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Family Rejection and Unprotected Sex inLatino Gay Men

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2020

Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The purpose of this study was to explore the role of family rejection on the sexual behavior of Latino gay men under the guidance of the minority stress model. Family rejection was analyzed as a distal stressor, self-esteem as a proximal stressor, and unprotected sex as the outcome. The hypotheses were tested using regression, mediation, and multiple regression of secondary data from the Latino men who have sex with men community involvement project. The results suggested that family rejection is a weak predictor of low self-esteem and engaging in receptive unprotected sex with more partners. Low self-esteem did not mediate the relationship between family rejection and sexual behavior. These findings were obtained during a post hoc analysis using a continuous outcome variable. Using unprotected sex as a dichotomous variable was not useful to detect a statistically significant correlation. The results suggested that the mixed findings in the previous literature might be due to differences in the instrumentation of the variables. Recommendations are made for future research and policy about collecting and handling data to study sexual risk behavior in Latino gay men. An additional recommendation is the need to redefine unprotected sex under the light of the new preventive therapies for HIV and the current decline in condom use. The study highlighted the need for a multilevel approach to the health disparities affecting Latino gay men and the need for structural changes in federal and state policies to facilitate public health and clinical interventions that can lead to social change.

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Dedication

To Fran for his patience and love during these years. To my family for their support, understanding, and encouragement. To the millions of anonymous ones who never found support in their family.

Acknowledgments

This dissertation has taken me to a new level in the academic field. I have learned how to write, how to think, and how to reason public health. The completion of this rigorous and challenging process would not have been possible without the constant guidance and support of the members of the dissertation committee. I will be eternally grateful to Dr. Chinaro Kennedy, my committee chair, for her extraordinary and steady support and her wise words of advice. Writing this dissertation sometimes made me feel scared. Her encouragement made me feel stronger and more confident during these times. I am also full of gratitude for the guidance, help, and advice received from Dr. Jacquie Fraser, my second member, who guided me on how to approach these complicated topics so my work would produce a meaningful result. Also, thanks to the URR, Dr. Scott O. McDoniel, for taking the time to read my work and provide feedback. It would be unfair if I did not recognize the work of all the Walden University professors that for the past years have guided me towards this point and those who assisted me during the statistical analysis and the form and style review.

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Chapter 1: Introduction to the Study

Introduction

HIV and other sexually transmitted infections (STIs) disproportionally affect Latino gay men. Between 2010 and 2017, the incidence of HIV decreased or remained stable for gay and bisexual men, but increased by 17% among Latino gay men (Centers for Disease Control and Prevention [CDC], 2020). If the current trend continues, from 20 to 25% of Latino gay men will be diagnosed with HIV during their lifetime compared to only 10% of White gay men (Hess, Hu, Lansky, Mermin, & Hall, 2017). Existing research about the health disparities affecting lesbian, gay, bisexual, and transgender (LGBT) persons has focused mainly on middle-class White gay people, with little emphasis on racial and ethnic differences (Gattamorta, Salerno, & Quidley-Rodriguez, 2019). The emerging research devoted to Latino gay men highlights the role of stigma, discrimination, poverty, immigration status, language barriers, and mistrust in the healthcare system related to these disparities (CDC, 2019) and the reasons for the decline in condom use among this population (Rhodes & McCoy, 2015; Wade, Harper, & Bauermeister, 2018).

There is little empirical evidence about the role of family rejection and self-esteem on the sexual practices of Latino gay men (Gattamorta et al., 2019; Stettler & Katz, 2017). This study was an attempt to address this gap in research and to add insight into the HIV-related health disparities that affect Latino gay men. The results may contribute to social change by uncovering additional ethnicity-related risk factors that contribute to health disparities in this population. This insight may serve to inform

healthcare providers, medical educators, and public health professionals so they can develop cost-effective interventions to reduce health disparities.

Chapter 1 contains an overview of the background literature, the problem statement, and the purpose and significance of the study. This section also includes the research questions and hypotheses, the theoretical foundation, the definitions, assumptions, and the scope and limitations of the study.

Background

Between 2010 and 2016, the rate of HIV infections decreased for heterosexual men and women and for intravenous drug users (CDC, 2019). Among all gay and bisexual men, the incidence of HIV infections remained stable, but there were differences based on age, race, and ethnicity. The rate of new HIV infections decreased among White gay men, remained stable among Black gay men, and increased among Latino gay men by 30% (CDC, 2019). Younger Black and Latino men were more affected than their older counterparts. The new cases of HIV infections increased by 65% and 68% respectively for Black and Latino gay men between 25 and 32 years old (CDC, 2019).

Public health authorities are concerned about the disparities in the incidence and prevalence of HIV infections. Current efforts focus on screening those at risk, early diagnosis and treatment, and preexposure prophylaxis (PrEP), or postexposure prophylaxis (PEP; CDC, 2019). Some scholars have highlighted that between 2005 and 2014, there was a decline in the use of condoms among gay men and heterosexual men and women (Kann, McManus, & Harris, 2018; Koumans, Welch, & Warner, 2020;

Pebody, 2016). The number of gay men who reported condomless anal sexual intercourse increased from under 30% in 2005 to around 40% in 2014 in HIV positive and negative gay men (Pebody, 2016). This trend has been associated with novel prevention strategies like PrEP and with a successful highly active antiretroviral therapy. However, stating that PrEP is the reason behind the decline in condom use may not be accurate because the same trend existed before the introduction of this preventive treatment (de Wit et al., 2018; Grant et al., 2017; Pebody, 2016). Other factors that could influence the decline in condom use are the increasing number of HIV positive persons whose viral loads are undetectable, trivialization of the HIV infection, perceived trust in the sexual partner, and psychological vulnerability due to fatigue over sexual safety ("AIDS burnout"; Kelly, 2018; McKirnan, Houston, & Tolou-Shams, 2007; Pantalone et al., 2019; Wolitski, Valdiserri, Denning, & Levine, 2001). Among Latino gay men, besides the factors described above, a lack of understanding about HIV transmission risks, perception of reduced pleasure when using condoms, difficulties negotiating condom use, perceived peer norms and pressure, internalized homophobia, substance use, discrimination, psychological distress, and cultural values also may play a role (Rhodes & McCoy, 2015).

Understanding the disproportionate impact of the HIV epidemic in Latino gay men has been an elusive task for many researchers. Some scholars have suggested that the role of the family as it relates to sexual risk behaviors in Latino gay men should be explored (Bird, LaSala, Hidalgo, Kuhns, & Garofalo, 2017; Frye et al., 2015; Katz-Wise,

Rosario, & Tsappis, 2016; Murgo, Huynh, Lee, & Chrisler, 2017; Pastrana, 2015; Swendener & Woodell, 2017; Villicana, Delucio, & Biernat, 2016). Other researchers have highlighted the need to understand the role Latino cultural values play in the health disparities affecting this population (Eaton & Rios, 2017; Katz-Wise et al, 2016; Murgo et al., 2017; Pastrana, 2015; Pastrana, Battle & Harris, 2017; Petruzzella, Feinstein, Davila, & Lavner, 2019; Sánchez, Blas-Lopez, Martínez-Patiño, & Vilain, 2016; Swendener & Woodell, 2017; Villicana et al., 2016). Latino cultural values generate a type of family dynamics regarding sexuality, sexual orientation, and sexual behavior that is different from the family dynamics in other races/ethnicities (Craddock, Rice, Rhoades, Winetrobe, & Craddock, 2016; Dickenson & Huebner, 2016; Surace, Levitt, & Horne, 2017; Swendener & Woodell, 2017). These culturally determined differences in family dynamics might explain why Latino gay men are more likely to suffer family rejection due to their sexual orientation and to engage in sexual risk behavior than gay men from other races/ethnicities (Bird et al., 2017; Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017).

There is an emergent body of literature about the role of traditional Latino cultural values like machismo, familismo, respeto, and spirituality in the behaviors, attitudes, and beliefs of this population (Abreu, Gonzalez, Rosario, Pulice-Farrow, & Rodríguez, 2019; Adames & Chavez-Dueñas, 2017; Hirai, Winkel, & Popan, 2014; Sánchez et al., 2016; Surace, Levitt, & Horne, 2017; Zeglin et al., 2017). Machismo, the equivalent of the English term masculinity (Coronado, 2017), is associated with negative attitudes towards nonstrictly heterosexual, effeminate, or gender nonconforming children among Latinos

and with higher levels of internalized homophobia among Latino gay men (Estrada, Rigali-Oiler, Arciniega, & Tracey, 2011; Surace et al., 2017). For Sánchez et al. (2016), the influence of machismo explains why Latino gay men are concerned about masculine behavior, hold negative attitudes towards effeminate gay men, and prefer to keep their sexual orientation private (Sánchez et al., 2016). Familismo refers to feeling a strong identification and sense of belonging to the family and placing family values above personal choices (Smith-Morris, Morales-Campos, Alvarez, & Turner, 2013). Scholars have identified familismo as the most important cultural value for Latinos and the factor that determines most of the Latino attitudes, beliefs, and behaviors (Smith-Morris et al., 2013). Familismo has been associated with a lower likelihood of being tested for HIV in gay and bisexual Latinos who feel they have to maintain familial honor (Ma & Malcolm, 2016). The family for Latinos is an important source of emotional and financial support but also a source of conflict, stress, surveillance, and pressure (Smith-Morris et al., 2013). The negative factors associated with familismo especially affect gay and bisexual men who need to live their sexuality in secrecy to avoid shame, guilt, and humiliation and to maintain the reputation of the family. This compartmentalization of the sexual life makes it very difficult to establish a monogamous relationship, thereby increasing the odds of anonymous sex with multiple partners and making it difficult for Latino gay men to negotiate the use of condoms (Surace et al., 2017). Respeto, the Spanish term for respect, emphasizes that children must respect, obey, and manifest courtesy towards their parents, authorities, and elderly persons (Calzada, Fernandez, & Cortes, 2010). This cultural value

adds another layer to the barrier that familismo creates in the relationships between Latino gay men and their families. Being openly gay would affect the reputation and unity of the family and represent a disrespectful attitude towards the parents (Rosario, Schrimshaw, & Hunter, 2004). Spirituality is another important value for Latinos who see life resulting from a mixture between personal efforts and divine will (Zeglin et al., 2017). Spiritual and religious beliefs generate in some Latinos an external locus of control and a fatalistic view of life. This fatalism makes them see the possibility of being infected with HIV as something they cannot avoid (Zeglin et al., 2017). Spirituality can also be beneficial by leading to acceptance of sexual orientation and as a source of resilience when facing life challenges. However, it can also be a source of conflict within the family if the parents perceive that their children are acting against religious values or "the will of God" (Abreu et al., 2019). Adames and Chavez-Dueñas (2017) argued that Latino cultural values have positive and negative aspects and that drawing on the positive ones would be conducive to more accepting attitudes towards LGBT people and better family dynamics.

Family rejection is associated with adverse health outcomes, sexual risk behavior, and delayed medical care in Latino gay men (Bird et al., 2017; Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017; Li et al., 2017; Surace et al., 2017). Experienced or expected rejection from the family correlates with higher levels of anxiety and depression and lower self-esteem, lower odds of being out to others (Li et al., 2017; Pastrana, 2015; Stettler & Katz, 2017), higher likelihood of unprotected sex (Bird et al., 2017; Zeglin et

al., 2017), and lower likelihood of receiving treatment after being diagnosed with HIV (Rao, 2016). These associations are stronger for Latino gay men born outside the United States, born in families with low socioeconomic status and affiliated to conservative religious organizations (Ryan, Toomey, Diaz, & Russell, 2018), or were sent to "conversion therapies," interventions by religious or medical personnel trying to modify an individual´s sexual orientation (Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017; Ryan et al., 2018).

The relationship between family rejection and the adverse health outcomes might be exacerbated by internalized homophobia (Parra, Bell, Benibgui, Helm, & Hastings, 2017) or the use of alcohol or drugs during sexual encounters (Frye et al., 2015). The lack of emotional and instrumental support that results from family rejection may lead to sexual risk behavior as a way of looking for the satisfaction of emotional and economic needs (Bird et al., 2017).

The role of self-esteem in those who experience or expect family rejection has also been a recent focus of research (Stettler & Katz, 2017; Swendener & Woodell, 2017; Tate & Patterson, 2019; Wang 2017). Some scholars found that Latino gay men have lower self-esteem independent of their migratory status and are less likely to come out to their parents (Snapp, Watson, Russell, Diaz, & Ryan, 2015; Swendener & Woodell, 2017). These authors highlighted that family acceptance is the strongest predictor of self-esteem and is the only significant predictor of wellbeing. For Blais, Gervais, and Hébert (2014), low self-esteem correlated with homophobic bullying at home or outside the

home. Expected family rejection is associated with loneliness, low self-esteem, fear of disclosing sexual orientation, and sexual compulsivity (Chaney & Burns-Wortham, 2015).

The current literature offers some answers but offers limited empirical evidence about the role of family rejection in unsafe sexual practices and a possible association or mediating role of self-esteem in this relationship. A literature review (Perez, & Cruess, 2014) revealed the inconsistent findings regarding the relationship between Latino cultural values and sexual risk behaviors. Familismo can be a protective factor in some circumstances but can be a source of stress for those who do not conform to strict gender roles amidst a heterosexist culture. Latino gay men who live within nonaccepting families may be afraid of disrupting familial harmony and shaming the family (Perez & Cruess, 2014; Wang, 2017). Pastrana (2015) stated that we need a deeper understanding of the impact of the family in the Latino culture as he found that family support is the strongest predictor of outness. He explained that being out is necessary for connectedness to LGBT networks. This connectedness is important because these networks can act as a buffer against the effects of family rejection and other minority-related stressors (Scandurra et al., 2019). This gap in research has been highlighted by several other authors (Bird et al., 2017; Frye et al., 2015; Katz-Wise et al., 2016; Murgo et al., 2017; Pastrana, 2015; Villicana et al., 2016; Wang, 2017).

The present study was necessary to address the role of family rejection in the disproportionate impact of HIV infection among Latino gay men (CDC, 2016, 2017,

2019; Gattamorta et al., 2019; Rao, 2016; Shover et al., 2018; Stepler & Lopez, 2016; Stettler & Katz, 2017). Moreover, according to Hafeez et al. (2017), healthcare providers lack adequate training on the specific needs of Latino gay men. The results of this study represent an added insight into this problem and contributed to increase awareness to alleviate the disparities that affect this population.

Problem Statement

The rate of new HIV infections among Latino gay men is increasing despite being stable or decreasing in other ethnic groups (CDC, 2019, 2020). An estimated 20 to 25% of Latino gay men will be HIV positive during their lifetime compared to only 10% of Whites if the current trend continues (CDC, 2016; Hess et al., 2017). The problem addressed in this study is the effect of family rejection in the practice of unprotected sex in Latino gay men and if self-esteem mediates the relationship between family rejection and unprotected sex. Figure 1 shows a depiction of the overarching thesis that guided this dissertation.

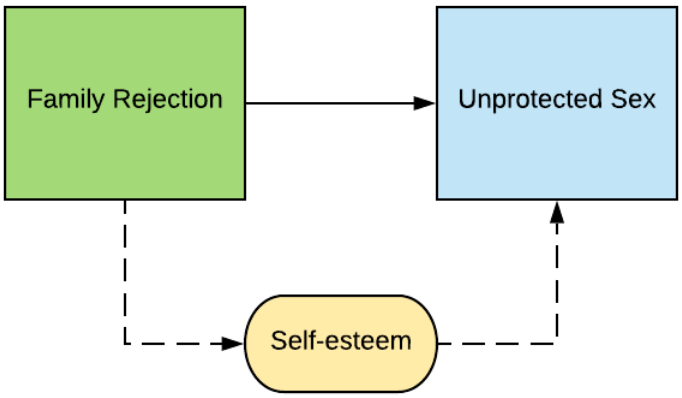

Figure 1. Overarching hypothesis of the present study. Family rejection is associated with unprotected sex. Self-esteem partially mediates or is associated with the relationship between family rejection and unprotected sex.

Purpose of the Study

The purpose of addressing this problem was to add insight into the role of family rejection in the increasing number of HIV infections among Latino gay men (see CDC, 2019, 2020). In the present study, I explored if there is a relationship between family rejection and unprotected sex in Latino gay men and between family rejection and self-esteem, and if self-esteem mediates the relationship between family rejection and unprotected sex.

Research Questions and Hypotheses

The research questions and hypotheses for this study were the following:

Research Question (RQ)1: What is the association between family rejection and practicing insertive anal sex without a condom in Latino gay men?

$H_0$1: Exposure to family rejection is not associated with practicing insertive anal sex without a condom in Latino gay men.

H_a1: Exposure to family rejection is associated with practicing insertive anal sex without a condom in Latino gay men.

RQ2: What is the association between family rejection and practicing receptive anal sex without a condom in Latino gay men?

$H_0$2: Exposure to family rejection is not associated with practicing receptive anal sex without a condom in Latino gay men.

H_a2: Exposure to family rejection is associated with practicing receptive anal sex without a condom in Latino gay men.

RQ3: What is the association between family rejection and self-esteem in Latino gay men?

$H_0$3: Exposure to family rejection is not associated with self-esteem in Latino gay men.

H_a3: Exposure to family rejection is associated with self-esteem in Latino gay men.

RQ4: To what extent does self-esteem mediate the relationship between exposure to family rejection and the use of condom?

$H_0$4: Self-esteem does not mediate the relationship between exposure to family rejection and the use of condom.

H_a4: Self-esteem mediates the relationship between exposure to family rejection and the use of condom.

Theoretical Framework for the Study

The present study was conducted using the minority stress theory (MST) as a guide (see Meyer, 1995, 2003; Meyer & Frost, 2013). The premise of this theory is that there are unique, chronic, and socially based minority-related stressors that determine health disparities in stigmatized minorities. The stressors can be acute or chronic events and are linked to a stigmatized minority status or identity (Stettler & Katz, 2017). The MST classifies the minority-related stressors as distal or proximal stressors. Distal stressors are objective prejudice-related events, violent or discriminatory acts that work independently of the individual. Examples include everyday discrimination, social rejection, microaggression (subtle forms of discrimination), and other events like missed opportunities (Meyer, 1995, 2003; Meyer & Frost, 2013). Proximal stressors are subjective experiences that depend on individuals' perceptions and evaluation of the events. Examples of proximal stressors are expectations of rejection, internalized stigma, and concealment of sexual orientation (Meyer, 1995, 2003; 2015; Meyer & Frost, 2013). There are also potential buffers against these stressors like social networks (including family support), resilience, and effective coping strategies (Scandurra et al., 2019; Stettler & Katz, 2017; van Bergen & Spiegel, 2014).

According to the MST, minority-related stressors have a more significant impact in the health outcomes of sexual minorities than general stressors like death of a relative,

job loss, or situations associated to the socioeconomic status (Meyer & Frost, 2013; Toomey, Ryan, Diaz, & Russell, 2018). Distal stressors can lead to adverse health outcomes directly or through proximal stressors (Denton, Rostosky, & Danner, 2014; Hatzenbuehler, 2009; Hatzenbuehler, Nolen-Hoeksema, & Erickson, 2008). According to Stettler and Katz (2017), expectation of rejection is a proximal stressor that is associated with anxiety, depression, identity concealment, and internalized homophobia. The psychological mechanisms proposed to explain these negative outcomes are rumination, hopelessness, pessimism, and isolation (Mohr & Sarno, 2016; Stettler & Katz, 2017). According to the MST, the impact of minority stressors on mental health, the resulting low self-esteem, and the use of harmful coping mechanisms could explain the vulnerability to adverse health outcomes and health disparities in sexual minorities (Dentato, 2012; Dentato, Halkitis, & Orwat, 2013; Meyer & Frost, 2013; Stettler & Katz, 2017).

A research study based on the MST should address some of the testable aspects of this model. First, minorities are exposed to more stressors than nonminorities. Second, minorities have more disorders than nonminorities (Meyer, 2015; Meyer & Frost, 2013). Third, minority-specific stressors mediate or explain variations in health disparities between minority and nonminority groups (Meyer, 2015; Meyer & Frost, 2013). Some researchers have tested the tenets of the MST and have found a relationship between stigma and internalized homophobia and emotional dysregulation but no association between expectation of rejection and emotional dysregulation (Dentato, 2012; Dentato et

al., 2013; Emlet, Fredriksen-Goldsen, Kim, & Hoy-Ellis, 2017; Rendina et al. 2017; Stettler & Katz, 2017). Social support, including family support, is a buffer against the impact of minority-related stressors (van Bergen & Spiegel, 2014).

Nature of the Study

I conducted a quantitative study to examine the relationships between family rejection and unprotected sex in Latino gay men and if self-esteem is associated with or mediates the relationship between family rejection and unprotected sex. I used secondary data from a database of 643 Latino gay men from Chicago (n = 320) and San Francisco (n = 324). The original data were collected as part of the Latino MSM Community Involvement: HIV Protective Effects project (Ramirez-Valles, 2014). The use of a quantitative methodology and the analysis of the variables with multiple linear regression and binary logistic regression are useful to test associations and mediation effects among the variables that were used in this study (see Creswell & Creswell, 2018). The data are available at the Interuniversity Consortium for Political and Social Research (ICSPR) website for public use and were extracted after receiving approval form the Walden University Institutional Review Board.

Definition of Terms

The following are the definitions of the essential terms used in this study:

Closeted/not being out: Those who do not self-accept as being gay or do not reveal their sexual orientation to others ("Closeted". *Cambridge English Dictionary*, 2020).

Coming out/outness/being out: The process or condition of being aware and self-accepting of one's sexual orientation and voluntarily revealing it to others (University of California San Francisco, n.d.).

Family rejection: Perceived or experienced loss of connection with one or more family members and the resulting lack of economic and emotional support (Carr, Holman, Abetz, Kellas, & Vagnoni, 2015).

Gay: People who are physically, emotionally, or romantically attracted to others of the same sex (University of California San Francisco, n.d.).

