# EXPLORING THE RELATIONSHIP BETWEEN BEING A PARENT AND THE ACCEPTANCE OF THE LESBIAN, GAY, BISEXUAL, AND TRANSGENDER (LGBT) COMMUNITY

by

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## ABSTRACT

Due to existing homophobic discrimination and stigma, sexual and gender minorities suffer disproportionately from health disparities as compared to their heterosexual peers. Research shows that social determinants of health are strong indicators for health outcomes, specifically citing positive influences from stability in social and family support. Yet lesbian, gay, bisexual, and transgender (LGBT) individuals risk damaging relationships with their parents when disclosing their sexuality. This study aimed to understand the relationship between parental status and acceptance of the LGBT community. It also assessed whether there was an interaction effect of gender (of an individual – non-parent or parent) with parental status that would affect overall LGBT acceptance. We hypothesized that there was an interaction between gender and parental status and that female parents were the most accepting of the LGBT community as compared with male or female non-parents and male parents. Using data from Acceptance Journeys, a social marketing campaign intended to increase LGBT awareness and decrease LGBT stigma, this study used logistic regressions to model the relationship between parental status and gender on LGBT acceptance. Results showed the odds of acceptance among non-parents to be marginally higher relative to parents (AOR = 1.22; 95% CI = 1.04, 1.41). Females showed more than double the odds of acceptance relative to males (AOR = 2.22; 95% CI = 1.91, 2.58). Together, the interaction of parent and gender had a significant effect on LGBT acceptance, with male parents being the least likely to express accepting attitudes towards the

LGBT community (AORs = 1.45, 2.99, 2.64; 95% CIs = 2.30, 3.88; 1.09, 1.92; 2.01, 3.64, respectively). While theories surrounding masculinity and heteronormativity provide support for these findings, future research needs to focus on the relationships between fathers and their children. The public health significance of this study was to provide the basis for intervening in father-child relationships by first addressing sexual health and then LGBT acceptance. By encouraging fathers to have conversations about sexual health with their children, especially if they may be LGBT, there is the potential to increase knowledge of STIs and HIV, and reduce the risk of transmission and infection among the LGBT community.

## TABLE OF CONTENTS

**PREFACE** ..... **IX**

**LIST OF ACRONYMS AND ABBREVIATIONS** ..... **X**

**1.0 INTRODUCTION** ..... **1**

**1.1 LGBT STIGMA** ..... **1**

**1.2 LGBT STIGMA AND ITS EFFECTS ON LGBT HEALTH DISPARITIES** ..... **4**

**1.2.1 LGBT Persons' Relationships with Family** ..... **6**

**1.3 NATIONAL LGBT CAMPAIGNS** ..... **8**

**2.0 METHODS** ..... **12**

**2.1 STUDY DESIGN** ..... **13**

**2.1.1 Analyses** ..... **17**

**3.0 RESULTS** ..... **20**

**3.1 REGRESSION ANALYSIS** ..... **24**

**4.0 DISCUSSION** ..... **28**

**5.0 CONCLUSION** ..... **32**

**BIBLIOGRAPHY** ..... **35**

## LIST OF TABLES

Table 1. Riddle Homophobia Scale Statements ..... 15

Table 2. Three-category Riddle Scale Attitudes ..... 15

Table 3. Scenario 1 – Negative; Two-category Riddle Scale Attitudes ..... 17

Table 4. Scenario 2 – Positive; Two-category Riddle Scale Attitudes ..... 17

Table 5. Characteristics of the Total Sample and by Parental Status ..... 21

Table 6. Scenario 1 (Negative) Stepwise Regression Analysis – Two-category LGBT Acceptance ..... 25

Table 7. Scenario 2 (Positive) Stepwise Regression Analysis – Two-category LGBT Acceptance ..... 27

## LIST OF FIGURES

Figure 1. Concept Model for Parent and Gender Relationship with LGBT Acceptance ..... 14

Figure 2. Distribution of Riddle Homophobia Scale Attitudes by Parental Status..... 23

Figure 3. Distribution of Riddle Homophobia Scale Attitudes by Gender..... 23

Figure 4. Distribution of Riddle Scale Homophobia Attitudes by *Gender x Parental Status*..... 23

# PREFACE

I would like to thank Drs. Shawnika Hull, Mackey Friedman, and Sarah Krier for sharing the story of Acceptance Journeys with me and allowing me to use their data for this thesis. It is a unique approach to public health interventions that I feel privileged to be have been a part of.

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## LIST OF ACRONYMS AND ABBREVIATIONS

AJ Acceptance Journeys

CDC Centers for Disease Control and Prevention

DHHS Department of Health and Human Services

DPCPSI Division of Program Coordination, Planning, and Strategic Initiatives

HIV human immunodeficiency virus

HRC Human Rights Campaign

LGB lesbian, gay, and bisexual

LGBT lesbian, gay, bisexual, and transgender

LGBTQ lesbian, gay, bisexual, transgender, and queer

MSM men who have sex with men

NIH National Institutes of Health

SEM social ecological model

SGM sexual and gender minorities

SGMRO Sexual and Gender Minorities Research Office

# 1.0 INTRODUCTION

Amidst research surrounding the health and well-being of the lesbian, gay, bisexual, and transgender (LGBT) community, there has been a gap in information on parent-child relationships. Individuals are largely affected by societal and cultural norms, and these ideals are often projected onto their children, regardless of whether the children hold the same ideals. In the case of homosexuality and the LGBT community, individuals' attitudes about heteronormativity are challenged and oftentimes the discomfort that arises drives LGBT stigma and discrimination, which are upstream factors that affect disease risk, specifically HIV. Social marketing can be used to address the discountenance in ideals that affects attitudes towards the LGBT community because it has the potential to reach a large audience. Utilizing this method for future LGBT public health practices and interventions may prove to be an effective way to influence behavior changes that expand to other social determinants of health as well.

## 1.1 LGBT STIGMA

Stigma surrounding the LGBT community is a result of homophobia and social constructs such as heteronormativity and masculinity (Herz & Johansson, 2015). Homophobia is defined as the "irrational fear, hatred, and intolerance of people who are gay, lesbian, or bisexual" (Evans & Wall, 1991). Homophobia is also associated with heteronormativity, which

in plain terms is society's accepted normalcy steeped in a dominant heterosexual culture (Herz & Johansson, 2015). It is a lens through which society often uses to negatively view homosexuality and critique lives of those in the LGBT community, drawing on arguments about lifestyle and central social institutions like family and marriage (Herz & Johansson, 2015). Heteronormativity also addresses a hierarchical system that favors privileges for those who fit within society's heterosexual norm. Only recently, marriage, an archetype of heteronormativity, was influenced by a Supreme Court decision to legalize of same-sex marriage across the United States. This, however, was met with opposition as several states moved to amend their state constitution to prohibit same-sex marriage. Legislation is only one way in which structural differences may be remedied, though the heteronormativity that fuels them remains.

According to the minority stress model developed by Ilan Meyer, stigma causes sexual minorities, specifically gay men, to experience a high level of chronic stress (Meyer, 2003). This model addresses this experience of stress in two ways: distal stress and proximal stress (Institute of Medicine (US) Committee, 2011). Distal stress focuses on actions of violence and discrimination experienced by LGBT persons. In contrast, proximal stress hones in on internalized homophobia (e.g. adopting society's heteronormative ideals and applying them to oneself), perceived stigma (external rejection or discrimination that causes an LGBT person to be hypervigilant of their surroundings), and concealment of one's sexual orientation or transgender identity (Institute of Medicine (US) Committee, 2011). These stressors have an impact on all aspects of an LGBT person's health and well-being, from increased disease risk to mental health issues.

