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Gender Discrimination Effects on Health Outcomes and Behaviors among African-American Transgender Women in Atlanta

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ABSTRACT

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By

Megan Smallwood Early

April 20, 2016

INTRODUCTION: Transgender women's experiences of violence and transphobia can negatively affect health outcomes and influence health behavior. Transgender women and especially African-American transgender women suffer a disproportionate burden of HIV and may have unique experiences around both race and gender, which involves an added layer of discrimination. According to the gender affirmation framework, the stigma associated with being a transwoman of color could be a primary driver for engaging in high-risk behavior.

AIM: The present study aims to determine how gender discrimination relates to HIV status, affects quality of life, and influences engaging in risky sexual behaviors or substance use. Additionally, the link between gender discrimination and gender affirmation was assessed and whether gender affirmation moderated the relationships between gender discrimination and HIV or quality of life.

METHODS: African-American transgender women were recruited with the assistance of transgender advocates and local community organizations. Face-to-face interviews with participants were conducted and their responses were recorded on a tablet. Data were collected from October 2014 to June 2015.

RESULTS: The sample consisted of 77 women with a mean age of 35 years old; approximately 40% of the sample was currently unemployed with an average annual income of less than $10,000. Additionally, 67% of the sample reported being HIV-positive. There was a significant interaction effect of gender affirmation and gender discrimination (i.e., ever being hit or beaten after disclosing) on quality of life ($p < .001$). A linear regression analysis revealed three gender discrimination items influenced quality of life: experiencing verbal abuse or harassment by a stranger ($\beta = -.327$, $p < .01$), ever being in situations where not disclosing put them in physical danger or harm ($\beta = -.305$, $p < .05$), and having problems getting health or medical services ($\beta = .268$, $p < .05$). A binary logistic regression analysis revealed a significant relationship between HIV status and experiencing verbal abuse or harassment by a family member or friend (AOR = .103, $p < .05$).

DISCUSSION: Women who reported higher levels of gender affirmation and experiencing physical violence after disclosing reported higher levels of quality of life than those who reported low levels of gender affirmation, indicating gender affirmation could be a potential protective factor for those who experience this type of discrimination. Quality of Life was the outcome most impacted by gender discrimination, and future interventions should focus on improving the quality of life of transgender women by decreasing transphobia and increasing resources for transwomen, regardless of HIV status.

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APPROVAL PAGE

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Author's Statement Page

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Chapter I: Introduction

Transgender women's (i.e., persons assigned "male" sex at birth, but identify as female) experiences of violence and transphobia (i.e., prejudice toward transgender individuals) can negatively affect health outcomes and influence health behavior. Transgender women are at higher risk of substance use and of developing mental health issues such as depression, anxiety, and low self-esteem (Clements-Noelle et al., 2001; Benotsch et al., 2013; Bockting, Miner, Swinburne, Hamilton, & Coleman, 2013; Budge, Adelson, & Howard, 2013). Specifically, Goldblum et al. (2012) found that 30% of transgender women had attempted suicide in the past, and almost 40% within that group had made three or more attempts in their lifetime. Additionally, transgender individuals are more likely to smoke than cisgender persons (i.e., those whose gender identity matches their sex assigned at birth) (Grant et al., 2011; Conron, Scott, Stowell, & Landers, 2011), and among older transgender adults, Fredriksen-Goldsen et al. (2013) reported poorer physical health (e.g., limited physical activity, higher obesity) than cisgender older adults.

There is extensive evidence in the literature on the experiences of violence and/or traumatic events among transgender women. Among a sample of transgender individuals in New York, almost 60% had experienced some form of violence or harassment, with economic discrimination based on gender identity being the strongest predictor of experiencing violence (Lombardi, Wilchins, Priesing, & Malouf, 2001). When examining experiences of violence and health outcomes, Nemoto, Bodeker, and Iwamoto (2011) found that, among transgender women who engage in sex work, more than 30% reported being verbally harassed daily and more than one third reported being raped or sexually assaulted before the age of 18. These experiences of

violence and/or transphobia were associated with negative mental health outcomes, particularly depression. However, institutional discrimination is also an issue faced by transwomen. Documented experiences of transgender individuals with the health system have included discrimination by providers (Richmond, Burnes, and Carroll, 2012) and harassment in medical settings (Grant et al., 2011). Additionally, transpersons have limited access to care, specifically because health insurance companies will not cover the medical costs associated with transitioning (e.g., hormone therapy, sex reassignment surgery) or other health issues related to their transition (Roller, Sedlak, & Draucker, 2015).