Homonegativity/homophobia: Irrational behaviors, attitudes, or feelings of disgust manifested by persons when confronted with nonheterosexuality. Fear or hate towards gays, lesbians, bisexuals, or transgenders (University of California San Francisco, n.d.).

Internalized homonegativity/homophobia: Negative attitudes, beliefs, and behaviors of gay persons about nonstrict heterosexuality and about their sexual orientation. Fear, self-oppression, and self-hate due to learned and accepted ideas about sexual identity and sexual orientation (Berg, Munthe-Kaas, & Ross, 2016; University of California San Francisco, n.d.).

Latino: People belonging to cultures that speak languages that derive from Latin: Spanish, Portuguese, French, Italian, and Rumanian (Fernandez-Morera, 2010; United States Census Bureau, 2018). However, in the present work, the term Latino was reserved to people who speak Spanish, live in a household where Spanish is the primary language,

self-identify as Hispanic or Latino, or descend from a family who speaks Spanish or self-identify as Hispanic or Latino.

Self-esteem: Having a favorable sense of worth, attitudes, and beliefs towards oneself (Bleidorn et al., 2019).

Sexual compulsivity: Continued or repetitive engagement in sexual behavior that produces physical or emotional distress despite the actual or potential negative consequences that might arise from it (Rooney, Tulloch, & Blashill, 2018).

Social homonegativity: Socially constructed ideas or forces that oppress those who are not strictly heterosexual (Jewell & Morrison, 2012).

Unprotected sex: Insertive or receptive anal sexual intercourse without condom with someone who could potentially have an STI (Slaymaker, Walker, Zaba & Collumbien, n.d.).

Assumptions

In this study, I assumed that the Latino MSM Community Involvement: HIV Protective Effects project database represents properly the Latino gay men in the Chicago and San Francisco (see Ramirez-Valles, 2014). Another assumption was that the participants understood the survey questions and gave unbiased responses. These assumptions were based on the description of the data collection process in the original study (Ramirez-Valles, 2014; Ramirez-Valles, Garcia, Campbell, Diaz, & Heckathorn, 2008; Ramirez-Valles, Kuhns, Campbell, & Diaz, 2010). A final assumption was that the original data were correctly entered and processed in the dataset.

Scope and Delimitations

Scope of the Study

In this study, I investigated the relationship between family rejection and unprotected sex in Latino gay men and if low self-esteem is associated with or mediates in this relationship. I used secondary data from the Latino MSM Community Involvement: HIV Protective Effects project (see Ramirez-Valles, 2014). The dataset contains responses from 643 Latino gay men older than 18 from Chicago (n = 320) and San Francisco (n = 323).

Delimitations of the Study

This study was delimited to self-identified Latino gay men and transgender persons (male to female) older than 18 living in San Francisco and Chicago. The participants were recruited through respondent-driven sampling, which is a social network referral method (see Ramirez-Valles et al., 2008; Ramirez-Valles et al., 2010).

Strengths and Limitations

Strengths of the Study

The use of respondent-driven sampling allows researchers to reach "hidden" or hard-to-reach populations and has proven to be superior to snowballing and very useful in the study of hidden populations like stigmatized minorities (Ramirez-Valles et al., 2008; Ramirez-Valles et al., 2010). The use of computer-assisted self-interviewing (the participant uses a computer to respond without an interviewer present) added reliability to

the responses by reducing the bias associated with stigmatized behaviors like unsafe sexual practices (see Ramirez-Valles et al., 2008).

Limitations of the Study

Studying Latino gay men is a challenge because it is difficult to understand the health issues of a "hidden" or hard-to-reach populations (Sell & Holliday, 2014). One limitation is that the original study has data from a population of Latino gay men in only San Francisco and Chicago, so the findings are not generalizable. The use of respondent-driven sampling may lead to selection bias because there could be an overrepresentation of participants recruited by people who have larger social networks or more recruiting skills (Ramirez-Valles et al., 2010). The nature of secondary data is a limitation because the data were not collected with the purpose of the present study, and this means that the variables of interest may not have been collected in the form that I would have collected them having in mind the research questions addressed in the present study (see Brakewood & Poldrack, 2013; Cheng & Phillips, 2014).

Another limitation is that the original dataset contains cross-sectional data, so no inference about causality could be made. The use of a convenience sampling (the selection of participants based on availability and convenience) is another limitation because it can lead to selection bias due to over- or under-representation of some population subgroups (see Creswell & Creswell, 2018; "Convenience sampling. Laerd Dissertation", 2012). Another limitation is that the study only contains data of family

rejection in the form of verbal stigmatization and has no information about physical abuse, which would have added enormous insight into this study.

A final limitation is that the data were collected in 2004 (published in 2014). However, I did not find another database that contains the variables I needed to respond my research questions. This database is still a reliable source of information because the influence of Latino cultural values like familismo and machismo are still a problem for Latino gay men (Gattamorta & Quidley-Rodriguez, 2018; Gattamorta et al., 2019).

Some may argue that the situation for Latino gay men has improved after the approval of the law permitting same sex marriage. This is a debatable topic because sexual minority rights do not consist in only being able to marry. Same sex marriage eliminated barriers to economic, financial, political, and personal development. However, some who voted in favor of gay marriage are not in favor of other antidiscrimination laws regarding healthcare, employment, and housing (Ball, 2016). In addition, Latino gay men are currently at risk of losing the benefits that the Affordable Care Act provided (Wang & Cahill, 2017). The Affordable Care Act (ACA) represented a great advance in the protection of minorities of disadvantaged social status or with preexisting conditions. The ACA is significative for decreasing LGBT and ethnic minorities health disparities due to its support for data collection, the expansion of the availability of insurance coverage, and the new nondiscrimination protections. This law guaranteed access to healthcare insurance to millions of Americans, including LGBT people (Baker, 2016; Wang & Cahill, 2017). At the beginning of the year 2016, the U.S. Department of Health and

Human Services approved a rule to ensure protections against discrimination based on gender or sexual orientation (Baker, 2016). This rule confirmed that Section 1557 of the ACA protected LGBT people and that no exemptions based on religion could be allowed for programs or healthcare facilities that receive federal funding. The legal interpretation of the rule is important because the words sexual orientation or transgender person are not explicitly mentioned in Section 1557 of the ACA. The rule states explicitly that no one can be discriminated against on the basis of sex, race, national origin, age, or disability (Baker, 2016).

The current government attempts to eliminate or to amend the ACA to permit health insurance companies to deny coverage to those with preexisting conditions and the states to opt out of providing essential health benefits. If this occurs, those with HIV will lose their healthcare benefits, and millions of LGBT might lose the possibility of STI screening and access to PrEP (Wang & Cahill, 2017). Besides these threats, there are other changes in federal policies related to LGBT population health like the rollback of data collection on sexual orientation and gender identity on surveys such as the American Community Survey and the National Survey of Older Americans Act Participants. Moreover, some laws permit healthcare providers claiming religious or moral objections not to offer services like HIV prevention and fertility treatments for same sex couples (Schneider, Silenzio & Erickson-Schroth, 2019; Wang & Cahill, 2017). Opponents of gay rights try to hinder the process of data collection that relates to the health of LGBT people (Baker, 2016; Schneider et al., 2019; Wang & Cahill, 2017).

The situation for some Latino gay men within their families may be worse than before the approval of the same sex marriage law. Gonzalez, Pulice-Farrow, and Galupo (2018) reported that 46.3% of the participants ($N = 102$) manifested that the election of Donald Trump created tensions and divisions within the families and that these participants felt betrayed by their family members who voted for Donald Trump. The sample in this study had a small representation of Latinos, but the results of the 2016 presidential election give an idea of what could have happened in Latino families after the results were known. Before the election, it was expected that 19% of Latinos would support Donald Trump, but the percentage of Latinos who voted for Trump was 28% (Pew Research Center, 2018).

Significance of the Study

There were nearly 60 million Latinos in the United States (18% of the population) in 2018 (Flores, Lopez, & Krogstad, 2019). This ethnic group is the second fastest growing ethnicity in the United States (Flores et al., 2019). In 2016, 5.4% of Latinos identified themselves as LGBT (Gates, 2017). According to population estimates, 21% of those who identify themselves as LGBT are Latinos (Williams Institute, 2019). The present study contributed to filling a gap in research by identifying better methods of studying the relationship between family rejection, low self-esteem, and unprotected sex in Latino gay men like the proper collection and instrumentalization of the variables used for this purpose. The current decline in condom use and the increase in the number of sexually transmitted infections among Latino gay men make the present investigation

especially important (see Copen, 2017; Kann et al., 2018; Pebody, 2016; Rhodes & McCoy, 2015). The findings of this study can increase the awareness among medical educators, clinicians, researchers, and public health professionals about how these understudied factors impact the health of Latino gay men and elicit social change. These findings might enhance medical education and clinical practice regarding the recognition of ethnicity-mediated and family level risk factors for HIV infection in this population subgroup (see Hafeez et al., 2017). This study is especially significant in this historical period when the rights of racial/ethnic and sexual minorities are in danger, and there are violent and legal attacks on LGBT people (Human Rights Campaign, 2018, 2020; Human Rights Watch, 2018; Romero, Shaw, & Conron, 2019; Waters, Pham, Convery, & Yacka-Bible, 2018).

Summary

Chapter 1 contained the current background information about family relationships and unsafe sexual practices in Latino gay men. In this section, I also presented the purpose and significance, the definition of the variables and terms, the research questions and hypotheses, the scope, the assumptions, the strengths, and the limitations of the study. Previous researchers have focused on the relationship between discrimination, stigma, and homonegative attitudes with unsafe sexual practices but leaves a gap about the role of family rejection on the practice of unprotected sex in this population. The results of this study add insight into this research gap and contribute to social change by informing medical educators, clinicians, public health professionals, and

other researchers about how to properly collect and select the variables to study the relationship between minority stressors and sexual risk behavior. Following these recommendations may serve to better understand the specific factors behind the increasing rate of HIV infections in Latino gay men. This new insight might serve to create interventions to reduce health disparities in this population. Chapter 2 contains a review of the literature that encompasses the relevant peer-reviewed articles written during the past 5 years.

Chapter 2: Literature Review

Introduction

The incidence of HIV and other STI infections is disproportionately impacting Latino gay men while decreasing or remaining stable among heterosexuals of all races and White gay men (CDC, 2017, 2019, 2020; Hafeez et al., 2017; Snapp et al., 2015; Rao, 2016; Stettler & Katz, 2017; Toomey et al., 2018). These health disparities have been attributed to a lower rate in condom use among Latino gay men compared to White gay men (Perrotte, Bibriescas, Wainwright, Garza, & Baumann, 2018; Rhodes & McCoy, 2015). Engaging in receptive condomless anal sex increases the risk of HIV acquisition 18 times compared to condomless vaginal sex (CDC, 2017). The practice of unprotected sex among Latino gay men has been attributed to depression, machismo beliefs, use of substances during sex, and body dissatisfaction with high investment in personal appearance (Brady et al., 2018; Gleton, Jahanfar, Inungu, & Latty, 2019; Millar, Starks, Grov, & Parsons, 2017; Perrotte et al., 2018). There is little evidence about the role of family dynamics in the practice of unprotected sex among Latino gay men (Abreu et al., 2019; Eaton & Rios, 2017; Kavanaugh, Taylor, Stuhlsatz, Neppl, & Lohman, 2019; Wang, 2017). The purpose of this study was to determine the influence of family rejection on the practice of unprotected sex in Latino gay men and if self-esteem mediates or is a moderator of that relationship.

Several scholars have addressed the relationship between family dynamics and sexual behavior in gay men in an emergent body of literature (Bird et al., 2017; Fraser,

Pierse, Chisholm, & Cook, 2019; Hafeez, Zeshan, Tahir, Jahan, & Navee., 2017; Li et al., 2017; Pastrana, 2015; Swendener & Woodell, 2017). Some authors concluded that family relationships are an essential determinant of sexual behavior (Bird et al., 2017; Chaney & Burns-Wortham, 2015; Craddock et al., 2016; Fraser et al., 2019) and a strong predictor of self-esteem (Abreu et al., 2019; Craddock et al., 2016; Gonzalez et al., 2018; Hafeez et al., 2017; Parra et al., 2017; Ryan et al., 2018; Snapp et al., 2015; Wang, 2017).

The Latino culture is embedded in certain features like familismo, or the tendency to place family values above the personal interest; machismo, or the belief that males have to be brave, hypermasculine, and protectors of their family; and marianismo, or the belief that females have to be submissive and caregivers (Abreu et al., 2019; Pastrana, 2015; Pinos, Pinos, Baitar, Jerves, & Enzlin, 2016; Surace et al., 2017). Traditional gender roles, rigid family structure, and religious conservativism are also common among Latinos (Abreu et al., 2019; Pastrana, 2015; Surace et al., 2017). Understanding the role of the family in Latino gay men requires a consideration of the ethnic and cultural characteristics of this population (Abreu et al., 2019; Sánchez et al., 2016; Surace et al., 2017; Zeglin et al., 2017) and the important role of the family for Latinos (Abreu et al., 2019; Pastrana, 2015; Surace et al., 2017).

Latino gay men, compared to White gay men, are more conscious about masculinity and more likely to keep their sexual orientation private (Sánchez et al., 2016). Some Latino gay men have to choose between living according to their family values or according to their sexual orientation (Eaton & Rios, 2017). The first choice

leads to living their sexuality in secrecy, which has adverse effects on mental health and self-esteem and increases the risk of engaging in unprotected sex (Eaton & Rios, 2017; Pastrana, 2015). The second choice leads to a sense of betrayal to their families, which can also impact mental health and self-esteem (Eaton & Rios, 2017; Pastrana, 2015).

After the 2016 presidential election in the United States, there was an increase in family rejection, broken family relationships, interpersonal sexual orientation-based harassment, and decreased trust in family members (Gonzalez et al., 2018; Ramirez, Gonzalez, & Galupo, 2017). Family rejection is associated with low self-esteem, anxiety and depression, substance use, homelessness, internalized homophobia, and suicidal thoughts, especially in sexual minorities (Hafeez et al, 2017; Parra et al., 2017). Family rejection, either explicit or subtle, is a major source of stress for Latino gay men (Stettler & Katz, 2017) and is associated with depression, anxiety, low self-esteem, and suicidal ideation in this population (Abreu et al., 2019; Wang, 2019). Another outcome of family rejection is an increased risk of acquiring HIV or other sexually transmitted infections (Chaney & Burns-Wortham, 2015; Fraser et al., 2019). The sense of rejection at the moment when young gay men need more support and acceptance creates the conditions for them to find that acceptance through unsafe sexual practices (Bird et al., 2017).

Low self-esteem is one of the negative consequences of family rejection (Abreu et al., 2019; Gonzalez et al., 2018; Hafeez et al., 2017; Snapp et al., 2015; Ryan et al., 2018; Wang, 2019). Low self-esteem is associated with sexual compulsivity and with not being tested for HIV or being unaware of HIV status (Chaney & Burns-Wortham, 2015). Low

self-esteem is also associated with adverse health and social outcomes (Blais et al., 2014; Wang, 2017). Homophobic bullying correlates with low self-esteem directly or is mediated by internalized homophobia (Blais et al., 2014). Li et al. (2017) found that 53% of their participants reported that the family was the source of homophobic bullying. Another effect of family rejection is the development of sexual compulsivity. The most crucial determinant of this was not disclosing sexual orientation to the mother due to fear of rejection (Chaney & Burns-Wortham, 2015).

Eaton and Rios (2017) stated that clinicians should develop a tool for the detection of those who suffer rejection from the family. The finding of this study might provide insight to clinicians and medical educators about the specific health issues that affect Latino gay men. The lack of family-based interventions among Latinos and the reasons for their implementation has been highlighted by some researchers (Zeglin et al., 2017).

In this chapter, I present the current literature on the association between family rejection, self-esteem, and unprotected sex and literature in which these issues are examined related to the MST. This chapter includes the strategy used to find the literary sources and explains in more detail the theoretical foundation of the study.

Literature Search Strategy

I conducted a literature review of the variables used in this study. The search strategy included peer-reviewed articles with full text available, written originally in English, and published between 2014 and 2019. The databases used were MEDLINE,

EBSCOhost, CINAHL, PubMed, and Science Direct. The literature search included the following keywords: *Latino gay men, family rejection, unprotected sex, sexual risk behavior, self-esteem, minority stress,* and *homonegativity*.

Theoretical Foundation

Understanding the health disparities affecting Latino gay men requires a multiperspective holistic approach. The more commonly used perspectives for the study of minorities are the minority stress theory (MST; Meyer, 2003), the life course perspective (Elder, Johnson, & Crosnoe, 2003), the social ecological model (Bronfenbrenner, 1979), and intersectionality (Crenshaw, 1990). This study is based on MST (Meyer, 1995, 2003; Meyer & Frost, 2013). Proponents of the MST argue that stigmatized minorities are exposed to unique, chronic, and socially mediated minority-related stressors that determine physical and mental health disparities. The stressors can be distal (prejudice-related events) or proximal (expectations that events will happen, internalized stigma, and concealment of sexual orientation). The proximal stressors involve psychological mechanisms like rumination, hopelessness, pessimism, and isolation that conduce to negative mental health outcomes (Mohr & Sarno, 2016). Distal stressors include prejudice-related events and violent or discriminatory acts that work independently of the individual. Examples include everyday discrimination, social rejection, microaggression (subtle forms of discrimination), and nonevents like missed opportunities (Meyer, 1995, 2003, 2015; Meyer & Frost, 2013). Distal stressors can lead to adverse health outcomes directly or through proximal stressors (Hatzenbuehler, 2009;

Hatzenbuehler et al., 2008). These stressors have a more significant repercussion in the mental health of sexual minorities than general stressors (Toomey et al., 2018). Expectations of rejection (one of the proximal stressors) produces adverse outcomes like low self-esteem, anxiety, depression, identity concealment, and internalized homophobia. The proximal stressors are also associated with negative and hazardous coping strategies that increase vulnerability to diseases (Stettler & Katz, 2017).

Using the MST, some researchers concluded that distal stressors like experiences of discrimination and prejudice correlated with proximal stressors like internalized homonegativity and expectations of rejection and that proximal stressors mediated the relationship between distal stressors and poor coping self-efficacy and adverse health outcomes (Dentato et al., 2013; Denton et al., 2014; Meyer & Frost, 2013; Stettler & Katz, 2017).

Van Bergen and Spiegel (2014) conducted a qualitative study based on the MST and analyzed the mediating effect of coping strategies in the relationship between LGBT-related stigma and health. The results suggested that using coping strategies like avoidance, denial, and repression lead to self-harm, substance use, and violence. The authors of this study mentioned that rejection by the family (actual or threat of rejection) had a large negative impact on the health of LGBT (van Bergen & Spiegel, 2014). Those who had positive coping patterns had better physical and mental health outcomes. These healthy emotional coping patterns appeared in those who were accepted and supported by their parents (van Bergen & Spiegel, 2014).

Hatzenbuehler et al. (2008) found a correlation between minority stressors and HIV behavior, substance use, and depression. The participants were followed up on after the death of their partners, and there was no association between this major life event (general stressor) and the outcomes. The authors stated that minority stressors might lead to avoidance coping strategies that result in poor mental health and an increased risk of unprotected sex as a means to cope with stressors (Hatzenbuehler et al., 2008).

In this study, I measured the impact of family rejection as an added distal stressor in the practice of unprotected sex in Latino gay men. According to the tenets of the MST, family rejection would act directly and indirectly on the practice of unsafe sex. The indirect action of family rejection would be through low self-esteem. Low self-esteem may result proximal stressors (internalized stigma, identity concealment, and expectation of rejection) and may correlate with the practice of unprotected sex. In this study, I explored if low self-esteem (as a proximal stressor) is associated or partially mediates the relationship between family rejection (distal stressor) and the practice of unprotected sex (outcome). These assumptions were expressed in the research questions and hypotheses above. The findings of this study may add an insight to explain the impact of family rejection and low self-esteem on the increasing rate of HIV infection in Latino gay men.

Literature Review Related to Key Variables

The purpose of this study was to determine the influence of family rejection on the practice of unprotected sex in Latino gay men and if self-esteem moderates or mediates this relationship. This chapter presents and examines the current literature with

relevant findings related to the variables and the population of interest. This section contains the current scholarly work about the role of the family in the Latino culture and its significance for the health disparities in Latino gay men. This search also unveiled controversial and unclear findings that demand a more in-depth study of the relationship between family rejection, self-esteem, and unprotected sex in this population.

HIV-Related Disparities Affecting Latino Gay Men

The incidence of HIV and other STIs is increasing among Latino gay men while it is decreasing or remaining stable among gay men of other races and ethnicities (CDC, 2017; CDC, 2019; CDC, 2020; Hafeez et al., 2017; Snapp et al., 2015; Rao, 2016; Stettler & Katz, 2017; Toomey et al., 2018). Scaccabarrozzi (2015) stated that there is a health gap and an HIV gap while describing the barriers to HIV prevention that Latino gay men face. He argued that the STIs-related health disparities affecting Latino gay men were associated to homophobia, transphobia, anti-immigrant sentiments, stigma, immigration status, poverty, income inequalities, lack of insurance, Latino cultural homophobia, Latino cultural values, and prevalent beliefs about masculinity and gender roles (Scaccabarrozzi, 2015). Other authors have attributed these health disparities to a lower rate in condom use among Latino gay men compared to White gay men (Perrotte et al., 2018; Rhodes & McCoy, 2015). The introduction of preexposure prophylaxis (PrEP) in 2012, brought hope regarding the end of the HIV epidemic (Huang Zhu, Smith, Harris, & Hoover, 2018). However, racial and ethnic minorities (those who would most benefit) are not getting the benefits of this preventive treatment (Huang, et al., 2018). White persons

account for 68.7% of the PrEP users while Black and Latino people account for 11.2% and 13.1% respectively (Huang et al., 2018). Disparities in the access to PrEP, added to a lower rate in condom use may be the explanation for the disparities in incidence of HIV and other STIs affecting Latino gay men (Milano, 2015). Those who engage in receptive anal sex without condoms have a risk of getting infected with HIV that 18 times higher than that of condomless vaginal sex (CDC, 2017). Unprotected sex among Latino gay men has been attributed to depression, machismo beliefs, use of substances during sex, and body dissatisfaction with high investment in personal appearance (Brady et al., 2018; Gleton, et al., 2019; Millar, Starks, Grov, & Parsons, 2017; Perrotte et al., 2018). Milano (2015) stated that among gay men, there is a lack of trust in the safety of condoms and lack of knowledge about how to use condoms effectively. Table 1 shows the estimated annual HIV infections in the United States between 2010 and 2016.