These issues are further exacerbated by gender, race, and ethnic and cultural pressures (Institute of Medicine (US) Committee, 2011). While heteronormativity addresses issues

concerned with sexuality norms, masculinity focuses more on gender expectations for men. It relates to ideologies held within a society or culture that is concerned with the perceived demeanor, roles and/or responsibilities of men (Bowleg et al., 2011). The same can be said of females and femininity as perceptions of what it means to be a man or woman expressed in gender stereotypes places undue stress on homosexual individuals to appear either more masculine or feminine to be accepted by society, or to be seen as desirable by individuals to whom they are attracted (Sanchez, Greenberg, Liu, & Vilain, 2009). This is further emphasized in a study by Marcell et al. which discusses the negative relationship between masculine beliefs and the utilization of health care services among adolescent males (2007). The role masculinity plays here is that seeking health care is a sign of weakness as men should be the providers, not seekers, of care (Marcell et al., 2007).

Race and ethnicity also plays a significant role in a person's identity as an individual as well as part of a community explains why stigma of LGBT persons can have such an isolating effect in certain cultures. Latino communities and the ingrained idea of machismo, or masculinity and the role of a man in the family setting within the Latino culture, is one example of how gender, race, ethnicity and culture are all factors in LGBT stigma within the Hispanic community (Estrada, Rigali-Oiler, Arciniega, & Tracey, 2011). Similarly, ideals of masculinity held within the African American population include how men should have multiple female sexual partners, often concurrently, or that "real Black men are heterosexual, not MSM" (Bowleg et al., 2011). Bowleg et al. discuss how these ideas then have downstream effects on sexual risk as Black MSM may feel obligated to have sex with women in an effort to hide their same-sex preference and avoid stigmatization (2011). The minority stress model shows us that LGBT stigma is not one-dimensional. In fact, it is a multi-faceted issue that is deeply rooted in identity:

both the LGBT person's own perceived identity and society's expected identity for LGBT persons.

## 1.2 LGBT STIGMA AND ITS EFFECTS ON LGBT HEALTH DISPARITIES

Gender and sexual minorities suffer disproportionately from health disparities (Fredriksen-Goldsen et al., 2014). The U.S. Department of Health and Human Services (DHHS) defines health disparities as: "adverse health outcomes for communities that have, as a result of 'social, economic and environmental disadvantage, systematically experienced greater obstacles to health" (Fredriksen-Goldsen et al., 2014). As a marginalized population, LGBT persons are at increased risk of poor health, disability, and premature death. Research shows that LGBT persons have higher rates of substance use, smoking, and alcohol consumption, all of which begin at a young age, in comparison with heterosexual people (IOM, 2011). In addition to these behaviors, LGBT people also are more often found to be homeless, which further increases their risk of poor health outcomes (IOM, 2011).

A major driver of LGBT health disparities is the lack of attention to sexual and gender identity within the health care system and the underutilization of health care services for fear of stigma (Lim & Hsu, 2016). The AIDS epidemic in the early 1980s added to the existing homophobia and discrimination of the LGBT community by health care workers (Lim & Hsu, 2016). There was a fear of contracting the disease to which researchers and medical staff knew very little about at the time. Though it seemed to be predominantly affecting gay men, the modes of transmission were not determined until a few years into the epidemic. Yet, decades after we have developed a better understanding of HIV and AIDS, negative attitudes towards the LGBT

community persist among health care workers, which has a great effect on the utilization of health services by LGBT persons (Lim & Hsu, 2016). There is high level of insensitivity and lack of cultural competence exhibited by health professionals when providing treatment for people who are LGBT (Lombardi, 2001). On many occasions, doctors and nurses have been cited in outwardly expressing negative opinions regarding LGBT patients' lifestyles or non-conforming gender roles (Lombardi, 2001). It has also been reported that health care workers explicitly turn these patients away from receiving the care they seek (Lombardi, 2001), thus discouraging them in the future from seeking medical when they need it (IOM, 2011). This is especially evident in the case of lesbian and bisexual women who have shown higher rates of breast cancer and obesity compared to heterosexual women (IOM, 2011).

In addition to active discrimination, there is a general poor understanding of health risks associated with the LGBT community among health professionals (Institute of Medicine (US) Committee, 2011). Subgroups within the LGBT population engage in different sexual behaviors – same-sex attraction versus same-sex intercourse –, giving rise to different, yet important, health implications within the population (Institute of Medicine (US) Committee, 2011). It is important that health providers be educated on different health outcomes for LGBT people and develop cultural competence to improve the environment in which they provide care.

Another perpetuating factor of LGBT stigma and the cycle of health disparities among the LGBT community is homonegativity, which is fueled by heteronormativity and ideals of masculinity. Jeffries et al. defines homonegativity as the negative outward perceptions and treatment received by MSM due to their sexual orientation (2015). His research focuses on the negative environment that surrounds MSM and other LGBT persons, finding that these unhealthy, non-supportive environments further affect the health of this population (Jeffries et

al., 2015). The homonegativity exuded from the community and possibly friends and family members has a direct effect on internalized homonegativity among MSM – an unsatisfied feeling about their own sexual orientation (Jeffries et al., 2015). These feelings feed into HIV stigma and discourages conversations about homosexuality and sexual health, which are especially important in educating this high-risk population about safe sexual practices, e.g. condom use. This ultimately leaves LGBT persons more vulnerable to diseases such as sexually-transmitted infections and HIV (Jeffries & Johnson, 2015).

This is even more disconcerting since MSM, especially African American MSM, are at the highest risk of contracting HIV than any other group (Matthews et al., 2016). In fact, the Centers for Disease Control and Prevention (CDC) estimates that if HIV incidence rates persist, 1 in 6 gay and bisexual men will be infected with HIV in their lifetime (NCHHSTP, 2016). Furthermore, 1 in 2 African American MSM will be infected with HIV during their lifetime, compared to 1 in 4 for Hispanic MSM and 1 in 11 White Caucasian MSM (NCHHSTP, 2016). Latino MSM follow African American MSM with the second highest HIV incidence rate (NCHHSTP, 2016). This can be attributed to machismo-driven discrimination towards homosexual men within the Latino community. Their lack of communication about HIV, sexual attraction, and homosexual behaviors that increase the risk of certain diseases have caused a steady increase in HIV incidence within population over the years (Jarama, Kennamer, Poppen, Hendricks, & Bradford, 2005).

### 1.2.1 LGBT Persons' Relationships with Family

Key social determinants of health that have a strong effect on health outcomes are social factors and interpersonal relationships. The social ecological model (SEM) hones in on how

society, community, family, and individual level relationships and the environments created by these relationships influence health outcomes (Jeffries et al., 2015). The SEM, which was incorporated in developing Healthy People 2020's section on LGBT health, addresses individual and population-level determinants of health as it relates to creating structured health interventions. A key component of the SEM for LGBT health is environment and understanding LGBT behavior, specifically how it affects the society and vice versa (Institute of Medicine (US) Committee, 2011).

