionality theory. Intersectionality reflects complex interactions among historical,

institutional, legal, cultural, and ethnic factors and how those instances effect one's ability to be

sociopolitically aware (Opara, 2018). Ecklund (2012) suggested intersectionality should be

considered a framework for working with an individual and their families, as a young person

may have multiple identities and family members each represent the intersection of those

identities in the larger family system. Family members' intersecting identities in these social

constructs can contribute to the oppression and perceptions of girls of color in the United States

and impact the success of prevention programming (Clonan-Roy et al., 2016). The historical

context of U.S. society shapes a communal view of adolescent girls and women of color through

its values, encouraging risky behaviors in adolescent girls of color through the ongoing

marginalization of these girls and their families. Intersectionality, in combination with a

strengths-based theory such as empowerment theory, provides a framework to aid in

understanding how Black and Latinx families navigate their environments and identities that

are—through theoretical standpoints—expected to place them at risk for negative behaviors and

produce negative outcomes.

Intersectionality can be considered a standpoint theoretical framework such that

empowerment theory can be viewed as the overarching macro-theory that bridges the gap

between multiple systems that impact interactions, based on sociohistorical occurrences and self-

efficacy to challenge power structures (Demo, 2007; Opara, 2018). As a standpoint theoretical

framework, intersectionality offers a theoretical framework that sheds light on the reasons Black

and Hispanic adolescent girls are not only susceptible to engaging in risky behaviors, but more likely to have poorer health and developmental outcomes than White girls. As a standpoint, individuals learn to perceive the world and themselves from the perspective of their social group, including its history. Consequently, group characteristics, such as race and gender, shape group members' knowledge and actions (Collins, 1991).

For the proposed study, intersectionality will be used as a guiding framework to closely examine girls' outcomes, empowerment processes, identities, family processes, interactions in relationships, and social supports in the context of institutional oppressions that may occur in an urban geographical space. The use of intersectionality as a tool for analyses provides the discipline of family science with a critical interpretive framework for reframing how researchers conceptualize, investigate, analyze, and address disparities and social inequality in health that are influenced by and affect families (Bowleg, 2012; Few-Demo, 2014).

Risk Factors for Drug Use and Sexual Risk Behavior

Researchers have found that risk factors commonly affect adolescent girls of color due to their unique positions in belonging to multiple groups and identities that have been historically oppressed. Risk factors for sexual risk and drug use are similar. In fact, risk factors for drug use often precipitate the likelihood of engaging in sexual risk behaviors such as having sexual intercourse with multiple partners or not using condoms, thus having a strong mediating role (Peterson, Buser, & Westburg, 2010). Empirical studies have supported the relationship and coexistence of drug use and risky sexual behavior (e.g., Jackson, Seth, DiClemente, & Lin, 2015). Bachanas et al. (2002) reported that adolescents who used substances also were likely to have multiple sexual partners, be diagnosed with a sexually transmitted disease, and less likely to use condoms during sex. The relationship between risky sexual behaviors and drug use likely

relates to the mediating effect of drug use, which negatively impacts decision-making capacity (Peterson, Buser, & Westburg, 2010). However, risky sexual behavior and drug use may have a positive relationship because of similar environmental, structural (i.e., community resources, lack of health education, and neighborhood values and norms), and psychosocial factors. This interrelationship can also be an explanation of adolescent girls' inability to make positive decisions, due to lack of education on the consequences and self-efficacy in refusal skills. Thus, it may be beneficial to understand the risk factors that contribute to drug use among girls of color, as a way to prevent sexual risk behaviors among this group.

Neighborhood Context

Neighborhood context has a great influence on sexual risk behavior in adolescents and sexual health outcomes (Respress, Amutah-Onukagha, & Opara, 2018; Stevens, Gilliard-Matthews, Nilsen, Malven, & Dunaev, 2014). In underresourced urban communities, adolescents of color often lack quality health-care access, culturally sensitive physicians and health care staff, and lack health-education resources, all contributing to increased morbidity and mortality among this group (Gentry, Elifson, & Sterk, 2005; Haley et al., 2017; Respress et al., 2018). Research has indicated, that African American female adolescents tend to obtain their sexual partners from their immediate neighborhoods (Floyd & Brown, 2013; Respress et al., 2018). In these neighborhoods, female adolescents and their partners live in areas that inhibit the same structural barriers that contribute to negative sexual health outcomes in their communities (Floyd & Brown, 2013).

In urban, under resourced communities, neighborhood risk factors such as drug access and exposure, crime, violence, education, and income inequality link to risky sexual and drug-use behaviors (Floyd & Brown, 2013; Howe, Siegel, & Dulin-Keita, 2017; Leventhal & Brooks-

Gunn, 2000; Wright, Bobashev, & Folsom, 2007). After controlling for family and individual

level factors, Kerrigan, Witt, Glass, Chung, and Ellen (2006) found that low neighborhood

cohesion significantly aligned with low condom use among adolescents, perhaps because youth

rely on their immediate environments, including their peers and neighborhoods, to develop ideas

and shape their values and beliefs. For example, youth who reside in suburban or upper-class

neighborhoods are often less likely to engage in risky behaviors due to representation of positive

role models in their environments due to high social capital. Researchers have explored context

by examining behaviors and characteristics associated with under resourced neighborhoods such

as exposure to violence (e.g., child abuse, domestic violence, and violent behaviors),

victimization, and lack of access to social capital: all risk factors that increase the likelihood of

engaging in negative health behaviors among adolescent girls (Alleyne-Green, Coleman-

Cowger, & Henry, 2013; Farrell, 2017; Lutfi, Trepka, Fennie, Ibanez, & Gladwin, 2015).

Adverse childhood experiences (ACE) are stressful or traumatic events, including abuse and

neglect (Felitti et al., 2018). ACE can include household dysfunction such as witnessing

domestic violence or criminal activity or growing up with family members who have substance-

use disorders (SAMHSA, 2018). ACE strongly relate to the development of a wide range of

chronic health issues throughout a person's life course, including those associated with drug use

and abuse and sexual risk behaviors (SAMHSA, 2018). Research on the association between

violence and risky behaviors among girls of color often focus on sexual victimization rather than

exposure. Violence exposure is a major public health issue and can affect adolescents. However,

different kinds of violence can exist and overlap and have cumulative effects on girls of color.

Cumulative effects of violence may be more important in understanding, as they predict

psychosocial and health outcomes in adolescent girls such as depression, anxiety, and decreased

self-esteem (Ritter, Stewart, Bernet, Coe, & Brown, 2002). Voisin, Jenkins, and Takahashi (2011) described an ecological conceptual framework in their study such that community-violence exposure disrupted positive development in school, negatively impacted peer relationships and mental health contexts, and led to sexual risk behaviors in their sample of adolescent girls. Given the diverse ways violence can occur, adolescents can experience violence by witnessing acts in their homes or neighborhoods, or even being victimized by members of their family, peers, or neighbors.

A majority of African American and Hispanic youth often reside in communities where they are disproportionately exposed to various instances of violence (Foster, Brooks-Gunn & Martin, 2007). Girls may respond differently to exposure to violence than boys. Little attention has been given to how girls in low-income urban communities respond to community violence and how manifestation of risky behaviors can be a direct consequence of exposure. Exposure to violence may be an important contextual factor related to risky sexual behavior and drug use among adolescent girls of color. Given the power differential that impacts girls and women of color due to their intersecting marginalized identities, girls of color are often given less power in their relationships. This dynamic thereby leading to increased vulnerability to being sexually victimized and low self-efficacy about refusing to engage in drug use and sexual risk behaviors. Exposure to violence among adolescent girls of color may exacerbate the power inequity already experienced by girls in heterosexual romantic relationships (Wingood & DiClemente, 1998, 2000) because of its impact on self-efficacy and sense of control, as well as the direct connection between partner violence and unwanted or unprotected sex (e.g., rape; Alleyne-Green et al., 2012; Wingood & DiClemente, 1998). Gender often determines which kind of acts of violence one commonly witnesses or experiences. Adolescent girls of color are more likely to be

victimized including through sexual abuse or rape than their male counterparts (Chiodo et al., 2012). In addition, girls' manifest behaviors differently from boys as a response to witnessing acts of violence. Wilson, Woods, Emerson, and Donenberg (2012) examined the effects of multiple types of violence in an urban sample of adolescent girls and found that the majority reported exposure to at least one violent event (91%). In addition, Wilson et al. (2012) found that all types of violence exposure (physical, sexual, and witnessing violence) predicted sexual risky behaviors among adolescent girls.

Sociohistorical Context

Sociohistorical factors can impact and promote risky behaviors in adolescents that may be detrimental to their health and overall quality of life (Collins et al., 2015; Lutfi et al., 2015). The historical experience of the enslavement of African Americans and the residual effects of such a traumatic time period, has contributed to racist and sexist values, beliefs, and ideologies that are embedded in society (Collins et al., 2015; Gentry et al., 2005; Respress et al., 2018), leaving Black girls to negate oversexualized images of themselves due to normalization. African American and Hispanic adolescents tend to learn about values relating to sexual behaviors and perceptions of drug use from their immediate systems, which comprise peers and family (Aronowitz, Rennels, & Todd, 2006; Córdova et al., 2016). Because girls of color have been treated unfairly, due to racist and sexist ideologies that have become normalized in culture, their self-identities form based on their view of themselves in relation to how they are viewed in society (Demo, 2007; Respress, Amutah-Onukagha, & Opara, 2018). Not only do peers and being accepted by them become more important during adolescence, but during this developmental stage, racial and ethnic stereotypes associated with their identities become known and internalized (Rowley, Kurtz-Costes, Mistry, & Feagans, 2007).

Acculturation. Latinx are currently the largest ethnic minority group in the United States, comprising of about 35.3 million people; 12.5% of the country's population (U.S. Census Bureau, 2010). Excluding Puerto Ricans, as they are U.S. citizens, more than 47% of Hispanics/Latinx are foreign-born (Pew Research Center, 2017). For Hispanics and other U.S. immigrant groups, acculturation can be a challenge for families as children attempt to bridge gaps between two worlds. Acculturation is the process by which individuals adopt the attitudes, beliefs, and behaviors of a dominant culture (Berry, 1980). High levels of acculturation among Latinx align with indicators of poor physical and mental health such has diagnoses of chronic and infectious diseases compared to those who exhibit lower levels of acculturation (Abraído-Lanza, Echeverría, & Flórez, 2016; Gil, Wagner, & Vega, 2000). During the process of acculturation, Hispanics may adopt unhealthy behaviors and be exposed to risk factors that result in shifts in morbidity and mortality for various diseases. Acculturation aligns with substance abuse (Vega, 1998). Acculturation and stress from the process may influence substance use among adolescent girls through the deterioration of Hispanic family values, attitudes, and behaviors that may conflict with dominant societal norms (Shinke, Fang, Cole, & Cohen-Cutler, 2011).

School context. Due to the premise that adolescents spend a majority of their time in school settings, schools are typically the environments in which adolescents' behaviors, beliefs, and values are shaped, due to attitudes and norms exhibited in those settings (Respress et al., 2018). Harper, Dittus, Steiner, & Ethier (2017) indicated that school connectedness had a significant association with sexual behavior in adolescents. Youth who feel connected to their schools and are performing well academically often initiate sex at a later age and are less likely to engage in illicit drug use; also, they have fewer sexual partners, engage in safe-sex practices,

and are less likely to get pregnant (Kirby, 2008; Respress, Amutah-Onukagha, & Opara, 2018). Engaging positively in school and having a high sense of belongingness in school settings among adolescents aligns with delays in having sex and low rates of pregnancy (Basch, 2011). Thus, social support provided by positive peer groups and engaged families can also provide a buffering effect against risk-taking behaviors and increase school connections among adolescents of color (Collins et al., 2015; Garcia-Reid, 2007; Garcia-Reid, Lardier Jr., Reid, & Opara, 2018).

Protective Factors for Black and Hispanic Female Adolescents

For urban adolescent girls of color, being exposed to risk factors does not always result in engagement in risky behaviors. However, protective factors can enable adolescent girls of color to adapt mechanisms of resiliency naturally that unconsciously alleviate the effects of exposure to risk factors in their environment. Protective factors, particularly in a young girl's immediate environment (e.g., peers, family) can balance and buffer risks of exposure and access to drugs and pressure to engage in risky sexual behaviors. This next section will provide a brief overview of protective factors researchers have explored on sexual health and drug use in Black and Hispanic girls. In addition, this section will discuss protective factors that will be tested in this study.

Social Support

Social support is the range of significant interpersonal relationships that impact an individual's functioning (Cauce, Felner, & Primavera, 1982). Hirschi (1977) attempted to further elaborate on the concept of social support, noting it encompasses "the set of presently significant others who are either members of one's social network (i.e. peers, family)". Social support is conceptualized as one of the most important antecedent stress-resistance resources and protective factors that contribute to positive adaptation outcomes.

Peer Support

Forming peer relationships is important during adolescence, as youth are especially concerned with being accepted by their peers during this developmental period (Juvonen, Espinoza, & Knifsend, 2012). During adolescence, youth begin to rely heavily on the approval of their peers rather than their families. Social support from peers can also serve as a protective buffer for adolescents residing in under resourced urban communities (Garcia-Reid, 2007; Garcia-Reid, Lardier, Reid, & Opara, 2018; Peterson et al., 2010). Peer support through positive peer networks has a profound impact on youth in academic achievement and mental health outcomes (Drolet & Arcand, 2013).

Youth tend to have relationships with others that are similar to them in socioeconomic status, interests, personality, race, and gender (Brown & Larsen, 2009; Eiser, Morgan, Gammage, Brooks, & Kirby, 1991). How adolescents form friendships differs by gender. Adolescent boys tend to have a more difficult time forming intimate deep friendships than adolescent girls (Way, 2012). Adolescent girls are able to form close friendships due to gender norms that are placed on girls at an early age, compared with adolescent boys of color who may adapt to masculine roles that prohibit them from forming close intimate bonds with peers (Rose & Rudolph, 2006; Way, 2012). Such norms allow adolescent girls to form meaningful friendships that have deep intimacy, providing high levels of social support more effortlessly than boys (Fehr, 2004; Garcia-Reid et al., 2018). Because adolescent girls are susceptible to peer influences, positive peer support can provide an important socializing experience that may lead to positive behavioral outcomes (Choukas-Bradley, Gilette, Cohen, & Prinstein, 2015). Positive peer support can offer vital emotional and practical support needed to manage health concerns and prevent teen girls from engaging in risky behaviors. Positive peer support and school

importance align with less sexual risk-taking practices. Family and peer support directly impact success in school and reduce sexual risk taking, compared to boys (Garcia-Reid et al., 2018).

Family Support

In the social support construct, families (e.g., parents, guardians, and siblings) are seen as important and vital relationships. Family support can play a crucial role in positive youth development. In a cultural context, families are a crucial part of Black and Latinx families, as they often teach their daughters cultural values and morals and form intimate connections. Positive family support makes an invaluable contribution to the lives of Hispanic adolescents (Garcia-Reid, Reid, & Peterson, 2005; Guilamo-Ramos et al., 2009) and Black adolescents (Collins, & DeRigne, 2017; Hutchinson & Cederbaum, 2011; Hutchinson et al., 2012). Perceived social and emotional support provided by parents (Christenson & Thurlow, 2004), and family cohesion (Li & Warner, 2015) have been associated with feelings of competence, a sense of connection to peers, positive school engagement, reduction in sexual risky behaviors, and drug-use abstinence. Such supportive relationships are critical for at-risk students who are exposed to various risk factors that can lower their self-esteem and place them in vulnerable positions to engage in negative behaviors.

Variables influenced by ethnicity or race can affect protective factors. Among Black girls, those entering early adolescence appear to gain a sense of protection from higher levels of trust, closeness, and pride in their family members (Horton & Gil, 2008). Specific to Latinas, *familismo* can be an essential protective factor. Strong family ties can serve as a protector to keep Latina adolescents from engaging in risky behaviors (Brooks, Stuewig, & LeCroy, 1998). Researchers have widely cited maternal closeness and communication as a protective factor for sexual risk behavior and drug use among Black and Hispanic female adolescents (Hutchinson et

al., 2012; Schinke, Fang, & Cole, 2009). Latinx cultural values nurture and support mother–daughter relationships. Latina mothers traditionally hold a high and powerful role in the family (Gomez & Marin, 1996). Latina mothers traditionally have been viewed as owing the family a duty of self-sacrifice (Galanti, 2003; De La Rosa, Dillon, Rojas, Schwartz, & Duan, 2010). This role has been termed *marianismo*. *Machismo* refers to the concept of masculinity in which Latino men are expected to take a leadership role within the family (Galanti, 2003); *marianismo* refers to women who are selfless and dedicated to their position as *buena ama de casa* (good housewife and mother), and their daughters, *buena hija* (good daughter), are expected to treat their mothers with great respect and admiration (De La Rosa, Dillon, Rojas, Schwartz, & Duan, 2010). According to the literature, close ties based on cultural values between Latina mothers and daughters can cause Latina mothers to be overly protective of their daughters resulting in increased supervision and conversations, which may aid in reducing the likelihood of engaging in risky behaviors (e.g., substance abuse or premarital sex) and poor outcomes for girls. As a result of traditional cultural values, Latina mothers and daughters form deep, intimate lifelong bonds, relying on each other for emotional support. Consistent with research on common protective factors among adolescents, for girls especially, strong parent–child closeness is associated with positive developmental outcomes and less sexual risk taking (Egeland & Carlson, 2004; Kotchick, Shaffer, Miller, & Forehand, 2001). Researchers have identified the mother–daughter bond among African American and Hispanic to be the most important relationship and describe mothers as the key person providing information about health, sexuality, and HIV prevention (Amutah-Onukagha, Opara, Hammonds, & Guthrie, 2018; Barman-Adhikari, Cederbaum, Sathoff, & Toro, 2014). Positive mother–daughter relationships align with girls' ability to refuse substance use and sexual risk behaviors (Boyd, Ashcraft, &

Belgrave, 2006). In addition, parental monitoring and parental support may be particularly important for adolescents residing in under resourced, low-income neighborhoods where exposure to violence, drugs, and negative peer pressure are common. Parental monitoring and closeness may be more beneficial for girls than for boys because girls are more responsive to close knit, personal, and intimate relationships, and may interpret parental supervision and closeness as a form of caring, viewing permissiveness as a lack of concern (Donenberg, Emerson, & Mackesy-Amiti, 2011; Garcia-Reid, Lardier Jr., Reid, & Opara, 2018). Such perceptions could allude to the role of found low parental supervision which is associated aligns with girls engaging in risky behaviors such as sexual risk behaviors and drug use which may be a response to fulfilling unmet emotional needs at home (Donenberg et al., 2011).

Ethnic Identity

African Americans/Blacks and Hispanics often use their immediate social environments to form opinions, ideas, and views about themselves as a way to form their own identities. Ethnic identity refers to (a) self-identification with a specific ethnic group; (b) the sense of belonging and attachment to such a group; (c) the perceptions, behaviors, and feelings one has, due to such membership; (d) and involvement in the cultural and social practices of the group (Phinney, 1989; Phinney & Chavira, 1992; Phinney & Kohatsu, 1987; Phinney et al., 2001; Phinney & Ong, 2007). Various definitions of ethnic identity typically encompass an individual view of self and group, derived from their knowledge of membership in that particular group in addition to the values, beliefs, and emotional attachment to that group (Phinney & Chavira, 1992; Tajfel, 1981). Ethnic identity can play a crucial role in reducing healthy behaviors among ethnic minority populations (Nguyen & Belgrave, 2011). One's ethnic identity can change over time, due to sociohistorical, contextual, and cultural factors (Phinney, 1992; Phinney & Ong, 2007).

Phinney (1989) conceptualized ethnic identity as a two-dimensional construct that comprises exploration and affirmation/commitment. Ethnic-identity exploration represents the process by which an individual actively examines what is defined as a member in their ethnic group (Phinney, 1989). Ethnic-identity commitment consists of an individual's strong attachment, engagement with, and sense of belonging to their ethnic group (Phinney, 1989; Phinney & Ong, 2007).