Table 1

Estimated Annual HIV Infections in the United States, 2010 – 2016

	2010	2011	2012	2013	2014	2015	2016
Number of new infections (total U. S. population)	41,100	40,300	40,000	38,900	39,100	39,000	38,700
African American gay and bisexual men	9,800	9,600	10,000	9,900	10,200	10,000	9,800
Latino gay and bisexual men	6,400	6,600	7,100	7,200	7,700	8,000	8,300
White gay and bisexual men	8,000	7,800	7,800	7,300	7,400	7,000	6,700

Latino Gay Men and Family Rejection

Sánchez et al. (2016) compared the degree of consciousness about masculine stereotypes and anti-effeminacy in White and Latino gay men. The sample consisted of two closely matched groups of White (n = 54) and Latino (n = 54) gay men, older than 18 years (M = 30.57, SD = 10.27), that were U.S. citizen or residents. The participants responded to online surveys that were guarded against repeated attempts by IP verification. All the participants self-defined as gay or mostly gay. Independent sample t-tests showed that there was no difference in the importance of masculinity between White and Latino gay men. Latino gay men scored slightly higher on this aspect, but the difference was not statistically significant. However, for Latino gay men, it was more important that they and their partners were not noticeable as gay (d = 0.40 for White gay men and 0.62 for Latino gay men). The degree of negative attitudes towards effeminate men was equal for both groups but Latino gay men were more concerned with their masculine behavior than White gay men (M = 95.41 and M = 77.35 respectively, p = 0.006, d = 0.50). Both groups expressed equal rejection of effeminate men (d = 0.21). There was no statistically significant difference across groups regarding negative feelings about being gay (d = 0.17). However, Latino gay men were more concerned about keeping their sexual orientation private (d = 0.54) and about being accepted by others (d = 0.57) than White gay men. White gay men, on the other hand, expressed more difficulty in the process of coming out than Latino gay men. There was no difference in levels of internalized homophobia between these groups. The authors explained that this

last finding cannot be generalized because the samples of Latino and White gay men were closely matched in income and education while the broader population of Latino and White gay men have noticeable differences in income and education levels. The authors also stated that they treated the Latino group as a monolithic population without considering the country of origin or if they were raised by immigrants or by a family born in the USA. The authors of this research showed that gay men who adopt strict gender stereotypes and are concerned about keeping their sexual orientation private are less likely to be tested for HIV (Sánchez et al., 2016). Concern about masculinity, internalized homophobia, and efforts to keep sexual orientation in private negatively affect the wellbeing of the individuals and that of those around them. The authors suggested that the concern of Latino gay men with keeping their sexual orientation private and being accepted by others might be related to cultural differences between Europeans (focused on the internal aspects of the self) and Latin Americans (the needs of the family and the community are above one's personal needs). The authors stated that it was necessary to examine the role of these social constructs and family relationships in the sexual behavior and life-style choices of Latino gay men.

Swendener and Woodell (2017) conducted a cross sectional study using data from the Social Justice Sexuality Project from 5,500 individuals. This project included 1,159 Latinos (23%). The researchers tried to elucidate the predictors of family support for sexual and ethnic minorities using intersectionality. For Latinos, identification with a more marginalized minority status (bisexual or queer), being single, and not being out

were associated with lower family support. On the contrary, those who identified themselves as gay, were in a relationship, and had disclosed their sexual orientation to the family reported higher family support. The results indicate that disclosure of the sexual orientation could be a first step for gaining family support. The level of family support also correlated with income. This means that for those who cannot be economically independent, it would be more difficult to succeed in this first step. Family support also correlated with happiness and self-rated health. This study by Swendener, & Woodell shows the relationship between family support, disclosure of sexual orientation, self-rated health and happiness. This is a cross sectional study so inferences about causality cannot be made. It is not clear if sexual orientation disclosure determines family support, self-rated health, and happiness or if family support determines disclosure, happiness, and self-rated health.

Wigderson, Lindahl, and Malik (2019) used a longitudinal design to explore three dimensions of parental response to children's sexual orientation - acceptance of sexual orientation, general emotional support, and ambivalence about children´s sexual orientation. The authors also determined if these three dimensions predicted internalized homophobia, substance use, and mental health. The researchers followed up the participants for two years. The study began with 36 parent-child dyads and only 27 of those finished the study. Parental ambivalence about children´s sexual orientation was positively correlated to youths' report of parental rejection but was unrelated to parents' self-reports of rejection. Parental acceptance of sexual orientation inversely correlated

with externalizing symptoms (e.g., hyperactivity and aggression) (t (26) = –2.23, $p < .05$) predicting 16% of the variance of these symptoms two years later (R^2 =. 166, F (1, 25) = 4.99, $p < .05$). Parental emotional support was inversely related to youth internalizing symptoms like depression, anxiety, and social phobia (t (26) = –1.73, $p < .096$), and substance use problem severity. Higher levels of emotional support correlated with lower substance severity scores (t (26) = – 2.41, p < .05) significantly predicting 18.8% of the variance in substance use severity (R^2 = 188, F (1, 25) = 5.78, $p < .05$). There was no significant association between parental ambivalence about children´s sexual orientation with homophobia, mental health issues, or substance use. These results cannot be generalized since the sample size is limited and the participants were recruited from universities or community settings that serve sexual minorities. The authors stated that these parents were probably more accepting of sexual diversity than those in the general population.

Craddock et al. (2016) performed a cross-sectional study using a sample of Black, Latino, and White homeless youth (n = 754; ages 14 - 25) from a drop-in center in Los Angeles, California, to explore the relationship between family relationships and sexual risk behaviors. The results of the multivariate logistic regression analysis of data from a self-administered online surveys and personal interviews showed that there was at least one parent in the social network of 45% of all the participants. Those participants who reported positive relationships and support from their parents reported more condom use. Interestingly, being in contact with at least one parent resulted in a lower likelihood of

using condoms during sexual encounters for Black, White, and Latino gay men. Another significant result was that talking with parents about sex resulted in a four-fold increase in HIV testing for Black homeless youth males but a 91% reduction in HIV testing for Latino homeless youth males. Based on these results, the authors concluded that the quality of the relationship with the family was a determinant for sexual behavior. They also argued that the content or quality of the conversations with the family is what is important in the differences of outcomes across racial/ethnic groups. The authors highlighted that these differences might be due to cultural issues: Blacks tend to talk with their children about sex, sexual morality, and birth control while Latinos talk about sexual abstinence until marriage. The authors proposed family-based interventions to lower the risk of HIV and increase the likelihood of being tested for HIV. This study has limitations because it consisted of a convenience sample of homeless youth in Los Angeles. It is not possible to generalize to those who are not homeless or live in other USA cities with a more diverse Latino population (e.g., from Cuba, Venezuela, Dominican Republic). This study is critical because it suggests that family interventions can be created to modify the quality and the content of the conversations about sex between the parents and Latino gay men to prevent sexual risk behavior and increase the use of condoms and HIV testing.

Carr et al. (2015) performed a qualitative study to investigate the phenomenon of estrangement, defined as the lost communication between parents and children after the parent-child bond has been damaged, in a non-matched sample of 898 participants of

which there were 546 parents and 352 adult children. The authors concluded that estrangement has devastating consequences for the mental health of children and parents because the expectation is that parent-child relationships are permanent. The dissolution of a relationship that is expected to be permanent makes both groups (parents and children) try to find an explanation of why this might have happened. Parents commonly attribute estrangement to causes that are independent from the children´s personality (external causes). These external causes were classified as intrafamilial (X^2 (1) = 5.37, p < .05) or interfamilial (X^2 (1) = 56.12, p < .001). Example of intrafamilial factors are family stressors (e.g., divorce) or children´s entitled behavior. Examples of interfamilial factors were "children´s objectionable relationships". Children, on the other hand, attributed estrangement to internal characteristics of their parents (intrapersonal) like being narrow-minded, "toxic," unable to accept their dating partners, or self-centered behavior (X^2 (1) = 44.38, p < .001). As a result of this rupture of the family bonds, children feel unaccepted and unsupported. Another finding was that parents tend to be unsure of the reasons behind estrangement and cite a long list of possible causes while adult children were more explicit about these reasons. An important contribution to the literature was that the average age at which estrangement occurred was 31 years old. Previous researchers had assumed that estrangement occurred during adolescence. This study was cross-sectional, which means that it is difficult to generalize the findings or state causation. Other limitations were that the participants were recruited from an online support community and that the parents were mostly females and Caucasians. Even though this study does

not have a representative amount of Latino gay men, it is important for this study because it explores the consequences of the loss of family relationships.

Pastrana (2015) performed a quantitative study using a nationwide sample of 1,159 Latino gay men, lesbians and bisexuals to elucidate the factors that predict outness and the role of family support in outness levels. The author discussed the concept of familismo thoroughly – placing the interests of the family or social network above the personal interests – which is pervasive in the Latino culture. The scholar argued that there are significant barriers that impact the sexual decisions of Latino LGBT. Some of these barriers are traditional religious beliefs, traditional family structures, and rigid gender roles. Latinos are more family-oriented than people from other ethnicities, and, in some cases, they have to make hard decisions between living according to their family values and according to their sexual orientation. Living according to their family values may lead them to perform same-sex acts in anonymity, which reduces the likelihood of being tested for HIV or receiving medical care. On the other hand, if they decide to live according to their sexual orientation, they may feel a sense of betrayal to their families and culture. These factors have a more significant impact on recent immigrants and young Latino gay men who do not have the means for financial independence. The author concluded that Latino gay men are less likely to be out to their families or other people when compared to gay people from different ethnicities of the same age. An unexpected finding was that the most important predictor of outness was family support followed by the belief that one's sexual orientation is important. These factors are essential for

creating a connection to the LGBT community. Interestingly, religion did not have an impact on outness. The results suggest that if Latino gay men do not feel supported by their families, and if they believe that their sexual orientation is not important, they will be less likely to be out and to receive the benefits of LGBT support networks, preventive healthcare, and HIV screening. The author also discussed that Latino gays might feel rejected due to race/ethnicity by the predominantly White LGBT community, and this impairs the sense of connection, adding another barrier to outness.

Toomey, Ryan, Diaz, & Russell, (2018) did a cross-sectional study to assess the relationship between parents' efforts to change their children's sexual orientation and their children´s mental health and adjustment later in life. The sample consisted of 245 White and Latino, and Latino mixed gay men, lesbians, bisexuals, and transgender people between the ages of 21 and 25. The participants were recruited from bars, clubs, and local community agencies in the San Francisco Bay area. They were required to be out to at least one caregiver and to have lived at least part of their adolescence with them. The result of the logistic and linear regression analyses showed that these sexual orientation change efforts (SOCE) were depression (*OR* = 2.20 (1.01- 4.73), $p < .05$), suicide attempt (*OR* = 3.08 (1.39-6.83), $p < .01$), life dissatisfaction (*OR* = - 0.19, $p < .01$), lack of social support (*OR* = - 0.26, $p < .001$), and lower education level (*OR* = - 0.15, $p < .05$). When external conversion efforts like a therapist or a religious organization were added, the results were even worse. There was depression (*OR* = 3.92 (1.92 - 8.00), $p < .001$), suicidal ideation (*OR* = 0.27, $p < .001$), suicide attempt (*OR* = 5.07 (2.38 - 10.79), $p <$

.001), life dissatisfaction (*OR* = - 0.34, $p < .001$), lack of social support (*OR* = - 0.45, $p < .001$), lower education level (*OR* = - 0.32, $p < .001$), and lower current income levels (*OR* = - 0.27, $p < .001$). There was a positive correlation between SOCE with or without external efforts and low self-esteem and the practice of sex without condoms, substance abuse, unprotected sex with HIV positive people, HIV diagnosis, and HIV risk, but these were not statistically significant. The association between the variables was stronger when children were sent to religious institutions to change their sexual orientation. An even stronger association was found for those who were sent to therapists. One conclusion of the study is that parents send children to sexual orientation change "therapies", defined as efforts to change an individual´s sexual orientation from homosexual to heterosexual using psychological methods or spiritual interventions (Cheers, Rickman, Campbell, & Ewings, 2019), following what they consider is best for their children. They want them to "fit in" in the traditional cultural and religious values, keep the harmony and unity of the family, and prevent any harm. Understanding these motivations is important for the creation of family education programs that would help parents to understand the origins of sexual and gender identity and the negative outcomes of sexual orientation change efforts. The study has some limitations. The researchers did not include people who are dissatisfied with their sexual orientation, people with more fluid sexual orientation, or specific religious affiliation. The authors mentioned the possibility that gay people who are well-adjusted do not recall family rejection or efforts to change their sexual orientation, which may explain why the association between

family rejection, self-esteem, and unprotected sex were not statistically significant in this sample.

Li, Thing, Galvan, Gonzalez, & Bluthenthal (2017), performed a qualitative study using a sample of 21 Latino gay and bisexual men from Los Angeles, California between 18 and 28 years old, from Mexican or mixed-Mexican origin. The scholars explored, through semi-structured interviews, the effects of microaggressions in Latino gay men, and the different forms of resilience strategies to cope with any indirect form of discrimination or microaggressions. The researchers purposely wanted to reduce heterogeneity regarding age, culture, education, sexual orientation, and outness. There were three themes prevailing regarding microaggressions: microinsults, micro assaults, and microinvalidations. The three themes that prevailed regarding resilience strategies were self-discovery, adaptive socialization, and self-advocacy. Self-discovery was defined as understanding the meaning of being a Latino gay seeking information from Latino gay peers or community leaders or engaging in LGBT community activities. Adaptive socialization was defined as a strategy for social thriving consisting of being aware of microaggressions without internalizing or being consumed by them. Self-advocacy was defined as an empowering capacity to challenge ostracizing harmful norms and educate others by representing oneself as a valuable person. The study by Li et al. is critical because, as a result of the advance in equal rights and the more accepting attitudes towards LGBT, some people use microaggressions instead of overt discrimination to oppress minorities. According to the authors, 87% of Latino gay men were victims of

microaggressions and 53% of them stated that the family was the most important source of these homonegative messages. Interestingly, these microaggressions appeared even in accepting families. In this case, the victims felt a sense of betrayal from the perpetrators. Microaggressions, for those that were not "out", created a barrier to the disclosure of their sexual orientation due to fear of rejection. Self-discovery, adaptive socialization, and self-advocacy were resilience strategies that provided the means for coping with microaggressions through identity strengthening and community involvement. These resilience strategies helped Latino gay men to understand microaggressions, while representing a buffer against mental health disorders, sexual risk behavior, and substance use independently of their "coming out" status. The importance of this study for the present research is that it shows that the family can be a significant source of stress for Latino gay men even when it is apparently accepting or tolerant of the sexual orientation. Microaggressions are or can be sometimes involuntary, so it is critical to intervene at the family level to reduce the impact of what has been called "death by a thousand cuts" (Nadal, Issa, Leon, Meterko, Wideman, & Wong, 2011; Li et al., 2017). The study concluded that community and family-based efforts are needed to reinforce resilience strategies in this population. These efforts need to consider individual differences and intersectionality. For example, a young gay man who depends economically on his parents cannot use self-advocacy to confront microaggressions. In this case, self-discovery and adaptive socialization might be better strategies. The limitations of this study are the heterogeneity of the sample and the reduced number of participants.

Eaton and Rios (2017) investigated the challenges associated with the subjective coming out experiences of Latino gay men in the intersection of gender, sexual, and racial/ethnic identity. These researchers conducted semi-structured interviews to a sample of 51 Latino gay men (ages 18-29). The study was performed under the lens of intersectionality, the double jeopardy theory, and the minority stress theory. The authors explained that they chose this population (young, gay, Latino) because this is an understudied population (referring to the intersection of sexual orientation, race/ethnicity, and age). They argued that the coming out experience occurs at the same time that the sexual and ethnoracial identity is in the process of formation, which is a critical time of identity development, so anything that has a negative impact during this period can produce detrimental results later in life. The authors explained that the Latino culture is pervaded by machismo, familismo, and strict gender roles and that these cultural values impose a barrier to coming out and personality development. The most important findings are that Latino gay men, when coming out, receive negative and pathologizing responses from their family (especially from their mothers). Also, 68% of the participants revealed negative attitudes in their social networks regarding their sexual orientation, and 55% reported that they decided to distance themselves from those negative experiences. Latino gay men face the "double bind" dilemma between coming out and losing personal connections or concealing identity and losing authentic relationships. This dilemma is common to all gay people, but in Latino gay men, another form of tension appears: the urge to prioritize the needs of the group (family, ethnic group) above their individual

needs. The impact of the cultural values is that collectivism, familismo, and machismo represent a barrier for Latino gay men when they try to seek social support. They may prefer to keep harmony within the family and try not to represent a burden to others. The expectations of rejection, verbal and physical harassment, hostile pathologizing environment, and the microaggressions from the persons who are supposed to be supportive produce a devastating emotional impact. One common coping strategy used by Latino gay men when they face family rejection is cognitive reframing. Cognitive reframing consists of mentally distancing themselves from the source of aggression to minimize stress by denying or minimizing their personal discrimination experiences. This is a strategy that may be protective in the short term but has a negative impact on wellbeing in the long-term. The findings of the study cannot be generalized due to its qualitative nature, the small sample size, and because the researchers did not analyze within groups variations (gay versus bisexual, differences that depend on the country of origin, education, socioeconomic status, or religiosity). However, according to the authors, these findings have implications for clinical practice. For example, healthcare providers and psychologists should acknowledge their patients' sexual orientation as it intersects with racial, ethnic, or cultural values. Also, clinicians might detect the cases of those who are victims of family rejection and provide the means of coping with those stressors. The authors also argued that clinicians should not remain blind to sexual orientation and the meaning of the double jeopardy that Latino gay men face during the process of coming out.

Hafeez, et al. (2017), in a literature, review collected important statistical and demographic data about LGBT people in the USA while highlighting the most important health disparities that affect this population. The authors concluded that compared to the general population, sexual minorities have higher levels of suicidal risk and depression. LGBT people reported more suicidal ideations than straight people (30% vs. 6%, $p < 0.0001$) and more self-harm behaviors (21% vs. 6%, $p < 0.0001$). Compared to straight people, gay men were more likely to engage in sexual activity ($OR = 2.62$, $p < 0.0001$), have anonymous partners ($OR = 2.44$, $p < 0.0001$), have sex under the influence of drugs ($OR = 1.85$, $p < 0.0001$), and have condomless sex during their last sexual encounter ($OR = 2.83$, $p < 0.0001$). LGBT people were more likely to experience family rejection and peer victimization. Peer victimization (bullying, forced sex, sexual violence) accounted for 50% of the differences in emotional distress between gay and straight participants. The authors stated that Latino gay men were more likely to experience family rejection and that those from families with strong religious affiliations and who were recent immigrants were more likely to have negative attitudes towards non-heterosexuals. Family rejection and conflicts within the family due to sexual orientation were found to be the most important pathway to homelessness among Latino gay men (Hafeez et al., 2017). Fraser, Pierse, Chisholm, and Cook (2019) corroborated these findings. Other disparities identified were an increased risk for physical health issues, lack of awareness of healthcare providers, and lack of healthcare services that paid attention to their specific needs. The authors highlighted the need for interventions that involve parents, teachers,

and healthcare providers that, together with social media campaigns, can be used to reduce health disparities.

Family Rejection and Self-Esteem

Parra et al, (2017) performed a cross-sectional quantitative study to investigate the moderation effect of peer support in the relationship between family rejection and psychosocial adjustment. The outcome variables were anxiety, depression, internalized homonegativity, and self-esteem. The sample consisted of 27 lesbian and bisexual young women and 35 gay and bisexual young men. ($N = 62$; ages 17 – 27, $M = 21.34$). Most of the participants were Caucasians (76%), college students (71%), predominantly or exclusively same sex attracted (79%), and out to at least one parent (90%). The results indicated that peer support moderates the relationship between family rejection and anxiety and depression but did not moderate the relationship between family rejection and internalized homophobia and self-esteem. The results suggest that having a supportive group could protect those who lack family support against mental health disorders but not against low self-esteem or internalized homophobia. This study is critical because it indicates that LGBT people who lack family support turn to peers or non-peers (teachers, mentors, coworkers) to get that support. These peer and non-peers could be used as a strategic point for detection and intervention to prevent and reduce negative health outcomes. The authors highlighted that more research is needed to elucidate why peer support does not moderate the relationship between family rejection and self-esteem or internalized homophobia. The limitations of this study are the use of a

convenience sample, cross-sectional nature, and self-reported data. This study did not have a significant sample of Latino gay men, but highlights that relying on peer support for those who are rejected by the family is not enough to reduce the impact of this rejection. These people may have lower levels of anxiety and depression, but their levels of internalized homophobia and self-esteem do not improve due to peer support. If low self-esteem mediates the relationship between family rejection and unprotected sex, having peer support will not moderate this relationship. Practitioners should be aware of this in their efforts to reduce health disparities affecting Latino gay men.