Because research shows that LGBT people are more likely to develop behaviors as youths, which increases their risk of poor mental, emotional, and physical health outcomes, there has been a push to focus interventions in family and school settings (IOM, 2011). Ryan et al. builds on the SEM by focusing on family rejection as a predictor for negative health outcomes of white and Latino LGB young adults (2009). Studying LGB individuals between the ages of 21-25 years, researchers found that experiences of rejection and negative reactions by family members toward LGB young adults and their sexual orientation were associated with high rates of self-reported suicide attempts, depression, substance use, and unprotected sex among the study population (Ryan et al., 2009). This research brings attention to the need for better understanding of the relationships between parents and their LGBT children, but proposes that health care providers act as a middle-man to help affect mental and behavioral health outcomes rather than drawing a direct path from parents to their children (Ryan et al., 2009).

An expansion of the systematic effects of family within the SEM can be explained through the theoretical framework of the family systems theory (FST). The FST seeks to explain that understanding an individual includes understanding their interdependence with family members (Bavelas & Segal, 1982). In a subsequent study by Ryan et al., researchers observe

family acceptance during adolescence and its effect on LGBT health in young adults (2010). Familial acceptance has a lasting influence on LGBT individuals' emotional and physical health, particularly LGBT adolescents (Ryan et al., 2010). Factors that influence one family member even on the individual level have repercussive effects on those relationships (Bavelas & Segal, 1982), which is made evident by research showing an association between increased risk of suicide attempts and mental illness in the LGBT community with increased rejection by family members (Ryan et al., 2009). These risks, however, can be lowered significantly with stronger interpersonal relationships (Ryan et al., 2010). Looking specifically at parents' relationships with their children, Halpern and Perry-Jenkins (2016) discuss the transference of gender roles from parent to child in their longitudinal study of children within the United States. Gender stereotypes and ideologies vocalized by parents greatly affect a child's understanding of gender roles and their attitudes towards either gender (Paul Halpern & Perry-Jenkins, 2016). Furthermore, purely addressing parent-child relationships, adolescent men whose parents communicate health concerns and discuss health care with them are more likely to use the health care system (Marcell et al., 2007).

## 1.3 NATIONAL LGBT CAMPAIGNS

There have been significant movements towards raising awareness and improving the health of LGBT people in the last 30 years. LGBT Pride events, for example, began in 1970 as a way to commemorate the 1969 Stonewall riots in Greenwich Village, New York where LGBT people publicly fought against police discrimination (Suh, 2014). Following the riots, Pride events emerged around the United States in support of the LGBT community and to fight stigma

and discrimination, and have slowly evolved from political and social demonstrations into celebrations of LGBT and queer life (Suh, 2014).

In 1980, Steve Endean founded the Human Rights Campaign (HRC) Foundation, which was established to be a gay and lesbian political action committee. The first of its kind, the HRC has since expanded from lobbying for gay civil rights legislation to become one of the largest civil rights organizations fighting to achieve equality for lesbian, gay, bisexual, transgender, and queer (LGBTQ) Americans nationwide (Human Rights Campaign, 2016). Its mission is to create a world in which all LGBTQ persons are accepted fully as members of society in all settings: home, workplace, and the community (Human Rights Campaign, 2016). To do so, the HRC has identified educating the American public about LGBTQ issues and encouraging the adoption of LGBTQ-inclusive policies and practices as its key goals (Human Rights Campaign, 2016). Recently, it has partnered with the National LGBT Health Education Center, which aims to increase health providers' understanding of LGBTQ patient health by creating patient-centered care trainings. The foundation has made tremendous efforts towards building support for LGBTQ persons that include both their families and social networks from every aspect of their life. In doing so, HRC hopes to positively impact acceptance of the LGBTQ community in the United States and globally.

In 2010, President Obama, with the help of Secretary of Health and Human Services Kathleen Sebelius, launched a new health initiative called Healthy People 2020. In addition to designing interventions to reduce and/or eliminate illness, disability, and premature deaths, it also focuses on: eliminating health disparities, addressing social determinants of health, improving people's quality of health care, reinforcing public health services, and ensuring health-related information is available and disseminated to the public (ODPHP, 2014). Obama

also made an effort to include LGBT individuals and families. Following a 2011 report by the Institute of Medicine, *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*, recommendations were made to the National Institutes of Health (NIH) to better guide their research on LGBT health (IOM, 2011).

In response to these recommendations and a clear call to address LGBT health and well-being, the NIH Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) created the Sexual and Gender Minorities Research Office (SGMRO) in September 2015 (NIH, 2016). Under the direction of Dr. Karen Parker, SGMRO is tasked with working directly with and across NIH Institutes, Centers, and Offices, utilizing the resources to address research gaps related to sexual and gender minorities (SGM). To do so, SGMRO will work to identify indicators of SGM health outcomes and provide guidance on ongoing SGM health interventions (NIH, 2016).

With a burgeoning focus on LGBT health and well-being throughout the United States, the need to understand social factors surrounding health outcomes for this population is imperative. These social factors include racial and cultural traditions, adherence versus nonconformance to gender norms, and homophobia and stigma. All of these act as upstream factors that affect downstream health outcomes, particularly increased risks for sexually transmitted infections and HIV. Understanding interpersonal relationships especially within the family setting and between parents and their children can help inform future intervention. Parents are presumed to be protective of their children, who are dependent on them for basic economic and financial means, but more importantly for stability in family life.

In this study, we explore the relationship between being a parent and the acceptance of the LGBT community. We observe the individual pathways between parental status and LGBT

acceptance, and gender of an individual and LGBT acceptance. The research question we seek to answer is whether the gender of an individual interacts with parental status to affect the existing parental status + LGBT acceptance pathway. With evidence that females are more accepting than males, with males more affected by heteronormativity than females, and understanding that children depend heavily on parents for financial and economic means, we hypothesize that gender does affect the parental status-acceptance pathway and that female parents are more accepting than male parents and individuals of either gender who are not parents.

# 2.0 METHODS

This study was a secondary data analysis of cross-sectional survey evaluation data from Acceptance Journeys (AJ) collected online by Qualtrics Survey System. AJ was a five-year social marketing campaign to raise awareness and acceptance of the LGBT community. It was first launched in Milwaukee County, Wisconsin in December 2011 (Hull, Gasiorowicz, Hollander, & Short, 2013) and was later replicated in Pittsburgh, PA beginning in 2012. AJ sought to gauge the perceptions and attitudes of the community before and after exposure to the campaign. Data was collected in Cleveland, OH and St. Louis, MO, serving as the control cities. The five waves of data collection occurred in November 2011, June 2012, March 2013, February 2014, and April 2015. Pittsburgh was represented in this data set beginning in 2012 with Survey Wave 2.

AJ was piloted in Wisconsin following an epidemiological investigation of the African American MSM community found that gay-related stigma contributed to the increase in new infections in this population (Hull et al., 2013). The program was used as a platform to share stories from non-LGBT people about their journey to accepting LGBT friends and family. Through mass media content (e.g. billboards and photo cards) developed using concept-tested photo images of local LGBT persons and their loved ones, AJ sought to promote LGBT acceptance by influencing people's attitudes and perceptions of normativity (Hull et al., 2013). When testing the relationships between exposure to the campaigns and acceptance, Hull et al.

found that the relationship was significant and negative (2016). There was evidence, however, that with the expansive reach of social media, exposure to AJ campaigns did bleed, though minimally, into the control cities.