Ethnic Identity Versus Racial Identity

The social construction of race and ethnicity in the United States can be complex and difficult to define and frame. Sociologists differentiate ethnicity from race by defining race as groups who share similar physical characteristics and ethnicity as those groups that share similar values, customs, and beliefs (Gaylord-Harden, Ragsdale, Mandara, Richards, & Petersen, 2007). However, groups such as Blacks who were born and reside in the United States can comprise multiple ethnic groups (e.g. African American, African, and Afro-Caribbean; Schwartz et al., 2014), and some researchers have further argued that ethnic and racial identity may be inseparable concepts for such groups especially African Americans (Brittian et al., 2015; Schwartz et al., 2014). Using race as a social construction references an individual's sense of collective identity, based on self-perceptions of shared commonalities, values, and beliefs with a racial group (Helms, 1993, p. 3). Commonly, racial identity is based on outward visual appearances such as skin color and contributes to how groups are treated, which opportunities they will receive, and the types of environments in which they reside.

Hispanic Americans in contrast with African Americans can identify their country of origin and can share a commonality in experiences, language, and norms that allow them to be more connected through ethnicity (Umana-Taylor et al., 2014). For Latinx, the concept of ethnic

identity can serve as a strong protective factor, whereas racial identity tends to be more important for Black participants (Charmaraman & Grossman, 2010; Schwartz et al., 2014). Although more research would aid in understanding the effects race has on ethnic identity and whether both constructs are inseparable or can be measured similarly, empirical evidence supports that African Americans have similar ethnic-identity scores compared to other groups who may appear to have stronger connections to their country of origin (i.e., Asian Americans, Latinx; Charmaraman & Grossman, 2010; Umana-Taylor et al., 2014; Schwartz et al., 2014).

Ethnic Identity and Drug Use

Research is beginning to emerge that reveals an association between ethnic identity and risky behaviors. Thus, the notion of strengthening ethnic identity in individuals may be an effective and innovative approach to promoting healthy and positive behaviors among youth of color. Although inconsistencies exist, a strong relationship between ethnic identity and drug use has been reported in the few studies that have examined both variables. For example, researchers found that higher levels of ethnic identity align with lower use of drugs including tobacco, alcohol, and marijuana, and with drug abstinence and drug free attitudes (Belgrave et al., 1997; Belgrave, Brome, & Hampton, 2000; Brook, Duan, Brook, & Ning, 2007; Lardier, Reid, Garcia-Reid, 2018; Lardier, Garcia-Reid, & Reid, 2018; Sanchez, Hamilton, Gilbert, & Vandewater, 2018). Researchers have concluded that individuals who have low levels of ethnic identity are more likely to experience negative psychological emotions (e.g., low self-esteem, shame, and anxiety; Rivas Drake et al., 2014), and are more likely to use drugs and alcohol, which may be a coping mechanism for undiagnosed and untreated mental health symptoms (Fisher, Zapolski, Sheehan, & Barnes-Najor, 2017). As a protective factor, increasing one's ethnic identity may also impact drug use through its positive relationship with self-esteem and self-worth (Fisher et

al., 2017). Ethnic identity may influence drug use by improving self-esteem, reducing

psychological emotions, and normalizing positive group norms and cultural values.

However, other researchers suggested that higher levels of ethnic identity can align with

higher levels of drug use (Zamboanga, Raffaelli, & Horton, 2006; Zamboanga, Schwartz, Jarvis,

& Van Tyne, 2009). Corneille and Belgrave (2007) found that higher ethnic identity affiliated

with substance abuse among low-income African American girls. Marsiglia, Kulis, Hecht, and

Sills (2004) found that a strong sense of ethnic identity predicted lower drug use for White

respondents but higher drug use for other ethnic-minority groups (e.g. Mexican Americans,

American Indians, and African Americans). Espinosa-Hernandez and Lefkowitz (2009) found

that higher levels of ethnic identity among African American men aligned with high alcohol

consumption and engagement in sexual risky behaviors such as drinking alcohol before sex,

compared to men who had lower levels of ethnic identity.

An explanation for this paradox can be the belief in negative stereotypes for ethnic

minorities that belong to historically marginalized groups. Individuals may adhere to such

stereotypes and begin to internalize negative views about their group while simultaneously

having a strong sense of attachment and belonging with their ethnic group (Marsiglia, Kulis, &

Hecht, 2001; Stephens & Few, 2007). For example, African American and Mexican American

adolescents who had high and positive ethnic identity scores reported less drug use compared

with those students who had high ethnic identity scores but viewed their race in stereotypical

ways (e.g., people in my ethnic group are inferior and engage in irresponsible behaviors;

Marsiglia et al., 2001).

Ethnic identity and sexual risk behavior. The relationship between ethnic identity and

sexual risk behavior is beginning to emerge in the literature, though it remains limited. Salazar

and colleagues (2004) examined the effect of a self-conceptualization construct (self-esteem, ethnic identity, and body image) on African American adolescent girls' self-efficacy in refusing unprotected sex. Results from the study indicated that positive self-conceptualization increased refusal of unprotected sex through its association with partner communication (Salazar et al., 2004). In another study, Belgrave et al. (2000) found that ethnic identity was significantly associated with positive sexual attitudes and values after predictors such as age, family cohesion, self-esteem, and school interest were controlled for among adolescent females. Beadnell et al. (2003) found that ethnic identity aligned with African American women not engaging in sexual risk-taking behaviors such as having sex with multiple partners and remaining abstinent from sex. Shehadeh and McCoy (2013) found that among African American and Hispanic migrant workers, higher levels of ethnic identity aligned with lower levels of engaging in sexual risky behaviors including unprotected sex. Interventions for sexual risk behavior and STI prevention that are tailored to African American and Hispanic girls and women often focus on increasing ethnic identity and pride (e.g., Wingood & DiClemente, 1995; Hernandez, Zule, Karg, Browne, & Wechsberg, 2012). The association between two constructs can relate to feelings of self-worth, self-esteem, and pride of oneself, which can buffer mental health effects that may mediate the relationship between self-characteristics and sexual risk behaviors.

Mediating Effect of Psychological Empowerment (PE)

The reviewed literature shows the burgeoning relationship ethnic identity has to PE (e.g., Gutiérrez, 1995; Lardier, Garcia-Reid, et al., 2018; Molix & Bettencourt, 2010) and alcohol, tobacco, and other drug use (e.g., Garcia-Reid et al., 2013; Umaña-Taylor, 2010). A significant body of research also identified the relationship between PE and drug use (e.g., Christens et al., 2012; Holden et al., 2004; Peterson & Reid, 2003), solidifying the influence PE can have on

reducing substance use. Previous studies have shown the mediating influence of PE between community participation and sense of community (Zimmerman, 2000) as well as developmental outcomes (Cattaneo & Chapman, 2010). Other studies have also shown the mediating role of PE between ethnic identity and well-being (Molix & Bettencourt, 2010) and between ecological support systems and developmental outcomes (Christens & Peterson, 2012). For example, greater levels of PE mediated the relationship between transformational leadership (critically thinking about ways to improve the environment) and organizational commitment among hospital nurses (Avolio et al., 2004). As several empowerment-based researchers have eluded (e.g., Christens & Peterson, 2012; Molix & Bettencourt, 2010; Peterson et al., 2011), a question remains of the mediating effect PE holds when in the presence of ethnic identity and drug use and also whether sexual risk behavior has a relationship with PE and drug use.

Psychological Empowerment and Ethnic Identity

Freire (1968) suggested in order for power dynamics and inequities to diminish, society has to make an attempt to understand marginalized groups in the context of their sociocultural history. Therefore, it is critical to further explore the relationship between how empowerment is conceptualized and its connection with cultural factors such as ethnic identity among individuals from historically marginalized groups (Hipolito-Delgado & Zion, 2015). Individuals who possess or belong to marginalized identities that are empowered, tend to have a stronger connected to their ethnicity or culture which in turn aids in them to feel proud of themselves, their decisions, and their beliefs (Gutiérrez, 1995; Molix & Bettencourt, 2010; Tatum, 1997). Literature supports the relationship among PE, ethnic identity, and higher levels of empowerment (e.g., self-efficacy, cultural group connections) in the presence of higher levels of ethnic identity (e.g., Gutiérrez, 1995; Molix & Bettencourt, 2010; Tatum, 1997). Because people develop PE through close,

interpersonal relationships and in-group interactions (Speer & Hughey, 1995), for adolescents, the ability to develop a sense of identity and belongingness is conceptually similar to ethnic-group identity (Speer & Hughey, 1995; Speer et al., 2012). Researchers have shown that the relationship between ethnic identity and PE serves as a protective factor against the use of substances (e.g., Christens et al., 2012; Holden et al., 2005; Hughey et al., 2007; Peterson & Reid, 2003). Recently, Lardier, Garcia-Reid, & Reid (2018) found that youth with higher scores on PE and ethnic identity reported greater community participation, neighborhood sense of community, school importance, and had a higher risk perception about drug and alcohol use. Therefore, the evidence presented represents the empirical relationship between ethnic identity and PE and its indirect effect on drug use/abuse.

According to PE in the context of girls of color, it is essential to examine the intrapersonal component of empowerment to assess how girls can develop cognition of sociopolitical environments in patriarchal societies. Such an examination can further serve as a buffer to reduce risk behaviors that produce negative outcomes for this group. For the proposed study, intersectionality will be used as more as a conceptual framework or paradigm than a traditional testable theory, whereas I will test empowerment theory to determine its relationship with protective factors as predictors and their relationships with outcome variables.

Research Questions

R_1: Are there measurement differences in how PE is measured among Black and Hispanic girls using the SPCS-Y one factor, two factor, and abbreviated two factor scale?

H_1: There will be no differences in model fit based on the full one factor SPCS-Y, the two factor SPCS-Y, and two factor abbreviated SPCS-Y among Black and Hispanic girls

H_2: The abbreviated two factor scale will show a better model fit on sample than the one factor scale

R_2: Does ethnic identity, social support, and PE have a direct effect on drug use in Black and Hispanic girls?

H_1: Ethnic identity will have a direct effect on drug use in Black and Hispanic girls

H_2: Social support will have a direct effect on drug use in Black and Hispanic girls

H_3: PE will have a direct effect on drug use in Black and Hispanic girls

R_3: Does PE mediate the relationship among ethnic identity, social support, drug use, and sexual risk behavior outcomes in Black and Hispanic girls?

H_1: PE will mediate the relationship between ethnic identity, social support, drug use, and sexual risk behavior.

H_2: PE will have a positive relationship with ethnic identity, which will impact drug use and sexual risk behavior.

H_3: PE will have a positive relationship with social support, which will impact drug use and sexual risk behavior.

R_4: Does drug use mediate the relationship among ethnic identity, social support, PE, and sexual risk behavior among Black and Hispanic girls?

H_1: Drug use will mediate the relationship between ethnic identity, social support, PE, and sexual risk behavior.

H_2: Drug use will have a positive relationship with ethnic identity, which will impact drug use and sexual risk behavior.

H_3: Drug use will have a positive relationship with social support, which will impact PE and sexual risk behavior.

R_5: Are there racial differences in the relationships between ethnic identity, social support

and the mediating effect of PE and drug use on sexual risk behavior?

H_1:There will be differences in the relationships between ethnic identity and social

support on PE among Black and Hispanic girls

H_2:There will be differences in the relationship between PE and drug use as a

mediator among Black and Hispanic girls

Chapter 3: Research Design and Methods

Sample and Design

Data used in this study were accrued from two survey administrations between the years of 2006–2007 and 2007–2008 for the purpose of conducting a needs assessment in a northeastern U.S. urban school district. The purpose of conducting a needs assessment for this population was to understand the relationships between high rates of crime and substance abuse and low educational outcomes for the city (Reid, Yu, & Garcia-Reid, 2014). The city and school district were adamant about the need to understand patterns and behaviors of youth residing in this urban community. It was important for information to be collected quantitatively to aid in the development and implementation of a federal initiative to prevent drug abuse and sexual-risk behaviors among racial and ethnic minority youth in an urban community (Reid & Garcia-Reid, 2013). Eight high schools in the community participated. To obtain a representative sampling of high school students, students were recruited from their physical education and health education classes, as these classes are required in all 4 years of high school. This process allowed for an equal sampling of high school students that would be representative of the school district. The participating school district allowed parent permissions slips to be sent home to all students. All students who returned permission slips and signed youth assent forms were eligible to take the survey. The survey was administered to students during their health-education classes. All English students answered a self-administered questionnaire.

Community Profile[1]

The target community is located in the northeast and is described as a predominantly low income, urban under resourced city in New Jersey with a population of roughly 147,000 residents (U.S. Census Bureau, 2016). According to the U.S. Census Bureau, approximately 29.1% of the city's population lives below the poverty line, with an average household income of $34,042, which is nearly $40,000 less than the state's average income. Moreover, 27.9% of the residents living in this city were under the age of 18. Over 90% of the city's population identify as either Hispanic (57.7%) or as African American/Black (34.7%) and nearly one third are foreign-born residents (U.S. Census Bureau, 2016). The needs assessment for this town was conducted because it is considered among one of the poorest cities in this northeastern locale and has one of the highest rates of substance abuse, STIs, and HIV/AIDS in the state. Currently, this community ranks third in the state for HIV/AIDS prevalence (New Jersey Department of Health, 2015).

School-District Profile

This community is one of most diverse school districts in New Jersey (N.J. Department of Education [DOE], 2016). Yearly, the school district enrolls 25,000 students in grades kindergarten through high school. In total, the city has 54 schools including 10 high schools. This school district is one of the four school districts in New Jersey that is state-operated and is managed by the DOE since 1991 because of its previous fiscal mismanagement and poor student achievement (DOE, 2016).

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[1] It is important to note that the demographic profile of this community is based on the most recent census and local level data from 2016. This is due to the lack of change in demographics over the past decade in addition to affording the ability to adapt findings from this study to the current student population of this community.

More than 90% of the district's students receive free or reduced-price lunches with 72% receiving free lunch (DOE, 2016). At the time the survey was administered in 2006–2007, 68% of the city's school-district students received free school lunch and 10.2% received reduced-price school lunch (DOE, 2007). In 2007–2008, 71.2% of students received free school lunch and 9.2% received reduced-price school lunch (DOE, 2016). Free or reduced-price lunch eligibility is a common indicator of socioeconomic status used in adolescent research (Harwell & LeBeau, 2010; Skiba et al. 2005). Trends in socioeconomic status among the city's school youth seem to have remained steady over the years. Of students, 15% receive special-education services and 13% of students are English-language learners (ELL) who receive bilingual/English as a second language services.

As of 2016, 67.7% of students identified as Hispanic, 22.2% identified as African American/Black, approximately 4.4% identified as White, and 4.9% identified as Asian or Middle Eastern (DOE, 2016). Nearly 50% of all students in this community speak a primary language other than English. Students and their families speak more than 40 languages (DOE, 2016).

Demographics of the Sample

In the 2006–2007 school year, through convenience sampling, 648 youth were surveyed (a 26% response rate), and in the 2007–2008 school year, 991 students were surveyed (a 39.6% response rate), for a total sample of 1,639 students. Girls comprised 999 of study responses. The original sample of students was delimited because the research questions aimed to understand the factors that seek to protect African American/Black and Hispanic female adolescents in addition to assessing differences between both groups. The sample was further delimited to include participants who self-identified as Black/African American only ($n = 340$) and Non-White

Hispanic only (*n* = 490). Black and Hispanic female adolescents comprise of the two largest

cultural groups in the sample and in the community, from which the data emanated, further

highlighting the importance to delimit the sample to focus on the two groups (U.S. Census

Bureau, 2016). Among girls, almost a third (30.9%) were between the ages of 13 and 15 and

almost half (46.7%) were between the ages of 16 and 18. Female students were evenly split

among this sample between ninth (25.3%), 10th (23.8%), 11th (24.2%), and 12th (26.1%)

grades. See Table F1 for additional demographic information and percentages of those receiving

free or reduced-price lunch.

Measurements

Students were administered a survey that consisted of approximately 222 questions

during 1-hour time periods in class. The survey included perceptive and validated measures of

social support (Cauce, Felner, & Primavera, 1982), ethnic identity (Phinney, 1989; Phinney &

Ong, 2007), PE (e.g., Christens & Peterson, 2012; Holden et al., 2005; Peterson et al., 2011a;

Peterson & Reid, 2003), 30-day drug use, and sexual-risk behavior (Kann et al., 2004; 2014b).

Previous researchers determined the scales used in this study (see Appendices A–E) are

psychometrically sound, with high reliability and validity for this specific population.

Social support. The condensed version of the Social Support Rating Scale (SSRS)

measures social support or attachment to members of the community (Cauce, Felner, &

Primavera, 1982). The SSRS was adapted from the National Longitudinal Study of High School

Students (U.S. Department of Health, Education, and Welfare, 1975). This scale consists of eight

items evaluating social support among adolescents from a variety of sources, including

principals, teachers, and friends (see Appendix A). Cauce, Felner, and Primavera (1981)

validated this scale among a sample of high risk adolescents and discovered three support

dimensions in the scale: family (parents and relatives), formal (e.g., teachers, principals, and state workers), and informal (e.g., friends and peers) support. Respondents indicated the level of helpfulness provided by each source on a Likert-type 5-point scale ranging from *not at all helpful* to *very helpful*. Cronbach's alpha for scale with this sample was .79.

Sociopolitical control. The Sociopolitical Control Scale for Youth (SPCS-Y) is a widely used measure of the intrapersonal components of PE (Zimmerman & Zahniser, 1991). This measure is a 17-item questionnaire with a two-dimensional scale developed and validated by Zimmerman and Zahniser in 1991 (see Appendix B). Researchers use the scale to assess youth self-reported leadership and social-engagement behaviors in school and community contexts. The measure includes eight items to assess leadership competence and nine items to assess sociopolitical control, which are dimensions that represent the latent construct of PE (Holden, Evans, Hinnant, & Messeri, 2005; Peterson et al., 2006; Zimmerman & Zahniser, 1991). Respondents indicated their level of agreement with statements such as *"I am a leader in groups"* and *"I can usually organize people to get things done."* Responses score a 5-point Likert-type scale ranging from *Strongly disagree* to *Strongly agree*. Cronbach's alpha for this sample was .88.

Zimmerman and Zahniser (1991) discovered two negatively worded items (i.e., one item measuring leadership competence and another item for policy control) failed to load on the expected factor as they tested the scale. Negatively worded items (e.g., items using the term "not") are defined as those phrased semantically in the opposite direction from a particular construct (Cronbach, 1950; Peterson et al., 2006). Another study that tested the underlying structure of the SPCS discovered similar findings that resulted in several negatively worded items that did not produce significant loadings (Smith & Propst, 2011). According to Peterson et

al. (2006), both these studies failed to use confirmatory-factor-analysis (CFA) techniques to effectively measure the factor structure. However, both studies suggested that method bias from the use of negatively worded items may have a detrimental impact on the psychometric properties of the SPCS. This study will further test and validate the scale using CFA techniques will be used for this population of adolescent females of color.

In this study, sociopolitical control was measured using the SPCS-Y (Christens et al., 2016; Peterson et al., 2011; Zimmerman & Zahniser, 1991). Peterson et al. (2011) validated and confirmed the SPCS-Y using CFA (overall scale: Cronbach's α = .89) as a two-factor measure that examined leadership competence (Cronbach's α = .81) and policy control (Cronbach's α = .85). Recently, Christens et al. (2016) validated an 8-item abbreviated version of the SPCS-Y among a sample of Malaysian adolescents and confirmed the multidimensional nature of this scale, encompassing leadership competence (Cronbach's α = .78) and policy control (Cronbach's α = .79). Even more recently, Lardier et al. (2018) validated the factor structure of the 8-item abbreviated version of the SPCS-Y among a sample of youth of color (Cronbach's α = .82) and policy control (Cronbach's α = .81). For the current study, the 8-item measure of leadership competence (Cronbach's α = .83; M = 3.14, SD = 1.47) and 9-item measure of policy control (Cronbach's α = 85; M = 2.71, SD = 1.57) were used with the combined total score (Cronbach's α = .89; M = 3.70, SD = .60). Respondents were asked to indicate their level of agreement with statements such as "*I am a leader in groups*" and *"I can usually organize people to get things done."* Responses were recorded using a 5-point Likert-type scale ranging from the *Strongly disagree* (1) to *Strongly agree* (5). For this study, Cronbach's α = .88; M = 63.47, SD = 10.32.