Wang (2017) conducted a secondary data analysis based on the Stigma Communication Model and Revised Labelling Theory to explore the psychological impact of verbal stigmatization. The study was conducted using the Latino MSM community involvement: HIV protective effects with a sample of 643 Latino gay men form Chicago and San Francisco (Ramirez Valles et al., 2005; Ramirez Valles et al., 2010). The data were analyzed by partial least squared structural equation modeling. This statistical method is used in the early stages of theory or model development. The results of the study suggested that there is an association between exposure to verbal stigma in the form of name calling and labeling and low self-esteem, shame, stigmatized beliefs, and perceived lack of social support. The author highlighted that given the importance of the family for Latinos, exposure to stigmatization from family members was associated with higher levels of shame and negative psychological wellbeing. Verbal stigmatization predicted stigma belief ($R^2 = .14$, $p < .001$), low self-esteem ($R^2 = .11$, $p < .001$), and

perceived lack of social support (R^2 = .22, p < .001). Shame mediated the relationship between verbal stigma and low self-esteem (R^2 = - .35, p < .001), and perceived lack of social support (R^2 = - .28, p < .001). Shame was the strongest predictor of low self-esteem (R^2 = -.35, p < .001). The author also found a correlation between verbal stigmatization and community involvement (R^2 = .15, p < .001) and between shame and community involvement (R^2 = .10, p < .001). Community involvement was defined as participating in LGBT organizations and volunteering in HIV-related social support groups. The author interpreted this as a coping mechanism to deal with the negative emotions resulting from the feeling of shame and exposure to verbal stigma.

This study was conducted using the same database that I used. The author did not separate family stigmatization from exposure to other sources of stigma. The author suggested that it is necessary to explore how communication of stigma messages within the family affects the psychological wellbeing and coping behavior of Latino gay men (Wang, 2017).

Snapp et al. (2015) performed a cross-sectional study using a sample of 245 non-Latino White and Latino young adults who self-identify as males (46.5%), females (44.9%), or transgender people (8.6%) between the ages 21 and 25 years. The authors aimed to determine if family acceptance and two other forms of sexuality-related social support (friends and community) buffer the effect of minority-specific stressors on mental health based on the tenets of the minority stress model (Meyer, 2003). The authors also investigated if each of these forms of support remained a significant protective factor

when all of them were considered together. The authors found that family, peer, and community support strongly predicted self-esteem. Family acceptance was the strongest predictor of self-esteem and healthy adjustment (feelings about their current situation, general self-esteem, and LGBT self-esteem). The results of the regression analysis showed that, when controlling for sexuality specific support, Latinos had lower self-esteem, and the positive relationship between Latino identity and LGBT esteem was not significant. There were no differences based on immigrant status. The stronger predictor of adjustment, LGBT esteem, and favorable current life situation was the number of people to whom they were out. One key finding is that family acceptance strongly predicts self-esteem, favorable current life situation, and LGBT self-esteem. The relationship between family acceptance and these positive outcomes remained significant when other forms of support were added to the model. There was an association between the number of friends who knew about their sexual orientation and positive outcomes, but this relationship was partially mediated by personal characteristics and family acceptance. The most important finding was the long-lasting effect of family support (the only significant predictor of all measures of adjustment) on the well-being of LGBT youth. Other factors that had a positive influence on well-being were peer support, reading LGBGT publications, and going to LGBT events and bars. These have a much lower effect on well-being, and this effect probably involves self-identity and affiliation factors rather than the feeling of support. The authors highlighted that non-White LGBT people were less likely to come out to their parents when compared to Whites of the same

age. They suggested investigating which cultural, racial, or ethnic factors determined this difference. The authors proposed interventions at the family, school, and community levels that consider individual differences and intersectionality. They cited previous success in these types of interventions in conservative religious families (Ryan & Chen-Hayes, 2013).

Blais et al. (2014), using a sample of 300 LGBT people (ages 14 - 22), performed a quantitative cross-sectional study aiming to identify the relationship between homophobic bullying, internalized homophobia and self-esteem, and internalized homophobia. There was not a significant representation of Latino gay men because the study was performed through online surveys in Quebec, Canada. However, this research is critical because it shows the correlation between exposure to rejection due to sexual orientation and lower self-esteem. The authors found that homophobic bullying affects self-esteem directly and indirectly (partial mediation effect) through internalized homophobia. There was a statistically significant correlation between exposure to homophobic bullying and internalized homophobia and lower self-esteem. The statistical model explained 29% of the variance of self-esteem, 19.6% of the variance of internalized homophobia. The authors suggested that interventions to prevent homophobic bullying might reduce the negative effects on sexual minorities. The background research in this study highlighted the link between low self-esteem and psychological distress, suicidal ideation, suicide, criminal conviction, lower educational achievement, lower income, and post-traumatic stress. These correlations were higher for

gay men than for lesbians and even higher for transgender people than for gay men. The study presents the limitation that is cross-sectional. However, the authors cited a previous longitudinal study whose authors also found that peer victimization predicts lower self-esteem (Overbeek, Zeevalkink, Vermulst, & Scholte, 2010). Other limitations are that the researchers only evaluated emotional (not physical) forms of bullying and that the sample consisted of a higher proportion of women than men. The authors stated that men are more likely to suffer from bullying than women and also less likely to participate in online surveys.

Chaney & Burns-Wortham (2015) performed a cross-sectional study by analyzing data from 305 gay and bisexual men (18 - 64 years old; median = 34). The authors aimed to elucidate the relationship between loneliness, self-esteem, and coming out on sexual compulsivity. Sexual compulsive behavior has the same characteristics as any addictive behavior. The person spends excessive time thinking about or engaging in sex, engaging in risky sexual behavior (multiple partners, anonymous, unprotected sex) despite the potential negative consequences, tolerance (needing more frequent and intense experiences), continuing to engage despite demonstrated adverse effects, anxiety when it is not possible to engage in the behavior, and unsuccessful attempts to stop the practice. Sexual compulsivity has been associated with loneliness, secrecy, broken familial, intimate, and peer relationships, difficulties at work, spiritual conflicts, sense of shame and guilt, sexually transmitted infections, and low self-esteem and respect. The authors stated that sexual compulsivity might be affecting up to 8% of Americans. This disorder

is more common in men and more common in gay and bisexual men compared to straight men. The most important findings of the study are that gay men who do not disclose their sexual orientation to their mothers are more likely to develop compulsive sexual behavior. The authors suggested that this relationship might be due to internalized heterosexism. This statement was based on previous research showing that internalized heterosexism prevents gay men from disclosing their sexual orientation to their mothers (Dew, Myers, & Wightman, 2006). The authors of the study did not find a link between sexual compulsivity and HIV status (contrary to other studies) but found a relationship between not knowing their HIV status or not being tested ever for HIV and self-esteem. Those who had been tested during the previous years reported higher levels of self-esteem than those who had not been tested for more than one year or had never been tested. The three most important predictors of sexual compulsivity were loneliness, self-esteem, and not having disclosed sexual orientation to the mother. The authors conceptualized that loneliness leads to engaging in sexually compulsive behaviors that briefly relieve the sense of loneliness. A consequence of the increasing compulsivity is damage to social, intimate, and peer relationships making the individual feel even more lonely. The same occurs for individuals with low self-esteem. They may engage in risky sexual activity with multiple and anonymous partners looking to alleviate the low sense of self-worth by feeling desired by others. These repeated activities will negatively affect self-esteem, and the individuals may feel even less worthy. The authors of the study did not offer an explanation about the relationship between not disclosing the sexual

orientation to the mother and sexually compulsive behavior. They stated that this finding was probably related to internalized heterosexism. The limitations of the study are the use of a convenience sample from bars (they are more likely to be comfortable with their sexual orientation) and that the HIV status data were self-reported. This study is cross-sectional, so they could not determine causality or the direction of the correlations.

Overbeek et al. (2010), conducted a longitudinal study to explore the bidirectional associations between peer victimization and self-esteem and the moderation effects of ego-resilient, undercontrolling, and overcontrolling personality types. The sample consisted of 774 adolescents (11-16-year-old) who were survey in 2005, 2006, and 2007. The results of the bidirectional analyses were that self-reported peer victimization predicts lower self-esteem (those with lower self-esteem perceived themselves as being more victimized [β = -.08, p < .0, range from -.23 (p < .001 to -.27 (p < 001]) in the two- and three-years intervals. Low self-esteem did not predict subsequent peer victimization (there was an association, but it was not as strong). The authors found that the overcontrolling personality type moderates the relationship between self-esteem and victimization (adolescents with overcontrolling personality types encounter report more peer victimization when their self-esteem is low). Overcontrollers were not more likely to develop low self-esteem if they were victimized by peers. The overcontrolling personality type had high scores on neuroticism and conscientiousness, relatively high scores on agreeableness and openness, and low levels of extraversion. The undercontrolling type scored high on neuroticism, low on agreeableness and conscientiousness, and average on

extraversion and openness. The ego-resilient type had low scores on neuroticism, high scores on extraversion, conscientiousness, and agreeableness, and average on openness.

The relevance of this article for the present study is that some research suggests that low self-esteem may also be due to peer victimization (Gómez-Ortiz, Roldán, Ortega-Ruiz, & García-López, 2018). However, the direction of the relationship between peer victimization and low self-esteem is difficult to assess in a cross-sectional study. Longitudinal studies are better to study the relationship between these variables because the stability of self-reported peer victimization decreases over time probably due to an increase in self-esteem (van Geel, Goemans, Zwaanswijk, Gini, & Vedder, 2018). This is the longest longitudinal study that I found to argue that low self-esteem does not develop (at least with statistical significance) from peer victimization. This is in contrast to the conclusions of a meta-analysis (van Geel et al., 2018), which authors argued that the relationship between peer victimization and low self-esteem is strong in both directions. This meta-analysis, however, included only one longitudinal study that lasted 24 months. The rest of the studies included lasted less than 18 months. Besides this, the authors did not adjust for confounders stating that these covariates varied widely across the included studies.

Family Rejection and Unprotected Sex

Bird et al. (2017), using an exploratory qualitative study, explored the relationship between family rejection and HIV-related sexual risk behaviors by interviewing an ethnically diverse (equal number of White, Black, and Latino) sample of 21 HIV-positive

gay and bisexual men between 18 and 24 years old. The results of the study showed that disclosure of sexual orientation in an unaccepting setting leads to familial conflict due to mismatched needs and feelings. Parents react with disappointment and disapproval in a circumstance in which children are in need of support and acceptance. During the interviews some participants stated that they would not disclose their sexual orientation to their families due to fear of rejection (*n* = 7). This fear of disclosure resulted from hearing anti-gay slurs from family members. Thirteen participants stated that the coming out process was received with strong family rejection and disapproval statements; however, some parents became more acceptant over time (*n* = 7). The impact of family rejection was noticeable in lack of emotional support, advice, and supervision (*n* = 7); lack of instrumental support (housing, clothes, schooling) (*n* = 9); rejection from their homes (*n* = 3); children running away from home (*n* = 5); need to engage in survival sex (*n* = 5); exposure to sexual exploitation (*n* = 5); and seeking older people as partners (*n* = 6). The authors concluded that family rejection leads to hardships that make people at risk of being sexually exploited or engaging in sexual risk behaviors as a way of getting financial and emotional support. They also stated that family rejection also produces depression, isolation, anxiety, and stress that could have made the participants engage in unprotected sex as a way of coping. The study by Bird et al. (2017), adds insight into the emerging body of literature, exploring this topic by trying to conceptualize the impact of family rejection in HIV-related sexual risk behavior. The authors highlighted that most participants reported family rejection and the use of "survival sex" to provide support for

themselves. They stated that little is known about how family rejection leads to an increased likelihood of unprotected sex and HIV infection. As mentioned above, even though some of the families reacted with strong rejection to the disclosure of sexual orientation, there were a number of them that became more acceptant over time. The authors, based on these findings, suggested that the family could be a point for intervention in the prevention of HIV-related behavior and highlight the need for creating supportive strategies and programs targeting young LGBT and their families. They also stated that Blacks and Latinos expressed more family rejection than Whites. Then, they recommended to study the racial and ethnic differences that explain the relationship between family rejection and sexual risk behavior. This study has significant limitations. This is an exploratory qualitative study with a small sample size (Bird et al., 2017). The participants were recruited from a community clinic that offers free medical attention, so it does not cover the experiences of those with higher socioeconomic status.

Latino Gay Men and Unprotected Sex

Frye et al. (2015) used data from 1,369 gay men (*M* (age) = 32 ; 32% White, 32% Latino, 25% Black men) to perform a quantitative analysis of the relationship between discrimination and HIV risk behavior. The results showed that the risk of acquiring HIV correlates with higher levels of sexual orientation-related discrimination at home or social neighborhoods but not with racial discrimination. The authors highlighted the adverse psychological effects of sexual orientation-related discrimination and its correlation with the practice of unprotected sex. Bivariate analysis showed a statistically significant

association between sexual orientation-based discrimination and unprotected sex (*OR* = 3.36; 95% *CI* [1.71, 6.61]). The correlation between race-based discrimination and unprotected sex was not statistically significant. Surprisingly, there was no significant association between experiencing both forms of discrimination and unprotected sex. The relationship between sexual orientation-based discrimination and unprotected sex was mediated by using alcohol during or before intercourse (*OR* = 2.01, 95% CI [1.35, 2.99]), psychological distress (*OR* = 1.65, 95% CI [1.37, 1.98]), and internalized homophobia (*OR* = 1.22, 95% CI [1.01, 1.46]). The analysis of the demographic variables suggested that financial insecurity, condom self-efficacy, and perceived peer sexual risk norms were significantly associated with sexual risk behavior. During the multivariate analysis, there was a correlation between perceived home or social neighborhood sexual orientation-related discrimination for Latino gay men, but it was not statistically significant. The authors attributed the lack of significance to the small sample. They cited previous studies in which larger samples were used and a statistically significant association between these variables for Latino gay men was found. The researchers did not find a relationship between internalized homophobia and unprotected sex when alcohol use and psychological distress were controlled for. To explain this finding, they cited a meta-analysis that concluded that the correlation between internalized homophobia and sexual risk behavior might decrease over time (Millett et al., 2012). The results of the study by Frye et al. suggest that practitioners, teachers, and social organizations should address these environmental factors that determine the higher risk of HIV infections in those who

suffer discrimination due to sexual orientation. This study has several limitations. First, it was a cross-sectional study, so causality cannot be determined. Also, the authors did not determine if the discrimination acts occurred at home, school, or the workplace. Another limitation is that the results were based on the participants´ evaluation of the discrimination events as being racial or sexual orientation-based discrimination. Finally, there was a low correlation between sexual risk behavior and being HIV positive. The authors argued that many might be having unprotected sex with HIV positive people whose viral loads were undetectable or were under treatment with preexposure prophylaxis (PrEP), reducing the likelihood of HIV acquisition.

In a cross-sectional study, Corsbie-Massay, Miller, Christensen, Appleby, Godoy, & Read (2017), performed online interviews to 161 Black and Latino gay men (ages 18 - 30) in Los Angeles county to explore the relationship between sexual orientation and ethnic pride and condom use. The authors found that feeling proud of the sexual identity correlates with less unprotected sex for Black and Latino gay men (*IRR* = .77, 95% CI [0.64, 0.92], $p = .005$). For Black gay men, ethnic exploration reduced the effect of sexual pride on unprotected sex, while for Latino gay men, this variable strengthened the effect. This three-way interaction model was statistically significant (*IRR* = 2.27, 95% CI [0.64, 0.92], $p = .005$). The authors explained that this difference might be due to cultural differences between these two communities. The authors argued that the reason for this might be that Latinos tend to tolerate homosexuality in silence while Black people are more likely to openly manifest negative attitudes towards homosexuality. Another reason

could be that there is a huge Latino community in Los Angeles County (48.1% of the population of the county) that provides many LGBT community resources that help cope with stressors. The Los Angeles County gay population is the second largest gay population in the USA, so they might see their Latino and gay identities as not independent. The findings of this study regarding the association of sexual orientation pride and less unprotected sex are important because those who are rejected form the family are less likely to feel proud of their sexual orientation and then more likely to engage in unprotected sex. The results of this study also make evident the importance of LGBT community organizations that support Latino gay men as a valuable intervention strategy to reduce sexual risk behavior.

Surace et al. (2017) performed a quantitative study to explore the relationship between machismo, caballerismo (being respectful towards women), and familismo and unprotected anal intercourse (UAI) and the appeal of sex without a condom (ASWC) in Latino gay men. The sample consisted of 76 Latino gay men living in the United States. A third of the sample was born outside the USA, and the mean age was 31.97 (19 -72). All the participants had a middle socioeconomic status and overall high education status. The results showed that, for Latino gay men, family support was the most important Latino cultural value ($M = 40.73$, $SD = 10.37$). Machismo and familial honor strongly predicted ASWC ($r = .32$, $p < .01$ and $r = .34$, $p < .01$ respectively). There was a positive relationship between ASWC and UAI ($r = .22$, $p = .06$). The correlation between family support and Latino cultural values and UAI was not statistically significant. There was a

statistically significant correlation between machismo and familial honor ($r = .31$, $p < .01$). There was also a statistically significant relationship among familial honor ($r = .28$, $p = .02$), family support ($r = .27$, $p =. 02$), and interconnectedness ($r = .45$, $p < .01$) with caballerismo. The researchers also found that Latino cultural values strongly predict ASWC. These values accounted for 50.4% of the variance in ASWC ($R^2 = .25$, F (6,69) = 3.91, $p < .01$). Machismo and familial honor were strong predictors of ASWC ($\beta = .24$, $p = .03$ and $\beta = .31$, $p = .05$ respectively). However, the model did not find a statistically significant correlation between Latino cultural values and UAI ($R^2 = .14$, F (6,69) = 1.84, $p = .103$). The authors stated that these findings could be due to the small sample, relatively high socioeconomic status and education level of the participants, and the sampling method (snowballing might attract those who are comfortable with their sexual orientation). This is a critical study since it was the first quantitative study in which the relationship between Latino cultural values and the risk of acquiring HIV through the practice of unprotected sex was explored. The notion that Latino cultural values strongly predicted ASWC is important since these attitudes might manifest in sexual risk behaviors. These sexual risk behaviors could result from ASWC plus the current tendency within the gay community to trivialize HIV infection (Thomas, Mience, Masson, and Bernoussi, 2014). The limitations of this study are that it did not include people who were uncomfortable with their sexual orientation or from low socioeconomic status.

Zeglin et al. (2017) conducted a quantitative study based on the social cognitive theory (Bandura, 1999) to elucidate the predictors of condom use among 482 people who identified themselves as gay (83.8%), bisexual (17.6%), men who have sex with men (12.2%), or "on the down-low" (1.2%). There were participants from Brazil (30.3%), Colombia (35.1%), and the Dominican Republic (34.6%) but currently living in the United States. The mean age of the participants was 36.37 (*SD* = 9.54). The authors used secondary data to perform an exploratory factor analysis from the Latino sexual beliefs scale questionnaire. This study was the first quantitative approach used to identify cultural constructs that could serve to predict and modify sexual behavior in Latino gay men. These cultural constructs were romantic exigency and sexual acquiescence. Romantic exigency refers to a common belief among Latinos that condoms reduce the intimacy of the sexual encounter, transmits a sense of lack of trust, and impairs the emotional connection between the partners. Sexual acquiescence refers to the fatalistic idea that getting infected with HIV is inevitable which leads to passivity and resignation regarding the risk of HIV. Sexual acquiescence reflects the belief in an external locus of control promoted by religious conservativism. Zeglin et al. (2017) found that romantic exigency and sexual acquiescence are viable Latino cultural sexual beliefs that should be included in future research about condom use and HIV risk. The authors argued that the combination of romantic exigency and sexual acquiescence results in loss of control during sexual encounters. The loss of control may be due to high sexual arousal, need for expression of masculinity, influence of alcohol or drugs, or a more powerful partner.

Also, self-control is perceived as "un-Latino" by this ethnic community that sees loss of control as "the normal way things work." The sexual relationships among Latino gay men are conceived in an active-passive basis that is deeply rooted in strict gender roles, machismo, and a traditional view of masculinity. The passive part allows the active one to make decisions about the use of condoms. The study by Zeglin et al. (2017), has some limitations. The small geographic area, limited number of countries of origin of the participants, and the use of ambivalent terms in the survey items. The authors concluded that the findings suggest that drawing on the positive aspects of Latino cultural values may sever to develop family-based intervention strategies.

Latino Gay Men and Minority Stress

Toomey et al. (2018) conducted a quantitative study was performed by surveying 245 LGB persons between the ages of 21 and 25years. The sample consisted of a proportional amount of White (n = 48.6%) and Latino (n = 51.4%) LGB people from the San Francisco Bay area in California. The objective was to retrospectively analyze how the participants coped with minority stressors when they were adolescents and their adjustment (defined as self-esteem and LGBT self-esteem) as adults and their academic achievement. The authors found that LGBT-specific strategies like getting involved in LGBT organizations were associated with better outcomes, while alternative seeking strategies like finding new friends were associated with poorer outcomes. Cognitive based strategies (e.g., imagining a better future) were also associated with negative adult adjustment and lower academic achievement. The researchers explained the different

forms that adolescents have to cope with stressors. There are four families of strategies that adolescents use to cope with stressors: problem-solving, support-seeking, distraction, and escape. Problem-solving strategies are cognitive strategies that include planning, decision-making, reflecting, perspective-taking, or strategizing, and are used by older adolescents with advanced cognitive skills. Support-seeking strategies are behavioral strategies that include getting involved with organizations, peer support, or finding information from others to solve problems. Distraction strategies are a combination of cognitive and behavioral ways of coping that include getting involved in activities that help forget about the stressors. Escape strategies include denial, avoidance, or withdrawal. This last form is used by adolescents that feel that the source of stressors in uncontrollable. The authors stated that some adolescents might use alcohol, drugs, or risky behaviors as a form of distraction. The findings of the study show that LGBT-specific strategies are associated with better outcomes like higher self-esteem, better achievement in school, and fewer depression symptoms. Cognitive and alternative seeking strategies are associated with more depressive symptoms, increased likelihood of dropping out of school, and lower self-esteem and life satisfaction. One important finding is that those who identified as queer ($r = .24$, $p < .001$) and Latino ($r = .17$, $p < .05$) were more likely to use LGBT-specific strategies than Whites, lesbians, or those who self-identified as gay. Another important finding is that those in economic disadvantage tended to use cognitive strategies more frequently compared to those with a more advantaged economic situation ($r = .21$, $p < .01$). The importance of this study is that it

might be the foundation for the creation of intervention strategies for Latino gay men who lack family acceptance and support. As stated in chapter one, the results of this dissertation might add insight that could help clinicians and educators to detect and help those who are at risk of getting sexually transmitted infections. Once they are detected, practitioners should bring them the best solution, and, according to this study, involvement in LGBT organizations is better than finding new groups of friends or engaging in cognitive-based strategies. The authors of this study found that Latino gay men used more LGBT-specific strategies to cope with stressors, and this is associated with a better outcome. However, those in economic disadvantage tend to use coping strategies (cognitive) that are associated with a poorer outcome. Latino gay men who suffer family rejection are more likely to have economic challenges, so they might be included in the group that uses negative coping strategies (Fraser et al., 2019). It is paramount that practitioners understand that some coping strategies are protective by providing resilience, while others might exacerbate the risk of getting involved in unhealthy behaviors.