The whole data set included 4,536 total observations from Milwaukee, Pittsburgh, St. Louis and Cleveland. For this analysis, only observations with complete gender, race/ethnicity, and reported parental status profiles were considered. There were 4,526 total observations remaining after removing observations where gender, race/ethnicity, and parental status were not specified. Our defined population of interest was individuals who responded to the question, "Are you a parent or guardian to children under the age of 18?", are male or female, and are Black/African American, White/Caucasian or Mixed, or Latino.

## 2.1 STUDY DESIGN

*Variables*

Though family relationships can influence the health outcomes of LGBT individuals, there is limited research focused on parent-child relationships and the proposed effects of parental status on the perceptions and acceptance of the LGBT population. Our independent variables of parental status, gender, and an interaction term of gender and parental status were used to assess the dependent variable of LGBT acceptance, included in the survey as a question of which opinion most closely aligns with the respondent's thinking towards the gay community. We controlled for race, city, survey year, income level, sexual orientation, and age of the survey participants. This study used the Riddle Homophobia Scale to assess participants' perception of and attitudes towards the LGBT community.

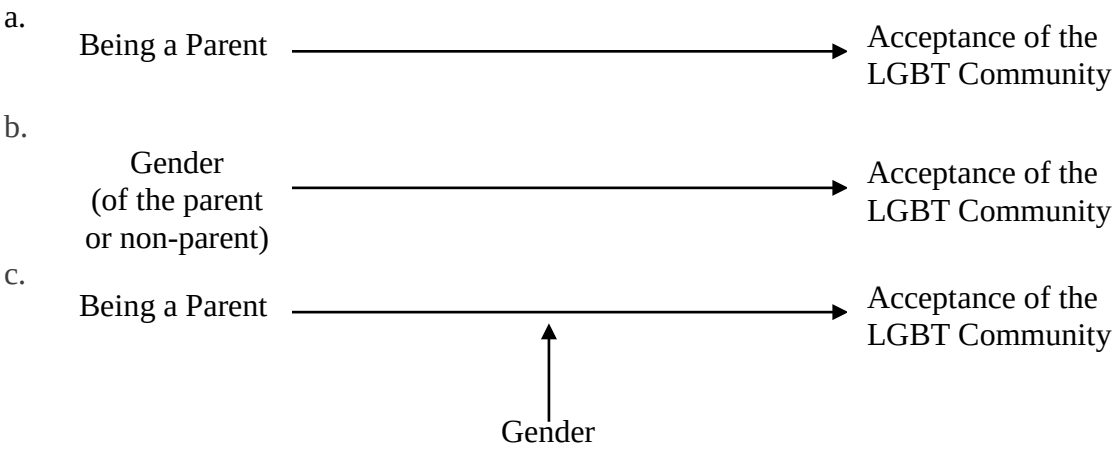


**Figure 1. Concept Model for Parent and Gender Relationship with LGBT Acceptance**

*Measures*

Merged data from all five AJ survey waves were analyzed rather than a specific survey year because year-by-year data analysis showed no significant variation over time in terms of LGBT acceptance trends. The Riddle Homophobia Scale gauges an individual's level of attitude toward the gay community with a set range from repulsion as the highest homophobic/lowest accepting attitude to celebration as the least homophobic/most accepting attitude (Wall, 1995). Homophobic and accepting attitudes were measured along individual paths of parental status and gender, then measured against the interaction of gender and parental status to observe any interaction of the two effectors (Figure 1). Using statements reflecting varying levels of homophobic to accepting attitudes, participants were asked to "Please check the statement that most closely reflects your current thinking about gay men in your community". Participants had the choice of five statements, ordered in decreasing homophobic opinions, or increasing positive attitudes and acceptance (Table 1).

**Table 1. Riddle Homophobia Scale Statements**

| | Answer Choice | Statement |
|---|---|---|
| Decreasing homophobia / Increasing acceptance ↓ | 1 | If a friend or family member told me he was gay, I would no longer speak to him. |
| | 2 | It is important for me to avoid gay men. |
| | 3 | I have no problem with gay men, but see no need for them to express their sexual orientation publicly. |
| | 4 | In general, I believe it is morally acceptable to be gay. |
| | 5 | Gay men are of value to my community. |

To truly separate less accepting and more accepting attitudes, we grouped the statements into three categories based on attitude: less accepting (negative attitude), neutral (tolerant), and more accepting (positive attitude) (Table 2). The third answer choice (Statement 3), "I have no problem with gay men, but see no need for them to express their sexual orientation publicly," was considered to be the neutral or tolerant opinion of all the choices (Table 2).

**Table 2. Three-category Riddle Scale Attitudes**

| Group#, Attitude | Statement |
|---|---|
| 1<br>Negative;<br>Less Accepting | 1 If a friend or family member told me he was gay, I would no longer speak to him.<br>2 It is important for me to avoid gay men. |
| 2<br>Neutral;<br>Tolerant | 3 I have no problem with gay men, but see no need for them to express their sexual orientation publicly. |
| 3<br>Positive; More Accepting | 4 In general, I believe it is morally acceptable to be gay.<br>5 Gay men are of value to my community. |

However, after careful consideration of the meaning behind Statement 3 (“I have no problem with gay men, but see no need for them to express their sexual orientation publicly”), we concluded it provided a more negative connotation than one that leads to acceptance. In the interest of understanding how the relationship between LGBT acceptance, parental status and gender may differ if Statement 3 was considered a positive attitude rather than a negative attitude and vice versa, we created two new variables to represent each scenario. The first, Scenario 1, treats the sample of participants who identified closely with Statement 3 as being less accepting of the LGBT community (Table 3). The second, Scenario 2, treats the sample of participants who chose Statement 3 as being more accepting of the LGBT community (Table 4). LGBT acceptance was assessed along the individual pathways of parental status and gender, and with the interaction term gender and parent, denoted *gender x parent.* Thus, in addition to individual dichotomous variables of parental status – *parent vs. non-parent,* – and gender – *male and female*, - a *gender x parent* interaction term was created to take on four possible values: male non-parent, female non-parent, male parent, and female parent. Male parents served as the reference preliminary analyses showed decreased odds of acceptance among this group relative to the rest.