The Multigroup Ethnic Identity Measure (MEIM). The original MEIM was designed and used among multiple ethnic groups (Phinney 1989, 2007) and is considered one of the most

widely used self-reported measures for ethnic identity. The MEIM was validated among youth

across the United States and internationally across many applied and psychometric research

studies (e.g. Avery, Tonidandel, Thomas, Johnson, & Mack, 2007; Dandy, Durkin, McEvoy,

Barber, & Houghton, 2008; Gaines et al., 2010; Kazarian & Boyadjian, 2008), with high internal

consistency and validity, ranging from .71 to .92 (Phinney & Ong, 2007). For this study,

Cronbach's α = .86; M = 53.81, SD = 8.91. Responses were measured using a 4-point Likert-type

scale ranging from s*trongly disagree* (1) to *strongly agree* (4; Phinney, 1989; 2007).

Sexually risky behavior. Seven items were adapted from the National Youth Risk

Behavior Survey (CDC, 2004), which assesses sexual behavior among high school aged

adolescents (see Appendix D). Sum of this scale were the mean of responses on the seven items,

with higher scores indicating greater frequency of risky behaviors. The scale takes into account

several factors including prevalence of sexual intercourse, number of sexual partners,

contraceptive use, and the age at which such behavior began. Peterson et al. (2010) reported a

Cronbach's alpha of .70 for these seven items. For this study, Cronbach's α = .75; M = 7.12, SD

= 3.6

30-day drug use. Researchers measure past-30-day drug use using items from the

National Survey on Drug Use and Health (SAMHSA, 2006) and Youth Risk Behavior Survey.

The scale consisted of three items that assessed how often participants smoked cigarettes, drank

alcohol, and smoked marijuana in the past 30 days. An example of an item is "*Estimate the*

number of days you used marijuana or hashish in the last 30 days." Participants respond to these

items on a 7-point scale (1 = 0 days; 2 =1–2 days, 3 = 3–5 days; 4 = 6–9 days; 5 = 10–19 days; 6

= 20–29 days; 7 = All 30 days). Sum of this scale are the mean of responses on the 3 items, with

higher scores indicating greater frequency of use. Based on prior research, the drug use variable

construct had a Cronbach's alpha ranging from .89 to .96 (Brener et al., 2014; Peterson, Buser, & Westburg, 2010). For this study, Cronbach's $\alpha = .78$; $M = 4.38$, $SD = 2.31$.

Data-Analysis Plan

Preliminary Analysis

Data analysis will involve three separate stages. First, preliminary analyses of data will involve assessing normality, distribution, and collinearity issues. Standard cut-offs for kurtosis will be 3, as that defines a normal distribution, and skewness values should be close to zero (Field, 2013). Appropriate variable transformations will be applied to severely nonnormal variables (Field, 2013). Multicollinearity will be tested by calculating the variance inflation factor and tolerance. If the value of tolerance is less than 0.2 and simultaneously, the value of the variance inflation factor is 10 or above, multicollinearity is present and will require further investigation (Bowerman & O'Connell, 1990). Visuals such as residual scatter plots will show whether assumptions of homoscedasticity have been violated. This assessment is crucial to avoid Type I and Type II errors. In addition, alpha-level reliabilities will be used to assess internal consistency of scales and bivariate correlations to examine initial associations among variables used in analysis (Field, 2013). Empowerment-based scales such SPCS-Y (e.g., Christens & Peterson, 2012; Peterson et al., 2006, 2011) and the MEIM (e.g., Phinney & Ong, 2007) should allow me to observe relatively normal distributions based on previous research. However, using a structural equation model allows for flexibility in choices in analyzing nonnormal data due to model specification and estimation methods (Iacobucci, 2010).

Missing Data

The multiple imputation (MI) feature in SPSS 23 will be used to examine patterns and missing variables (i.e., completely at random, missing at random, or missing not at random

(Allison, 2002; Graham, 2010). Using 10 MI iterations, each variable will be regressed on a set of theoretically and conceptually related predictors (Allison, 2002). Following MI techniques, complete sets of variable blocks will result in lost error, adjusted through imputations and random draws (Graham, 2010).

Confirmatory Factor Analysis

CFA is a theory-driven technique. The planning of analysis is driven by theoretical relationships among observed (manifest) and unobserved variables (latent). CFA and exploratory factor analysis (EFA) are similar in design. For study purposes, CFA will be used to (a) test the hypotheses to derive factor loadings and factor interrelationships, (b) find the equivalence of factor structures across multiple groups in our sample, and (c) modify indicators to reduce the scale(s) for this population. In addition, the ultimate goal of CFA is to minimize differences between estimated and observed matrices in analysis (Schreiber et al., 2015). CFA as the technique aims to find the underlying factor model that best fits the data to acquire factor loadings, whereas EFA exploratory factor analysis seeks to impose a particular factor model on the data to see how well that model explains the responses (or outcomes), based on the set of measures (Grimm & Yarnold, 1995). In addition, CFA derives models *a priori* (e.g., reasoning from theory to hypothesize a structure beforehand or deductive logic) and then evaluates its goodness of fit to the data (Grimm & Yarnold, 2010). CFA requires foresight, as it used to test theory, whereas EFA is a tool for building (or developing) theory. The CFA model assumes two main sources of variation in responses to observed indicators (Grimm & Yarnold, 2010). Specifically, participants' scores on observed indicators (or measured variables) are assumed to be influenced by latent constructs (or underlying factors) and by measurement errors. As given in the example by Zimmerman and Zahniser (1991), when describing SPCS negatively worded

items, CFA can estimate factor loadings and factor interrelationships, partialing out shared measurement errors through common methods of assessment (Grimm & Yarnold, 2010).

CFA provides a goodness of fit for each model, which refers to examining the overall size of the fitted residuals it produces (e.g., the degree of correspondence between the interrelationships predicted by the model and the interrelationships actually observed; Grimm & Yarnold, 2013). In a CFA model, the closer the residuals are to zero, the better the model fits the data. CFA yields an overall maximum likelihood chi-square and unassociated p value, which indicates the probability that the matrix of fitted residuals generated by the model is different from zero. In CFA, a statistically significant chi square denotes that the model is not a good fit, as it fails to reproduce the observed data accurately.

Assumptions of Confirmatory Factor Analysis

CFA requires a large sample (Guadagnoli & Velicer, 1988). Small samples would provide less powerful in detecting a model's true lack of fit, thereby inflating a model's goodness of fit due to low statistical power from having a small sample (Grimm & Yarnold, 2010). Inadequate sample size biases results in Type I errors (finding a good fit when there is not a good fit). Although no exact rule exists on sample size, researchers estimate that 10 per estimated parameter is the general consensus (Schreiber et al., 2015).

CFA assumes normality in multivariate samples. Besides assuming that each indicator is normally distributed, all linear observations of these indicators are also normally distributed. Nonnormally distributed variables can distort goodness of fit indices, which can result in invalidated conclusions (Browne, 1984). To prevent inaccuracy, tests of normality will be conducted on the sample for scales that are intended to be validated.

The next stage involves running each model separately using regression techniques. Regression coefficients will be generated through CFA. Regression analyses will test direct and indirect effects of present observed variables and examine the relationship between exogenous and endogenous variables (Iacobucci, 2010).

Structural Equation Modeling (SEM)

Due to the nature of the research questions, latent constructs being examined, and hypothesized outcomes, a more advanced and robust test of statistical relationships is needed for this study. SEM is a multivariate statistical analysis technique that is used to analyze structural relationships using a conceptual model, path diagram, and system of linked regression-style equations (Gunzler & Morris, 2015). Researchers use SEM to capture complex and dynamic relationships among observed and unobserved variables (Hoyle, 1995; Ullman, 2001). The variables used in this study (e.g., social support, drug use, and sexual risk) are latent constructs with measures reduced and validated for this population through factor analysis. SEM is the combination of factor analysis and multiple regression analysis. SEM approaches are well-suited to many studies due to their ability to address latent variables and assess complex mediating relationships in causal analysis (Gunzler & Morris, 2015). Schreiber et al. (2015) considered SEM a confirmatory technique that displays the various relationships among latent variables and includes two components: a measurement model (e.g., CFA), and a structural model or path model. In SEM, endogenous variables (dependent variables) or exogenous variables (independent variables) can be latent or manifest (unobserved or observed). SEM techniques are superior to standard regression analyses in several ways. SEM is a robust and rigorous technique that allows for the following: (a) More accurate estimates of the hypothesized causal variables and their effects on other variables; (b) Estimation of all effects (both causal and dependent)

simultaneously; (c) Greater accuracy of parameter estimates when examining competing models; (d) Comparison effects of multiple mediators (Fabrigar, Porter, & Norris, 2010; Zhao, Lynch, & Chen 2010).

Assumptions of SEM. To use SEM, several assumptions have to be met: (a) a linear relationship is present between endogenous and exogenous variables (Hoyle, 1995); (b) endogenous and exogenous variables should have a cause-and-effect relationship, tested based on theory (Iacobucci, 2010); (c) because outliers can affect the significance of the hypothesized model, data should be free of outliers (Motulsky, 2014); (d) a nonspurious relationship should exist between the endogenous and exogenous variables. Nonspurious relationships assume that the relationship between two variables cannot be explained without a third variable (Hoyle, 1995); (e) equations between variables must be greater than the estimated parameters (Hooper, Coughlan, & Mullen, 2008); (f) a sample size of at least 150–200 is preferred with at least 10 to 15 indicators (Grimm & Yarnold, 1995; Hoyle, 1995; Iacobucci, 2010); (g) error terms among endogenous variables and exogenous variables are uncorrelated with other variable error terms (Hoyle, 1995); and (h) the researcher should use interval data for analysis (Hoyle, 1995).

Conducting SEM. Gunzler & Morris (2015) provided the four comprehensive steps that are needed to conduct SEM: (a) specifying the model; (b) assessing model fit; (c) making any model modifications; and (d) testing hypotheses of interest. First, researchers should define individual constructs theoretically. The overall measurement model was developed using path analysis based on hypothesized independent variables and outcomes. Path analysis is a set of relationships between exogenous and endogenous variables (see Figures 1–4).

First, this study will conduct a confirmatory test of the measurement model using CFA. CFA will provide appropriate factor loadings to be used for SEM (Gunzler & Morris, 2015). The

measurement model validity will be assessed using CFA to test the theoretical measurement. The results of the CFA should align with the constructs' validity (Gunzler & Morris, 2015). After this is completed, the structural model will be specified, where structural paths are drawn between constructs. Lastly, the structural model validity will be examined. A model is considered a good fit if the value of the chi-square test is not significant, and at least one incremental fit index and one badness of fit index meet the predetermined criteria (Hoyle, 1995).

Mediation Analyses

Using analysis of a moment structures (AMOS) software, the main study variables will be examined using six SEM models to assess direct effects and path coefficients based on three research questions, including mediating variables. Model fit will be reassessed for each of these (as suggested by Gignac, 2006) and examine paths examined for reduction in magnitude (aligned with Mallinckrodt, Abraham, Wei & Russell, 2006; Zhao et al., 2010). Chi square (X^2_{diff}) testing will be conducted to evaluate change in fit between two models. Full mediation will be present if direct path(s) diminish to 0 and declare partial mediation if they reduce, but not to zero (Zhao et al., 2010). If all paths are significant, partial mediation and indirect effects will be present (Zhao et al., 2010).

Six SEM path models will be tested, based on the three hypothesized path models (see Figures 1–4) and then will run the path models separately by group will results in six SEM path models. To assess fit among all six SEM-path models (Arbuckle, 2013) multiple measures of fit will be used to determine model fit. These include the chi square (X^2) test, comparative fit index, goodness of fit indices and root mean square error of approximation (RMSEA; Iacobucci, 2010; West, Taylor, & Wu, 2012). To assess these indices, several rules are in place such as: a) nonsignificant chi square (X^2); b) comparative fit index (CFI) and goodness of fit index (GFI) of

over 0.95; c) smaller RMSEA of less than 0.09 are desirable (less than 0.05 = good fit, 0.05-0.08

= acceptable fit and 0.09-0.10 = unacceptable fit (Byrne, 2010; West et al., 2012).

Chapter 4: Results

Preliminary Analyses

Table F1 shows the descriptive statistics of the study variables. Table F2 displays the

missing item response rates for the main study variables. Table F3 displays the correlation results

for the study variables among the delimited sample.

Missing Data

Little's missing completely at random test was meaningful (p = .001) for a sample of (N

= 830) examining the following variables: age, grade, race, ethnic identity, social support, PE,

30-day drug use, and sexual risk behavior. Hence, I reject the null hypothesis and conclude that

data were not missing completely at random but were missing at random. After additional

examination, a proportion of missing values was found to be higher for items used to measure

30-day drug use and sexual risk behavior (see Table F2). This is consistent with literature in

which participants often feel hesitant in answering questions that measure risky behaviors,

thereby leading to an observation of missing data by a researcher (Podsakoff et al., 2012).

Researchers use a number of methods to address missing data such as maximum likelihood

(ML), the expectation–maximization algorithm, and MI (Newman, 2003). To further analyze and

address missing data, MI techniques were implored, which require that data are missing at

random from the population (Newman, 2003). The MI imputation feature in SPSS allows

researchers to include for additional variables in the imputation process thereby greatly reducing

the likelihood of omitting a variable important to the missing-data model (Graham, 2003). When

using MI techniques, error-variance and parameter estimations may be lost; therefore,

researchers use bootstrapping techniques in addition to MI (Graham, 2009; McGinniss & Harel,

2016), using 10 MI iterations for each variable. The MI approach is well documented and has

shown good results when the imputation model at least approximates the true missing data and has performed adequately with deletion and single-imputation approaches in structural equation modeling (Shin, Davidson, & Long, 2017).

Missing data was imputed and further analyses were examined using alpha-level reliabilities (Cronbach α) and a bivariate correlation matrix to assess the internal consistency of scales and evaluate initial associations between main study variables (Field, 2013; See Table F3). Next, tests of normality and collinearity were examined. Criteria for normality include kurtosis of at no more than 3 and skewness of 0 (Field, 2013). After examining variables for normality, 30-day drug use was shown to be nonnormal (see Table F3). Other researchers reported similar findings (e.g., Christens & Peterson, 2012; Lardier, 2016). SPCS-Y, which scholars use to measure PE, social support, sexual risk behavior, and MEIM (used to measure ethnic identity) displayed normal distributions (Christens & Peterson, 2012; Phinney, 1989; Phinney & Ong, 2007; Peterson et al., 2006; Peterson et al., 2011a). To summarize, all variables included in analyses were in the appropriate parameters, with the exception of 30-day drug use, which was highly skewed (3.65) and leptokurtic (16.39) as expected (see Table F3).

Researchers can access numerous transformation procedures to correct and address nonnormal data: (a) log transformation $(\log[Xi])$; (b) square root transformation $(\sqrt{xi}$); (c) reciprocal transformation $(1/Xi)$; and (d) reverse-score transformations (Field, 2013). However, because AMOS SEM software was used to analyze data, transformation procedures were not implored. In this study, using AMOS SEM, ML procedures provided a more rigorous method of analyzing nonnormal data (Hancock & Liu, 2012; Walker & Smith, 2016). In addition to ML procedures, Bollen–Stine (1992) bootstrap procedure using 500 bootstrap resamples (Walker & Smith, 2016). Researchers have observed that Bollen–Stine bootstrap procedures

provide an appropriate and rigorous method of analyzing nonnormal data with sample sizes of more than 200 (Nevitt & Hancock, 2001).

Tests of mean differences (e.g. *t*-tests) were conducted to determine if meaningful differences of equality of means emerged between Black and Hispanic girls in the sample. Table F4 shows descriptive statistics for the variables used in the current study. Based on observable differences in means by group, independent sample *t*-tests for the scales by race/ethnicity were used in the study. The Levene's test was examined, which tests the null hypothesis that the variances of two groups are equal, which is one of the core assumptions for running an independent sample *t*-test. After further inspection, there were statistically significant mean differences among both groups, based on ethnic identity ($p = .001$), social support ($p = .04$), and PE ($p < .001$). No statistical significance emerged by group for 30-day drug use ($p = 0.97$) and sexual risk behavior ($p = .10$; see Table F3). These results provided a rationale to test models separately by race/ethnicity for the main analyses.

Main Analytic Results

In the next section, the results of the validation of the SPCS-Y scale among girls of color living in an urban community are discussed. Confirmatory factor analysis confirmed the unidimensional structure, the abbreviated bidimensional structure, and other measurement properties such as model fit, item loadings, and internal consistencies among this sample.

Confirmatory Factor Analysis

Several fit indices that researchers use widely and consider robust measures of fit (Hoyle, 1995) were used to determine good model fit. These measures included the chi-square ($\chi2$) test, minimum discrepancy per degree of freedom (CMIN/*df*), GFI, adjusted goodness of fit index (AGFI), CFI, RMSEA, Akaike information criterion (AIC), and Bayesian information criterion

(BIC). Nonsignificant χ^2 values indicate acceptable model-fit; however, χ^2 must be considered in tandem with other fit indices, as χ^2 may be a too stringent and often-unrealistic standard of GFI (West, Taylor, & Wei, 2012). Higher values greater than .95 on the GFI, AGFI, CFI, and Tucker–Lewis Index (TLI) determine adequate model fit. If the CFI is less than one, the CFI is always greater than the TLI. TLI and CFI highly correlate so to determine model fit, researchers should report only one of the two as a measure of model-fit statistics (Hoyle, 1995). Smaller RMSEA values, less than .09, are adequate (i.e., RMSEA less than .05 = good fit; 05–.08 = acceptable fit; .08–.10 = marginal fit; greater than 0.10 = poor fit; MacCallum, Browne, & Sugawara, 1996; West et al., 2012). The RMSEA is currently the most popular measure of model fit, recommended to be reported in all studies that use CFA or SEM. For RMSEA, a provided confidence interval is very informative about the precision in the estimate of the RMSEA.

Confirmatory Factor Analysis of the SPCS-Y on Total Sample

I examined three models through CFA. Table F5 displays the model-fit statistics for the three models. The first model includes all 17 items in the full SPCS-Y, loaded onto a single latent construct. Model 1 showed adequate model fit (CMIN/df = 1017.77, GFI = 0.87, AGFI = 0.83, TLI = .80, CFI = 0.83, RMSEA = 0.09). Model 2 examined the full 17-items, loaded as two dimensions: leadership competence and policy control. Eight items loaded onto the leadership competence factor (i.e., Items 1 through 8) and nine items loaded onto one policy-control factor (i.e., Items 9 through 17). Model 2 did not show adequate fit (CMIN/df = 583.21, GFI = 0.93, AGFI = 0.93, TLI = .90, CFI = 0.91, RMSEA = 0.63). Model 3 examined the abbreviated 8-item scale, recently validated by Lardier, Garcia-Reid, and Reid (2018) and showed superior model fit compared to Models 1 and 2: (CMIN/df = 74.39, GFI = 0.98, AGFI = 0.88, TLI = .87, CFI = 0.97, RMSEA = 0.05). Among the three models, the third model had the smallest AIC and BIC

and a nonsignificant χ^2, which, taken collectively with other indices of model fit, indicates a better fitting model. The third model represents the abbreviated version of the SPCS-Y. An adequate or good model of fit refers to how closely the observed data match the relationships specified in a hypothesized model and how consistent the model is to the data. Table F6 shows the standardized loadings that represent the strength of each SPCS-Y item in relation to the hypothesized factor tested in the analysis. Factor loadings consistently had stronger loadings in the unidimensional PE construct shown in Model 1 and the abbreviated, two factor construct shown in Model 3.