Stettler & Katz (2017) performed a literature review based on the minority stress theory explored if difficulties with emotion regulation (ER) mediated the relationship between exposure to minority-related stressors and mental health disparities. Emotion regulation is the processes of monitoring, evaluating, and modifying emotional reactions to achieve one´s goals. The authors stated that minority stressors impact ER and that the family has an essential role in ER. Minority stressors impact cognitive processes leading

to negative self-esteem and hopelessness; social and interpersonal skills through isolation; and, ER/coping strategies, through the use of maladaptive mental processes such as rumination. The family, according to the authors, can have a positive influence in ER if allows for children´s psychological autonomy (by accepting and supporting their sexual orientation). However, a non-accepting family (one that either openly or subtly rejects their children´s psychological autonomy) will be a source of distress and create problems with ER in children. Adolescence is a critical period during which some regulatory systems like affect regulation are in development. Exposed to discriminatory policies, verbal harassment, cyberbullying, and physical violence is linked to increased suicidality even when the person is not a direct victim (Bouffard & Koeppel, 2014). Minority-specific discrimination, violence, and bullying are examples of distal (external) stressors that act on the individual by inciting mental processes leading to internalization of the stigma. Internalized stigma is associated with low self-esteem, anxiety and depression. In the face of overt rejection or expectation of rejection, the individual has to take decisions about if disclosing or concealing sexual orientation. Disclosure is associated with feelings of anxiety and fear of rejection while actively deciding to conceal sexual orientation is associated to worse mental health outcomes. According to Stettler and Katz (2017), identity concealment leads to hypervigilance for cues of rejection and fear of discovery. Identity concealment also makes difficult to connect with other LGBT people and receive minority-specific support from peers or social networks. The conclusion of the literature review is that the link between minority stressors and

mental health disparities can be explained by the interaction between cognitive processes (negative self-schemas and hopelessness), social interaction difficulties (loneliness), and hazardous coping/emotion regulation strategies (rumination). The authors argued that the interaction between these factors increase the vulnerability to mental health disorders in sexual minorities. The authors cited studies that concluded that gay youth of ethnic minorities are more likely to receive negative parental responses after disclosure of sexual orientation. Parental rejection is associated with lower self-esteem, depression, suicidality, substance use, and poorer health status. They cited several studies stating that parental support acts as a buffer against homophobic bullying on suicidal ideation. Also, parental support buffers the effect of racial/ethnic discrimination on negative health outcomes. They proposed emotion socialization practices to improve emotions regulation as an intervention.

Summary of the Literature Review

The review of the literature showed the health disparities that affect Latino gay men (CDC, 2017; CDC 2019; Fraser et al*.,* 2019; Hafeez et al., 2017; Rao, 2016; Surace et al., 2017) and also the need to increase the awareness of health care providers to reduce these disparities (Eaton & Rios, 2017; Hafeez et al., 2017). There is a growing interest in the role of family dynamics and Latino cultural values in the health outcomes and disparities affecting Latino gay men (Pastrana, 2015; Surace, et al., 2017). The review of the recent literature shows how Latino cultural values like strict gender roles, familismo, and machismo determine different family dynamics and different sexual behaviors

between Latino gay men and gay men of other races/ethnicities (Craddock et al., 2016; Hafeez et al., 2017; Pastrana, 2015; Sánchez et al., 2016; Zeglin et al., 2017). The prevalent conservative views about gender roles and religiosity that exist in Latino families may be the reason behind the different family interactions in this community. Latinos tend to either tolerate homosexuality in silence (Corsbie-Massay et al., 2017), talk about sexual abstinence as a way of dealing with same-sex orientation (Craddock et al., 2016), or make active efforts to change their children´s sexual orientation (Ryan et al., 2018). Machismo emphasizes the role of the man as provider, decision-maker, and protector of the family (Sastre, De La Rosa, Ibanez, Whitt, Martin, & O'Connell, 2015). The pervasive influence of this traditional cultural value, according to Sánchez et al. (2016), is a determinant of the concern that Latino gay men have about masculinity, keeping their sexual orientation private, and being accepted by others. Familismo (together with machismo), make some Latino gay men live their sexuality in anonymity which reduces the likelihood of being out to others and of being tested for HIV (Pastrana, 2015), while increasing the appeal of having sex without a condom (Surace et al., 2017). Zeglin et al. (2017) stated that cultural values like machismo together with traditional views of the romantic relationships based on active-passive roles, fatalistic views about the inevitability of HIV infection, perceiving self-control as a non-Latino value, and seeing condoms as a barrier to intimacy, connection and trust are pervasive cultural beliefs that catalyze the practice of unprotected sex.

Family support is the most important cultural value for Latinos, together with familial honor and familismo (Surace et al., 2017). Snapp et al. (2015) highlighted that family support has long-lasting positive effects on self-esteem, wellbeing, and healthy adjustment during adulthood. Pastrana (2015) stated that the positive impact of familial support on healthy adjustment, maybe because familial support is the strongest determinant of outness; being out to others, facilitates social interactions with other LGBT community members, seeking help from LGBT organizations, and using positive coping mechanisms to deal with sexual orientation-related discrimination (Corsbie-Massay et al., 2017; Toomey et al., 2018).

Latino gay men are more likely to experience family rejection than gay men from other races/ethnicities (Bird et al., 2017; Hafeez et al., 2017). Family rejection has devastating effects on the healthy development of the personality and the sexual identity (Carr et al., 2015). There is a correlation between family rejection and low self-esteem (Blais et al., 2014; Parra et al., 2017), and unprotected anal intercourse (Bird et al., 2017). The relationship between family rejection and negative health outcomes may be due to (1) estrangement with family members (Carr et al., 2015), (2) lower levels of outness (Li et al., 2017), (3) using ineffective coping mechanisms (Eaton & Rios, 2017; Toomey et al., 2018), (4) lack of emotional and instrumental support (Bird et al., 2017), and (5) not being proud of the sexual orientation (Corsbie-Massay et al., 2017). The effects of family rejection are worse for younger Latino gay men who cannot live independently from their families (Pastrana, 2015), and for those whose parents send to “therapies” to

change their sexual orientation (Ryan et al., 2018). Younger Latino gay men tend to use escape coping mechanisms like denial, use of substances, and unprotected sex sometimes as a way of receiving the emotional support they lack or as "survival sex" to deal with financial hardship (Craddock et al., 2016; Toomey et al., 2018). When Latino gay men feel discrimination due to their sexual orientation, they are more likely to engage in unprotected sex. Parra et al. (2017) found that anxiety and depression, internalized homophobia, and low self-esteem mediate the relationship between discrimination and unprotected sex. Peer support moderates the relationship between these variables when they act through anxiety and depression but not in the pathway through low self-esteem or internalized homophobia (Parra et al., 2017).

Some researchers did not find a relationship between family rejection and unprotected anal sex (Surace et al., 2017). However, other authors found an association between family rejection and unprotected anal sex but not with HIV serostatus (Frye et al., 2015). Surace et al. (2017), mentioned that family rejection correlates with a higher appeal of sex without a condom.

In this study, I will argue that Latino gay men who suffer family rejection are more likely to engage in unprotected sex than those who have family support. If family rejection increases the appeal of unprotected sex, those who have low self-esteem and are incapable of negotiating the use of a condom, are more likely to engage in unprotected sex (Bird et al., 2017; Surace et al., 2017). Other factors that may contribute to unprotected sex are the trivialization of HIV infections, substance use during sexual

intercourse, the need to engage in "survival sex", or the increasing use of PrEP, PEP, having sex with people whose viral loads are undetectable, and seeing the use of condoms as a sign of mistrust and impediment of intimacy (Surace et al., 2017; Thomas et al., 2014). I will also argue that low self-esteem partially mediates the relationship between family rejection and unprotected sex. Latino gay men who suffer or expect family rejection (1) have a lower self-esteem (Blais et al., 2014; Chaney & Burns-Wortham, 2015; Parra et al., 2017), (2) are less proud of their sexual orientation (Corsbie-Massay et al., 2017) and (3) engage in sexual compulsive behaviors (Chaney & Burns-Wortham, 2015), secrecy, and anonymity (Sánchez et al., 2016). The relationship between family rejection, low self-esteem, and sexual compulsive behavior might be explained by non-disclosure of sexual orientation (Chaney & Burns-Wortham, 2015). Sexual compulsive behavior may lead to low self-esteem, loneliness, broken familial and peer relationships, and a lower likelihood of having ever been tested for HIV or knowing their HIV serostatus. Not being aware of their HIV status harms self-esteem (Chaney & Burns-Wortham, 2015).

Looking at these issues through the lens of the minority stress model (Meyer, 2003; Meyer, & Frost, 2013), it can be argued that Latino gay men suffer from more stressors than the general population. These stressors create a disadvantaged status due precisely to their minority identity (sexual orientation and race/ethnicity). Distal minority stressors like discrimination due to their sexual orientation and race/ethnicity, and proximal minority stressors events like expectations of rejection, identity concealment,

and internalized homophobia, have a negative impact on the health of Latino gay men that can explain the health disparities that affect this population. These effects could be buffered by positive coping mechanisms and social support (including family support) but in the case of some Latino gay men, the family, instead of being a protective factor, may become an added distal stressor.

There is a gap in research about the relationship between family rejection and unprotected sex in Latino gay men and the role of self-esteem in this relationship. The complexity of the family interactions in the Latino culture and the influence of these interactions in the intersection of sexual orientation and ethnicity is an understudied phenomenon (Eaton & Rios, 2017; Surace et al., 2017).

Healthcare educators and healthcare providers should be aware of these findings because it is necessary to create screening tools and detection mechanisms to identify those who are at risk of having sexual risk behavior. Frye et al. (2015) stated that discrimination due to sexual orientation correlates with an increased likelihood of having unprotected anal sex. There are some possible buffers in the effect of sexual orientation-related discrimination on unprotected sex. These are family support (Snapp et al., 2015; Surace et al., 2017), peer support (Parra et al, 2017), individual coping mechanisms, and support from LGBT organizations (Toomey et al., 2018).

LGBT-specific support seeking strategies are the most effective and long-lasting strategies to deal with minority-specific stressors (Toomey et al., 2018). Other strategies are cognitive reframing or alternative seeking, which can be useful to cope with minority-

specific stressors in the short term but have adverse effects in the long-term (Eaton & Rios, 2017). The most harmful minority-stress coping strategies are escape mechanisms including substance use, denial, and practicing unprotected sex. These strategies are more often used by younger gay men or by those who feel their situation is beyond their control (Toomey et al., 2018). Toomey et al. found that those who identify as queer used more LGBT-specific support seeking strategies while those who identify as gay used more cognitive reframing.

Summary and Conclusions

There is a gap in research regarding the role of the family and self-esteem in the practice of unprotected sex and health disparities affecting Latino gay men. While some Latino families are supporting and accept their children´s sexual orientation, other families continue to manifest negative attitudes due to the prevalence of cultural values that emphasize strict gender roles and ideas derived from religious conservativism. Minority-specific stressors have a negative impact on mental health that can be either buffered by an accepting family or deepened by a non-accepting family. Those who suffer rejection from their families are at risk of developing low self-esteem and be obliged to live their sexual life in anonymity and engage in unprotected sex as a coping mechanism to deal with stress. Chapter 2 unveils the need for identification of the role of the family interactions in the health disparities affecting Latino gay men. The identification of the role of the family might lead to the creating of family interventions to reduce these disparities and to increase the awareness of healthcare providers about

this problem. In chapter 3, I will explain the research design, methodology, rationale for the research design, research questions, and data analysis plan.

Chapter 3: Research Method

Introduction

The purpose of this study was to assess the association between family rejection and unprotected sex in Latino gay men and to determine of self-esteem moderates or mediates this relationship. In Chapter 3, I describe the research design, the rationale for the research, the research questions, the threats to validity, and the ethical considerations of the present study. The research hypotheses were tested using simple and multiple linear regression and binary logistic regression analysis. The results may contribute to a deeper understanding of the role of family interactions in the disproportionate number of HIV infections among Latino gay men. I used secondary data from the Latino MSM Community Involvement: HIV Protective Effects. The theoretical framework behind this study was the minority stress model (see Hatzenbuehler et al., 2008, Meyer, 1995; Meyer & Frost, 2013; Meyer, Schwartz, & Frost, 2008). Previous researchers found evidence of the relationship between minority stressors and sexual risk behavior but focused on societal-level discrimination. Little information exists about the interactions between family rejection, self-esteem, and sexual risk behavior of Latino gay men (English, Rendina, & Parsons, 2018; Goldbach & Gibbs, 2017; Hatzenbuehler, 2009; Hatzenbuehler et al., 2008). This chapter also includes the procedures used for data collection and sampling strategies used in the main study (Latino MSM Community Involvement).

Research Design and Rationale

I performed a quantitative cross-sectional study to explore the impact of family rejection on the sexual risk behavior of Latino gay men and the role of self-esteem in the relationship between these variables. A cross-sectional study is useful because it provides a clear picture of a public health issue by finding first-order associations between independent and dependent variables of interest (Setia, 2016). The sample size was calculated using G*Power software. The data were obtained from the Latino MSM Community Involvement: HIV Protective Effects study and are available for public use. The data were analyzed using simple linear regression, binary logistic regression, and multiple linear regression. The use of these statistical tests is justified and useful for testing the research hypotheses (see Creswell & Creswell, 2018).

Secondary Data Characteristics

I used secondary data collected from the Latino MSM Community Involvement: HIV Protective Effects study. The goal of this study was to determine if involvement in HIV/AIDS and gay-related community organizations had a moderation effect on sexual risk behavior in Latino gay, bisexual, and transgender men. A respondent-driven sampling (RDS) was used in this cross-sectional study and is an innovative sampling technique that has proven useful in studying hidden populations like undocumented immigrants and stigmatized minorities (see Heckathorn, 2011). The RDS started with a small group of Latino gay men (“seeds”) who then recruited their peers and these in turn others until the sample size was reached. RDS is different from (and sometimes confused

with) snowballing sampling. Snowball sampling (chain referral sampling) is a method to study hard-to-reach populations and the structure of social networks. Snowballing has some limitations regarding reliability and the ability of making good estimates because it starts with a nonrandom convenience sample (seeds) who recruits other participants in their social network. As the number of waves increases, there is an increase in the convenience sampling bias of unknown direction and magnitude (Heckathorn, 2011). To overcome the limitations of snowballing, a HIV prevention project in Connecticut developed a new method called RDS. This method has been used in more than 120 studies in different countries and has proven to have better estimability and reliability when studying hard to reach populations like drug users, illegal immigrants, and other stigmatized minorities (Kuhns et al., 2015). RDS starts with a nonrandom sample (seeds) who recruits other participants in their social network but has different assumptions to meet. If the assumptions of RDS are met, then as the number of waves increases, there is a geometrical and accelerated reduction in bias that is independent of the initial (nonrandom) convenience sample (seeds; Heckathorn, 2011).

Secondary Data Extraction

I analyzed secondary data that are publicly available and can be accessed on the Inter-university Consortium for Political and Social Research (ICPSR) website (see Ramirez Valles, 2014). The data that pertained to the variables of interest to the present study were all available for public access. Despite the public availability of the data, I

sent an email to the ICSPR requesting permission. They responded confirming that I did not need special permission to use the data for this dissertation.

The source of data for the present study was the Latino MSM Community Involvement study. The database contains information from surveys administered to Latino gay men living in Chicago and San Francisco during the summer and fall of 2004. The items of interest to respond the research questions of this study were those related to experienced family rejection as a child or adult and those that contained information about unprotected sex. The survey also contains a self-esteem score that was calculated using the Rosenberg Self-Esteem Survey. The use of this database is justified because even though many things have changed since 2004 (legalization of gay marriage and a more tolerant attitude towards LGBT people), the pervasive role of Latino cultural values on the sexual behavior of Latino gay men still exists (see Surace et al., 2017). This database was recently used by another researcher to investigate the effects of verbal stigmatization from family members on the mental health of Latino gay men (see Wang, 2017). The situation for some Latino gay men may be worse than before the approval of the same-sex marriage legal protections because the discriminatory acts may be exerted by claiming religious or moral objections (U.S. Department of Health and Human Services, 2018). There is still a large gap in the collection of data necessary to reduce health disparities in LGBT people (Baker, 2016; Cahill, & Makadon, 2017). There are increasing tensions and family division among Latinos that started after the 2016 presidential election in the United States (Gonzalez et al., 2018).

As stated in the literature review, traditional Latino cultural beliefs like machismo, caballerismo, and familismo correlate with higher levels of ASWC. The influence of family dynamics is still the most important Latino cultural value in this ethnic community. Family support was reported as the most important among these values (M = 40.73, SD = 10.37) in an online interview among 76 Latino gay men (33% born outside the United States; Surace et al., 2017). In this study, traditional machismo showed a statistically significant correlation with internalized homophobia (β =.27, p =.02). Machismo accounted for 34.5% of the variance of internalized homophobia, R^2 =.12, F (6,69) = 1.56, p =.02. Machismo and familial honor accounted for more than 50% of the variance of appeal of sex without condom (R^2 =.25, F (6,69) = 3.91, p <.01; Surace et al., 2017).

Sánchez et al. (2016) also demonstrated that some Latino gay men who are U.S. citizens or residents in the United States are still concerned with masculine behavior, have negative attitudes towards effeminate gay men, and are still concerned about keeping their sexual orientation private. According to Collins (2018), Latino gay men still consider familial communication a constant struggle and are affected by a multiple minority status (being gay and Latino in a society that is pervasively heterosexist and White). Family rejection due to sexual orientation is still a problem affecting the Latino gay community in the United States because some of the Latino families are still guided by machismo and heterosexism as the only acceptable ways of expression of one´s sexual identity (Collins, 2018). According to Orozco and Perez-Felkner (2018), machismo is

still a pervasive Latino cultural value that impairs the health development of the sexual identity in the Latino gay men community. Machismo makes Latino gay men see their sexual identity through negative lens and makes difficult for them to come out and receive the benefits of the LGBT community networks. These authors also argued that studying this community is a very difficult task because for some of them, coming out might represent alienation and rejection from their ethnic communities and families (Orozco & Perez-Felkner, 2018).

The difficulty in studying and obtaining data from a community that is hard to reach may be the reason why there are no more current databases available that contain the variables that I needed to answer my research questions. Besides the fact of the nonexistence of newer databases containing the variables I needed, I considered that the data are still valid because the methodology used (respondent-driven sampling) has demonstrated to produce results with very little bias and is useful for the study of hard to reach populations like Latino gay men. Also, in 2013, the Inter-university Consortium for Political and Social Research performed consistency checks, standardized missing values, and checked for undocumented or out-of-range codes.

Study Participants

The participants in the Latino MSM Community Involvement study (Ramirez-Valles, 2014) identified themselves as male (85%) or male to female transgender persons (15%). They were from 18 to 49 years old and born in Mexico (47%), the United States (23%), or other Latin American countries. Most of the participants were bilingual (mean

score 2.85). Half of them did not have more than a high school diploma. The unemployment level was 35%, and the annual income was less than $10,000 for 40% of them. Half of the participants reported unprotected oral sex, and 25% of them unprotected anal sex during the 12 months previous to the survey (Ramirez-Valles et al., 2008).

Power Analysis for the Study

I performed a power analysis for the present study to determine the sample size necessary to test the research questions. This simple calculation tool helps avoid using samples that are too small to detect statistically significant differences between groups (Statistic Solutions, 2017). The power of a study represents the probability that the results are significant if the null hypothesis is rejected. I used the G*Power software to determine the sample size necessary for the simple linear regression tests. Using one predictor variable, a $p = .05$, and a power = .80, the minimum sample size needed was 55 participants. In the case of multiple regression analysis, the minimum required sample was 68 ($p = .05$, and a power = .80), and for binary logistic regression, the minimum sample size required was 30 ($p = .05$, and a power = .80).

Instrumentation

Independent Variable (IV)

Family Rejection (RQ1, RQ2, RQ3, RQ4; continuous variable; range 6 to 24).

The Latino MSM Community Involvement asked the participants several questions that measured rejection. In this study, I used six of the survey items that focused on several aspects of rejection from the family. The possible responses in the database were *never*, *once or twice*, *a few times*, or *many times*. The responses were added to obtain a scale measurement (range 6 to 24).

Q394: While growing up, how often were you made fun of or called names (faggot, queer, sissy, etc.) by your own family, because of the way you behaved? This question was coded in the database as GAYSTGEXP5.

Q397: As an adult, how often has your family made fun of you or called you names (faggot, queer, sissy, etc.) because of your sexual orientation? The code for this question in the database was GAYSTGEXP9.

Q381: Most families would be disappointed to have a gay son. This question was reverse coded. The database code for this question was GAYSTGPCVD10.

Q407: How often were you rejected by your family because of your sexual orientation? The code for this question in the database was GAYSTGEXP19.

Q396x: While growing up, how often did members of your family tell you to change your behavior because you looked too effeminate? This item was coded as GAYSTGEXP8 in the database.

Q410: How often has your family ignored or refused to acknowledge your sexual orientation? This item was coded as GAYSTGEXP21 in the database.