**Table 3. Scenario 1 – Negative; Two-category Riddle Scale Attitudes**

| Group#, Attitude | Statement |
|---|---|
| 1 Negative; Less Accepting | 1 If a friend or family member told me he was gay, I would no longer speak to him. |
| | 2 It is important for me to avoid gay men. |
| | 3 I have no problem with gay men, but see no need for them to express their sexual orientation publicly. |
| 2 Positive; More Accepting | 4 In general, I believe it is morally acceptable to be gay. |
| | 5 Gay men are of value to my community. |

**Table 4. Scenario 2 – Positive; Two-category Riddle Scale Attitudes**

| Group#, Attitude | Statement |
|---|---|
| 1 Negative; Less Accepting | 1 If a friend or family member told me he was gay, I would no longer speak to him. |
| | 2 It is important for me to avoid gay men. |
| 2 Positive; More Accepting | 3 I have no problem with gay men, but see no need for them to express their sexual orientation publicly. |
| | 4 In general, I believe it is morally acceptable to be gay. |
| | 5 Gay men are of value to my community. |

### 2.1.1 Analyses

We began with an analysis of 4,526 total observations, focusing on the individual relationships between parental status and LGBT acceptance, and gender and LGBT acceptance,

followed by analyses using *gender x parent* to observe any moderation effect by gender on the parent-acceptance relationship. We created two separate scenarios by reducing the Riddle Scale three categories to two categories, combining the neutral answering group with either the less accepting (Table 3) or the more accepting (Table 4) categories. A comparison of Scenarios 1 and 2 (Tables 3 and 4) is a comparison of language interpretation versus statistical interpretation. In the first scenario, we created a larger sample of those who were less accepting overall, n = 2,553. We placed the neutral group into the less accepting category, thereby following the negative connotation of Statement 3. This statement choice aligns most with the lowest homophobic attitude on the Riddle Homophobia Scale, which is named "acceptance" but implies there is something *to* accept and confers a level of discomfort (Wall, 1995).

In the second scenario, we combined the neutral respondents with the more positive responding participants, following a more structural division of the answer choices – attributing neutral ground to the middle answer choice (Table 2 and 4). By moving the bulk of responses (the neutral attitudes) to an already large portion of the sample (the positive attitudes), we were left with a more focused sample group (n = 242) that only expressed negativity towards the LGBT community. Doing so essentially removed ambiguity from the remaining smaller sample of negative attitudes (Table 4).

We used stepwise logistic regression analyses to compare LGBT acceptance among non-parents and parents, males and females, and male non-parents, female non-parents, male parents, and female parents for both scenarios. This allowed us to model the odds to which each sample population was more or less likely to express accepting opinions of the LGBT community. These models controlled for survey wave (time), city, age, race/ethnicity, and sexuality of the

participants. All analyses were performed using Stata/SE version 14.0 (StataCorp LP, College Station, TX).

# 3.0 RESULTS

Table 5 summarizes total sample characteristics included in this study. Of the 4,526 men and women who were included in this study, 1,666 participants identified themselves as a parent or guardian to children under the age of 18 while the remaining 2,860 answered they were not a parent or guardian to children under the age of 18. The sample's mean age was 46.07 years, the mean ages of non-parents and parents were 48.37 and 42.12 years, respectively. Of all participants, 49.6% identified as Black, 50.1% White, 0.31% mixed Black and White, and 1.3% Latino/a.

**Table 5. Characteristics of the Total Sample and by Parental Status**

| Variable | Total *(n = 4,526)* | Parental Status | | |
|---|---|---|---|---|
| | | Non-parent *(n = 2,860)* | Parent *(n = 1,666)* | *p-value* |
| Mean Age | 46.1 | 48.4 | 42.1 | < 0.01* |
| City, *n(%)* | | | | 0.603 |
| Milwaukee | 26.5 | 27.1 | 25.5 | |
| Pittsburgh | 20.7 | 22.1 | 20.9 | |
| St. Louis | 25.9 | 25.3 | 26.8 | |
| Cleveland | 26.9 | 26.9 | 26.8 | |
| Survey Wave, *n* | | | | < 0.01* |
| Baseline/Year 1 | 792 | 490 | 302 | |
| Year 2 | 548 | 343 | 205 | |
| Year 3 | 803 | 533 | 270 | |
| Year 4 | 1,208 | 859 | 349 | |
| Year 5 | 1,175 | 635 | 540 | |
| Mean Income | $41,966 (sd= $26,279) | $41,050 (sd= $26,145) | $43,553 (sd= $26,445) | 0.067 |
| Gender, *n(%)* | | | | < 0.01* |
| Male | 33.4 | 37.5 | 26.4 | |
| Female | 66.6 | 62.5 | 73.6 | |
| Race, *n(%)* | | | | < 0.01* |
| Black/African American | 49.6 | 45.7 | 56.7 | |
| White/Caucasian | 50.1 | 54.2 | 43.1 | |
| Mixed (Black & White) | 0.31 | 0.17 | 0.54 | |
| Ethnicity, n(%) | | | | |
| Latino | 1.3 | 1.05 | 1.74 | 0.048* |
| Sexuality, *n(%)* | | | | 0.006* |
| Heterosexual/Straight | 92.7 | 91.8 | 94.2 | |
| Bisexual | 3.24 | 3.37 | 3.01 | |
| Gay/Lesbian | 2.95 | 3.58 | 1.87 | |
| Other | 1.15 | 1.26 | 0.96 | |

*denotes statistical significance at $\alpha = 0.05$

Figures 2 through 4 present cross-tabulations of attitudes towards the LGBT community by parental status and gender. Among non-parents, 1.47% would no longer speak to a friend or family member if they came out as gay versus 1.20% of parents, while 3.81% of non-parents feel it is important for them to avoid gay men compared with 4.26% of parents (Figure 2). However, 49.9% of non-parents and 52.9% of parents have no problems with gay men, but see no need for them to express their sexual orientation publicly (Figure 2). The distribution of non-parents and parents is similar among those who express more accepting attitudes towards homosexuality such as "it is morally acceptable to be gay" (21.6% vs 21.9%) and "gay men are of value to my community" (23.2% vs 19.6%) (Figure 2). Chi-squared analysis of the Riddle Homophobia Scale responses shows no statistical significant difference between parents and non-parents ($p = 0.059$).

A similar distribution is seen among gender that is statistically significant ($p < 0.01$) with the majority of males and females closely identifying with Statement 3, 58.8% and 47.2%, respectively (Figure 3). A larger proportion of males identify with Statements 1 and 2, 2.18% and 5.82%, respectively, as compared to females, 0.96% and 3.05%, respectively (Figure 3). This trend is repeated for the more accepting attitudes of Statements 4 and 5 with 17.7% of males believing it is morally acceptable to be gay compared to 23.8% of females, and 15.5% of males vs. 25.1% of females believing gay men are of value to their community (Figure 3). The distribution of responses within each *gender x parent* value (Figure 4), parents and nonparents for both males and females, showed statistical significance ($p < 0.01$) overall with the majority responses citing more positive opinions of gay men in the community and less than 10% of each *gender x parent* subgroup citing the two more negative, less accepting opinions.