Confirmatory Factor Analysis of the SPCS-Y on Black Girls ($N = 340$)

Table F7 depicts the model fit indices for the SPCS-Y only for Black girls in the sample. The first model included all 17 items loading onto the single latent construct, consisting of all 17 items included in the SPCS-Y. The single-factor solution showed an overall adequate model fit (CMIN/df = 417.48, GFI = 0.86, AGFI = 0.82, TLI = .72, CFI = 0.81, RMSEA = 0.08). Model 2 examined the two-factor construct with all 17 items. Eight items loaded onto the leadership-competence factor (i.e., Items 1 through 8) and nine items loaded onto the policy-control factor (i.e., Items 9 through 17). Model 2 showed slightly better model fit than Model 1 (CMIN/df = 294.7, GFI = 0.91, AGFI = 0.88, TLI = .87, CFI = 0.89, RMSEA = 0.06). Model 3, the third CFA model, with the proposed abbreviated 8-item scale (i.e. Items 1, 3, 4, and 6 loaded onto the leadership competence factor whereas Items 10, 12, 14, and 16 loaded onto the policy control factor) showed superior model fit compared to Models 1 and 2 (CMIN/df = 37.54, GFI = 0.97, AGFI = 0.95, TLI = .95, CFI = 0.97, RMSEA = 0.05). Table F8 shows the standardized loadings that represent the strength of each SPCS-Y item in relation to the hypothesized factor tested in

the analysis. Factor loadings consistently had stronger loadings in the two-factor construct for the SPCS-Y.

Confirmatory Factor Analysis of the SPCS-Y on Non-White Hispanic Girls Only ($N = 490$)

Table F9 illustrates the model fit indices for SPCS-Y for only Non-White Hispanic Girls ($N = 490$). Model 1 included all 17 items that loaded onto one single latent construct consisting of all 17 items included in the SPCS-Y. The single-factor construct showed an overall adequate model fit to the data (CMIN/df = 534.87, GFI = 0.86, AGFI = 0.82, TLI = .81, CFI = 0.84, RMSEA = 0.09). Model 2 examined the two dimensional construct with all 17 items. Eight items loaded onto one single leadership-competence factor (i.e., Items 1 through 8) and nine items loaded onto one policy-control factor (i.e., Items 9 through 17). Model 2 showed slightly better model fit than Model 1 (CMIN/df = 342.14, GFI = 0.93, AGFI = 0.90, TLI = .90, CFI = 0.84, RMSEA = 0.06). Model 3, the third CFA model, with the proposed abbreviated 8-item scale (i.e. Items 1, 3, 4, and 6, loaded onto the leadership-competence factor whereas Items 10, 12, 14, and 16 loaded onto the policy-control factor) showed a superior model fit to the data compared to Models 1 and 2 (CMIN/df = 30.79, GFI = 0.99, AGFI = 0.97, TLI = .98, CFI = 0.98, RMSEA = 0.03). Table F10 shows the standardized loadings that represent the strength of each SPCS-Y item in relation to the hypothesized factor that was tested in the analysis. Factor loadings indicated that all three models had a good fit to the data. Model 2 indicated a better model fit in the full 17-item two-factor construct of SPCS-Y and Model 3 indicated a superior fit to the data in the abbreviated SPCS-Y model.

For the main analytical models, I used the SPCS-Y unidimensional and bidimensional versions in the path analysis. The abbreviated bidimensional SPCS-Y appeared to fit the data better than the full two-factor model. The first six models used the one-factor SPCS-Y scale in

the path model whereas the last three models used the bidimensional SPCS-Y in the path model.

I tested a total of nine path models.

Model Testing on the Total Sample (*N* = 830)

I first tested path-model mediating variables among the total sample and tested the

hypothesized path model then separately by group (i.e., Black and Hispanic girls). I tested all

models through AMOS SEM software. To conduct path models, I used a maximum likelihood

estimator, a robust method for analyzing continuous variables. A maximum likelihood estimator

also accounts and allows for missing data to be analyzed adequately, and accounts for

heteroskedasticity and variables that are nonnormal (Arbuckle, 2013). Path analysis is a test

based on multiple regression models. The analysis allows for exploration of significant and

nonsignificant relationships between exogenous (i.e., independent variable) and endogenous

variables (i.e., affected by one or more variables in a model; Iacobucci, 2010). Path analysis

through SEM are superior to multiple regression analyses because (a) it provides more accurate

estimates of significant and nonsignificant effects of variables in model-based hypotheses

testing; (b) SEM allows regression estimates of all effects by variable simultaneously; (c) it

allows the researcher to compare effects of multiple mediators (Zhao, Lynch, & Chen, 2010);

and (d) SEM path analyses allow for parsimonious testing of variables, particularly in the case of

small sample sizes, thereby providing meaningful results (Peterson et al., 2014).

Psychological Empowerment and Drug Use as Mediators

Model 1 tested the direct and indirect effects of social support and ethnic identity using

PE and drug use as mediators and sexual risk behavior as an outcome. Table F11 displays the

results of the path analysis for the first model for the total sample of Black and non-White

Hispanic girls (*N* = 830). Fit indices were the most insensitive and responsive to sample size,

indicating that the model had excellent fit to the data on the total sample [(χ2 (3) = 2.360, p

= .501) RMSEA = .00 (90% CI = [.00, .05]); CFI = .99]. This model had two exogenous

variables (i.e., social support and ethnic identity). Mediating variables were PE and drug use and

endogenous variables were sexual risk behavior. This model was retained for subsequent

analyses by group (e.g. Black versus Hispanic). Based on the values of the standardized

regression coefficients, social support had a statistically significant positive relationship with PE

(b = .319, p < .001). A positive relationship also arose between ethnic identity and PE (b = .44, p

< .001). A direct effect emerged between ethnic identity and drug use in which ethnic identity

had a negative relationship with drug use (b = .03, p = .003). A direct effect for drug use and

sexual risk behavior indicated a positive and significant relationship (b = .46, p < .001). The

results indicated that social support and ethnic identity directly affected PE, and ethnic identity

predicted lower drug use. PE did not mediate the relationship among social support, ethnic

identity, and sexual risk behavior, however drug use showed a significant mediating effect

between the exogenous variables and endogenous variable. Bollen–Stine bootstrapping results

showed the p value was greater than .05 (p = .26), indicating that the proposed model is

consistent with the sample data (Bollen & Stine, 1992).

Path Analysis for Black girls (N = 340)

Table F12 displays the results of Model 2, which tested the direct and indirect effects of

social support and ethnic identity using PE and drug use as a mediator and sexual risk behavior

as an outcome among Black girls only (N = 340). This model displayed excellent fit to the data,

[(χ2 (3) =.850, p = .837) RMSEA = .00 (90% CI = [.00, .05]), GFI = 0.99, AGFI = 0.99, CFI

= .99]. Furthermore, the results of standardized regression coefficients revealed that social

support has a positive relationship with PE (b = .41, p < .001). In addition, ethnic identity has a

positive relationship with PE ($b = .42$, $p < .001$). Among Black girls, ethnic identity had a negative relationship with drug use ($b = -.09$, $p = .002$). Also, drug use had a positive relationship with sexual risk behaviors among Black girls ($b = .67$, $p < .001$). The results illuminated that social support and ethnic identity had a significant direct effect on PE whereas ethnic identity predicted lower drug use. PE did not perform has a significant mediator in this model among Black girls, however 30-day drug use did.

Path Analysis for Hispanic girls ($N = 490$)

Table F13 displays the results of Model 3, which tested the direct and indirect effects of social support and ethnic identity using PE and drug use as a mediator and sexual risk behavior as an outcome among Hispanic girls ($N = 490$). This model was a good fit, evidenced by the values of fit indices, [($\chi 2$ (3) = 3.926, $p = .627$) RMSEA = .02 (90% CI = [.00, .08]); CFI = .99]. Based on standardized regression coefficients, social support had a significant relationship with PE ($b = .20$, $p < .001$) and ethnic identity had a positive relationship with PE ($b = .38$, $p < .001$). Moreover, a direct effect and positive relationship emerged between 30-day drug use and sexual risk behavior ($b = .44$, $p < .001$). These results indicated that social support and ethnic identity predicted higher levels of PE whereas ethnic identity predicted lower drug use.

In conclusion, three paths were common across groups such that social support and ethnic identity predicted higher PE. In contrast, drug use predicted higher sexual risk behavior. Results indicated that social support and ethnic identity had a significant relationship and direct effect on higher PE for Black and Hispanic girls. PE continued not to have a mediating role in this model whereas 30-day drug use did. Overall, no differences emerged between Black and Hispanics girls based on the hypothesized path model.

Psychological Empowerment as a Predictor

PE did not appear to be a significant mediator in the previously tested mediation models.

Therefore, in Models 4–6, I tested PE as an exogenous variable in addition to ethnic identity and

social support to further understand the role of psychological empowerment on risky behaviors.

Thirty-day drug use in the model was tested as a mediator and sexual risk behavior as an

outcome variable. Table F14 displays the results of the path analysis for the total sample ($N =$

830). Age and grade level were included as control variables in this model. This model was a

good fit based on the model-fit statistics: [($\chi 2$ (5) = 28.492, p = .001) RMSEA = .07 (90% CI =

[.00, .08]); GFI = .99, AGFI =.99 CFI= .98]. A significant negative relationship arose between

PE and drug use (b = -.02, p = .007). Social support also had a direct effect and negative

relationship with drug use in which the relationship was significant (b = -.07, $p < .001$). Ethnic

identity also had a significant negative impact on drug use (b = -0.05, $p = < .001$). PE had a

significant indirect effect on sexual risk behavior, mediated by drug use among girls in this

sample (b = -.04, p = .003). Thirty-day drug use performed as a partially mediated the

relationship between social support and ethnic identity on sexual risk behavior.

Psychological Empowerment as a Predictor for Black Girls Only

For Model 5, PE, social support, and ethnic identity as exogenous variables mediated by

30-day drug use and sexual risk behavior as endogenous variables. Age and grade were included

in the model as covariates. Table F15 displays model-fit statistics based on the subsample of

Black girls (N = 340). This model was not a good fit, evidenced by the fit indices, [($\chi 2$ (4) =

5.624, p = .229) RMSEA = .035 (90% CI = [.00, .09]); GFI = .99, AGFI = .96, CFI = .99]. The

results of standardized regression coefficients depicted a negative relationship between PE and

drug use (b = -.06, p = .022). Social support also had a negative relationship with drug use such

that one unit increase in social support aligned with a decrease of -0.17 units in drug use, and this relationship was statistically significant ($b = -.17$, $p < .001$). This outcome indicates that PE and social support had a significant relationship with lower drug use among Black girls. Drug use partially mediated the relationship between social support and sexual risk behavior.

Psychological Empowerment as a Predictor for Hispanic Girls Only

In Model 6, PE, social support, and ethnic identity were tested as exogenous variable mediated by 30-day drug use and sexual risk behavior as endogenous variables. I included age and grade as covariates. Table F16 shows the results on only Hispanic girls ($N = 490$). This model was also a good fit based on the values of the goodness of fit indices, [$\chi2$ (5) = 9.182, p =.102, RMSEA = .04 (90% CI = [.00, .08]); GFI = .99, AGFI = .98, CFI = .99]. According to the results of standardized regression coefficients, social support had a negative relationship with drug use ($b = -.06$, $p < .001$). In addition, PE had an indirect effect with sexual risk behavior mediated by drug use ($b = -.04$ $p = .026$). Drug use partially mediated the relationship between ethnic identity and psychological empowerment on sexual risk behavior.

Psychological Empowerment Conceptualized Using the Abbreviated SPCS-Y

According the results from the CFAs (see Tables F5–F10), the abbreviated two factor SPCS-Y had a superior consistent model fit to the sample. Due to this finding, the next three models (see Tables F17–F19) were tested using the abbreviated SPCS-Y scale, which conceptualized PE. In measuring PE, the bi-dimensional abbreviated model accounted for two factors (policy control and leadership competency), tested as independent variables in addition to ethnic identity and social support. In included 30-day drug use in the model as a mediator and sexual risk behavior as an endogenous variable.

Table F17 displays the results of the path analysis for the total sample ($N = 830$). Age and grade level were included as control variables in this model. This model was an adequate fit to the data based on the model-fit statistics: [($\chi2$ (5) = 3.569, p = 0.467) RMSEA = .01 (90% CI = [.00, .10]); GFI = .99, AGFI = .99 CFI = 1.00]. In this model, policy control had a significant negative relationship with 30-day drug use (b = -.07, p = .017). Leadership competency did not have a significant effect with 30-day drug use (see Table F17). Policy control had a significant negative direct effect with sexual risk behavior mediated by 30-day drug use (b = -.10, p < .001). Ethnic identity (b = -.050, p < .001) and social support had a significant negative effect on 30-day drug use (b = -.06, p = .032).

Next, the hypothesized model was examined on solely Black girls in the sample. Table F18 displays the results of the path analysis for the sample ($N = 340$). Age and grade level were included as control variables in this model. This model was an adequate fit based on the model-fit statistics: [($\chi2$ (5) = 6.482, p = .166) RMSEA = .01 (90% CI = [.00, .10]); GFI = .99, AGFI = .99 CFI = 1.00]. I tested the two-factor abbreviated model (policy control and leadership competency) separately. Among the entire sample, policy control had a significant negative relationship with 30-day drug use (b = -.14, p = .019). Leadership competency did not have a significant effect with 30-day drug use. Ethnic identity (b = -.27, p < .001) and social support had a significant negative effect on 30-day drug use (b = -.17, p < .001). Drug use had a significant positive direct effect on sexual risk behavior (b = 0.65, p < .001).

Last, the hypothesized model was tested on Hispanic girls only ($N = 490$). Among this sample, the abbreviated SPCS-Y had a superior model fit to the sample. Age and grade level were included as control variables in this model. Table F19 displays the results of the path analysis. This model had a superior fit based on model-fit statistics: [($\chi2$ (4) = 3.569, p = .988)

RMSEA = .01 (90% CI = [.00, .10]); GFI = .99, AGFI = .98 CFI = 1.00]. In measuring PE, I

tested the two-factor abbreviated model (policy control and leadership competency) paths

separately. Ethnic identity had a significant negative relationship with 30-day drug use (b = -.11,

p = .023). Social support had a significant negative effect with 30-day drug use (b = -.15, p

= .002). No significant paths emerged between policy control and leadership competency with

drug use and sexual risk behavior.

Chapter 5: Discussion

Understanding resiliency among urban girls of color and its role in prevention has been limited in research. Despite exposure to adverse experiences, girls of color possess remarkable strengths that researchers and the community do not present or highlight. Thus, as researchers ignore the strengths and attributes of girls who are not engaging in risky behaviors, this absence can further marginalize girls of color and contribute to the deficit narrative that follows them into adulthood. Past and current approaches to reducing sexually risky behaviors and drug use among youth often seek to remove risks from urban communities, change cultural norms, and view adolescents of color and their families through a deficit lens. Such approaches often do not consider environmental contexts and how strengths present in ethnic cultures can serve as protective factors against risky behaviors for adolescents. Even less attention has been placed on the availability of racial and gender-specific programs that seek to address health disparities.

This study aims to persuade prevention researchers to begin using empowerment and intersectionality theories as foundational frameworks to allow for the promotion of strengths to highlight among an oppressed and marginalized group (i.e., Black and Hispanic girls). Acknowledging strengths and promoting protective factors can further decrease poor health outcomes as a result of engagement in risky behaviors (i.e., drug use and sexual risk behavior) associated with adolescent girls who lack such protective factors. Empowerment theory proposes that an individual is able to gain control over their life to engage in systematic social change, which implies that individuals have strengths (Zimmerman, 2000). Such strengths allow for individuals to feel in control of their environment and be able to identify sources in their community to support them in achieving positive outcomes. Public health and social work personnel have used this concept of empowerment widely (Beeker, Guenther-Grey, & Raj,

1998). However, more attention to empowerment theory should be incorporated in family-science and human-development work.

The use of intersectionality theory as a framework acknowledges that girls of color are forced to live among a population where they function in a patriarchal society that continues to label them as inferior. As Few-Demo (2014) suggested, "intersectionality and intersectional analysis are the future of mainstream family science". Intersectionality theory goes beyond empowerment and aims to center the experiences of girls of color whose identities overlap, producing multiplicative oppressions (Hill-Collins & Bilge, 2016). Such an experience impacts how society views girls and how girls operationalize the concept of empowerment in their worldview. Due to the multiplicative nature of being female, a member of a racial/ethnic minority, low socioeconomic status, and young age, urban adolescent girls of color often face double or triple jeopardy, contributing to poor health and educational outcomes compared to their White counterparts (Collins, 2015). Racially gendered forms of oppression may contribute to girls and women feeling less empowered due to power imbalances.

Ethnic minority groups whose identities have been historically oppressed and marginalized often lack access to important resources that can aid in their success, due to low social capital and inequities present in their neighborhoods as a result of residential segregation (Lardier, Herr, Barrios, Garcia-Reid, & Reid, 2017). Also, such identities may be further marginalized due to stereotypical imagery that allows girls of color to overidentify with negative role models, thereby normalizing risky behaviors and values (Opara, 2018). Researchers must recognize the intersections of multiple interlocking social identities that contribute to views, values, beliefs, and outcomes in ethnic-minority females.

The need to acknowledge intersectionality as a unifying framework for community workers, clinicians, and researchers is often ignored due to the paucity of knowledge in conducting intersectionality research through quantitative methods (Bowleg, 2012). At minimum, researchers can acknowledge intersectionality as a framework rather than a theory by collecting data on race, ethnicity, age, socioeconomic status, and gender, and informing their interpretation of results based on gender and racial differences in their sample to guide methodological considerations (Bowleg, 2012; Few-Demo, 2014). Similar to the concept of empowerment, analyses grounded in feminist principles allow researchers to explore how women and girls are oppressed—bringing attention to inequities they experience and empowering them to participate in efforts to impact positive social change (Collins, 1991). Feminist theory implores equity and a focus on justice with the goal of providing information, empowerment, and change through sociopolitical control (Allen, 2016; Allen & Jaramillo-Sierra, 2014; Few-Demo, Lloyd, & Allen, 2014). As the concepts of empowerment theory and feminist theories (e.g., intersectionality and critical-race theories) often overlap, empowering marginalized groups to challenge power structures and be aware of their sociopolitical stance, is the core foundation. Combining empowerment theoretical measures promises understanding of complexities of gender/racial-specific samples through quantitative methodology.

Additionally, little is known about how PE is conceptualized in girls of color and the role of empowerment processes in reducing risky behaviors. In empowerment research, a majority of studies that have examined PE and youth developmental outcomes have acknowledged gender differences (Christens & Lin, 2014; Christens & Peterson, 2012; Christens et al., 2011; Peterson & Hughey, 2004; Speer, Peterson, Armstead, & Allen, 2013; Speer et al., 2012), however, results are often confounded by race and convoluted with the experiences of boys, and do not get

investigated further. In addition, minimal research has examined the various roles of PE as it is conceptualized using the SPCS-Y and the abbreviated SPCS-Y as mediators and as independent variables in conjunction with conceptually related variables such as ethnic identity and social support.

Validation of SPCS-Y

Lack of validated measures in empowerment research on girls of color impact understanding empowerment's role in prevention for urban girls. In addition, because outcomes about girls of color often are combined or are compared with boys of color in research, their unique lived experiences in a racist, sexist, and patriarchal society can impact empowerment processes and outcomes but subtly are ignored and not further examined in research. To promote the use of empowerment measures, one aim of this study was to validate the full item and abbreviated SPCS-Y on a sample of girls of color. Previous studies that have examined the abbreviated version of the SPCS-Y (e.g., Christens et al., 2016; Lardier, Garcia-Reid, & Reid, 2018; Peterson et al., 2017) and have found it to be a better fit to the data than the full-item SPCS-Y, demonstrating that the abbreviated scale is more suitable to conceptualize sociopolitical control among samples in a shorter version.