Dependent Variables (DV)

DV1: Insertive anal sex without condom (RQ1; dichotomous).

DV2: Receptive anal sex without condom (RQ2; dichotomous).

The Latino MSM Community Involvement included the following questions assessing the practice of unprotected sex in the self-administered survey:

Q292: In the last 12 months, did you have insertive anal sex (your penis in his ass) without condoms? This question was coded as SEX12INSANLU in the database.

Q294: In the last 12 months, did you have receptive/passive anal sex (his penis in your ass) without condoms? This item was coded as SEX12RECANLU in the database.

DV3: Self-esteem (RQ3**;** continuous variable; range 16 to 40).

The participants responded to the Rosenberg Self-Esteem Scale, which is a 10-item self-esteem questionnaire with high validity and reliability (Petersen, Schulenberg, Abramowitz, Offer, & Jarcho, 1984; Quilty, Oakman, & Risko, 2006; "Rosenberg Self-Esteem Scale (SES) - Statistics Solutions", 2019). The possible responses were scored from 1 (“strongly agree”) to 4 (“strongly disagree”). Some items were reverse scored (3, 6, 8, 10). The sum scores for all 10 items were grouped in the variable coded as SELFESTEEM. The highest possible score (40) indicates higher self-esteem while the lowest possible score (16) indicates lower self-esteem.

DV4: Receptive and insertive anal sex without condom (RQ4**;** dichotomous). The values for this variable appear in the database coded as UNPROTECTED12 and were

obtained from the sum of the items Q292 (insertive unprotected sex) and Q294 (receptive unprotected sex) used in the RQ1 and RQ2, respectively.

Mediator variable (MV)

MV: Self-esteem (RQ4**;** continuous variable; range 16 to 40).

SELFESTEEM: Sum Self-esteem (RQ3; continuous, scale, range 16 to 40).

The participants responded to the Rosenberg Self-Esteem Scale, which is a 10-item self-esteem questionnaire with high validity and reliability (Petersen et al., 1984; ("Rosenberg Self-Esteem Scale (SES) - Statistics Solutions", 2019). The possible responses were scored from 1 (strongly agree) to 4 (strongly disagree). Some items were reverse scored (3, 6, 8, 10). The sum scores for all 10 items were grouped in the variable coded as SELFESTEEM. The highest possible score (40) indicates higher self-esteem while the lowest possible score (16) indicates lower self-esteem.

Research Questions and Hypotheses

RQ1: What is the association between family rejection and practicing insertive anal sex without a condom in Latino gay men?

$H_0$1: Exposure to family rejection is not associated with practicing insertive anal sex without a condom in Latino gay men.

H_a1: Exposure to family rejection is associated with practicing insertive anal sex without a condom in Latino gay men.

RQ2: What is the association between family rejection and practicing receptive anal sex without a condom in Latino gay men?

$H_0$2: Exposure to family rejection is not associated with practicing receptive anal sex without a condom in Latino gay men.

H_a2: Exposure to family rejection is associated with practicing receptive anal sex without a condom in Latino gay men.

RQ3: What is the association between family rejection and self-esteem in Latino gay men?

$H_0$3: Exposure to family rejection is not associated with self-esteem in Latino gay men.

H_a3: Exposure to family rejection is associated with self-esteem in Latino gay men.

RQ4: To what extent does self-esteem mediate the relationship between exposure to family rejection and the use of condom?

$H_0$4: Self-esteem does not mediate the relationship between exposure to family rejection and the use of condom.

H_a4: Self-esteem mediates the relationship between exposure to family rejection and the use of condom.

Data Analysis

RQ1: What is the association between family rejection and practicing insertive anal sex without a condom in Latino gay men? The independent variable used to answer this question was family rejection and was measured using six survey items that with four possible answers. The responses of the six items were added to obtain a single score

value in a scale from 6 to 24. The dependent variable (insertive anal sex without condoms) used was measured as a dichotomous variable. This question was analyzed using binary logistic regression. The alpha level used was $p < .05$.

RQ2: What is the association between family rejection and practicing receptive anal sex without a condom in Latino gay men? The independent variable was family rejection and was measured using six survey items that with four possible answers. The responses of the six items were added to obtain a single score value in a scale from 6 to 24. The dependent variable (receptive anal sex without condoms) used was measured as a dichotomous variable. This question was analyzed using binary logistic regression. The alpha level used was $p < .05$.

RQ3: What is the association between family rejection and self-esteem in Latino gay men? The independent variable was family rejection and was measured using six survey items that with four possible answers. The responses of the six items were added to obtain a single score value in a scale from 6 to 24. The dependent variable (self-esteem) was measured as a continuous variable (self-esteem score from 10-items Rosenberg scale). This question was analyzed using simple linear regression. The alpha level used was $p < .05$.

RQ4: To what extent does self-esteem mediate the relationship between exposure to family rejection and the use of condom? The independent variable was family rejection that was measured using six survey items that with four possible answers (the responses of the six items were summed to obtain a single value in a scale from 6 to 24). The

mediator was self-esteem (continuous variable; self-esteem score from 10-items Rosenberg scale). The dependent variable (anal sex without condoms) used was measured as a dichotomous variable. This question was analyzed using the mediation analysis by Hayes (see Hayes, 2018). The alpha level used was $p < .05$.

Threats to Validity

Research is conducted to determine cause and effect or evidence of association between exposures and outcomes. One of the main purposes of research is to apply the findings extracted from a small sample to a large population. Any factor that reduces the confidence in the relationship between the variables is known as a threat to internal validity. On the other hand, factors that reduce the confidence in the applicability of the results to larger groups are known as threats to external validity (Creswell & Creswell, 2018).

Threats to External Validity

External validity can be threatened by selection bias (Creswell & Creswell, 2018). The participants who participated in the main study were recruited by respondent-driven sampling. This is a good method to reach hidden populations but may lead to selection bias because of the size of the networks or the participants' abilities to recruiting others. Another threat is the Hawthorne effect (Creswell & Creswell, 2018). Participants who know they are participating in research may respond differently than in another setting. Another threat to external validity is the misunderstanding of the questions (Creswell & Creswell, 2018). In the main study, the questions were offered in English and Spanish.

The administration of the survey as computer assisted self-interviews is a good method to reduce bias in the case of stigma-related items but the participants cannot ask for help if they do not understand a question.

Threats to Internal Validity

Internal validity can be threatened by inconsistency among the survey items when they are historically applied and redeveloped (Creswell & Creswell, 2018). Researchers generally use survey instruments that have demonstrated consistency through their application and maturation in several studies and in multiple settings. The main study used in this study established its internal validity through the instrumentation of the survey used. The Rosenberg test for self-esteem is a well-established instrument that reliable measures self-esteem. The use of reverse coding in the survey items assessing for family rejection also reduced the threats to internal validity.

Ethical Considerations

The data used for the present study are available for public use at the ICSPR website. The data were collected with the purpose of assessing the impact of family rejection and self-esteem on the practice of unprotected sex in Latino gay men. There are no conflicts of interest and no funding has been necessary to develop this study. This dissertation was approved by the Walden University Institutional Review Board (IRB number 06-01-20-0525435).

Summary and Conclusions

In this study, I conducted use a quantitative research methodology to analyze data from the Latino MSM Community Involvement: HIV Protective Effects study. The data containing information about family rejection, self-esteem, and unprotected sex was extracted and analyzed in SPSS. Simple linear regression, binary logistic regression, and mediation analyses were used to assess the relationships between the variables. The data analysis explored if family rejection correlates with unprotected sex and if there is a mediation effect of self-esteem in the relationship between family rejection and unprotected sex. Chapter 4 includes a detailed explanation of the data analysis and the outcome of each regression model. The following section will also offer a more detailed explanation of the data collection process and the coding of the variables.

Chapter 4: Results

Introduction

The purpose of this secondary data quantitative analysis was to determine if there is an association between exposure to family rejection and the practice of condomless sex in Latino gay men and if self-esteem mediates the relationship between these variables. The data were obtained from the Latino MSM Community Involvement: HIV Protective Effects Project (Ramirez-Valles, 2014). The original study had a sample of 643 Latino gay men and male to female transgender persons older than 18 years of age. The participants were recruited using respondent driven sampling, and the data were collected using computer-assisted self-interviews. The participants were recruited through respondent-driven sampling, which is a social network referral method (Ramirez-Valles, 2014; Ramirez-Valles et al., 2008; Ramirez-Valles et al., 2010). This chapter contains a description of the dataset, data collection process, coding of the variables in the original study, the inferential statistical analysis I performed, and the outcomes of the regression models I used to address the research questions.

Research Questions and Hypotheses

RQ1: What is the association between family rejection and practicing insertive anal sex without a condom in Latino gay men?

$H_0$1: Exposure to family rejection is not associated with practicing insertive anal sex without a condom in Latino gay men.

H_a1: Exposure to family rejection is associated with practicing insertive anal sex without a condom in Latino gay men.

RQ2: What is the association between family rejection and practicing receptive anal sex without a condom in Latino gay men?

H_02: Exposure to family rejection is not associated with practicing receptive anal sex without a condom in Latino gay men.

H_a2: Exposure to family rejection is associated with practicing receptive anal sex without a condom in Latino gay men.

RQ3: What is the association between family rejection and self-esteem in Latino gay men?

H_03: Exposure to family rejection is not associated with self-esteem in Latino gay men.

H_a3: Exposure to family rejection is associated with self-esteem in Latino gay men.

RQ4: To what extent does self-esteem mediate the relationship between exposure to family rejection and the use of condom?

H_04: Self-esteem does not mediate the relationship between exposure to family rejection and the use of condom.

H_a4: Self-esteem mediates the relationship between exposure to family rejection and the use of condom.

Data Collection

For this secondary data analysis, I used data that from the Latino MSM Community Involvement: HIV Protective Effects Project (Ramirez-Valles, 2014). The data included demographic variables such as age, income, education, and city of residence from a sample of 643 Latino gay men living in Chicago (n = 320) and San Francisco (n= 323) in 2004.

Coding of the Variables

Experiences of family rejection and stigmatization due to sexual orientation were assessed by using six survey items with four answer choices (range 1 = *never* to 4 = *many times*). I combined these responses to obtain a single continuous variable (range 6 to 24).

The relevant questions are as follows:

Q394: While growing up, how often were you made fun of or called names (faggot, queer, sissy, etc.) by your own family because of the way you behaved?

Q396x: While growing up, how often did members of your family tell you to change your behavior because you looked too effeminate?

Q397: As an adult, how often has your family made fun of you or called you names (faggot, queer, sissy, etc.) because of your sexual orientation?

Q407: How often were you rejected by your family because of your sexual orientation?

Q409: How often have you moved away (such as leaving the house, moving to another city) from friends and family because of your sexual orientation?

Q410: How often has your family ignored or refused to acknowledge your sexual orientation?

Sexual risk data were assessed by asking the participants if they had unprotected receptive or insertive anal sex in the past 12 months. The resulting variable was dichotomous (0 = no, 1 = yes).

Q292: In the last 12 months, did you have insertive anal sex (your penis in his ass) without condoms?

Q294: In the last 12 months, did you have receptive/passive anal sex (his penis in your ass) without condoms?

UNPROTECTED12: Unprotected sex, past 12 months (insertive & receptive) 292 + 294

Self-esteem was assessed by using the Rosenberg Self-Esteem Scale. The possible responses for the 10 items were scored from 1 (*strongly agree*) to 4 (*strongly disagree*). Some items were reverse scored (3, 6, 8, 10). The sum scores were grouped in the variable coded as SELFESTEEM (range 16 = lowest self-esteem to 40 = highest self-esteem).

Results of the Hypotheses Testing

RQ1: What is the association between family rejection and practicing insertive anal sex without a condom in Latino gay men? To test this hypothesis, I performed a binary logistic regression test using family rejection as the independent variable and unprotected insertive sex as the dependent variable. Linearity implies that per every unit

increase in a continuous independent variable, the logit (log odds transformation) of the dependent variable increases by a certain constant amount. For example, family rejection was measured using a score from 6 to 24. The binary logistic regression model permits predicting changes in the outcome variable resulting from different levels of the independent variable. According to Hilbe (2016), the assumptions of binary logistic regression are (a) the dependent variable must be a dichotomous one, (b) there must one or more continuous or nominal independent variables, (c) the observations and categories of the dependent variable must be independent, (d) there must be a minimum of 15 cases per each of the independent variables, (e) there must be linearity in the logit, (f) there must be absence of collinearity, and (g) there must be absence of significant outliers.

A binary logistic regression was performed to assess the effects of family rejection on the likelihood that participants engage in insertive (active) unprotected sex. The assumption of linearity of the variable family rejection with respect to the logit of the dependent variable was assessed via the Box-Tidwell procedure (see Laerd Statistics, 2017). This has been recommended by several statisticians (see Laerd Statistics, 2017). A Bonferroni correction was applied in the model, resulting in statistical significance being accepted when $p < .001$ (see Laerd Statistics, 2017). Based on this procedure, family rejection was found to be linearly related to the logit of unprotected sex in the past 12 months (insertive plus receptive). Based on this, it was found that family rejection was linearly related to the logit of the unprotected sex during the past 12 months. The SPSS output did not reveal any standardized residuals (outliers). The logistic regression model

was not statistically significant, $\chi 2 = .085$, $p = .770$. The model did not explain the variance in insertive unprotected sex (Nagelkerke $R^2 = .000\%$). The results of the binary logistic regression suggest that family rejection does not predict insertive unprotected sex in Latino gay men. Following the results of the statistical test, I failed to reject the first null hypothesis (see Table 5).

Table 2

Logistic Regression Predicting the Likelihood of Unprotected Insertive Sex Based on Family Rejection Score

Variables in the equation									
								95% C.I. for EXP(B)	
		B	*SE*	Wald	*df*	Sig.	Exp(B)	Lower	Upper
Step 1[a]	Fam_RJ	-.006	.019	.085	1	.770	.994	.958	1.033
	Constant	.756	.254	8.838	1	.003	2.130		

a. Variable(s) entered on step 1: Fam_RJ.

RQ2: What is the association between family rejection and practicing receptive anal sex without a condom in Latino gay men? A binary logistic regression was performed to assess the effects of family rejection on the likelihood that participants engage in receptive (passive) unprotected sex. The assumptions for this test are mentioned above in the section for the first research question. The linearity of the continuous variable, family rejection, with respect to the logit of the dichotomous dependent variable unprotected sex in the past 12 months was assessed using the Box-Tidwell procedure (see Laerd Statistics, 2017). A Bonferroni correction was applied to the model, resulting in statistical significance being accepted when $p < .001$ (see Laerd

Statistics, 2017). The results indicated that family rejection was linearly related to the logit of the receptive unprotected sex during the past 12 months. The SPSS output did not reveal any standardized residuals (outliers). The logistic regression model was not statistically significant, $\chi 2 = .655$, $p = .418$. The model did not explain the variance in insertive unprotected sex (Nagelkerke $R^2 = .002\%$). The results of the binary logistic regression suggest that family rejection does not predict receptive unprotected sex in Latino gay men. Following the results of the statistical test, I failed to reject the second null hypothesis (see Table 6).

Table 3

Logistic Regression Predicting the Likelihood of Unprotected Receptive Sex Based on Family Rejection Score

Variables in the equation									
								95% C.I.for EXP(B)	
		B	*SE*	Wald	*df*	Sig.	Exp(B)	Lower	Upper
Step 1[a]	Fam_RJ	-.016	.019	.655	1	.418	.984	.948	1.022
	Constant	.934	.257	13.149	1	.000	2.544		

a. Variable(s) entered on step 1: Fam_RJ.

RQ3: What is the association between family rejection and self-esteem in Latino gay men? I performed a simple linear regression test using family rejection as the independent variable and self-esteem as the dependent variable. The assumptions of linear regression are that (a) the independent variable must be a continuous variable, (b) the dependent variable must be a continuous variable, (c) there must be linearity between the independent and dependent variables, (d) there is independence of observations

(tested with the Durbin-Watson statistic), (e) there is an absence of significant outliers, (f) there is homoscedasticity, and (g) regression residuals' lines are approximately normally distributed ("Assumptions of Linear Regression - Statistics Solutions", n.d.).

A linear regression was performed to assess the effect of family rejection score on self-esteem score. The visual inspection of the scatterplot of family rejection versus self-esteem superimposed regression line indicated a linear relationship between the variables. There was independence of residuals (Durbin-Watson statistic of 2.055). The visual inspection of a plot of standardized residuals versus standardized predicted values indicated that there was homoscedasticity. The visual inspection of the normal probability plot indicated that the residuals were normally distributed.

The results of the linear regression test suggested that family rejection accounted for 1.2% of the variation in self-esteem with adjusted R^2 = .012, a small size effect according to Cohen (1988). Family rejection predicted self-esteem, F (1, 640) = 8.852, p = .003. Per every unit that the family rejection score increased, self-esteem decreased by 1.2% 95% *CI* (-.180 - -.037). Following the results of the statistical test, I rejected the third the null hypothesis (see Table 7).

Table 4

Linear Regression Predicting Self-Esteem Based on Family Rejection Score

Model Summary[b]

					Change Statistics			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2
1	.117[a]	.014	.012	4.62460	.014	8.852	1	640

Model Summary[b]

	Change Statistics	
Model	Sig. F Change	Durbin-Watson
1	.003	2.055

a. Predictors: (Constant), Fam_RJ
b. Dependent Variable: Sum Self-esteem

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	189.317	1	189.317	8.852	003[b]
	Residual	13687.644	640	21.387		
	Total	13876.961	641			

a. Dependent Variable: Sum Self-esteem
b. Predictors: (Constant), Fam_RJ

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	34.325	.484		70.947	.000	33.375	35.275
	Fam_RJ	-.109	.037	-.117	-2.975	.003	-.180	-.037

a. Dependent Variable: Sum Self-esteem

Dependent Variable: Sum Self-esteem

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	189.317[a]	1	189.317	8.852	.003
Intercept	107651.724	1	107651.724	5033.526	.000
Fam_RJ	189.317	1	189.317	8.852	.003
Error	13687.644	640	21.387		
Total	712685.000	642			
Corrected Total	13876.961	641			

a. R Squared = .014 (Adjusted R Squared = .012)

RQ4: To what extent does self-esteem mediate the relationship between exposure to family rejection and the use of condoms? To test the fourth hypothesis, a mediation analysis using the PROCESS Procedure for SPSS Version 3.5 (Hayes, 2018) was performed. The analysis resulted in a statistically significant relationship between family rejection and self-esteem (Table 8). However, this effect is very small t (640) = -2.98, p = .003, η^2 = .014. This indicates that 1.4% of the variance in self-esteem was explained by family rejection (per every unit increase in family rejection score the self-esteem decreased by .11 units).

The overall logistic regression model of unprotected sex within the past 12 months (outcome) regressed on family rejection, and self-esteem was not statistically significant (p = .692). The results of McFadden = .0009, Cox & Snell = .0011, and Nagelkerke = .0016 are very small suggesting that the model was not significant. The test of the direct effects of family rejection on unprotected sex in the past 12 months was not significant (p = .610). The direct effect value = .0085, *OR* = 1.0085. Odds ratios near 1 indicate no effect. The test of the indirect effects (through the mediator) of family rejection on unprotected sex reported confidence interval values between -.0061 and .0026. Because "0" is contained within this interval, I concluded that the result is not statistically significant. After testing this hypothesis and considering that neither of the predictors was statistically significant in their relationship with unprotected sex and that self-esteem did not show a mediation effect, I failed to reject the fourth null hypothesis (see Table 8).

Table 5 *Mediation Analysis Family Rejection, Self-Esteem, and Sum of Unprotected Sex Using Hayes Procedure*

Outcome variable: SELFESTE

Model Summary

R	R-sq	MSE	F	df1	df2	p
.1168	.0136	21.3869	8.8520	1.0000	640.0000	.0030

Model

	coeff	se	t	p	LLCI	ULCI
constant	34.3253	.4838	70.9473	.0000	33.3753	35.2754
Fam_RJ	-.1086	.0365	-2.9752	.0030	-.1803	-.0369

Outcome variable: UNPROTEC

Model Summary

	coeff	se	Z	p	LLCI	ULCI
constant	-1.1802	.6606	-1.7865	.0740	-2.4750	.1146
Fam_RJ	.0085	.0167	.5087	.6109	-.0242	.0411
SELFESTE	.0135	.0181	.7449	.4563	-.0220	.0490

These results are expressed in a log-odds metric.

-2LL	ModelLL	df	p	McFadden	CoxSnell	Nagelkrk
828.4596	.7374	2.0000	.6916	.0009	.0011	.0016

Direct and indirect effects of Family Rejection (X) on Unprotected Sex (Y)

Direct effect of X on Y

Effect	se	Z	p	LLCI	ULCI
0085	.0167	.5087	.6109	-.0060	.0411

Indirect effect(s) of X on Y

	Effect	BootSE	BootLLCI	BootULCI
SELFESTE	-.0015	.0021	-.0060	.0024

Analysis notes and errors
Level of confidence for all confidence intervals in output: 95.0000
Number of bootstrap samples for percentile bootstrap confidence intervals: 5000
NOTE: Direct and indirect effects of X on Y are on a log-odds metric.
NOTE: Variables names longer than eight characters can produce incorrect output.

Post Hoc Analysis

To further explore the relationship between family rejection and unprotected sex, post hoc logistic regression analyses was conducted using the outcome variable measured as a continuous variable instead of as a dichotomous variable. The regression post hoc analyses (Table 9) showed statistically significant associations between family rejection and engaging in unprotected receptive anal sex with more partners in the past 12 months ($r = .193$, $p = < .05$). There was also a statistically significant association between family rejection and self-esteem ($r = -.117$; $p > 0.01$). The association between family rejection and the sum of receptive and insertive unprotected sex measured as continuous variables was not statistically significant.