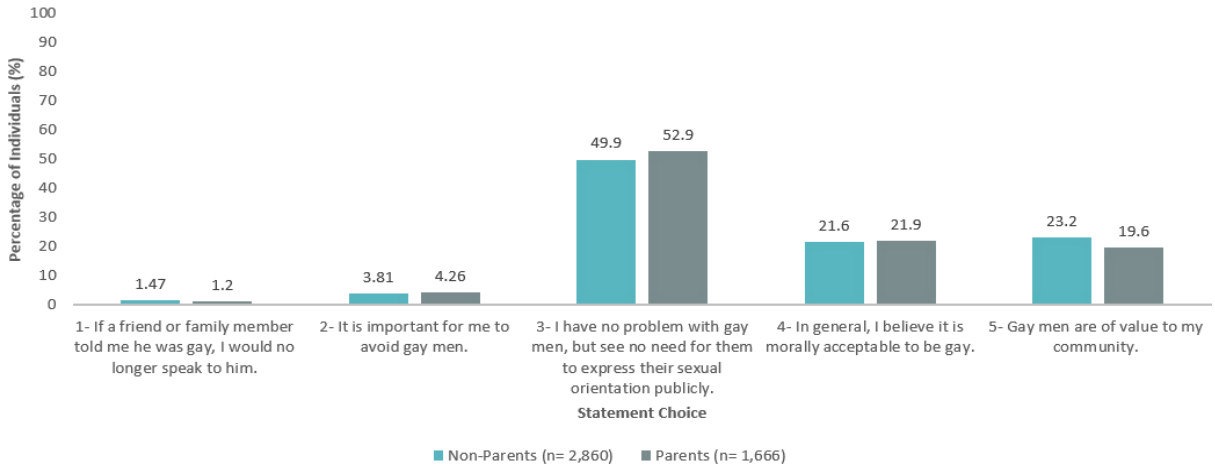


**Figure 2. Distribution of Riddle Homophobia Scale Attitudes by Parental Status**

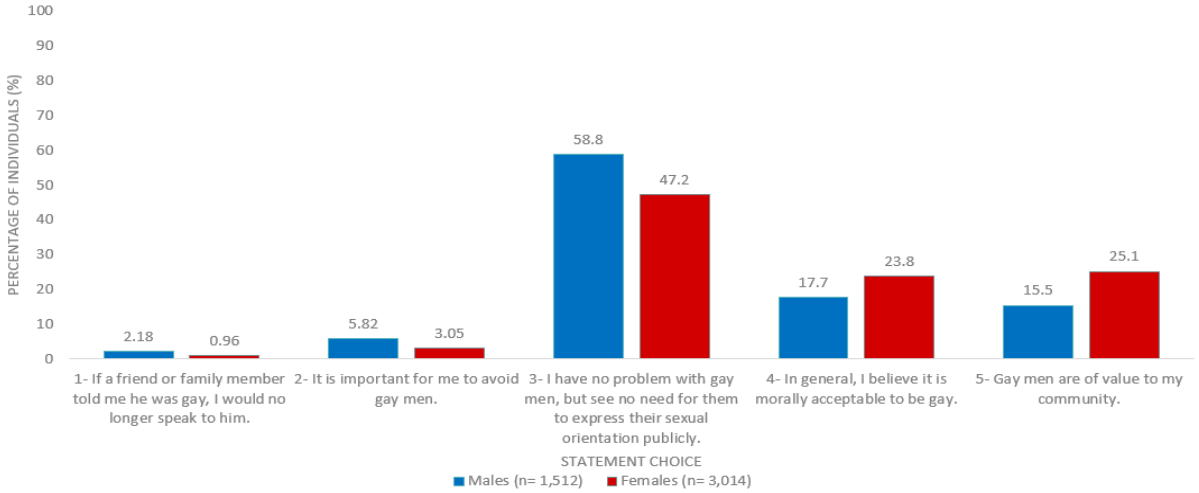


**Figure 3. Distribution of Riddle Homophobia Scale Attitudes by Gender**

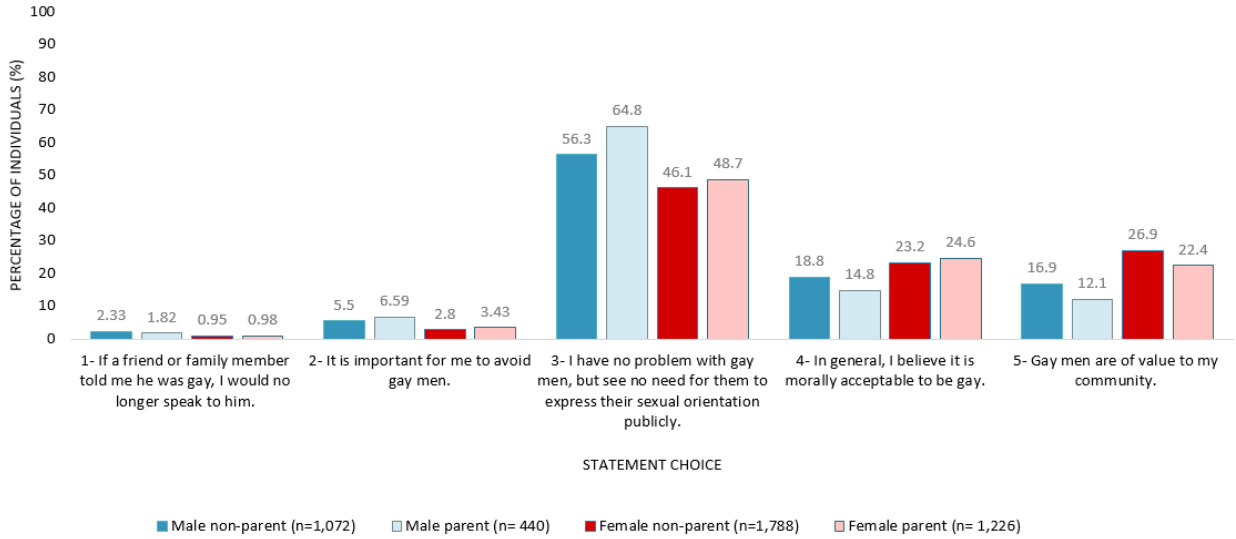


**Figure 4. Distribution of Riddle Scale Homophobia Attitudes by *Gender x Parental Status***

## 3.1 REGRESSION ANALYSIS

Step-wise logistic regression was used to model the relationship between parental status, gender, and their interaction on LGBT acceptance using the Riddle Scale attitudes in two different scenarios. The first analysis focused on LGBT acceptance when participants who answered neutral/tolerant were included with the sample of participants who expressed less accepting or negative opinions (Table 4). Table 6 displays AORs and 95% CIs for associations between LGBT acceptance, the independent variables of parental status, gender, *gender x parent*, and the covariates for Scenario 1. Compared to parents, non-parents were more likely to be more accepting of the LGBT community (AOR = 1.22; 95% CI = 1.04, 1.41). Gender was independently associated with LGBT acceptance with females being more likely than males to be accepting (AOR = 2.22; 95% CI = 1.91, 2.58). With the interaction term of parental status and gender, *gender x parent*, male parents were used as the reference group because this sample of participants were expected to be the least accepting of the other *gender x parent* variable values. Each of the other three *gender x parent* subgroups, male non-parent, female non-parent, and female parent, had a statistically significant relationship with LGBT acceptance. Odds of acceptance were nearly three times higher for female non-parents relative to male parents (AOR = 2.99; 95% CI = 1.91, 2.58). Odds of acceptance were more than twice as high for female parents relative to male parents (AOR = 2.64; 95% CI = 2.01, 3.46). Odds of acceptance were greater among male non-parents relative to male parents (AOR = 1.45; 95% CI = 1.09, 1.92).

Among race and ethnicity, Black/African Americans served as the reference group. Odds of acceptance were higher among White Caucasians as relative to Blacks (AOR = 1.40; 95% CI

= 1.21, 1.61). It was also statistically significant that the odds of acceptance were higher among Latino individuals relative to non-Latino individuals, though the number of Latino individuals was an exceedingly small sample size (AOR = 1.25; 95% CI = 0.70, 2.24). In terms of sexuality of the participants, those who identify as heterosexual were used as the reference group. Odds of acceptance were significantly higher among individuals who identified as bisexual or gay/lesbian as compared to heterosexuals (AORs = 3.71 and 6.50; 95% CI = 2.57, 5.35 and 4.18, 10.1, respectively).