Findings from this study were consistent with research that found the abbreviated 8-item scale was a superior fit to the full 17-item version. This was seen across the entire sample and also by subgroup. An explanation of this finding may be the way empowerment processes and outcomes emerge based on specific contexts, which may make the specific items that had higher factor loadings more translatable to this group (Peterson et al., 2011; Zimmerman, 1995). Based on empirical evidence on the validity and the reliability of the 8-item SCPS-Y among girls of color, researchers recommended that the shortened version of the scale be used in similar

contexts in the future (Christens, Krauss, & Zeldin, 2016). Findings add to not only empowerment research, but to intersectionality and feminist literature as an appropriate measure to examine empowering processes and outcomes for girls of color.

In future research, items in the SPCS-Y should be tailored to different youth groups and populations (Peterson et al., 2011). Zimmerman (1995) notes that Specific operational definitions of SPC should be context-specific, and the search for a single universal measure of empowerment for all populations and contexts is an inappropriate goal (Zimmerman, 1995). Thus, it is important and instrumental that measures for SPC be validated and confirmed before interpreting how girls conceptualize empowerment.

Psychological Empowerment

Zimmerman (1995) argued that measuring SPC in the intrapersonal component may be an indicator of PE overall in a specific context. For this study, and to be consistent with empowerment research, PE was conceptualized using the sociopolitical control construct measured by SPCS-Y. This format refers to an ability to identify and pinpoint those in power, understand how to acquire essential resources, and define the factors they include in their decision making (Christens & Peterson, 2012b). Researchers designed the SPCS-Y to represent the two hypothesized SPC dimensions of leadership competence and policy control. Previous studies demonstrated the mediating role of PE on developmental outcomes (Christens & Peterson, 2012; Lardier, 2016) and further investigated PE as an outcome (Peterson & Reid, 2003; Speer et al., 2012).

Although this study did not demonstrate the mediating role of PE between protective factors and sexual risk behavior, it did show a promising role as an independent variable for selected outcomes. Examining PE as an independent variable in this study was essential in

understanding the direct effects of an individual's perception of empowerment, their ability to

engage in political control and leadership ability, and how such qualities contribute to specific

outcomes (i.e., drug use and sexual risk behavior). Researchers have consistently shown PE to

align with risky behaviors such as drug/substance use among youth of color (Peterson, Peterson,

Agre, Christens, & Morton, 2011; Peterson & Reid, 2003). No identified studies tested PE solely

on a sample of urban females of color or demonstrated such findings through an intersectionality

framework. For this study, PE as a unidimensional construct and 30-day drug use were first

tested as mediating variables among ethnic identity, social support, and sexual risk behavior.

Demonstrated in the first model, social support and ethnic identity was found to have had

a positive and significant direct effect with PE among girls in this study. The literature supports

this finding, suggesting that PE can develop through interactions that translate into social

supports in an individual's system (Christens & Peterson, 2012). Not only does having

supportive systems in a youth's environment lead to higher levels of PE but also can accompany

a positive, bidirectional effect on one's ethnic identity as well.

Findings also indicated the role of ethnic identity among girls of color in empowering

them and in increasing their sense of sociopolitical control. This finding is consistent with

research that demonstrated the strong impact and interacting effects between PE and ethnic

identity (Christens et al., 2012; Holden et al., 2005; Hughey et al., 2007; Lardier, Garcia-Reid, &

Reid, 2018; Peterson & Reid, 2003). This can be due to the empowering effect that can take

place when an individual whose ethnicity has been marginalized is educated on principles of

pride relating to their ethnicity, honor, and close attachment to their cultural roots. Ethnic

identity begins to emerge as an intertwined construct that can be used in conjunction with

empowerment. Because empowerment is a concept that can allow individuals from marginalized

communities to gain the ability to be in control of their environment, understanding how

empowerment is conceptualized among ethnic minorities from marginalized backgrounds is

crucial (Freire, 1968; Peterson et al., 2014; Rappaport, 1987; Rappaport et al., 1984; Travis &

Leech, 2014; Zimmerman, 2000).

Using an intersectionality framework allows researchers to highlight the intersection of

identities of adolescent girls of color including race, ethnicity, gender, and class, understanding

that these identities have been historically oppressed for generations and contributing to their

ability to even feel empowered. Researchers showed the importance of using culturally specific

measures (i.e., ethnic identity) when attempting to understand developmental outcomes caused

by engagement in risky behaviors such as drug use and abuse and sexually risky behaviors

(Beeker et al., 1998; Christens & Peterson, 2012; Israel, Schulz, Parker, & Becker, 1998). In the

first three models, PE did not appear to have a mediating role in predicting sexual risk behavior,

although 30-day drug use had a direct negative significant effect on sexual risk behavior.

30-day Drug Use as a Mediator

Drug use appeared to have a direct negative effect with ethnic identity and sexual risk

behavior, indicating that girls in this study who had high levels of ethnic identity were less likely

to engage in drug use in the past 30 days. When accounting for group differences, ethnic identity

was a protective factor for drug use among only Black girls. An explanation for this finding can

be that Black girls who do not engage in risky behaviors may have higher levels of pride and

cultural values that incline with messages of self-worth, positive role models with whom they

can identify from the perspective of race and gender, and support that promotes healthy

behaviors. This possibility is consistent with literature that supports the role of ethnic identity

and substance-use abstinence among Black adolescents (Belgrave et al., 1997; Belgrave, Brome,

& Hampton, 2000; Brook, Duan, Brook, & Ning, 2007; Lardier, Reid, Garcia-Reid, 2018; Lardier, Garcia-Reid, & Reid, 2018; Sanchez, Hamilton, Gilbert, & Vandewater, 2018).

There were significant effects that emerged among Hispanic girls who exhibited high levels of ethnic identity on 30-day drug use but were not consistent. This inconsistency has been seen in other research as well (Gary & Montgomery, 2012). An explanation for this result can be the inconsistency of how researchers measure and conceptualize ethnic identity. Various ethnic groups of Hispanic heritage may have different effects on certain outcomes. Across all three models (Model 1–3), sexual risk behavior and drug use had a significant positive relationship, suggesting that girls who engaged in drug use were also more likely to engage in sexual risk behavior. This is consistent with research and can be explained by the commonality of risk factors present for sexual risk behaviors and drug use.

Psychological Empowerment as a Predictor

To understand the role of PE on girls of color, PE was tested as an independent variable in addition to ethnic identity and social support. PE did not have a significant mediating effect on sexual risk behavior in previous models. Age and grade in the remaining models and they did not have a significant effect on the variables. Among girls of color in the study, PE, social support, and ethnic identity had a negative relationship with drug use. PE also had a significant indirect effect with sexual risk behavior mediated by 30-day drug use. This suggests that 30-day drug use impacted the strength of the relationship between PE and sexual risk behavior. Thus, girls with high levels of PE are less likely to engage with sexual risk behavior if they are not engaging in drug use.

As PE is often used in empowerment research to predict developmental outcomes such as drug use or school importance among youth, very limited empirical evidence supports the

association between empowerment using the SPCS-Y and sexually risky behaviors. However, similar studies examining the association between empowerment using other measures and sexual activity showed promising results (e.g., Reininger, Pérez, Flores, Chen, & Rahbar, 2012). A similar relationship arose with social support, indicating that 30-day drug use had a mediating effect between social support and sexual risk behaviors in the total sample. Consistent with research, girls who had higher levels of social support and did not use drugs were also more likely to not engage in sexually risky behaviors (Hamme Peterson et al. 2012).

Group Differences

Among Black girls, PE had a direct effect on 30-day drug use, but no effect on sexual risk behavior. Among Black girls, 30-day drug use mediated the relationship between social support and sexual risk behavior. Researchers documented the importance of social support on sexual risk behaviors among adolescent women (Reininger, Pérez, Flores, Chen, & Rahbar, 2012). Consistent with research on the importance of familial and positive peer networks among Black girls, findings revealed that social support is a crucial protective factor (Garcia-Reid, Lardier, Reid, & Opara, 2018; Hutchinson et al., 2012; Schinke, Fang, & Cole, 2009). Among Hispanic girls, 30-day drug use mediated the relationship between PE and sexual risk behavior, indicating that Hispanics who engaged in lower rates of drug use had high levels of PE and lower levels of sexual risk behavior. Social support also had a significant negative effect on 30-day drug use but not on sexual risk behavior. A possible explanation is how sexual risk behavior is measured in the study. As previously mentioned, the two groups studied here conceptualize sexual risk behavior differently. Black girls who engage in sexual risk behaviors that lead to diagnoses of STIs, HIV, or early pregnancy were genuinely found to have sex with multiple partners and had sex at earlier ages; for Hispanic girls, sexual risk behaviors align with having

sex with fewer partners (often in monogamous relationships) but without contraceptives (Pflieger et al., 2014; Upchurch et al., 1998). In this study, PE may be an important construct in reducing sexual risk behavior among Hispanic girls, as the concept of empowerment, including leadership skills and engagement, can give girls the confidence to refuse engagement in risky behaviors with their partners, even in a monogamous relationship.

SPCS-Y Abbreviated Model

More recently, empowerment researchers have insinuated the importance of using shortened instruments in data collection to improve the reliability of results (Peterson et al., 2014). This change is crucial, especially when working in communities with individuals who are already burdened with individual and structural-level factors that can impede their ability to participate in long-term intervention studies and research projects. This study is one of the few to test the abbreviated SPCS-Y solely on a sample of urban girls of color and test its validity in a structural path model. This study allows researchers to understand solely the effects on PE, conceptualized as sociopolitical control among girls living in a patriarchal society and also to understand which dimension in sociopolitical control has a more beneficial impact on outcomes for girls of color.

In the last three models, social support and ethnic identity showed significant negative effects with 30-day drug use. In regard to sociopolitical control, among the total sample, policy control appeared to have a significant negative effect on 30-day drug use. Policy control also had a direct negative relationship with sexual risk behavior mediated by 30-day drug use. Policy control had a more significant effect, signifying that girls who were more aware of sociopolitical aspects were less likely to engage in risky behaviors. Leadership competency appeared not to have a significant effect on 30-day drug use or sexual risk behavior. When racial differences

were accounted for, Black girls appeared to have a stronger negative relationship with policy control on drug use and sexual risk behavior, while the relationship disappeared for Hispanic girls. This finding contributes significantly to empowerment research, indicating that specific components such as policy control rather than leadership competency can have a direct effect on the engagement of sexual risk and drug use among girls of color and have the potential to be used as tools in prevention research.

Implications

Findings from this dissertation provide promising results to shape research, practice, and policy. In this study, I examined the role of empowerment, social support, and ethnic identity on risky behaviors among adolescent girls of color through a strengths-based, intersectional lens using empowerment theory (Zimmerman, 1999) and intersectional analyses (Crenshaw, 1996; Hill-Collins, 2000). The aims of this study were to highlight the strengths of girls of color and their supportive networks, discuss the importance of cultural values, and learn from the experiences of girls of color who are not engaging in risky behaviors to inform prevention research. Intersectionality as a framework posits that people who belong to historically marginalized groups and not dominant groups are the experts of their lived realities and should be the starting point of information (Bowleg et al., 2013; Weber & Parra-Medina, 2003). Therefore, findings from this study suggest that prevention research, interventions, and programming should be informed by the experiences of Black and Hispanic adolescent girls by highlighting protective factors that can be incorporated to buffer risk exposure. Often substance abuse and sexual-health researchers view adolescent minority girls from a deficit perspective, highlighting the risks present in their neighborhoods and their culture and overemphasizing engagement in risky behaviors. Ignoring the factors that are present for girls who are not

engaging in risky behaviors can be detrimental for girls of color and further marginalize them as a group. Thus, this study aimed to enhance the use of cultural values and continuously discussing protective factors and strengths to step away from the risk perspective.

Implications for Research

The infusion of empowerment and intersectionality theory allowed for the strengths and the experiences of girls of color to be the central point of this study, specifically targeting girls whose backgrounds have been historically marginalized. The use of intersectionality theory in substance abuse, HIV/AIDS, and STI prevention research among girls of color is limited. This study provides support for researchers to use intersectionality theory as a framework for quantitative study. Bowleg (2013) posited that the difficulties researchers have in using intersectionality theory is its inability to "test" the theory on a specific population. By nature, the concept of intersectionality subverts its ability to test or measure, as that would assume that categories of identities can be divided and measured. Intersectionality theory allows researchers to understand the importance of viewing populations as having multiplicative identities that contribute to their view of society and their current conditions.

Another implication of the findings is that one can measure and conceptualize sociopolitical control using the SPCS-Y as a two-factor abbreviated scale among urban girls of color. Results contributed significantly to empowerment and feminist theory; I urge researchers to adopt new measures such as the abbreviated SPCS-Y to measure empowerment among young girls of color in the United States. By contributing to empowerment research, findings seek to highlight the identities of girls of color and portray their experiences through a strengths-based lens and approach. By introducing a scale that has the ability to measure empowerment, this study allows prevention researchers and community leaders to develop programs that promote

empowerment processes and outcomes. Researchers working with girls of color in underresourced communities could use the abbreviated version of SPCS-Y, which could be particularly important in developing strengths-based youth programs to understand how girls of color can engage in sociopolitical control and the factors that nurture or inhibit such empowering processes.

This study supports the advancement of girls of color, whose backgrounds have been historically marginalized, to engage in roles that not only support leadership and political engagement but engage in spaces where they are supported by family, peers, and adult mentors who can assist in nurturing their needs. Because girls of color who belong to marginalized backgrounds and identities are often forced to be resilient, empowerment researchers can begin to explore the role of political engagement that fosters resilience. Clonan-Roy et al. (2016) suggested in their feminist analysis, "understanding sociopolitical environments can be viewed as the engagement of resistance for liberation, operate as self-righting tendencies or protective practices that allow one to persevere through adversity and challenging experiences". Empowerment researchers can begin to highlight this view using empirical evidence to encourage programming with girls of color, engaging in methods that foster critical consciousness thinking that can support their resilience, bolster their confidence, instill pride (i.e., racial, ethnic, and gender pride), thereby improving developmental outcomes.

Strengthening ethnic identity among girls of color has been seen consistently in the literature to buffer engagement in risky behaviors. Engaging in organizational activities that foster empowerment should be embedded in deep cultural values and principles that allow girls to simultaneously become more attached to their community and self-identity while challenging structural factors that have placed them at risk historically. For girls of color, who have to

challenged and combatted sexist and racist ideologies, such challenges can affect their sense of self in relation to the way society views them. Different from boys of color, who challenge racial and ethnic-specific discrimination, girls of color must negotiate their identity and how society views them, often in an oversexualized way, serving as multiplicative forms of oppression, given that they belong to various intersections (e.g., race, ethnicity, gender, and class).

Researchers and policymakers often suggest the formation of policies that are unrealistic and may further marginalize groups, thereby leading to an exacerbation of symptoms associated with drug abuse and increased incidence of STI or HIV/AIDS. A solution to understanding the unique needs of vulnerable populations such as girls of color is to allow youth to be part of prevention planning and research through every step of the process. Such an approach allows prevention researchers to engage in quality community-based participatory research, which has proven to have beneficial results on such populations (Fullilove & Fullilove, 1995). In public-health, social-work, and family-science fields, professionals are trained to engage and work with the most vulnerable and work with "hard to reach" populations. Often professional workers do not represent or ignore such communities in research and policy formation, making it difficult to tailor programs that can directly impact such communities (Burlew et al., 2011).

Neighborhood context plays a significant role in availability, access, and attitudes surrounding drug use among youth and the shaping of values and beliefs around sexual health, thereby impacting the incidence of substance abuse, HIV/AIDS, and STI (Floyd & Brown, 2013; Zimmerman & Farrell, 2017). As 30-day drug use was a significant mediator in this study, addressing visibility and access to drug use in neighborhoods can be key in reducing behaviors associated with sexual risk. Policymakers need to understand the importance of monitoring

substance use through local-level data collection of key drugs used in local urban communities such as tobacco, marijuana, and alcohol.

The Strategic Prevention Framework provided by SAMHSA (n.d.) provides a useful framework to assess local community needs. The Strategic Prevention Framework is outcome driven and designed to aid researchers, community leaders, and practitioner collect data to inform prevention programming. An example involves the use of formative data collection that occurs before an intervention or policy goes into effect, allowing researchers to understand baseline trends. Formative data also provide a guide and foundation for leaders to evaluate whether targeted communities or groups are successful in meeting specific needs and outcomes. For example, with recreational marijuana legalization on the horizon in New Jersey, it is essential that cities begin collecting baseline data on marijuana use and understanding gender, racial, and age disparities in use. Colorado Department of Health noted their disadvantage in adopting a comprehensive public health framework after recreational marijuana use was legalized (Ghosh et al., 2016). The lack of baseline marijuana questions and the lack of validated surveys that examined marijuana use prevalence before legalization in Colorado made it difficult for researchers to collect accurate measures of marijuana use among youth and adults (Ghosh et al., 2016). Such an absence can lead to flawed approaches in prevention programming designs for heterogeneous communities in New Jersey. In short, researchers should make substantial efforts to understand drug trends among girls of color and use local-level data to tailor prevention efforts.

Implications for Practice

In this study, I presented findings that highlighted the role of PE, social support, and ethnic identity on sexual risk behavior and drug use among urban girls of color. Clinicians and

researchers should understand the impact such factors have on reducing negative health outcomes among girls of colors and acknowledge the cultural differences that may be present between Black and Hispanic girls living in the same communities. The main finding present in all models was that drug use and sexual risk behavior had a significant positive relationship. In addition, drug use was a significant mediator between protective factors and sexual risk behaviors suggesting that by preventing drug use/abuse, prevention researchers can simultaneously reduce sexual risk behaviors. Incorporating programs that highlight factors already present in ethnic minority families allows individuals from marginalized backgrounds to appreciate the tools they currently possess, thereby empowering youth and families to make effective decisions that impact their view of self in a positive way.

Strengths-based and culturally competent frameworks are beginning to emerge as key instruments in family science. Practitioners must acknowledge that historically marginalized families should feel valued and applauded for their work in challenging negative narratives and stereotypical beliefs about their groups. As urban families must live in communities that are often segregated, drug infested, and riddled with violence, the ability of parents, educators, and adult allies to continue to teach their daughters' drug-resistance strategies should be highly regarded. The use of intersectionality theory in the study highlights how diverse families, through social support, respond to historical and social inequalities through resilience and resourcefulness, providing a protective instrument for adolescent girls of color. The incorporation of this lens in prevention research and clinical practice would allow for more targeted substance-abuse-prevention programs. Findings encourage clinicians to highlight the strengths in ethnic-minority families and move away from the deficit model.

As social support was a significant finding in this study, which includes the construct of family support, peer support, and support from other adult allies (i.e., counselors, teachers), study results support the importance of family programming as a key determinant in reducing substance use and sexual risk behavior prevention among girls of color. Using family-based interventions in community work is essential, honoring the special relationship of Black and Hispanic adolescent girls with their families, particularly maternal figures, who are a primary part of their microsystem (Bronfenbrenner, 1979). Practitioners should begin to understand how Black and Hispanic girls' social identities intersect and operate in their lives and environments, and their strengths as young women is crucial. Interventions that address drug use and abuse and sexual health among Black and Hispanic girls should specifically address community stressors such as family cohesion, anxiety, trauma, and school stress. Such stressors may contribute to high engagement in risky behaviors among urban youth.