Table 6 *Correlation Family Rejection, Self-esteem and Events of Receptive Unprotected Sex*

Correlations

		Fam_RJ	Sum Self-esteem	Q294a Number of male partners P12M: receptive anal sex w/o condoms
Fam_RJ	Pearson Correlation	1	-.117**	.193*
	Sig. (2-tailed)		.003	.014
	N	643	642	163
Sum Self-esteem	Pearson Correlation	-.117**	1	-.119
	Sig. (2-tailed)	.003		.131
	N	642	642	162
Q294a Number of male partners P12M: receptive anal sex w/o condoms	Pearson Correlation	.193*	-.119	1
	Sig. (2-tailed)	.014	.131	
	N	163	162	163

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

To rule out confounders, a hierarchical multiple regression analysis was conducted (see Table 10). Family rejection was included in the first block to determine if there was any significant change prediction power of family rejection on the number of partners with which the participants had receptive unprotected sex. In the second block, age was included as a potential confounder. And in the third block, the included potential confounders were income and highest level of education. When age was added to the model (block two), it resulted in a non-statistically significant change in $R^2 = .011$, $p = .185$ (see Table 10). The addition of the variables income and highest education resulted also in a non-statistically significant improvement in the prediction of unprotected sex with more partners over family rejection (R^2 change = .002, $p = .822$). The only variable that remained statistically significant in the three models was family rejection. Given these results, I concluded that age, income, and education were not confounders in the relationship between family rejection and the number of partners with which the participants engaged in receptive unprotected sex (see Table 10). Considering that there was no statistically significant direct effect of family rejection on unprotected sex in the past 12 months (dichotomous), ($OR = 1.0085$; $p = .611$) when analyzing the variables to test hypothesis number four (Table 8), and that I found a correlation between family rejection and having receptive unprotected sex with more partners, a new continuous variable (NIRUAS) was created by adding the number of partners for receptive and insertive unprotected sex. This variable permitted me to analyze the fourth hypothesis using continuous rather than dichotomous variables.

Table 7 *Hierarchical Multivariate Analysis Assessing for Possible Confounders in the Relationship between Family Rejection and Receptive Unprotected Sex with More Partners*

Model Summary[d]

					Change Statistics			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2
1	.193[a]	.037	.031	4.018	.037	6.228	1	161
2	.219[b]	.048	.036	4.008	.011	1.775	1	160
3	.224[c]	.050	.026	4.029	.002	.196	2	158

Model Summary[d]

Model	Change Statistics	Durbin-Watson
	Sig. F Change	
1	.014	
2	.185	
3	.822	2.052

a. Predictors: (Constant), Fam_RJ.
b. Predictors: (Constant), Fam_RJ, Age (Recoded)
c. Predictors: (Constant), Fam_RJ, Age (Recoded), Annual Income, Q18 Highest level of education completed.
d. Dependent Variable: Q294a Number of male partners P12M: receptive anal sex w/o condoms

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	100.544	1	100.544	6.228	.014[b]
	Residual	2599.063	161	16.143		
	Total	2699.607	162			
2	Regression	129.054	2	64.527	4.016	.020[c]
	Residual	2570.554	160	16.066		
	Total	2699.607	162			
3	Regression	135.423	4	33.856	2.086	.085[d]
	Residual	2564.184	158	16.229		
	Total	2699.607	162			

a. Dependent Variable: Q294a Number of male partners P12M: receptive anal sex w/o condoms
b. Predictors: (Constant), Fam_RJ.
c. Predictors: (Constant), Fam_RJ, Age (Recoded)
d. Predictors: (Constant), Fam_RJ, Age (Recoded), Annual Income, Q18 Highest level of education completed

(Table continues)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B
		B	Std. Error	Beta			Lower Bound
1	(Constant)	.907	.914		.993	.322	-.898
	Fam_RJ	.171	.069	.193	2.496	.014	.036
2	(Constant)	-.120	1.194		-.100	.920	-2.478
	Fam_RJ	.182	.069	.205	2.635	.009	.046
	Age (Recoded)	.228	.171	.103	1.332	.185	-.110
3	(Constant)	-.124	1.322		-.094	.926	-2.735
	Fam_RJ	.188	.070	.212	2.683	.008	.050
	Age (Recoded)	.237	.174	.108	1.363	.175	-.107
	Annual Income	.081	.149	.047	.549	.584	-.212
	Q18 Highest level of education completed	-.115	.231	-.043	-.498	.619	-.572

Coefficients[a]

Model		95.0% Confidence Interval for B
		Upper Bound
1	(Constant)	2.712
	Fam_RJ	.307
2	(Constant)	2.239
	Fam_RJ	.318
	Age (Recoded)	.566
3	(Constant)	2.488
	Fam_RJ	.326
	Age (Recoded)	.582
	Annual Income	.375
	Q18 Highest level of education completed	.342

a. Dependent Variable: Q294a Number of male partners P12M: receptive anal sex w/o condoms

Coefficients[a]

Model		95.0% Confidence Interval for B
		Upper Bound
1	(Constant)	2.712
	Fam_RJ	.307
2	(Constant)	2.239
	Fam_RJ	.318
	Age (Recoded)	.566
3	(Constant)	2.488
	Fam_RJ	.326
	Age (Recoded)	.582
	Annual Income	.375
	Q18 Highest level of education completed	.342

a. Dependent Variable: Q294a Number of male partners P12M: receptive anal sex w/o condoms

The statistical analysis (Table 11) resulted in a statistically significant model overall (R^2 = .047, p < .05). The correlations between family rejection and having either insertive or receptive unprotected sex with more partners was statistically significant (.213, p = < .05). There is a statistically significant correlation between self-esteem and having unprotected sex with more partners as shown in Table 12 (-.217, p < .05). When testing for mediation effect of self-esteem on the relationship between family rejection and having insertive or receptive unprotected sex with more partners (using the new variable), a statistically significant direct effect of family rejection on unprotected sex (sum of number of partners receptive and insertive unprotected sex) was found (see Table 13). This model was statistically significant (R^2 = .0849, p < .05), and the analysis of the direct of family rejection on the number of events of unprotected sex effect was B = .3360 (p < .05, 95% *CI* [.0129 - .6590]). The indirect effect of family rejection on unprotected sex (sum of insertive and receptive continuous) through self-esteem was not statistically significant ("0" was contained in the CI).

Table 8 *Regression Analysis Using the New Variable Number of Partners Unprotected Sex (Receptive and Insertive)*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1 df2	Sig. F Change
1	.213[a]	.046	.036	8.27241	.046	5.014	1 105	0.27

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	343.121	1	343.121	5.014	.027[b]
	Residual	7185.440	105	68.433		
	Total	7528.561	106			

a. Dependent Variable: NIRUAS
a. Predictors: (Constant), Fam_RJ

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.799	2.229		1.705	.091
	Fam_RJ	.365	.163	.213	2.239	.027

a. Dependent Variable: NIRUAS

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.217[a]	.047	.038	8.29869	.047	5.143	1	104

Model Summary[b]

Model	Change Statistics
	Sig. F Change
1	.025

Model Summary[b]

Model	Change Statistics
	Sig. F Change
1	.025

a. Predictors: (Constant), Sum Self-esteem
a. Dependent Variable: NIRUAS

Table 9 *Self-esteem and Unprotected Sex Number of Partners (Receptive and Insertive)*

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	354.191	1	354.191	5.143	.025[b]
	Residual	7162.299	104	68.868		
	Total	7516.491	105			

a. Dependent Variable: NIRUAS
b. Predictors: (Constant), Sum Self-esteem

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	22.335	6.158		3.627	.000
	Sum Self-esteem	-.420	.185	-.217	-2.268	.025

a. Dependent Variable: NIRUAS

Table 10 *Model Assessing if Self-esteem Mediates Family Rejection and Unprotected Sex with More Partners*

Model

	coeff	se	t	p	LLCI	ULCI
constant	34.3217	1.1779	29.1374	.0000	31.9858	36.6575
Fam_RJ	-.1061	.0864	-1.2283	.2221	-.2773	.0652

Outcome variable: SUM_NMPN (NIRUAS)

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2914	.0849	66.7789	4.7789	2.0000	103.0000	.0104

(*Table continues*)

Model

	coeff	se	t	p	LLCI	ULCI
constant	16.5659	6.6777	2.4808	.0147	3.3222	29.8096
Fam_RJ	.3360	.1629	2.0625	.0417	.0129	.6590
SELFESTE	-.3746	.1836	- 2.0399	.0439	-.7388	-.0104

Direct and Indirect Effects of Family Rejection (X) on Unprotected Sex Number of Partners (Y)

Direct Effect of X on Y

Effect	se	t	p	LLCI	ULCI
.3360	.1629	2.0625	.0417	.0129	.6590

Indirect Effect of X on Y

	Effect	BootSE	BootLLCI	BootULCI
SELFESTE	.0397	.0496	-.0199	.1697

Analysis notes and errors
Level of confidence for all confidence intervals in output: 95.0000
Number of bootstrap samples for percentile bootstrap confidence intervals: 5000
NOTE: Variables names longer than eight characters can produce incorrect output

After demonstrating that age, income, and education were not confounders in the prediction of unprotected sex, another multiple regression analysis was conducted to rule out other possible confounders like experienced sexual orientation or race stigma. This multiple regression analysis also served to test the tenets of the minority stress model. The premise of the minority stress model is that experiencing more minority stress correlates with a more negative health outcome (Meyer, 2015). In this study, I hypothesized that family rejection may act as an additional distal stressor for those Latino gay men who are nor accepted by their families. A hierarchical multiple regression analysis was conducted to determine if family rejection improves the prediction of having

receptive unprotected sex with more partners over experienced race and sexual orientation stigma (see Table 14). In the first block, the variables experienced gay stigma and experienced racial stigma were included. Family rejection was included in the second block.

Table 11 *Hierarchical Regression Analysis Gay Stigma and Race stigma and family Rejection*

Model Summary[c]

					Change Statistics			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2
1	.127[a]	.016	.004	4.087	.016	1.309	2	159
2	.214[b]	.046	.028	4.037	.030	4.937	1	158

Model Summary[c]

	Change Statistics
Model	Sig. F Change
1	.273
2	.028

a. Predictors: (Constant), Sum Race Stigma - Experienced, Sum Gay Stigma - Experienced
b. Predictors: (Constant), Sum Race Stigma - Experienced, Sum Gay Stigma - Experienced, Fam_RJ
c. Dependent Variable: Q294a Number of male partners P12M: receptive anal sex w/o condoms

(*Table continues*)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B
		B	Std. Error	Beta	t	Sig.	Lower Bound
1	(Constant)	1.115	1.410		.791	.430	-1.669
	Sum Gay Stigma - Experienced	.044	.030	.127	1.485	.140	-.015
	Sum Race Stigma - Experienced	.000	.028	.001	.014	.989	-.055
2	(Constant)	1.745	1.421		1.228	.221	-1.062
	Sum Gay Stigma - Experienced	-.070	.059	-.199	-1.175	.242	-.187
	Sum Race Stigma - Experienced	.007	.028	.020	.239	.812	-.049
	Fam_RJ	.323	.145	.362	2.222	.028	.036

Coefficients[a]

Model		95.0% Confidence Interval for B
		Upper Bound
1	(Constant)	3.899
	Sum Gay Stigma - Experienced	.104
	Sum Race Stigma - Experienced	.056
2	(Constant)	4.552
	Sum Gay Stigma - Experienced	.047
	Sum Race Stigma - Experienced	.062
	Fam_RJ	.610

a. Dependent Variable: Q294a Number of male partners P12M: receptive anal sex w/o condoms

Family rejection was included in the first block to determine if there was any significant change prediction power of family rejection on the number of partners with which the participants had receptive unprotected sex. In the second block, experienced race stigma was included as a potential confounder. In the third block, the included potential confounder was experienced gay stigma. Model one (experienced race and gay stigma) resulted with R^2 = .16 (adjusted R^2 = .004), and model two (adding family rejection) resulted in a statistically significant R^2 change of .030 ($p < .05$). The coefficients table shows that adding family rejection to the model improves the prediction of unprotected sex statistically significantly (B = .323, 95% CI [.036 -.610], $p < .05$). This analysis also showed that gay stigma and race stigma are not confounders in the relationship between family rejection and engaging in receptive unprotected sex with more partners.

Summary

The results of the regression and mediation analyses showed a statistically significant correlation between family rejection and self-esteem in Latino gay men, but this relationship was minimal. Per every single unit increase in the family rejection score, the self-esteem decreased by .11 units. Family rejection represents only 1.4% of the variance in self-esteem. The regression analyses did not show a statistically significant predictive relationship between family rejection and either insertive or receptive unprotected sex (dichotomous). The mediation analyses resulted in a non-statistically significant relationship between family rejection and the sum of insertive and receptive

unprotected sex when measured as a dichotomous variable. Self-esteem did not mediate the relationship between family rejection and unprotected sex when measured as a dichotomous variable.

The post hoc analyses showed a statistically significant association between family rejection and engaging in unprotected receptive anal sex with a higher number of partners during the past 12 months and also between family rejection and self-esteem. After controlling for age, income, and education, the relationship between family rejection and having receptive unprotected sex with more partners did not show a statistically significant change. This study also explored experienced gay stigma and race stigma as possible confounders and compared the value of family rejection as a predictor of unprotected sex over experienced gay and racial stigma. The hierarchical regression analysis showed that experienced gay and racial stigma were not confounders in the relationship between family rejection and unprotected sex and that family rejection was a statistically significant predictor of engaging in receptive sex with more partners while gay stigma and racial stigma were not.

In a further analysis of the variables and considering that there was a statistically significant relationship between family rejection and having receptive unprotected sex with more partners but no relationship with this variable when measured as a dichotomous one, a new continuous variable was created adding the number of partners for receptive and insertive unprotected sex. After analyzing this variable there was a

statistically significant relationship between family rejection and having unprotected sex with more partners but no mediation effect for self-esteem in this relationship.

Chapter 5 contains a discussion about the significance of these results in light of the current literature and theoretical framework of this study and suggestions for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to examine the relationship between family rejection and unprotected sex in Latino gay men and if self-esteem mediated this relationship if there was one. According to the minority stress model, distal minority identity-related stressors like rejection due to sexual orientation determine negative health outcomes directly and through proximal stressors like low self-esteem (Meyer, 1995, 2003, 2015). The impact of minority identity-related stressors on health can be buffered by coping and resiliency mechanisms like social support (including family support; (Meyer, 1995, 2003, 2015).

The overarching hypothesis of this study was that for some Latino gay men, the family would act as an added distal stressor instead of being a buffer, so this group would have a negative health outcome. I expected to find higher levels of unprotected sex in this group because, according to the recent literature, family rejection might lead to unprotected sex as a way of looking for emotional and instrumental support and also to difficulty in negotiating the use of condoms if self-esteem was low (Bird et al., 2017; Chaney & Burns-Wortham, 2015; Fraser et al., 2019; Hafeez et al., 2017; Li et al., 2017; Pastrana, 2015; Swendener & Woodell, 2017; Wang, 2017).

To analyze the hypotheses, I used data from the Latino MSM Community Involvement: HIV Protective Effects (see Ramirez Valles, 2014). This is the only database available that contains a number of participants who satisfied the sample size

needed and also the variables of interest. The validity of this database has been discussed on the basis of the increase in minority stress after the 2016 presidential election in the United States (Gonzalez, Ramirez, & Galupo, 2018; Gonzalez, Pulice-Farrow, & Galupo, 2018) and the recent use of this database in other research (Wang, 2017). This study contributes to a deeper understanding of the factors behind the disproportionate impact of HIV infections among Latino gay men (CDC, 2017, 2019, 2020) and to increase awareness among healthcare providers and public health professionals of the issues affecting this population.

Interpretation of the Findings

The sample used in the Latino MSM Community Involvement: HIV Protective Effects study was 643 Latino gay men older than 18 living in San Francisco and Chicago (Ramirez-Valles, 2014). Of the sample, 145 participants (22.6%) were born in the United States, 299 (46%) in Mexico or Central America, 66 (10.3%) in South America, and 58 (9.0%) in the Caribbean islands. Most of the participants were between the ages of 22 and 50. Sixty nine point five percent of the participants identified as gay, while 124 (19.3%) identified as bisexual, and 71 (11.0%) as male to female transgender persons. The majority of the participants arrived into the United States before the age of 40. Only 11 participants (less than 5%) came to the United States after the age of 41. The participants had a predominantly low average income level with 260 (40.4%) making less than $10,000 per year, 101 (15.7%) between $10,000 and $14,999 per year, and only 11 (1.3%) between $50,000 and 64,000 per year. Regarding education, 172 (26.7%) did not

complete high school, 149 (23.62%) had a high school diploma, 59 (9.2%) had a technical or vocational certificate, 158 (24%) had some college degree, 86 (13.4%), and 19 (3.0%) had a graduate degree.

The results of the statistical analyses of the hypotheses of this study suggested that family rejection does not predict either receptive or insertive unprotected sex and that self-esteem does not mediate the relationship between family rejection and engaging in either receptive or insertive unprotected sex. Findings showed that family rejection predicted a small percentage of the variance in self-esteem in the participants. Of the four research questions that guided this study, the results of only one (RQ3) resulted in statistically significant results. The association of family rejection with low self-esteem was also found in recent studies that were mentioned in the literature review in Chapter 2.

Wang (2017) conducted a secondary data analysis using the Latino MSM Community Involvement Project (the same database that I used in the present study). Wang found a strong correlation between exposure to verbal stigmatization and low self-esteem and perceived lack of social support. The author suggested that this relationship be explored in the context of the family considering the importance of the family for Latinos. The correlation between exposure to stigma messages and self-esteem in the study by Wang was - .11; $p < .001$. In my study, I isolated family rejection, and it resulted in a small but statistically significant effect ($r^2 = .012$; $p < .001$). Wang tested his hypothesis using partial least squared structural equation modeling and considered only

verbal stigmatization. I used simple linear regression and considered other types of family rejection, so these results cannot be compared.

The relationship between family rejection and self-esteem in Latino gay men is a topic that requires further exploration. Parra et al. (2017) found a relationship between family rejection and self-esteem using a sample with a low representation of Latino gay men. Snapp et al. (2015) also found a strong correlation between family rejection and low self-esteem and highlighted that Latino gay men have lower levels of self-esteem than White gay men. The authors found that family support has long-lasting effects and was the only predictor of self-esteem that remained significant after a hierarchical regression analysis (Parra et al., 2017).

Other studies mentioned in the review of the literature were conducted with a small representation of Latino gay men but also found a correlation between family rejection and low self-esteem (Blais et al., 2014; Chaney & Burns-Wortham, 2015; Parra et al., 2017). Parra et al. (2017) found a strong correlation between family attitudes towards homosexuality and depression, anxiety, internalized homophobia, and self-esteem. Peer support moderated the relationship between family rejection and anxiety and depression but not the relationship between family rejection and self-esteem or internalized homophobia (Parra et al., 2017).

The results of this study did not differ significantly from previous ones. The previous research literature has mixed findings about the relationships between discrimination events and risky sexual behavior. Frye et al. (2015) found a correlation

between discrimination due to sexual orientation and unprotected sex, while Surace et al. (2017) did not find correlation between sexual orientation-related discrimination and unprotected sex. Surace et al. found, however, a correlation between discrimination due to sexual orientation and the appeal of having unprotected sex. Bird et al. (2017) found an association between family rejection and unprotected sex, but their study was conducted using a small sample from community clinics that offered free healthcare, so they did not analyze the experiences of Latino gay men with higher socioeconomic status.

In the present study, I used a sample size that is above the recommended by the power analyses. Using G Power, the minimum sample size for linear regression was 62 participants, and for logistic regression, the minimum sample size was 30. The sample in the database used in this study was 643. This study was designed using a methodology followed by previous studies that addressed the relationship between unprotected sex and different possible predictors (Corsbie-Massay et al., 2017; Surace et al., 2017; Zeglin et al., 2017) and used unprotected sex measured as a dichotomous variable as the outcome. However, in this study, I divided the outcome into two possibilities (insertive and receptive unprotected sex). To the best of my knowledge, previous studies did not make this differentiation when analyzing the data.

At the beginning of the study, I expected to find statistically significant results by separating the outcome into receptive and insertive unprotected sex. However, even though there was a higher correlation between family rejection and receptive unprotected sex than between family rejection and insertive unprotected sex, this was not statistically

significant. One reason that may explain the lack of significant findings is that some of the participants did not recall events of family rejection if they had a proper social and emotional adjustment later in life (Toomey et al., 2018). Another reason may be that in the original study, there are no data about physical violence or efforts to change sexual orientation (or they are not recalled by the participants). Collecting this more specific type of information could help researchers find associations between exposures and outcomes. A third reason derives from the sampling methods used in the original study. Those who decide to participate in a research study and are recruited using snowball sampling may not be representative of the population of interest. The willingness to volunteer for a research study about sexuality may be associated with more positive attitudes towards their sexual identity and better sexual experiences (Dawson et al., 2019). Other factors like higher socioeconomic status and more social integration of volunteers have also been mentioned (Solarz, 1999). As mentioned before, the study of hidden populations is difficult, and even methods like respondent-driven sampling may not reach those who have not revealed their sexual orientation to others. Some Latino gay men may be afraid of losing social relationships with their families or ethnic group. An especially hard to reach subgroup of Latino gay men are those who are very young and are not economically independent from their families. Not having economic independence is a barrier for coming out if they expect rejection and imposes a limitation to receiving social support from LGBT social groups (Pastrana, 2015; Swendener & Woodell, 2017).

The nonstatistically significant results obtained after analyzing the data to respond to the research questions and the similarity of findings of this study to others in the previous research created the need to analyze possible reasons for this that are different from the ones exposed by previous researchers. One factor that could explain the lack of statistical significance is the way the variables were measured. In this study, I used unprotected sex measured as a dichotomous variable, but this variable was also measured in the original study as a continuous one recording the number of events of receptive and insertive unprotected sex. There are reasons that justify the use of dichotomous outcome variables. According to DeCoster, Gallucci, and Iselin (2011), dichotomization is justified if there is no perfect linearity. Using dichotomous variables not only simplifies the presentation of the results but also minimizes the number of misclassifications (Pedro Duarte Silva, 2017). Sexual risk behavior was measured as a dichotomous variable by Hosek et al. (2017). These researchers, in a study about adherence to PrEP, categorized participants as "adherent" (≥ 4 pills/week) or "nonadherent" (<4 pills/week) to the treatment and measured condomless sex as a dichotomous variable (Hosek et al., 2017).