Transgender women are also disproportionately affected by HIV. Several studies using self-report data indicate the high prevalence of HIV among transgender women, ranging from 22% (Baral et al., 2013) to 35% (Clements-Noelle, Marx, Guzman, & Katz, 2001). Furthermore, African American transgender women suffer disproportionately, with HIV rates ranging from 47% (Clements-Noelle et al., 2001) to 56% (Herbst et al., 2008). Among African American transgender women who are HIV positive, gender stigma, peer distrust, and institutional distrust were all reported barriers to care. Gender stigma emerged from narratives of women who said they were afraid to go out in public due to the stigma surrounding their gender identity, which often led to violence towards them. Additionally, transwomen of color may have unique experiences due to the intersectionality of their racial, gender, and sexual identities. Jefferson, Neilands, and Sevelius (2013) found that while experiences of racism and transphobia independently related to increased odds of developing depression, the combination of both led to even greater odds of depression. These findings indicate the multiple health disparities among transwomen of color, which may be attributed to the multitude of experiences with racism and transphobia.

The complexity around gender identity and not conforming to traditional gender norms may lead to traumatic experiences for trans-identified persons. In particular, transwomen of color may have unique experiences around both race and gender, which involves an added layer of discrimination. Sevelius (2013) proposed a framework on gender affirmation (i.e., when a person's gender identity is supported through social interactions), and suggests the stigma around being a transwoman of color was the primary driver for engaging in high-risk behavior. However, if transwomen's gender identity is recognized and supported by their social networks and everyday interactions, they are less likely to report engaging in risky health behaviors such as unprotected sex, unsafe hormone/silicone injections, and substance use. This framework is based on several theories, but is heavily influenced by intersectionality theory. Individuals have multiple identities that intersect to become who they are and, ultimately, how they behave. These behaviors are often influenced by life experiences, and if these experiences are not positive (e.g., racism, sexism, transphobia), it can often have detrimental effects. Using the gender affirmation framework proposed by Sevelius (2013), the present study aims to address the following research questions:

1. Do those who have experienced gender discrimination report higher rates of HIV?
2. To what degree does exposure to gender discrimination affect quality of life?
3. To what degree does exposure to gender discrimination affect the following health behaviors?
    a. Substance use: tobacco, alcohol, injection drugs, non-injection drugs
    b. Sexual behaviors: number of partners, condom use
4. Do those who report a higher degree of gender affirmation report less experiences of gender discrimination?

5. To what degree does gender affirmation affect HIV status and/or quality of life?
6. Does gender affirmation moderate the relationship between gender discrimination and HIV and/or Quality of Life?

Chapter II: Review of Literature

Gender Identity

Transgender, transsexual, gender nonconforming, gender queer, two-spirit, are some examples of identities that trans people use to describe their gender identity. Trans persons are individuals whose gender identity differs from the sex they were assigned at birth. People often refer to transmen as individuals who were assigned "female" sex at birth, but now identify as a man, and transwomen as individuals who were assigned "male" sex at birth, but now identify as a woman. However, these categories may not reflect actual experiences of trans people. For instance, Dargie, Blair, Pukall, and Coyle (2014) asked trans-identified participants to describe their levels of conforming to the gender they identify with and found varied responses. This indicates that gender is more fluid than generally thought, and the current binary definition of gender is not applicable. Even so, societal norms dictate that people in our culture conform to being men or women, not both/neither. Although, some trans people prefer to conform to this either/or notion in order to fit in (Roen, 2002).

This sort of confusion and complexity around gender identity can lead to traumatic experiences for trans-identified persons. In particular, transwomen of color may have unique experiences due to the intersection of race, gender, and sexuality.

Experiences of Transgender Women of Color

Graham (2014) conducted a qualitative study to explore young black transgender women's (i.e., between ages 18-24) experiences with various social institutions. They found that in a school setting, young, Black transwomen were often sent home for not conforming to heterosexist norms, experienced bullying and violence from their peers and had difficulty with teachers accepting their gender identity. Ultimately, these experiences often led to dropping out

of school and/or developing a tough facade of violence and "no tolerance attitudes for disrespect" in order to counter the violence and discrimination they experienced. Those who had been through the criminal justice system, usually due to being involved in sex work, had narratives of physical and sexual attacks, others not understanding or being supportive of their gender identity which led to forcing them to conform, and isolating them from others for their own "protection." These experiences ultimately led to a lack of trust of police and not wanting to call them for help. In the institution of church, there were mixed experiences. Some found the church as a place of refuge where it provided them strength and the ability to carry on. Others found it as another institution where they were not accepted for their true self, leading to a fear of revealing their true gender identities.

Additionally, transwomen of color may also experience multiple forms of discrimination based on race and gender identity. Jefferson, Neilands, and Sevelius (2013) found that while experiences of racism and transphobia independently related to increased odds of developing depression, the combination of the two was synergistic and led to even greater odds of depression. This indicates that there are multiple health disparities among transwomen of color, and more research is needed in this area. While transwomen have to deal with transphobia and all of the discrimination associated with their gender identity, transwomen of color have unique experiences where they have to deal with both racism and transphobia.