In addition, the formation of groups of strengths-based adolescent girls of color can be beneficial. Such groups can incorporate elements of policy control and leadership competency to effectively increase girls' awareness of sociopolitical control in their immediate environments. Providing safe spaces for girls of color whose backgrounds have been (and continue to be) minoritized can be empowering and nurturing to their ability to thrive in impoverished urban environments. Because society often values Anglo White beliefs and norms, groups comprising girls (and women) of color can serve as funds of knowledge and culture, promoting understanding of the social contexts in which they develop, and examining the specific forms of oppression they experience (Clonan-Roy et al., 2016). Formation of such groups can not only increase levels of empowerment but also increase their ethnic identity, as groups can include elements of pride and strength among ethnic minority girls and women. By framing adolescent

girls' group spaces with an intersectional approach, such groups encourage the development of critical consciousness and understanding of girls' ecological context (Freire, 1968). Thus, it is essential to permit Black and Hispanic adolescent girls to provide, from their perspective, specific protective factors that reduce their chances of using drugs and engaging in other risky behaviors.

Implications for Policy

With the legalization of marijuana on the horizon in New Jersey and the rise of the opioid epidemic, federal funding agencies such as National Institute on Drug Abuse and SAMHSA are beginning to encourage initiatives to solve the current opioid epidemic that has devastated communities throughout the United States. Unfortunately, historically in the United States, prevention efforts are not valued until an epidemic has been declared and individuals from privileged groups have been negatively affected. According to the latest findings from the *Monitoring the Future* study (Johnston et al., 2018), vaping among youth has been declared a national epidemic, with youth reporting high levels of vaping nicotine and marijuana products across the nation. Though prevention efforts have been acknowledged and funding has been designated to study the prevalence of drug use and treatment, innovative methods such as strengths-based approaches rather than focusing on a risk perspective are needed to obtain more aggressive and positive results.

Adopting a public health framework could aid in the mitigation of risks associated with drug availability. The Centers for Disease Control and Prevention (CDC, n.d.) outlined three components that comprise the public health framework: assessment, policy development, and assurance. Assessment refers to the investigation of environmental issues in a community through comprehensive needs assessments and data collection. Policy development refers to

developing policies to protect the public's health and safety. Assurance refers to how polices are enforced, regulated, and evaluated. Family scientists, including researchers and clinicians, can play a vital role in ensuring that all components of the framework are adopted and followed in the context of legal drugs (i.e., alcohol and tobacco) and illicit drug s (i.e., marijuana).

Strengths and Limitations

This dissertation has several strengths that contribute to sexual health and drug use-prevention research. First, this study moves from deficit-focused research and examines the social and cultural factors that can serve as protective effects for adolescent girls of color. Second, this study is part of a growing body of literature on empowerment research over the last decade that empirically tests PE using rigorous methodological techniques: SEM and CFA. Third, validated measures with strong psychometric properties in empowerment, social support, ethnic identity, drug use, and sexual risk behaviors among urban adolescent girls of color were included in this study, providing reliable results. Fourth, this study advances research on the mediating influence of drug use and its association with sexual risk behavior between social support, ethnic identity, and PE among low-income Black and Hispanic girls. Fifth, this study provides preliminary evidence that ethnic identity, social support, and PE (including leadership and policy-control dimensions) are significant protective factors in reducing risky behaviors among Black and Hispanic girls living in an urban community. Sixth, this study tests empowerment constructs using SPCS-Y, validated on ethnic minority female adolescents; this is the only study to date using empowerment-theory literature where the SPCS-Y scale and abbreviated SPCS-Y were validated on a single population, contributing to the research on PE and girls of color. Seventh, to date, no other researchers have combined the use of empowerment theory and intersectionality to examine protective factors among girls of color. Last, this study

contributes significantly to feminist literature and provides support for the use of intersectionality as a framework for a quantitative study. Study findings contribute significantly to not only empowerment research, but to the adaption of intersectionality theory in family science and public health research, and anti-deficit-focused prevention work for girls of color living in urban communities.

Despite its strengths, a few limitations should be acknowledged. First, due to the cross-sectional nature of the survey design, it is difficult to establish a causal relationship between variables and empowerment processes and outcomes. Cross-sectional studies provide an appropriate foundation to design future longitudinal studies. Future work should aim to replicate this study with a longitudinal design.

Second, specifically concerning an empowerment measure, the current study used a Likert-type scale-response system, which can be seen as a limitation. Recent researchers (e.g., Peterson et al., 2017) found that a phrase-completion format may help reduce bias and improve survey validity. Therefore, future researchers should examine the phrase-completion format and Likert-type scale-response format between the full 17-item SPCS-Y and the abbreviated SPCS-Y tested and validated in this study.

Third is the use of secondary data. With secondary data analyses, the researcher often does not have control over the survey design and quality of the data. For example, though the data available were appropriate to answer the research questions, several variables would have been useful in truly examining girls of color through an intersectional lens, such as gender identity and pride measures. Future researchers should aim to create and develop quantifiable scales that can allow for the rigorous understanding of the multiplicative identities to which girls of color belong (e.g., race, class, and gender). Previous researchers showed differences in

empowerment by gender (e.g., Christens & Lin, 2014; Christens & Peterson, 2012; Christens et al., 2011; Speer et al., 2012) and ethnic identity (e.g., Phinney et al., 2001; Rivas-Drake et al., 2014; Umana-Taylor et al., 2013). Although this study did not seek to compare boys to girls, future researchers should attempt to capture how gender and race intersect to contribute to empowerment processes among youth. Although secondary data analysis does significantly reduce time constraints in data collection and research, this method can have limitations. Also, data were self-reported and thus may be susceptible to over- or underreporting of risk behaviors.

A fourth limitation is that data accrued in 2006–2008 for needs-assessment purposes. Although the data may be outdated, to answer the study's research questions it was important to understand characteristics among girls of color, health outcomes, and characteristics based on age. This study accounted for these factors, given the large sample of adolescent girls who participated in this study. The availability of these data allowed for findings to be valid, providing protective factors for adolescent girls of color in an urban community.

Fifth, girls of color are not a homogenous group and have significant within-group differences. This study attempted to examine differences among groups by separating Black girls and non-White Hispanics girls; however, I did not examine within-group differences. Given the various ethnicities that comprise the Hispanic population (e.g., Puerto Rican, Dominican, Central American, and South American) and the Black population (e.g., Caribbean and African), it is essential for researchers to collect and test differences among various ethnicities that may highlight significant findings in how ethnic groups operationalize empowerment and key protective factors that may vary by ethnic group.

The sixth limitation involves the measurement of PE and how it was conceptualized it in the study. Although several studies that examined PE did so using the SPCS-Y scale, this scale

only measures the *intrapersonal* aspects of PE (Christens & Peterson, 2012; Peterson, 2014). Because empowerment theory is hierarchal and multilevel, future researchers should aim to validate and develop scales that examine all constructs present in empowerment theory. Such scales should be specifically developed for girls of color living in urban neighborhoods.

Last, the lack of qualitative inquiry into specific content that can aid in understanding the most important protective factors among girls of color was unavailable for the current study. Qualitative methods allow researchers to tell stories regarding the lived experiences of girls of color. Such stories cannot be measured. A qualitative methodology also allows researchers to understand what specific topics and concepts are most important to be incorporated in racial and gender-specific prevention work for girls of color in urban neighborhoods. This study provides preliminary evidence to explore how specific protective factors such as empowerment (including policy control and leadership competency), ethnic identity, and social support can reduce substance use and sexual risk behaviors among girls of color.

Conclusion

Research on the lives of young girls of color is often tied to research on the lives of boys of color. Even more worrisome is that research on the lives of adolescent girls of color is overshadowed and tangled with the lives of their nonminority female counterparts; Girls' intersections and experiences are often deliberately ignored in health and prevention research. It is critical that the tensions, oppressions, and structural contexts be made visible, to gain a clearer understanding of the circumstances that put them at risk and protect them. Due to the disproportionate rates of HIV/AIDS, sexually transmitted infections, and drug use that has impacted girls of color, it is imperative that researchers apply innovative methods in the near future. Substance-abuse and HIV/STI prevention research tends to overlook such critical

intersections and diminish the protective effects that familial supports and cultural values may have on girls of color. In addition, valuing the positive influences and strengths in ethnic-minority families is critical, as society often fails to celebrate families of color and view them through a deficit lens. Findings from this study call attention to the need to apply a family- and community-based approach to prevention work for girls of color. Understanding the mechanisms that have protected urban Black and Hispanic girls who are not engaging in risky behaviors is crucial. Implications from this study include informing preventive efforts by creating interventions and programming that seeks to empower adolescent females of color through an empowerment and feminist lens. In addition, this study can promote cultural factors such as ethnic identity that can be used in HIV and drug use prevention.

This study aimed to highlight the importance of prevention research to move away from a deficit perspective when discussing outcomes pertaining to historically marginalized groups. Researchers should celebrate the positive influences and strengths of families whose racial and ethnic backgrounds can contribute to the change of narrative. Findings call attention to the need to apply a family- and community-based approach to prevention work for girls of color, incorporate ethnic identity in intervention development, and implement programming that has PE elements for girls of color.

This study, grounded in public health but inclusive of family-science concepts, sought to make public health a social-justice issue. With the continued war on drugs that has plagued urban communities and has not reduced drug access in such communities, it is essential that prevention researchers and scientists develop innovative approaches to empower vulnerable youth to make healthy decisions that contribute to positive outcomes. Without addressing systemic factors such as poverty, income inequality, racism, sexism, lack of quality access to mental health and

healthcare, residential segregation, and criminal-justice disparities, health disparities will continue to plague minority groups.

Although scholars sometimes refer to intersectionality as a theory, it is not the kind of theory with which most social scientists are comfortable as it is not testable (Bowleg, 2012; Few-Demo, 2014). In this study, intersectionality theory was used as a framework to guide the methodology and interpret results nested in the context of the marginalization of women of color. This study is one of the few that aims to frame the findings of protective factors present among girls of color living in an urban neighborhood using intersectional analyses. This study also encourages the promotion of protective cultural and familial factors for girls of color. In addition, this study highlights the importance of developmental processes specific to ethnic minorities such as ethnic identity and the strong association this process has with empowering girls to engage in promotive behaviors.

Last and most importantly, findings intend to celebrate the positive attributes of belonging to an ethnic group and instilling pride in such groups rather than encouraging youth to view their identities as flawed and undervalued. This dissertation provides a unique perspective to the combination of protective factors such as empowerment, social support, and ethnic identity. Moving away from the deficit lens, it is important for researchers to understand why ethnic minority girls who live in urban neighborhoods remain abstinent or do not engage in risky behaviors. Furthermore, this study aimed to fill the gap in literature on PE theory as a tool for substance-abuse, STI, and HIV/AIDS prevention by validating the scale specifically among this group. As prevention researchers, clinicians, and family scientists, we have the obligation to strengthen the family unit and encourage the use of tools and strategies that are already present in families. Such an approach allows researchers to effectively learn from ethnic minorities as they

are the experts of their lived realities and effectively sustain prevention programming in their communities.

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Appendix A: Social Support Scale

Cauce, A., Felner, R. D., & Primavera, J. (1982). Social support in high risk adolescents

structural components and adaptive impact. *American Journal of Community Psychology,*

10, 417–428. doi:10.1007/BF00893980

Social support	Not at all helpful	A little helpful	Somewhat helpful	Helpful	Very helpful
Group of close friends					
Kids your age					
Father					
Mother					
Sisters/brothers					
Principal/assistant principal					
Teacher					
Other people (Guidance counselors, other adults not listed above, etc.)					

Appendix B: Ethnic Identity Scale

Phinney, J. S. (1989). Stages of ethnic identity development in minority group adolescents. *The*

Journal of Early Adolescence, 9, 34–49. doi:10.1177/0272431689091004

Multigroup ethnic identity	Strongly agree	Somewhat agree	Agree	Somewhat disagree	Strongly disagree
I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.					
I am active in organizations or social groups that include mostly members of my own ethnic group.					
I have a clear sense of my ethnic background and what it means for me.					
I like meeting and getting to know people from ethnic groups other than my own.					
I think a lot about how my life will be affected by the ethnic group I belong to.					
I am happy that I am a member of the group I belong to.					
I sometimes feel it would be better if different ethnic groups didn't try to mix together.					
I am not very clear about the role of my ethnicity in my life.					
I often spend time wi groups other than my own.th people from ethnic					
I really have not spent much time trying to learn more about the culture and history of my ethnic group.					
I have a strong sense of belonging to my own ethnic group.					
I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups.					
In order to learn more about my ethnic background, I have often talked to other people about my culture.					
I have a lot of pride in my ethnic group and its accomplishments.					
I don't try to become friends with people from other ethnic groups.					
I participate in cultural practices of my own group, such as special food, music, or customs.					
I am involved in activities with people from other ethnic groups.					
I feel a strong attachment towards my own ethnic group.					
I enjoy being around people from ethnic groups other than my own.					
I feel good about my cultural or ethnic background.					

Appendix C: Psychological Empowerment (SPCS)

Holden, D. J., Evans, W. D., Hinnant, L. W., & Messeri, P. (2005). Modeling psychological

empowerment among youth involved in local tobacco control efforts. *Health Education

& Behavior, 32,* 264–278. doi:10.1177/109019810427336

Zimmerman, M. A., & Zahniser, J. H. (1991). Refinements of sphere-specific measures of

perceived control: Development of a sociopolitical control scale. *Journal of Community

Psychology, 19,* 189–204. doi:10.1002/1520-662

Participatory competence	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
I am often a leader in groups					
I would prefer to be a leader rather than a follower.					
I would rather have a leadership role when I'm involved in a group project.					
I can usually organize people to get things done.					
Other people usually follow my ideas.					
I find it very easy to talk in front of a group.					
I like to work on solving a problem myself rather than wait and see if someone else will deal with it.					
I like trying new things that are challenging to me.					
I enjoy participation because I want to have as much to say in my community or school as possible.					
Youth like me can really understand what's going on with my community or school.					
I feel like I have a pretty good understanding of the important issues which confront my community or school.					
Youth like me have the ability to participate effectively in community or school activities and decision making.					
My opinion is important because it could someday make a difference in my community or school.					
There are plenty of ways for youth like me to have a say in what my community or school does.					
It is important to me that I actively participate in local teen issues.					
Most school or community leaders would listen to me.					
Many local activities are important to participate in.					

Appendix D: 30-day Drug Use

Centers for Disease Control and Prevention. (2004). Methodology of the Youth Risk Behavior

Surveillance System—2013. *Morbidity and Mortality Weekly Report, 53,* 1–13. Retrieved

from https://www.cdc.gov/mmwr/pdf/rr/rr6201.pdf

Peterson, C. H., Buser, T. J., & Westburg, N. G. (2010). Effects of familial attachment, social

support, involvement, and self-esteem on youth substance use and sexual risk taking.

Family Journal, 18, 369–376. doi:10.1177/1066480710380546

*This next set of questions asks you about tobacco use. For each statement, please tell me if you
have participated in this activity 0 days, 1 day, 3 to 5 days, 6 to 9 days, or 10 to 19 days, 20 to 29
days, or all 30 days*

During the past 30 days, on how many days did you…	0 days	1 or 2 days	3 to 5 days	6 to 9 days	10 to 19 days	20 to 29 days	All 30 days
Smoke cigarettes?							
Have 5 or more drinks of alcohol in a row, that is, within a couple of hours?							

During the past 30 days, how many times did you…	0 times	1 or 2 times	3 to 9 times	10 to 19 times	20 to 39 times	40 or more times
Use marijuana?						

During you life, how many times have you…	0 times	1 or 2 times	3 to 9 times	10 to 19 times	20 to 39 times	40 or more times
Used *any* form of cocaine, including powder, crack, or freebase?						
Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?						
Use **heroin** (also called smack, junk, or China White)?						
Used methamphetamines (also called speed, crystal, crank, or ice)?						
Used **ecstasy** (also called MDMA)?						

Appendix E: Sexual Risk Behavior

Centers for Disease Control and Prevention. (2004). Methodology of the Youth Risk Behavior

Surveillance System—2013. *Morbidity and Mortality Weekly Report, 53,* 1–13. Retrieved

from https://www.cdc.gov/mmwr/pdf/rr/rr6201.pdf

Peterson, C. H., Buser, T. J., & Westburg, N. G. (2010). Effects of familial attachment, social

support, involvement, and self-esteem on youth substance use and sexual risk taking.

Family Journal, 18, 369–376. doi:10.1177/1066480710380546

Sexual behavior	Yes	No	11 years old	12 years old	13 years old	14 years old	15 years old	16 years old	17 years old or older
Have you ever had sexual intercourse?									
How old were you when you had sexual intercourse for the first time?									

This next question asks you about the number of sexual partners you have had during your life.

For the next question, please answer if you have never had sexual intercourse, 1 person, 2

people, 3 people, 4 people, 5 people, or 6 or more people.

	I have never had sexual intercourse	1 person	2 people	3 people	4 people	5 people	6 or more people	I had sexual intercourse but not during the past 3 months
During your life, with how many people did you have sexual intercourse?								
During the past 3 months, with how many people did you have sexual intercourse?								
Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?								

The **last time** you had sexual intercourse, did you or your partner use a condom?

This next question asks you about your method used to prevent pregnancy. For the next question,

please select only one of the following responses.

	I have never had sexual intercourse	Condoms	Depo-Provers (injectable birth control)	Withdrawal	No method was used to prevent pregnancy	Birth control pills	Some other method	Not sure
The **last time** you had sexual intercourse, what **one** method did you or your partner use to **prevent pregnancy?** (Select only one response).								

Appendix F: Tables and Figures

Table F1

Descriptive Statistics of Study Variables

	Frequency	Percentage
Age (*M* = 16.01, *SD* = 1.06)		
13–15	79	9.5
15–18	750	
Grade		
9th Grade	200	24.5
10th Grade	194	23.3
11th Grade	208	25
12th Grade	221	26.5
Race		
African American	340	38.8
Non Black Hispanic/Latino	490	52.0
Free or reduced-price lunch		
Yes	567	68.3
No	263	31.7

Table F2

Item Nonresponse Rate (N = 830)

Demographics	Item nonresponse rate (%)
Age	0.9
Grade	0.8
Race (Black)	0.7
Hispanic	1.0
Main Analytic Variables	
Ethnic Identity	11.1
Psychological Empowerment	12.7
Abbreviated PE	9.7
Social Support	15.1
30-Drug Use	29.3
Sexual Risk Behavior	25

Note: Little's missing completely at random test chi square result: $\chi^2 = [df = 16161]$ 17724.69, $p = .001$).

Table F3

Correlations of Main Variables in Full Sample (N = 830)

	1	2	3	4	5
1. Psychological empowerment		.30**	.35**	-17**	-.02
2. Social support			.31**	-20**	-.13**
3. Ethnic identity				-23**	-.12**
4. 30-day drug use					.43**
5. Sexual risk behavior					
Mean	63.47	24.69	53.81	4.38	7.21
Standard deviation	10.32	6.40	8.91	2.31	3.60
Cronbach alpha	.88	.85	.86	.78	.75
Skewness	-.651	.054	-1.09	3.64	.829
Kurtosis	1.37	-.117	2.94	16.39	-.670

Table F4

Independent t-Tests Between Black and Hispanic Girls by Group

	Levene's test		t-test for equality of means						
	F	*p*	*t*	*df*	*p*	*Mdiff*	*SE*	Lower	Upper
Psychological Empowerment Scale	0.420	0.517	6.330	828.00	.001	4.21	0.67	2.91	5.52
Ethnic Identity Scale	0.125	0.723	2.556	828.00	.011	1.56	0.61	0.36	2.76
Social Support Scale	2.417	0.120	1.994	828.00	.046	0.88	0.44	0.01	1.75
Drug Use Scale	2.358	0.125	-0.042	828.00	.967	-0.01	0.16	-0.33	0.31
Sexual Risk Behavior Scale	15.920	0.001	1.590	661.96	.112	0.41	0.26	-0.10	0.93

Table F5

Fit Statistics for SPCS-Y Total Sample (N = 830)

Measures of fit	Model 1	Model 2	Model 3
x^2/CMIN	1017.77	583.21	74.39
CMIN/df	6.34	4.94	2.5
df	119	118	19
p-value	.001	.001	.001
GFI	0.87	0.93	0.98
AGFI	0.83	0.93	0.88
TLI	0.8	0.9	0.87
CFI	0.83	0.91	0.97
RMSEA	0.09	0.63	0.05
90% CI	.08–.09	.06–.07	.04–.07
AIC	1085.77	653.22	108.39
BIC	1252.63	824.99	191.83

Note. SPCS-Y = Sociopolitical Control Scale for Youth, CMIN = chi-square (χ2) test, minimum discrepancy, *df* = degree of freedom, GFI = goodness of fit index, AGFI = adjusted goodness of fit index, TLI = Tucker–Lewis index, CFI = comparative fit index, RMSEA = root mean square error of approximation, CI = confidence interval, AIC = Akaike information criterion, BIC = Bayesian information criterion.