**Table 6. Scenario 1 (Negative) Stepwise Regression Analysis – Two-category LGBT Acceptance**

| Variable | | Acceptance of LGBT Community AOR (95% CI) |
|---|---|---|
| **Parental status** | | |
| | Non-parents | 1.21 (1.05, 1.40) |
| | Parents | 1 |
| **Gender** | | |
| | Females | 2.22 (1.91, 2.58) |
| | Males | 1 |
| **Parental status + Gender** | | |
| | Female non-parents | 2.99 (2.30, 3.88) |
| | Male non-parents | 1.45 (1.09, 1.92) |
| | Female parents | 2.64 (2.01, 3.46) |
| | Male parents | 1 |
| **Race** | | |
| | White | 1.40 (1.21, 1.62) |
| | Mixed (Black and White) | 1.77 (0.52, 6.02) |
| | Black | 1 |
| **Ethnicity** | | |
| | Latino | 1.25 (0.70, 2.24) |
| | Non-Latino | 1 |
| **Sexuality** | | |
| | Bisexual | 3.71 (2.57, 5.35) |
| | Gay/Lesbian | 6.50 (4.18, 10.1) |
| | Other | 0.62 (0.34, 1.14) |
| | Heterosexual | 1 |

The two groups that were represented in this stepwise regression model were the sample of low accepting participants (who chose statements 1 and 2) plus those who chose the neutral/tolerant answer choice (statement 3), n = 2,553, and the sample of participants with more accepting opinions (who chose statements 4 and 5), n = 1,73. See Table 4 for visual division of the groups. AOR = Adjusted odds ratios; 95% CI = 95% confidence intervals. All ORs control for age, survey wave, income level, and city. OR =

Odds ratios; 95% CI = 95% confidence intervals. All ORs control for age, survey wave, income level, and city.

Regression modeling was then performed on Scenario 2, where participants who answered neutral were included with the sample of participants who expressed more accepting opinions (Table 5), for comparison. AORs and 95% CIs for associations between LGBT acceptance, the independent variables of parental status, gender, *gender x parent*, and the covariates are summarized in Table 7. With this shift of the sample of neutral participants, parental status was no longer statistically significant in affecting more accepting attitudes of the LGBT community. Odds of acceptance of the LGBT community were higher among non-parents relative to parents (AOR = 1.21; 95% CI = 0.88, 1.66). Non-parents in Scenario 2 were no more likely than non-parents in Scenario 1 to express more accepting attitudes. Gender, however, remained statistically significant with the odds of expressing more acceptance of the LGBT community more than double for females relative to males (AOR = 2.60; 95% CI = 1.91, 3.52). The odds of acceptance were three times higher for female non-parents relative to male parents (AOR = 3.11; 95% CI = 1.93, 5.01). Furthermore, the odds of acceptance were twice as high for female parents relative to male parents (AOR = 2.53; 95% CI = 1.54, 4.13). For male non-parents, the odds of acceptance were only marginally higher relative to male parents (AOR = 1.18; 95% CI = 0.75, 1.86).

The odds of acceptance among Black/African Americans were nearly two times higher relative to White Caucasians (AOR = 1.67; 95% CI = 1.21, 1.30). The odds ratio for the mixed Black and White sample could not be calculated because no participants who identified as mixed chose the either of the two more negative opinions, “If a friend or family member told me he was gay, I would no longer speak to him” and “It is important for me to avoid gay men” (Table 5). For individuals who identified as Latino, the odds of acceptance were nearly three times relative to

those who identify as non-Latino (AOR = 2.96; 95% CI = 1.27, 6.91). This second scenario also presented the odds of acceptance were nearly two times higher among bisexual and gay or lesbian individuals relative to heterosexuals (AORs = 1.78 and 2.95; 95% CI = 0.72, 4.40 and 0.93, 9.39, respectively).

**Table 7. Scenario 2 (Positive) Stepwise Regression Analysis – Two-category LGBT Acceptance**

| Variable | | Acceptance of LGBT Community OR (95% CI) |
|---|---|---|
| **Parental status** | | |
| | Non-parents | 1.21 (0.88, 1.66) |
| | Parents | 1 |
| **Gender** | | |
| | Females | 2.60 (1.91, 3.52) |
| | Males | 1 |
| **Parental status + Gender** | | |
| | Female non-parents | 3.11 (1.93, 5.01) |
| | Male non-parents | 1.18 (0.75, 1.86) |
| | Female parents | 2.53 (1.54, 4.13) |
| | Male parents | 1 |
| **Race** | | |
| | Black | 1.67 (1.21, 2.30) |
| | Mixed (Black and White) | - |
| | White | 1 |
| **Ethnicity** | | |
| | Latino | 2.96 (1.27, 6.91) |
| | Non-Latino | 1 |
| **Sexuality** | | |
| | Bisexual | 1.78 (0.72, 4.40) |
| | Gay/Lesbian | 2.95 (0.93, 9.39) |
| | Other | 0.23 (0.11, 0.49) |
| | Heterosexual | 1 |

The two groups that were represented in this stepwise regression model were the sample of low accepting participants (who chose statements 1 and 2), n = 242, and the sample of neutral participants plus those with more accepting opinions (who chose statements 3-5), n = 4,284. See Table 5 for visual division of the groups. AOR = Adjusted odds ratios; 95% CI = 95% confidence intervals. All ORs control for age, survey wave, income level, and city.

# 4.0 DISCUSSION

This study provides a glimpse into how individuals' attitudes towards the LGBT community differs whether they are a parent and how that relationship is moderated by gender of the parent. It explores the attitudes of non-parents versus parents towards the LGBT population by extrapolating their opinions of the LGBT community to the possibility of having an LGBT child. Contrary to our hypotheses, parental status is not a major factor as compared to gender of an individual in affecting positive acceptance of the LGBT community. This is interesting because parents are often the sole providers for children under the age of 18 for financial and economic means, which discourages LGBT youth from disclosing their sexual orientation to their parents for fear of losing financial support (Puckett, Woodward, Mereish, & Pantalone, 2015). These data show us that attitudes about the LGBT community are more or less maintained regardless of whether an individual has children. To interpret it another way could be that parents are less likely to be accepting because they have set expectations for their children. These expectations harken back to societal institutions of family and marriage. Parents may have more expectations for their children in terms of who they are attracted to and who they find as a life partner while non-parents are more removed from these situations as they do not have children (Herz & Johansson, 2015).

Independently, an individual's gender, however, is an important factor in shaping LGBT acceptance. Females are more likely to express more positive attitudes towards the LGBT

community than males. A reason for this observation could be that men are more adherent to gender norms and value the idea of masculinity more than women. When gender was coupled with parental status, there was an observed interaction that significantly impacted the outcome of more positive acceptance of the LGBT community. Female non-parents and female parents were more likely to have more accepting attitudes towards the LGBT population as compared to male non-parents and male parents. Though this is consistent with both the individual parent- and gender-only pathways and existing research on heteronormative theories and their effects on LGBT acceptance, the *gender x parent* interaction model minimizes the relationships of gender or parental status with acceptance alone. The parental status interaction with acceptance is statistically significantly affected by gender. Parents overall may be less accepting of the LGBT community, but coupled with being male further decreases the odds of accepting the LGBT community, due to a discomfort with homosexuality and expectations as to how males should act as part of our heteronormative society.