The mediation analyses may not have resulted in statistical significance because of the limitations imposed by the use of secondary data. Mediation analyses require strong assumptions (VanderWeele, 2016) that are difficult to meet if the data are not collected for this purpose. As an example, some participants could have been receiving therapy for depressive symptoms and manifested a higher self-esteem (this would be an unknown confounder). With the data available it was not possible to test the impact of

time-to-event outcomes (VanderWeele, 2016). The database used does not contain information about the time elapsed between the exposure to family rejection and the unsafe sex events (VanderWeele, 2016).

In a post hoc analysis of the data and with the objective of further exploring the relationship between family rejection and unprotected sex, logistic regression analyses were conducted using the continuous dependent variables. These post hoc analyses showed a statistically significant association between family rejection and engaging in unprotected receptive anal sex with more partners in the past 12 months (r = .193, n = 163, p = .014) but no statistically significant association between family rejection and unprotected sex when the outcome was the sum of receptive and insertive unprotected sex measured as continuous variables.

After finding these results, I investigated if age, income, education, sexual-orientation stigma, or racial stigma could be confounders. Two sets of hierarchical multiple regression analyses were performed. The first set of hierarchical multiple regression demonstrated that age, income and education were not confounders in the association between family rejection and having receptive unprotected sex with more partners. The second set demonstrated that sexual orientation stigma and race stigma were not confounders in this relationship. This second set also served to test the tenets of the minority stress model. Sexual orientation and race stigma together did not statistically significantly predict engaging in receptive unprotected sex with more partners but when

family rejection was added it represented a statistically significant increase in prediction of the outcome.

I also found a statistically significant association between family rejection and self-esteem (R^2 = -.117, p < .001). This finding is in tandem with those in previous research (Blais et al., 2014; Chaney & Burns-Wortham, 2015; Parra et al., 2017, and Snapp et al., 2015). Future studies should explore this relationship longitudinally to determine how self-esteem varies with aging (van Geel et al., 2018). The study of the impact of family rejection and other types of discrimination on self-esteem should also consider the short-term and long-term effects of family rejection (Bondü, Sahyazici-Knaak, & Esser, 2017). Another thing to consider is the impact of rejection from the father versus the mother and the buffering effect of having at least one accepting parent (Miranda, Affuso, Esposito, & Bacchini, 2016). The relationship between family rejection and self-esteem in this study was statistically significant but minimal. Per every single unit increase in the family rejection score, the self-esteem decreased by .11 units. Family rejection represented only 1.4% of the variance in self-esteem. It is difficult to compare this finding to those of previous studies since they had some limitations like small sample size with small proportion of Latino gay men and the effect of family rejection was not measure separate from other forms of social rejection (Blais et al., 2014; Parra et al., 2017; Snapp et al., 2015).

Limitations of the Study

The study of hidden populations like Latino gay men is challenging (Hirschtritt, Dauria, Marshall, & Tolou-Shams, 2018; Sell & Holliday, 2014; Witherspoon, Bámaca-Colbert, Stein, & Rivas-Drake, 2020). This is a limitation for many researchers who try to elucidate the reasons behind the health disparities affecting minorities. The United States Census Bureau only collects data about same-sex couples and not about sexual orientation ("United States Census (US Census)", 2020). This makes it challenging to study sexual minorities and to reach the objectives of Healthy People 2020 ("Lesbian, Gay, Bisexual, and Transgender Health | Healthy People 2020", 2020). This study is limited by the limitations of the original study since I am analyzing secondary data. As the original study only included data from Latino gay men in San Francisco and Chicago, it is difficult to generalize the findings to other areas of the United States with a Latino population with a different demographic composition.

Another limitation is the use of convenience sampling (the participants being selected based on availability and convenience) in the original study. This can lead to selection bias due to over or under-representation of some population subgroups (Creswell & Creswell, 2018; ("Convenience sampling. Laerd Dissertation", 2012). The researchers in the original study used respondent-driven sampling which is an excellent tool to reach "hidden populations" but there is a risk of selection bias if some of the recruiters have a more extensive social network (Ramirez-Valles et al., 2010).

Using secondary data has additional limitations like variables that were not collected, having in mind the purpose and the research questions of the present study (Brakewood & Poldrack, 2013; Cheng & Phillips, 2014). Another limitation is that the results cannot be used to make inferences because the original data are cross-sectional. In cross sectional studies, it is difficult to establish cause-effect or temporal relationship between the variables since they are assessed simultaneously (Carlson & Morrison, 2009; Setia, 2016). The study only contains family rejection data in the form of verbal stigmatization and has no information about physical abuse, which would have added enormous insight into this study; this is an additional limitation.

A final limitation is that the data were collected in 2004 (published in 2014). However, I did not find another database that contains the variables I need to respond to my research questions. This database is still a reliable source of information since the influence of Latino cultural values like familismo and machismo are still a problem for Latino gay men (Gattamorta & Quidley-Rodriguez, 2018; Gattamorta, Salerno, & Quidley-Rodriguez, 2019). The current validity of the data can be argued because of the increase in social acceptance of LGBT persons, the approval of same sex marriage and other legal protections for LGBT (Flores, 2019). However, according to Meyer (2016), LGBT equality is still an elusive vision. The author of the minority stress model stated that the efforts to reduce health disparities should not be limited or measured only by the level of equality under the law (Meyer, 2016). Public health efforts should focus on assessing how stigma and other prejudiced attitudes impact health because these

discriminatory attitudes are moving from the overt anti-LGBT legislation towards more disguised attitudes based on “religious freedom”, and the persistence of discriminatory and stigmatizing policies will likely result in persistence of the health disparities (Meyer, 2016).

The legal and political obstacles to achieving equality mentioned by Meyer (2016) are echoed by researchers (Baker, 2016; Ball, 2016; Cahill, & Makadon, 2017; Wang, & Cahill, 2017). There are politicians not willing to approve anti-discrimination laws regarding healthcare, employment and housing (Ball, 2016). Latino gay men, after the presidential election in 2016, are at risk of losing the health care benefits from the Affordable Care Act if the efforts of the current government succeed (Baker, 2016; Cahill, & Makadon, 2017; Wang, & Cahill, 2017). There are some legal loopholes that based on religious freedom permit discrimination to LGBT people and other minorities. Healthcare providers can use these laws to deny services like HIV prevention and fertility treatments for same sex couples citing religious or moral objections (U.S. Department of Health and Human Services, 2018). Conservative and religious organizations are hindering the process of data collection that would be beneficial to reduce health disparities in LGBT people (Baker, 2016; Cahill, & Makadon, 2017). After the election of Donald Trump, the situation for some Latino gay men may be worse than before the approval of same sex marriage. Gonzalez, Pulice-Farrow, and Galupo (2018), reported increasing intrafamily tensions and divisions after the results of the 2016 presidential election were published. Some LGBT people, including Latino gay men, felt betrayed by

their relatives who voted for voted for the Republican candidate (Human Rights Watch, 2018; Romero, Shaw & Conron, 2019; Waters, Pham, Convery & Yacka-Bible, 2018).

Another reason to argue in favor of the use of this database is that it was used three years ago by another researcher to study the effects of verbal stigmatization on Latino gay men (Wang, 2017).

Recommendations

In this study, I explored the relationships between family rejection due to sexual orientation and unprotected sex as a form of sexual risk behavior that may increase HIV and other sexually transmitted diseases and the role of self-esteem in the relationship between those variables. The study results suggested that family rejection due to sexual orientation correlates with low self-esteem and with and practicing receptive unprotected sex with more partners. The research hypotheses of this study were tested using dichotomous variables. I did not find a predictive relationship between family rejection and the outcome variables or a mediating role of self-esteem in this relationship. The only statistically significant finding was that family rejection predicted a poorer self-esteem in Latino gay men. Self-esteem did not predict unprotected sex and did not mediate the relationship between family rejection and unprotected sex. Given these initial findings and considering the mixed results of the previous literature, post hoc analyses were performed using continuous variables that counted the number of partners with which the participants had unprotected sex. These post hoc analyses demonstrated a predictive,

statistically significant relationship between family rejection and having receptive unprotected sex with more partners.

This study was designed following research design strategies found in the literature review and resulted in mixed and non-statistically significant findings that are similar to those found by previous researchers. The data analyses did not show a statistically significant predictive relationship between family rejection and either insertive or receptive unprotected sex when the outcome variable was measured as a dichotomous one. The mediation analysis resulted in a non-statistically significant relationship between family rejection and the sum of insertive and receptive unprotected sex measured as a dichotomous variable. Self-esteem did not mediate the relationship between family rejection and unprotected sex.

Previous studies did not analyze receptive versus insertive unprotected sex as the outcome variables. The way in which the variables are operationalized may be an explanation for the mixed findings. In the present study, I divided the dichotomous outcome variable into receptive versus insertive unprotected sex and obtained a higher correlation between family rejection and receptive unprotected sex. This correlation was not statistically significant but the difference in the results suggested that a further exploration had to be conducted. When using the outcome variable measured at the continuous level, some statistically significant results were obtained.

Future studies analyzing the risk factors for unsafe sexual practices should collect data using continuous variables and divide the variable unprotected sex into receptive and

insertive. When analyzing sexual risk behavior, the number of events may offer a better insight than a "yes or no" response (Millar et al., 2017). Figures 2 and 3 illustrate the relationship between family rejection and unprotected sex variables measured as a dichotomous variable and as continuous variable. It is evident from the visual inspection of these graphs that measuring the same variable as a dichotomous one does not show the relationship between the independent and the dependent variable and may lead to missing information and detecting risk factors in a population.

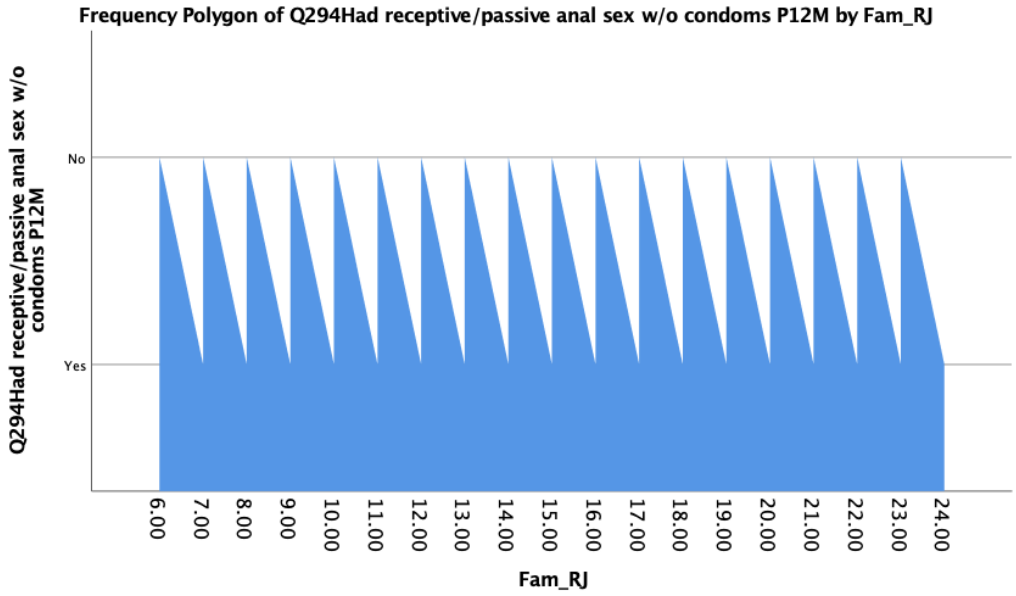

Figure 2. Frequency distribution using a dichotomous outcome variable.

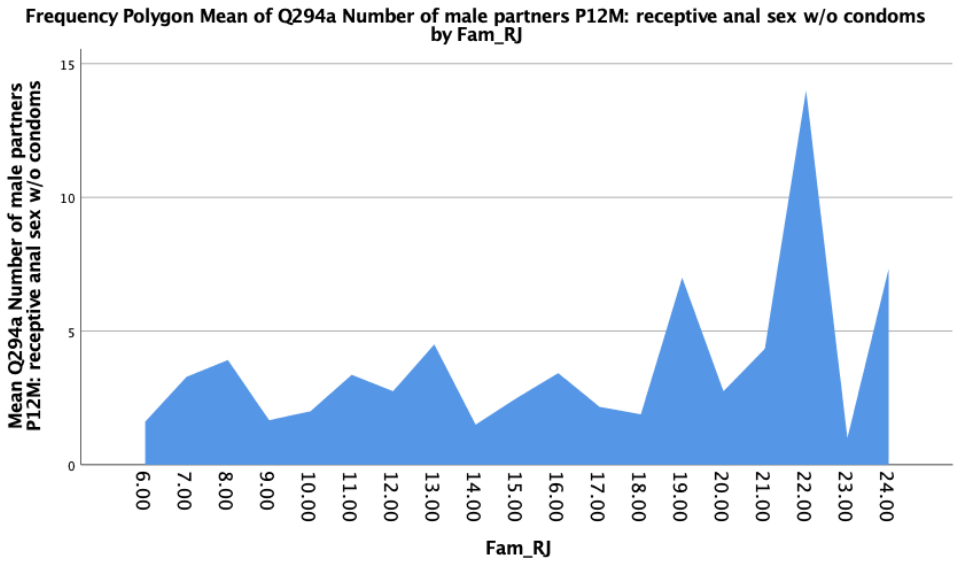

Figure 3. Frequency distribution using a continuous outcome variable.

Another suggestion is that more research is needed on potential confounding variables in the relationship between family rejection and sexual risk behavior since the analysis of data in this study did not show any confounding variable when age, income, education, gay stigma and race stigma were analyzed. An additional suggestion is the consideration of a redefinition of what is regarded as a sexual risk behavior under new circumstances like the use of PrEP and PEP, and undetectable viral loads in HIV positive persons. When collecting data about unprotected sex, it would be wise to include also data about PrEP or PEP use and also if the participant or partner is HIV positive, but their viral loads are undetectable.

Another recommendation is to perform longitudinal studies since the degree of self-esteem may vary with age. People become independent from their families, and their education level, income, and ties to the LGBT community and social support groups

increase (van Geel et al., 2018). Previous research also indicates that family levels of rejection and acceptance may vary over time and this is another reason to conduct longitudinal studies.

Future research should elucidate other possible mediators between family rejection and unsafe sexual practices. If it is not possible to intervene at the family level (exposure), it might be possible to act on the mediators to improve the outcome (VanderWeele, 2016). When studying the relationship between exposure to rejection and unsafe sex, it is important to collect the time that elapsed between the exposure and the outcome. It is also necessary to gather information about medical or psychological treatments that the participants might be receiving. This is necessary to rule out possible confounders and meet the strong assumptions required for mediation analyses (VanderWeele, 2016).

Researchers should elaborate surveys that contain more information about specific forms of rejection like physical violence or psychological harassment. Some families may be supportive but try to actively change their children sexual orientation because they consider this is the best thing to do for them to "fit in". The failure of the "sexual conversion therapies" may lead psychological distress, self-loathing and self-blaming and have an impact on self-esteem (Cheers et al., 2019; Toomey et al., 2018).

Regarding the methodology, researchers should consider how to deal with recall bias in the case that participants do not recall events of family rejection (Toomey et al., 2018). It is also important to develop sampling methods that permit reaching those that

have no possibilities of being recruited by snowballing or respondent driven sampling like those who are not out, or are very young to participate in research studies or cannot be recruited by conventional methods (Swendener & Woodell, 2017). Some attempts to reach these populations by using social media adds have resulted in discriminatory events after the participants shared the add among their contacts (Russomanno, Patterson, & Jabson Tree, 2019). In the case of Latino gay men, these methods should also consider that, due to specific Latino cultural factors, many may be afraid of losing social relationships with their families or ethnic group (Pastrana, 2015).

Implications

In this study, I sought to respond to four research questions that explored the relationship between family rejection due to sexual orientation and unprotected sex in Latino gay men and the potential mediating role of self-esteem. My aim was to address a gap in the literature to provide insight to healthcare providers, health sciences educators, and public health professionals about the factors contributing to health disparities among Latino gay men (Hafeez et al., 2017). I used a database containing the variables of interest collected among Latino gay men in San Francisco and Chicago. Understanding the relationship between stigma due to minority identities is essential to develop clinical and public health interventions (Hatzenbuehler, & Pachankis, 2016). The minority stress theory offers an explanation about how experiences of discrimination and stigmatization lead to internalization of the stigma and expectations of rejection (Meyer, 2003; Meyer,

& Frost, 2013) but the impact of stigma should be addressed using a multilevel approach (Hatzenbuehler, & Pachankis, 2016).

The first implication for practice of the present research is a call to public health researchers to gather evidence that demonstrates the need for collecting accurate data about sexual minorities. This evidence may inform policymakers so they might modify the way in which state and federal agencies collect health information (Hatzenbuehler, & Pachankis, 2016). The results of this study provided evidence about the need to collect data about risky sexual behavior as a continuous variable and not as a dichotomous one. A dichotomous variable will not differentiate between those who had one and those who had many unprotected sex events. Related to this is the need to distinguish between insertive and receptive unprotected sex. The results of the present study have also demonstrated the different findings obtained when using insertive and receptive unprotected sex as two distinct outcome variables.

A second implication relates to the particularities of people with more than one minority status and to the challenges of identifying risk factors in these populations. Considering that 5.4% of Latinos identify themselves as LGBT (Gates, 2017) and that according to data from the Williams Institute (2019), 21% of the LGBT population in the United States are Latinos, we can understand the importance of accurately identifying those at risk. The disproportionate impact of HIV and other sexually transmitted diseases affecting this population cannot be approached without first identifying those who will benefit from interventions. More research is needed to understand how institutional

policies that limit the opportunities of minorities determine the societal attitudes (including the family) towards sexual minorities. Family rejection is a form of interpersonal-level discrimination and stigmatization that may lead to internalized stigma, low self-esteem, and risky sexual practices (Hatzenbuehler, & Pachankis, 2016). A change in federal and state policies should not be limited to same sex marriage but to the elimination of any barrier that supposes an economic, financial, social, and health status disadvantage (Ball, 2016). This second implication for practice is significant given the decline in condom use among Latinos that the current literature exposes (Kann et al., 2018; Pebody, 2016; Rhodes & McCoy, 2015; Trujillo et al., 2019). The decline in condom use could be due to factors associated with Latino cultural values or with the advances in the preventive strategies for HIV. However, if family rejection is associated with low self-esteem, there is a possibility of failure to follow treatment guidelines due to the use of drugs or alcohol during sex (Millar, Starks, Grov, & Parsons, 2017).

A third implication is that researchers need to re-evaluate what constitutes unprotected sex and who is at risk of this practice. The concept of unsafe sexual practices should not be limited to the use of condoms but should be redefined under the light of new methods for preventing HIV like PrEP, PEP, or treatment as prevention. The redefined sexual risk behavior as an outcome should be explored after a cautious collection of the specific stressors that affect Latino gay men as sexual and ethnic minorities. A cautious collection means to gather information about rejection in the form of negative comments, verbal rejection, denial of sexual orientation, physical violence,

sexual abuse, or efforts to change sexual orientation. A cautious collection of data also implies determining if the rejection is from the whole family, or from the mother, the father, siblings, or distant relatives. The source and type of rejection may have a different impact on self-esteem and on the health outcome (Wigderson et al., 2019).

Another implication related to the screening practices for detecting those at risk of sexually transmitted infections. The screening should be done proactively and routinely since many LGBT people do not disclose their sexual orientation or behavior if they are not explicitly asked (Millar et al., 2017). Only through a conscious and careful work, can we effectively screen populations at risk and determine where public health resources should be invested.

These implications are significant these days due to the current sociopolitical situation in the United States. After the 2016 presidential election, minorities have seen an increase in discrimination and violent events that seem to respond to governmental legal actions against ethnic and sexual minorities (Human Rights Campaign, 2018; 2020; Human Rights Watch, 2018). My review of the literature indicated that, within some Latino families, there has been an increase in the tensions due to political and ideological divisions and that some Latino gay men felt betrayed by their families if they voted for Donald Trump (Human Rights Watch, 2018; Romero, Shaw & Conron, 2019; Waters, Pham, Convery & Yacka-Bible, 2018).

Conclusion

The problem addressed in this study was the relationship between family rejection and unprotected sex in Latino gay men and the potential mediating role of self-esteem in this relationship. The purpose of the study was to address a gap in the literature about the health disparities affecting this population. The findings of this study were mixed regarding the relationship between family rejection and unprotected sex as they are in the previous research literature about this topic. Using secondary data, I found that family rejection correlates with low self-esteem and having receptive unprotected sex with more partners. These findings were found during a post hoc analysis of the data. This highlighted the need to use the number of events rather than dichotomous variables as the outcome when exploring risky sexual behavior. The study of Latino gay men and the risk factors for the disproportionate impact of HIV in this population should be done cautiously for different reasons demonstrated by the results of this study. The assessment of the risk factors affecting Latino gay men health should be through longitudinal studies and not based on cross-sectional data. This will help to better understand the cause-effect or temporal relationships between the variables. The definition of unprotected sex should be redefined to include not only the use of condoms but using other preventive therapies like PrEP, or PEP.

In the present study, I provided evidence about the difficulty of studying populations with more than one minority identity and how careful be should be when collecting data and selecting the variables for statistical analysis. Latino gay men are part

of the second-largest growing ethnicity in the United States, and if this problem is not approached promptly and correctly, the present disproportion in HIV infections may become a public health problem.

Health science educators, researchers, healthcare practitioners, and public health professionals may benefit from the findings of this study and develop more effective ways of screening risk factors in sexual minorities, mainly if they belong to ethnic minorities.

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