Table F6

Standardized Item Loadings for Confirmatory Factor Analysis (From AMOS of the SPCS-Y (N = 830)

Item	Model 1 (one-factor model)	Model 2 (two factor model) Leader comp	Model 2 Policy control	Model 3 (two-factor model Abbreviated) Leader comp	Model 3 Policy control
1. I am often a leader in groups	0.54	0.65		0.65	
2. I would prefer to be a leader rather than a follower.	0.47	0.57			
3. I would rather have a leadership role when I'm involved in a group project	0.54	0.61		0.61	
4. I can usually organize people to get things done.	0.59	0.65		0.64	
5. Other people usually follow my ideas.	0.55	0.65			
6. I find it very easy to talk in front	0.48	0.50		0.54	
7. I like to work on solving a problem myself rather than wait and see if someone	0.47	0.50			
8. I like trying new things that are challenging to me.	0.59	0.60			
9. I enjoy participation because I want to have as much to say in my community or school as possible	0.63		0.64		
10. Youth like me can really understand what's going on with my community or school	0.53		0.55		0.56
11. I feel like I have a pretty good understanding of the important issues which confront my community or school	0.64		0.65		
12. Youth like me have the ability to participate effectively in community or school activities and decision making	0.58		0.60		0.65
13. My opinion is important because it could someday make a difference in my community or school	0.64		0.67		
14. There are plenty of ways for youth like me to have a say in what my community or school does	0.54		0.61		0.60
15. It is important to me that I actively participate in local teen issues	0.58		0.65		
16. Most school or community leaders would listen to me	0.58		0.58		0.61
17. Many local activities are important to participate in	0.58		0.63		

Note. AMOS = analysis of a moment structures, , SPCS = Sociopolitical Control Scale for Youth.

Table F7

Model Fit Statistics for CFA of SPCS-Y for Black Girls Only (N = 340)

Measures of fit	Model 1	Model 2	Model 3
x^2/CMIN	417.48	294.7	37.54
CMIN/df	3.51	2.5	1.98
df	119	118	19
p-value	0.001	0.001	0.007
GFI	0.86	0.91	0.974
AGFI	0.82	0.88	0.95
TLI	0.72	0.87	0.95
CFI	0.81	0.886	0.97
RMSEA	0.08	0.06	0.05
90% CI	.08–.09	.06–08	.03–.08
AIC	485.48	364.7	71.54
BIC	615.66	498.72	136.63

Note. CFA = confirmatory factor analysis, SPCS -Y = Sociopolitical Control Scale for Youth, CMIN = chi-square (χ2) test, minimum discrepancy, *df* = degree of freedom, GFI = goodness of fit index, AGFI = adjusted goodness of fit index, TLI = Tucker–Lewis index, CFI = comparative fit index, RMSEA = root mean square error of approximation, CI = confidence interval, AIC = Akaike information criterion, BIC = Bayesian information criterion.

Table F8

Standardized Item Loadings for Confirmatory Factor Analysis (From AMOS) of the SPCS-Y (N

= 340) Black Girls

Item	Model 1 (one-factor model)	Model 2 (two factor model)		Model 3 (two-factor model Abbreviated)	
		Leader comp	Policy Control	Leader comp	Policy Control
1. I am often a leader in groups	0.55	0.61		0.65	
2. I would prefer to be a leader rather than a follower.	0.31	0.56			
3. I would rather have a leadership role when I'm involved in a group project	0.59	0.52		0.67	
4. I can usually organize people to get things done.	0.53	0.67		0.61	
5. Other people usually follow my ideas.	0.52	0.65			
6. I find it very easy to talk in front	0.49	0.48		0.59	
7. I like to work on solving a problem myself rather than wait and see if someone	0.45	0.53			
8. I like trying new things that are challenging to me.	0.54	0.62			
9. I enjoy participation because I want to have as much to say in my community or school as possible	0.59		0.60		
10. Youth like me can really understand what's going on with my community or school	0.55		0.54		0.55
11. I feel like I have a pretty good understanding of the important issues which confront my community or school	0.63		0.68		
12. Youth like me have the ability to participate effectively in community or school activities and decision making	0.55		0.62		0.61
13. My opinion is important because it could someday make a difference in my community or school	0.61		0.67		
14. There are plenty of ways for youth like me to have a say in what my community or school does	0.50		0.61		0.54
15. It is important to me that I actively participate in local teen issues	0.54		0.68		
16. Most school or community leaders would listen to me	0.60		0.57		0.67
17. Many local activities are important to participate in	0.50		0.66		

Note. AMOS = analysis of a moment structures, SPCS = Sociopolitical Control Scale for Youth.

Table F9

Model Fit Statistics for Confirmatory Factor Analysis of SPCS-Y for Hispanic girls (N = 490)

Measures of fit	Model 1	Model 2	Model 3
x^2/CMIN	534.87	342.14	30.79
CMIN/df	4.5	2.9	1.62
df	119	118	19
p-value	0.001	0.001	0.043
GFI	0.86	0.93	0.985
AGFI	0.82	0.9	0.97
TLI	0.81	0.9	0.98
CFI	0.84	0.91	0.984
RMSEA	0.09	.06	0.03
90% CI	.08–.09	.06–.70	.07–.06
AIC	602.87	412.74	64.79
BIC	745.47	559.54	136.09

Note. SPCS -Y = Sociopolitical Control Scale for Youth, CMIN = chi-square (χ2) test, minimum discrepancy, *df* = degree of freedom, GFI = goodness of fit, AGFI = adjusted goodness of fit, TLI = Tucker–Lewis index, CFI = comparative fit index, RMSEA = root mean square error of approximation, CI = confidence interval, AIC = Akaike information criterion, BIC = Bayesian information criterion.

Table F10

Standardized Item Loadings for Confirmatory Factor Analysis (from AMOS) of the SPCS-Y (N =

490) [Hispanic Girls]

Item	Model 1 (one-factor model)	Model 2 (two factor model)		Model 3 (two-factor model Abbreviated)	
		Leader comp	Policy Control	Leader comp	Policy Control
1. I am often a leader in groups	0.50	0.61		0.58	
2. I would prefer to be a leader rather than a follower.	0.45	0.56			
3. I would rather have a leadership role when I'm involved in a group project	0.46	0.52		0.49	
4. I can usually organize people to get things done.	0.62	0.67		0.69	
5. Other people usually follow my ideas.	0.54	0.65			
6. I find it very easy to talk in front	0.47	0.48		0.50	
7. I like to work on solving a problem myself rather than wait and see if someone	0.47	0.53			
8. I like trying new things that are challenging to me.	0.60	0.62			
9. I enjoy participation because I want to have as much to say in my community or school as possible	0.60		0.60		
10. Youth like me can really understand what's going on with my community or school	0.53		0.54		0.55
11. I feel like I have a pretty good understanding of the important issues which confront my community or school	0.68		0.68		
12. Youth like me have the ability to participate effectively in community or school activities and decision making	0.60		0.62		0.66
13. My opinion is important because it could someday make a difference in my community or school	0.65		0.67		
14. There are plenty of ways for youth like me to have a say in what my community or school does	0.56		0.61		0.59
15. It is important to me that I actively participate in local teen issues	0.62		0.65		
16. Most school or community leaders would listen to me	0.55		0.57		0.63
17. Many local activities are important to participate in	0.62		0.53		

Note. AMOS = analysis of a moment structures, SPCS = Sociopolitical Control Scale for Youth.

Table F11

Model 1 Testing Mediation of Psychological Empowerment and Drug Use Predicting Sexual

Risk Behavior Among Sample (N = 830)

Variables			*β*	*S.E.*	*C.R.*	*p*
Psychological empowerment	<--	Social support	0.319	0.049	6.516	.001**
Psychological empowerment	<--	Ethnic identity	0.439	0.035	12.404	.001**
30-day drug use	<--	Social support	0.011	0.011	0.991	.321
30-day drug use	<--	Ethnic identity	-0.026	0.009	-3	.003**
30-day drug use	<--	Psychological empowerment	0.008	0.008	1.021	.307
Sexual risk behavior	<--	30-day drug use	0.461	0.052	8.9	.001**

Note. alpha level was determined 5%, Model fit statistics: C.R. = capability ratio, CMIN (chi-square (χ2) test, minimum discrepancy)/*df* = .787, GFI (goodness of fit) = 0.99, AGFI (adjusted goodness of fit) = 0.99, CFI (comparative fit index) = 0.97, RMSEA (root mean square error of approximation) = 0.00.

Table F12

Model 2 Testing Mediation of Psychological Empowerment and Drug Use Predicting Sexual

Risk Behavior among Black Girls (N = 340)

Variables			β	S.E.	C.R.	p
Psychological empowerment	<---	Social support	0.41	0.06	4.43	.001**
Psychological empowerment	<---	Ethnic identity	0.42	0.05	8.37	.001**
Drug use	<---	Social support	-0.17	0.02	-0.02	.001**
Drug use	<---	Ethnic identity	-0.09	0.01	-3.15	.002**
Drug use	<---	Psychological empowerment	0.01	0.01	1.85	.064
Sexual risk behavior	<---	Drug use	0.67	0.08	4.92	.001**

Note. alpha level was determined 5%, Model fit statistics: C.R. = capability ratio, CMIN (chi-square ($\chi2$) test, minimum discrepancy)/*df* = 37.54, GFI (goodness of fit) = 0.97, AGFI (adjusted goodness of fit) = 0.95, TLI (Tucker–Lewis index) = .95, CFI (comparative fit index) = 0.97, RMSEA (root mean square error of approximation) = 0.05.

Table F13

Model 3 Testing Mediation of Psychological Empowerment and Drug Use Predicting Sexual

Risk Behavior among Hispanic Females Only (N = 490)

Variables			β	*S.E.*	*C.R.*	*p*
Psychological empowerment	<-	Social support	0.20	0.068	4.682	.001**
Psychological empowerment	<-	Ethnic identity	0.38	0.048	8.975	.001**
Drug use	<-	Social Support	0.15	0.014	1.304	.001**
Drug use	<-	Ethnic identity	-0.12	0.011	-1.295	.195
Drug use	<---	Psychological empowerment	-0.04	0.009	-0.384	.701
Sexual risk behavior	<-	Drug use	0.44	0.068	7.6	.001**

Note. alpha level was determined 5%, Model fit statistics: C.R. = capability ratio, GFI (goodness of fit) = .998, CFI (comparative fit index) = .996, RMSEA (root mean square error of approximation) = .025, and the value of chi-square stood at $\chi2$ (3) = 3.926, *p* = .627.

Table F14

Model 4 Testing Mediation of Drug Use Predicting Sexual Risk Behavior Among Total Sample

(N = 830)

Variables			β	S.E.	C.R.	p
Drug use	<---	Psychological empowerment	-0.02	0.01	-2.691	.007**
Drug use	<--	Social support	-0.07	0.01	-5.450	.001**
Drug use	<--	Ethnic Identity	-0.05	0.01	-5.089	.001**
Sexual risk behavior	<---	Drug use	0.66	0.05	-13.308	.001**
Sexual risk behavior	<---	Psychological empowerment	-0.04	0.01	-2.983	.003**
Sexual risk behavior	<---	Ethnic identity	0.02	0.02	1.131	.258
Sexual risk behavior	<---	Social support	0.04	0.02	1.966	.049**

Note. alpha level was determined 5%, Model fit statistics: C.R. = capability ratio, GFI (goodness of fit) = .99, CFI (comparative fit index) = .98, RMSEA (root mean square error of approximation) = .07, and the value of chi-square stood at $\chi2$ (5) = 28.492, *p* < .001.

Table F15

Model 5 Testing Mediation of Drug Use Predicting Sexual Risk Behavior Among Black girls (N

= 340)

Variables			β	S.E.	C.R.	p
Drug use	<-	Psychological empowerment	-0.06	0.02	-2.28	.956
Drug use	<-	Social support	-0.17	0.02	-3.83	.001**
Drug use	<--	Ethnic identity	-0.29	0.02	-4.94	.001**
Sexual risk behavior	<-	Drug use	0.42	0.08	-8.30	.001**
Sexual risk behavior	<-	Psychological empowerment	-0.09	0.03	-1.53	.126
Sexual risk behavior	<-	Ethnic identity	0.02	0.03	0.36	.722
Sexual risk behavior	<-	Social support	0.11	0.03	2.04	.041**

Note. alpha level was determined 5%, Model fit statistics: C.R. = capability ratio, GFI (goodness of fit) = .978, CFI (comparative fit index) = .964, and the value of chi-square stood at $\chi2$ (5) = 28.079, $p < .001$.

Table F16

Model 6 Testing Mediation of Drug Use Predicting Sexual Risk Behavior Among Hispanics girls

(N = 490)

Variables			β	*S.E.*	*C.R.*	*p*
Drug use	<-	Psychological empowerment	-0.06	0.01	-1.843	.065
Drug use	<-	Social support	-0.06	0.016	-3.773	.001**
Drug use	<--	Ethnic identity	-0.03	0.012	-2.338	.019**
Sexual risk behavior	<-	Drug use	0.69	0.066	-10.397	.001**
Sexual risk behavior	<-	Psychological empowerment	-0.04	0.016	-2.224	.026**
Sexual risk behavior	<-	Ethnic identity	0.02	0.018	1.318	.187
Sexual risk behavior	<-	Social support	0.02	0.025	0.699	.484

Note. alpha level was determined 5%, Model fit statistics: C.R. = capability ratio, GFI (goodness of fit) = .995, RMSEA (root mean square error of approximation) = .041, and the value of chi-square stood at $\chi2$ (5) = 9.182, *p* = .102.

Table F17

Model 7 Testing SPCS-Y Abbreviated Scale and Mediation of Drug Use Predicting Sexual Risk

Behavior Among Total Sample (N = 830)

Variables			β	S.E.	C.R.	p
30-day drug use	<--	Policy control	-0.07	0.03	-2.38	.017**
30-day drug use	<--	Leadership competency	0.04	0.03	1.26	.206
30-day drug use	<--	Ethnic identity	-0.05	0.01	-5.07	.001**
30-day drug use	<--	Social support	-0.06	0.01	-4.40	.0001**
Sexual risk behavior	<--	Policy control	-0.10	0.05	2.14	.032**
Sexual risk behavior	<--	Leadership competency	-0.00	0.05	-0.09	.927
Sexual risk behavior	<--	Ethnic identity	0.00	0.02	0.62	.533
Sexual risk behavior	<--	Drug use	0.67	0.05	-13.15	.001**
Sexual risk behavior	<--	Social support	0.03	0.02	1.61	.107
Grade	<--	Social support	0.07	0.25	0.25	.796
Grade	<--	Ethnic identity	-0.15	0.34	-.439	.661
Grade	<--	Leadership competency	-0.01	0.12	-0.05	.957
Grade	<--	Policy control	0.02	0.12	0.13	.898
Age	<--	Social support	0.20	0.23	0.85	.397
Age	<--	Ethnic identity	0.09	0.32	0.27	.787
Age	<--	Leadership competency	-0.05	0.11	-0.48	.632
Age	<--	Policy control	0.02	0.11	0.169	.866

Note. alpha level was determined 5%, SPCS-Y = Sociopolitical Control Scale for Youth, Model fit statistics: C.R. = capability ratio, CMIN (chi-square (χ2) test, minimum discrepancy)/*df* (degree of freedom) = .467(4), GFI (goodness of fit) = .99, AGFI (adjusted goodness of fit) = 0.99, CFI (comparative fit index) = 1.00, RMSEA (root mean square error of approximation) = .01.

Table F18

Model 8 Testing SPCS-Y Abbreviated Scale and Mediation of Drug Use Predicting Sexual Risk

Behavior Among Black girls (N = 340)

Variables			β	S.E.	C.R.	p
30-day drug use	<--	Policy control	-0.14	0.06	-2.35	.019**
30-day drug use	<--	Leadership competency	0.09	0.05	1.67	.094
30-day drug use	<--	Ethnic identity	-0.27	0.02	-4.95	.001**
30-day drug use	<--	Social support	-0.17	0.02	-3.21	.001**
Sexual risk behavior	<--	Policy control	-0.13	0.08	-1.33	.002**
Sexual risk behavior	<--	Leadership competency	0.04	0.08	0.46	.649
Sexual risk behavior	<--	Ethnic identity	-0.00	0.03	-0.04	.969
Sexual risk behavior	<--	Drug use	0.65	0.08	-8.10	.001**
Sexual risk behavior	<--	Social support	0.06	0.03	1.72	.086
Grade	<--	Social support	0.07	0.25	0.26	.796
Grade	<--	Ethnic identity	-0.15	0.35	-0.44	.661
Grade	<--	Leadership competency	0.02	0.18	0.10	.922
Grade	<--	Policy control	-0.13	0.16	-0.78	.434
Age	<--	Social support	0.31	0.38	0.82	.410
Age	<--	Ethnic identity	-0.21	0.50	-0.43	.669
Age	<--	Leadership competency	-0.05	0.17	-0.28	.780
Age	<--	Policy control	0.01	0.15	0.09	.932

Note. alpha level was determined 5%, SPCS-Y = Sociopolitical Control Scale for Youth, Model fit statistics: CMIN (chi-square (χ2) test, minimum discrepancy)/*df* (degree of freedom) = 6.483(4), GFI (goodness of fit) = .99, AGFI (adjusted goodness of fit) = 0.96, CFI (comparative fit index) = 0.99, RMSEA (root mean square error of approximation) = .01.