When comparing Scenarios 1 and 2, we noticed interesting shifts in the gender pathway and combination parent-gender pathway, but not in the parent-only pathway. In both scenarios, we found that non-parents were more accepting than parents and females were significantly more accepting than male. Female non-parents and female parents were more likely to be accepting of the LGBT community and male parents were the least accepting subgroup. While similar trends were exhibited in both scenarios, Scenario 2 presented them at even greater levels as compared to Scenario 1. More interestingly, however, is the shift in statistical significance among parental status and the covariates from Scenario 1 to 2. We found that in Scenario 1, the difference between parents and non-parents' acceptance of the LGBT community is statistically significant. Race was only significant for those who were Black/African American, and sexuality was also

statistically significant. In Scenario 2, African American and Latino subgroups became statistically significant while parental status and sexuality became non-statistically significant. More specifically, the subgroup of male non-parents shifted from statistically significant to marginally statistically significant between Scenario 1 and 2, respectively. An explanation for these shifts could be the change in sample size, and thus causing the proportions of each covariate represented within the negative attitude group to shift. Another rationale for this observation could be that race/ethnicity and culture have a significant effect on attitudes towards the LGBT community and those are largely represented in the less accepting group. It could also be attributed to the ideals of masculinity that hold true regardless of whether a man has children. The level of discomfort rises for men as individuals move away from heteronormativity and gender norms where as women may more willingly adapt to these differences.

Findings from the analysis of Scenario 1 provide a stronger argument in response to this study's research question of whether this is an interaction between gender and parental status in terms of acceptance of the LGBT community. As mentioned earlier, the creation of Scenario 1 followed a literary interpretation of the Riddle Homophobia Scale statement that aligned with a more negative opinion of the LGBT community. It implied tolerance, yet exuded a lack of acceptance with the mentality of "Don't ask, don't tell, don't flaunt it." Furthermore, Statement 3 matches closest with least homophobic attitude on the Riddle Homophobia Scale claiming acceptance, but implies there is something *to* accept and confers a level of discomfort (Wall, 1995). Scenario 1 also provided more evenly represented samples of the dependent variables and covariates for both attitude groups. This explains the observed shifts in odds ratios when comparing Scenarios 1 and 2, where in Scenario 2 the number of individuals who identified as Latino or LGB were more strongly represented in the more accepting attitude group.

Based on data from this study, interventions focused on LGBT health outcomes and health disparities should focus on families as a support structure, but should not rely specifically on parent-child relationships. As a factor in LGBT acceptance, having children or dependents does not strongly influence an individual's perception of the LGBT community. Instead, there should be a stronger focus on gender within interpersonal and family relationships since males were overall less accepting than their female counterparts. With male parents showing the least odds of acceptance, fathers should be targeted for future anti-stigma campaigns for the LGBT community. This could have important implications for interventions focused on disease transmission and HIV infections among the LGBT community, particularly MSM. Campaigns to reduce LGBT stigma can help bolster acceptance of the LGBT community overall, but specifically targeting the male parent population can help alleviate the negative effects of stigma on mental and emotional health. These interventions can motivate male parents to have conversations about sexual health with their children and thereby strengthening the relationships they have with their children. They also can encourage young gay and bisexual men to be more proactive in seeking information about their sexual health on their own. The downstream effects could impact overall knowledge of HIV, including modes of transmission, how to reduce the risk of exposure to the virus as well as other sexually-transmitted infections, and available prevention methods such as PrEP and condoms.

# 5.0 CONCLUSION

In a society that is driven by quick sound-bites, blurbs, and images, capitalizing on social marketing could be a highly effective tool for public health interventions. Social marketing serves to influence a target audience and their behaviors to affect movement towards a preferred behavior, which can benefit society as a whole (Kotler & Lee, 2011). Currently, social marketing in public health in focuses on four main areas: health promotion, injury prevention, environmental protection, and community mobilization (Kotler & Lee, 2011). Utilizing social marketing, as AJ did, is a powerful way to target specific populations and have widespread dissemination of information. AJ took the universal concepts of love and acceptance and applied that lens to the African American LGBT population. It became a starting point for conversations surrounding a stigmatized topic but provided common denominators of community, love, acceptance, a journey – all simple things that people could relate to.

More needs to be done to understand relationships between parents and LGBT youth because there is a clear association between these relationships and the health outcomes of LGBT persons. Targeting fathers specifically may be most impactful as the data shows they are the least accepting of all the *gender x parent* groups. Additional interventions focusing on intervening on gender-driven motivations for acceptance of the LGBT population, however, also has the potential to affect change in population-level perception and attitudes of the LGBT community. Broadly affecting the male population and their perceptions of the LGBT

community may have positive downstream effects for fathers and LGBT child relationships for men when they become parents.

The study was not without its strengths and weaknesses. The strengths of this study lie in the data set, the large sample of survey responses collected over a five-year period, and its goal to address a gap in the current literature. Limitations of the study include using 5-year aggregate data from the AJ test cities as well as the control cities. While exposure to the AJ campaigns was not a variable incorporated into the study model, not separating the data based on city prevented truly identifying the nuances in acceptance between location. Understanding the demographics and political and religious landscapes of each location may have better informed the interpretation of the data. On this same note, religion or political affiliations were not considered in the analyses. Doing so may have affected the outcomes of the study since religion plays an integral role in the culture and identity of a person. Similarly, political affiliations vary among the different cities that were surveyed. Different political views may influence attitudes towards the LGBT community with regards to economic advantages, such as marriage benefits. Another limitation of this study is that the interpretation of the data was extrapolated to the entire LGBT community as a whole when the acceptance variable relied on a question that only addressed gay men. As a result, opinions expressed by survey respondents may only reflect their attitudes towards the gay men and not towards lesbians, bisexual or transgender individuals.

Future studies should consider the gender of the children and number of children each participant reports. This would be an important additional variable to observe because relationships between parents and children differ depending on both the gender of the parent and child (Balaji et al., 2012). Exploring LGBT acceptance by gender of the child would further uncover how gender relationships between parent-child relationships affect attitudes of

homophobia and acceptance. Furthermore, if an individual only has one child, this might motivate them to be more accepting where as if they have multiple children, the parent may be less inclined to be accepting and/or compare siblings' sexual orientations. Additional studies should also explore whether marital status of parents influences parental status as a factor in LGBT acceptance. This plays on the idea that individuals either can be influenced or pressured into a similar way of thinking as their significant other, or they take an opposing stance to be more of a supporting figure to their child and the possibility they might be LGBT. Additionally, contrary to stereotypical beliefs of mothers having a greater impact than fathers in affecting sexual behaviors of their sons and daughters, father-son interactions showed to be more important than mother-son interactions when it came to reproductive health issues (Marcell et al., 2007). Marcell et al. showed that children, particularly sons, who lived in a two-parent household and whose parents discussed sexual and reproductive health issues with them were more likely than others to seek out heath care when needed (2007). This is especially important moving forward with recommendations to target fathers when addressing LGBT stigma. Interventions that focus on father-son relationships as a mechanism to improve health outcomes of LGBT youth can positively affect the likelihood that LGBT individuals seek the health care they need and ensure more positive health outcomes later in life.

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