Table F19

Model 9 Testing SPCS-Y Abbreviated Scale and Mediation of Drug Use Predicting Sexual Risk

Behavior Among Hispanic girls (N = 490)

Variables			β	S.E.	C.R.	p
30-day drug use	<--	Policy Control	-0.08	0.037	-1.493	.135
30-day drug use	<--	Leadership competency	0.00	0.038	0.074	.941
30-day drug use	<--	Ethnic identity	-0.11	0.012	-2.275	.023**
30-day drug use	<--	Social support	-0.15	0.017	-3.095	.002**
Sexual risk behavior	<--	Policy control	-0.06	0.055	-1.172	.241
Sexual risk behavior	<--	Leadership competency	-0.03	0.056	-0.620	.536
Sexual risk behavior	<--	Ethnic identity	0.02	0.018	1.027	.305
Sexual risk behavior	<--	Drug use	-0.69	0.067	-10.330	.001**
Sexual risk behavior	<--	Social support	0.01	0.025	0.537	.591
Grade	<--	Social support	0.26	0.321	0.808	.419
Grade	<--	Ethnic identity	0.16	0.455	0.353	.724
Grade	<--	Leadership competency	0.02	0.157	0.108	.914
Grade	<--	Policy control	0.20	0.158	1.233	.218
Age	<--	Social support	0.15	0.296	0.509	.611
Age	<--	Ethnic identity	0.35	0.421	0.832	.406
Age	<--	Leadership competency	-0.03	0.145	-0.212	.832
Age	<--	Policy control	0.08	0.146	0.525	.600

Note. alpha level was determined 5%, SPCS-Y = Sociopolitical Control Scale for Youth, Model fit statistics: CMIN = (chi-square (χ2) test, minimum discrepancy)/*df* (degree of freedom) = .330(4), GFI (goodness of fit) = .99, AGFI (adjusted goodness of fit) = .98, CFI (comparative fit index) = 1.00, RMSEA (root mean square error of approximation) = .01.
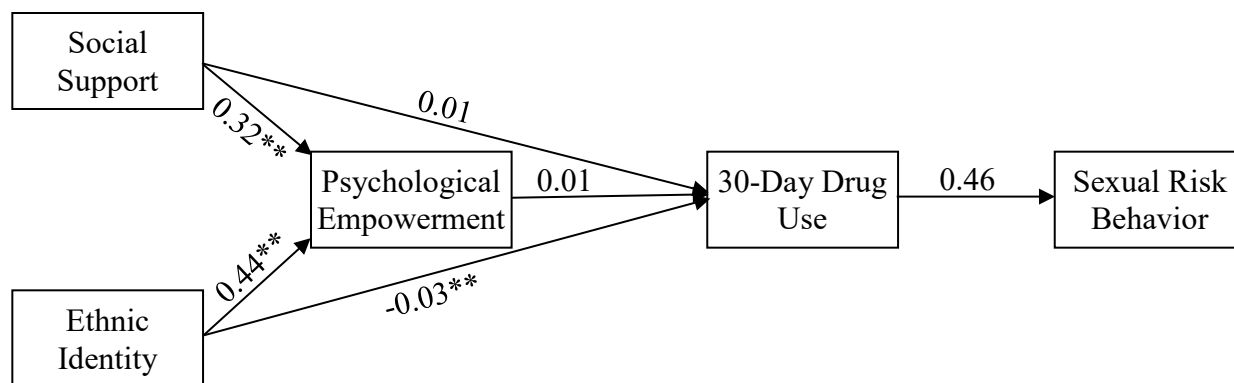
Figure F1. Model 1 testing mediation of psychological empowerment and drug use predicting sexual risk behavior among total sample (*N* = 830)
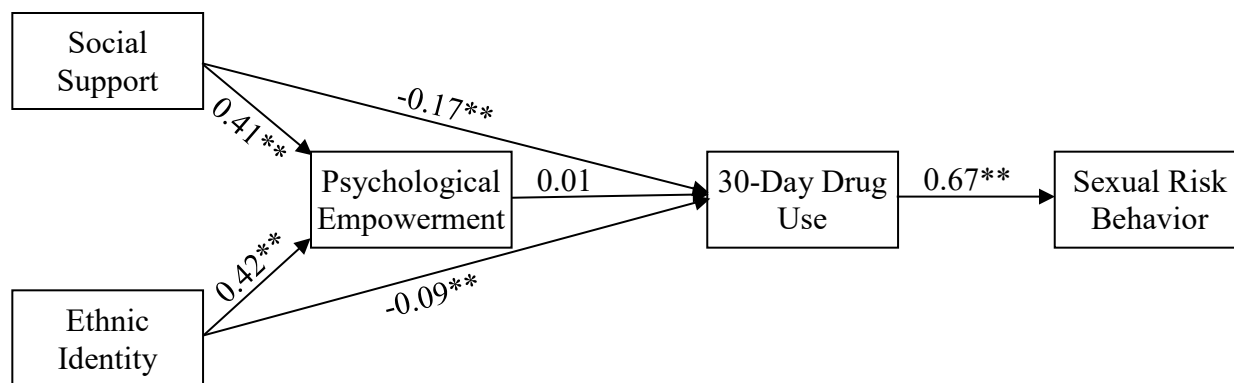
Figure F2. Model 2 testing mediation of psychological empowerment and drug use predicting sexual risk behavior among Black Girls ($N = 340$)
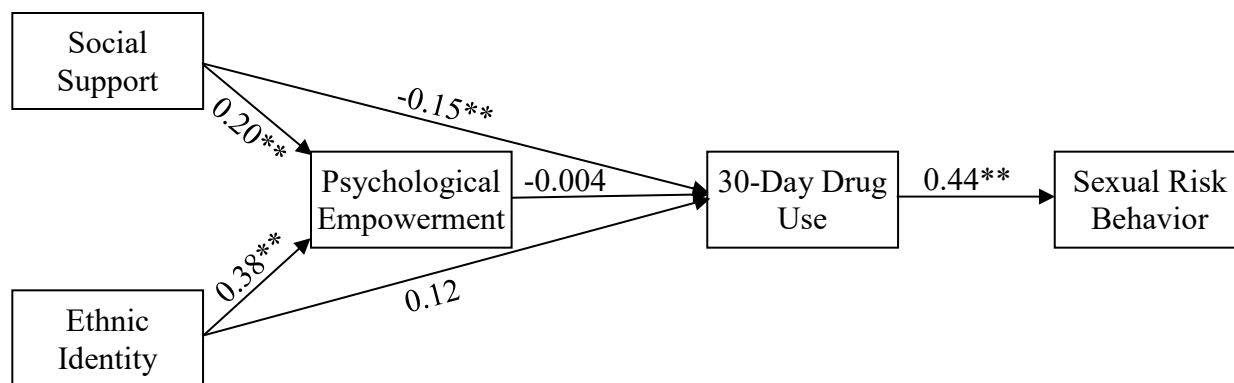
Figure F3. Model 3 testing mediation of psychological empowerment and drug use predicting sexual risk behavior among Hispanic Females only (*N* = 490)
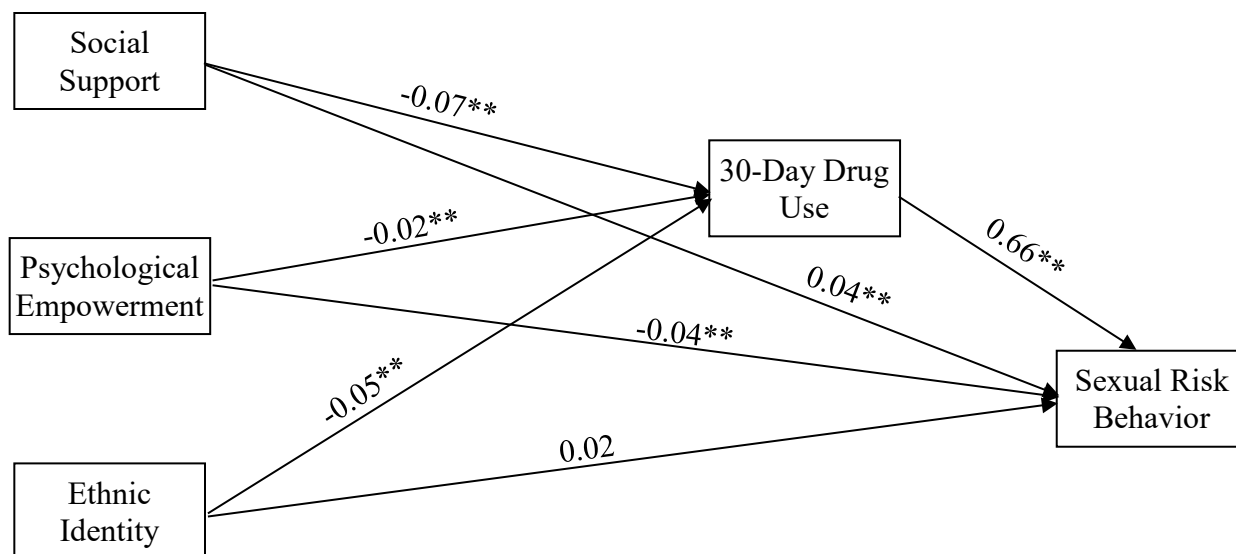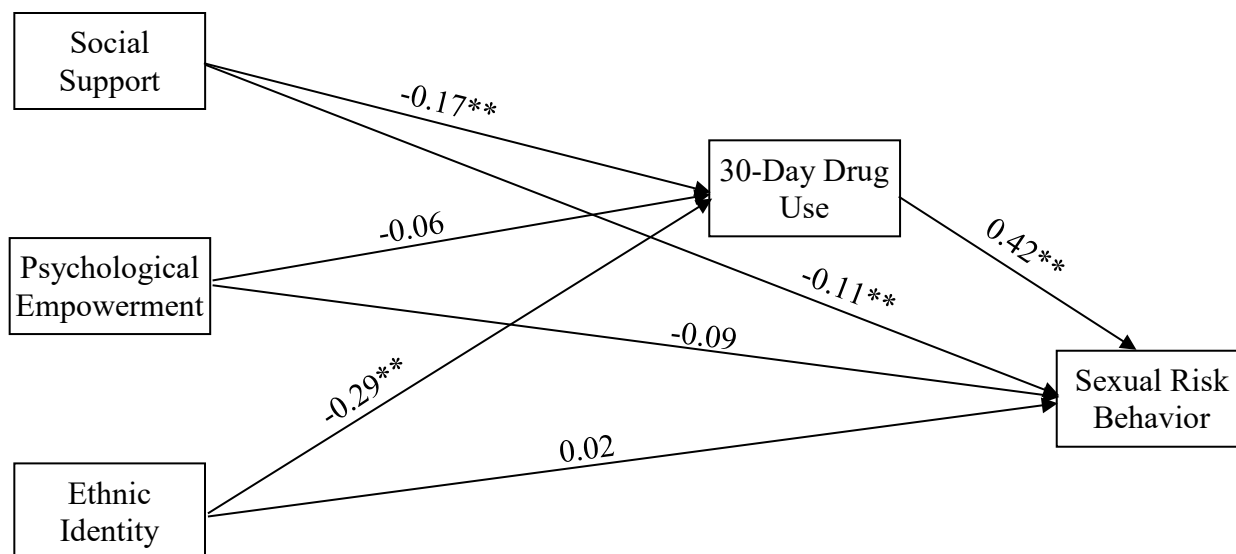
Figure F4. Model 4 testing mediation of drug use predicting sexual risk behavior among total sample (*N* = 830)

Figure F5. Model 5 testing mediation of drug use predicting sexual risk behavior among Black girls (*N* = 340)
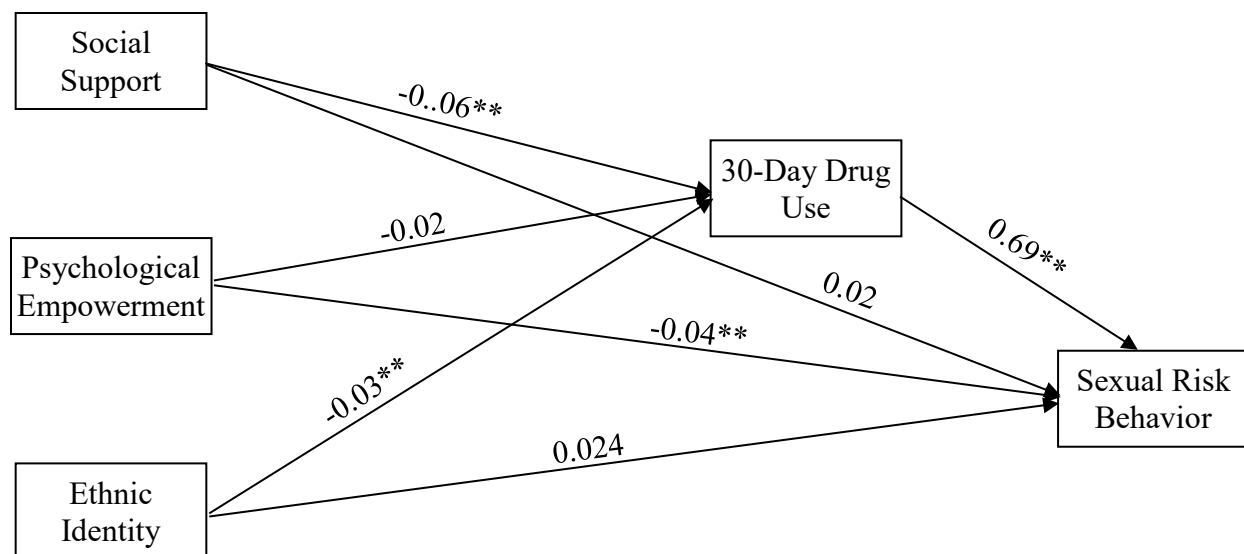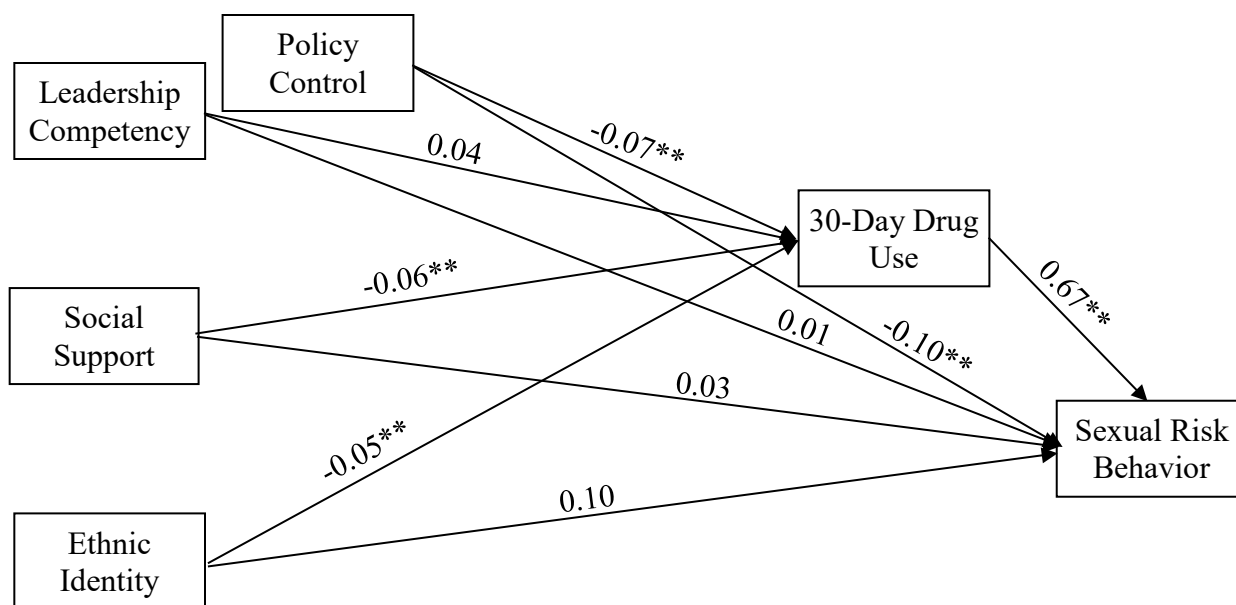
Figure F6. Model 6 testing mediation of drug use predicting sexual risk behavior among Hispanic girls (*N* = 490)

Figure F7. Model 7 testing Sociopolitical Control Scale for Youth abbreviated scale and mediation of drug use predicting sexual risk behavior among total sample (*N* = 830)
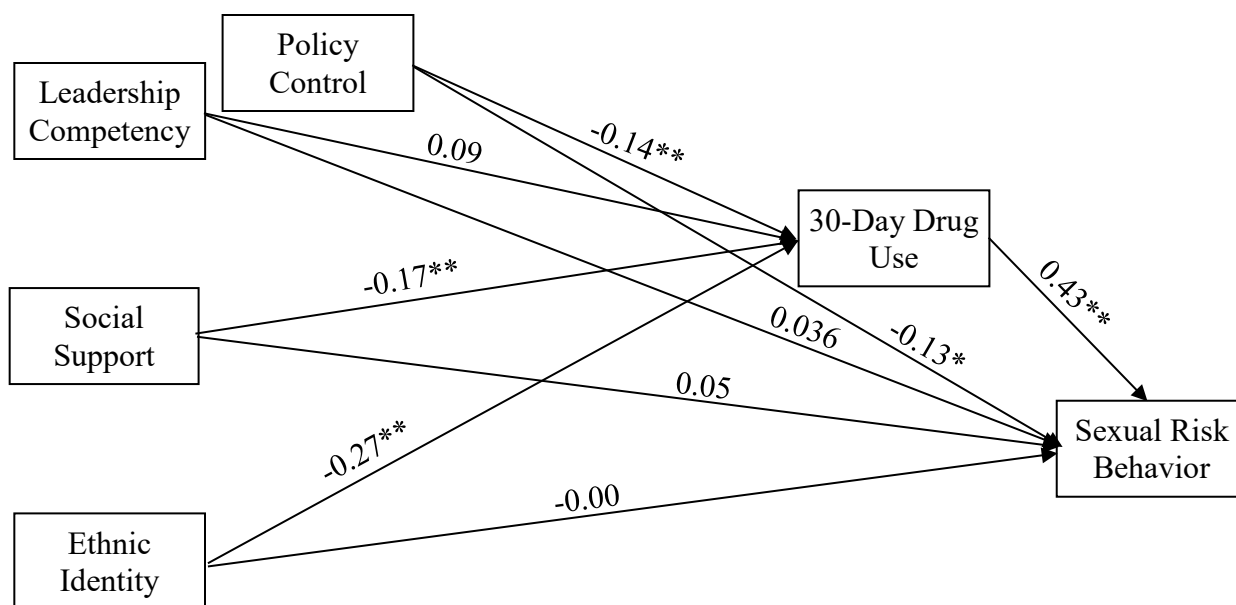
Figure F8. Model 8 testing Sociopolitical Control Scale for Youth abbreviated scale and mediation of drug use predicting sexual risk behavior among Black girls ($N = 340$)
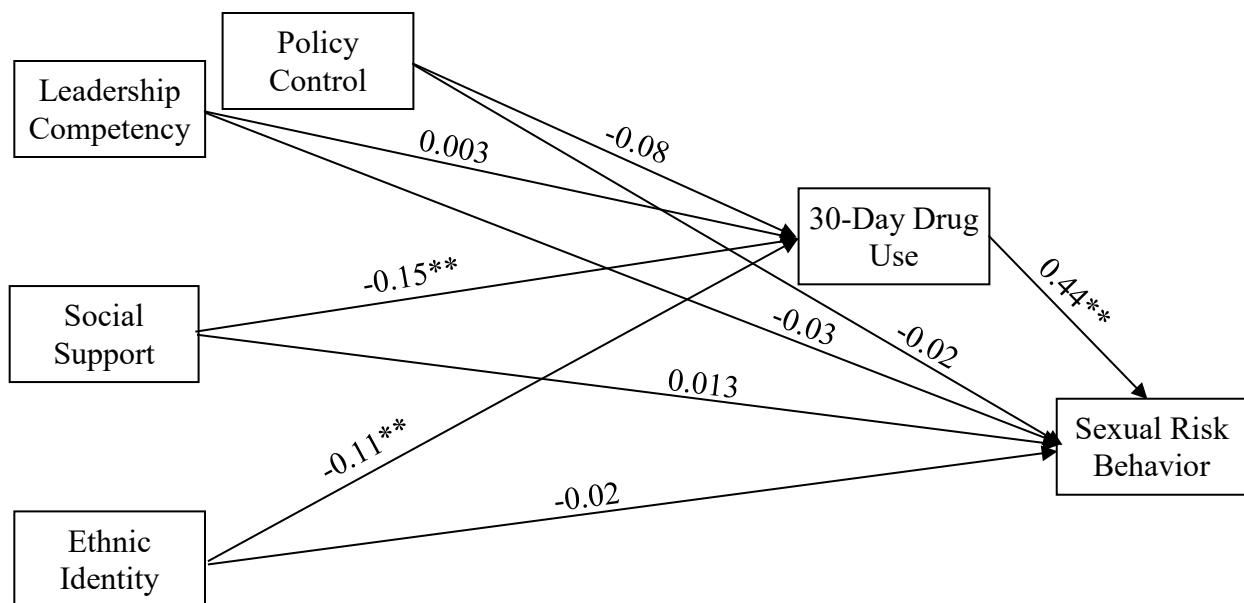
Figure F9. Model 9 testing Sociopolitical Control Scale for Youth abbreviated scale and mediation of drug use predicting sexual risk behavior among Hispanic girls ($N = 490$)

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