Health Outcomes

HIV

Transgender women, particularly African American transwomen, are at heightened risk of developing various negative health outcomes. There is a high prevalence of HIV in the transgender population, ranging from approximately 22% (Baral et al., 2013) to 35% (Clements-

Noelle, Marx, Guzman, & Katz, 2001) affected, compared to less than 1% of all adults (Baral et al., 2013). The numbers are even bleaker for African American transgender women: ranging from 47% (Clements-Noelle et al., 2001) to 56% (Herbst et al., 2008). The data are inconsistent as there are currently no national studies to reflect an accurate representation of HIV status in the transgender population.

Mental Health

Additionally, transgender women are at higher risk of developing mental health issues, principally substance use, attempted suicide, depression, anxiety, and low self-esteem (Clements-Noelle et al., 2001; Benotsch et al., 2013; Bockting, Miner, Swinburne, Hamilton, & Coleman, 2013; Budge, Adelson, & Howard, 2013; Goldblum et al., 2012). Goldblum et al. (2012) found that 30% of transgender women had attempted suicide in the past, and almost 40% within that group had made three or more attempts in their lifetime. Between 44% and 51% of transgender women have a history of depression (Bockting et al., 2013; Budge et al., 2013), with a positive correlation between depression and discrimination among African American transwomen (Jefferson et al., 2013). Discrimination is also positively correlated with smoking and failed attempts to quit smoking among transwomen (Gamarel et al., 2015), which is important as previous findings reveal that transwomen may be more likely to smoke than cisgender individuals (Conron, Scott, Stowell, & Landers, 2011).

Physical Health

There is a gap in the current literature on physical health outcomes and transgender women. Most of the published research is focused on mental and sexual health outcomes, and risky sexual and drug behaviors. However, one study focused on older transgender adults found that transgender adults reported poorer physical health (e.g., limited physical activity, higher

obesity) than cisgender older adults (Fredriksen-Goldsen et al., 2013). There are currently no studies assessing general health indicators, such as heart disease, diabetes, and poor nutrition.

Risk Factors

Violence and Discrimination

There is extensive evidence in the literature on the experiences of violence and/or traumatic events among transgender women. Among a sample of transgender individuals in New York, almost 60% had experienced some form of violence or harassment, and verbal harassment due to being transgender was most reported. Additionally, economic discrimination based on gender identity was the strongest predictor of experiencing violence (Lombardi, Wilchins, Priesing, & Malouf, 2001). In a sample of transgender persons in Los Angeles, Stotzer (2008) found that physical violence was most reported, and that the motivation was often a combination of race, gender, and sexuality. When examining experiences of violence and health outcomes, Nemoto, Bodeker, and Iwamoto (2011) found that, among transgender women who engage in sex work, more than 30% reported being verbally harassed daily and more than one third reported being raped or sexually assaulted before the age of 18. Additionally, these experiences of violence and/or transphobia led to negative mental health outcomes, particularly depression. Exposure to violence and traumatic experiences can also affect HIV transmission risk and antiretroviral failure. A recent study found that among HIV positive transgender and cisgender women, those who reported a recent trauma (i.e., abused, threatened, or the victim of violence in the past 30 days) were four times more likely to experience antiretroviral failure and also an increased risk of transmitting HIV to a negative or unknown status partner (Machtinger et al., 2012).

Sex Work

Transgender women who engage in sex work tend to have high rates of HIV (Clements-Noelle et al., 2001). When examining sex work as a risk factor, it is helpful to understand why transwomen may engage in sex work in order to mitigate the risk. Sausa, Keatley, and Operario (2007) interviewed transwomen of color in San Francisco to examine their experiences in sex work. They found that the women often got started in sex work as a way to emerge themselves in the trans community and find a network of social support. Oftentimes, the community they found with other transwomen involved in sex work became their source of family. Additionally, the women had a hard time finding well-paying jobs and an even harder time of keeping them due to discrimination in the workplace. Sex work was a means to pay the bills, but also to have a sense of autonomy. An interesting finding was that the women who were less able to "pass" (i.e., looking like the gender they identify with) turned to sex work as a form of employment. Those who felt they were better able to pass said they could find legal employment. Additionally, race/ethnicity was a major factor for these women turning to sex work. The women noted that the multiple oppressions they experienced based on race and gender identity made employment very difficult, and oftentimes it was hard to distinguish whether they were being discriminated against based on race or gender. Nuttbrock et al. (2009) also found that transgender women used sex work as a means of affirming their gender identity.

Homelessness

It is estimated that approximately 20% of transgender individuals experience homelessness or unstable housing (Minter & Daley, 2003), with Black transwomen being 3 times more likely to experience homelessness because of discrimination related to their gender identity compared to White transwomen (Grant et al., 2011). A recent study found that transwomen who

were homeless or "marginally housed" (i.e., staying with friends/family, living in hotel/motel, or in a recovery or sober livinghouse) were more likely to engage in substance use, but the "marginally housed" were most likely to use illegal hormone injections. Additionally, those who were homeless were more likely to be HIV-positive and report engaging in unprotected sex. (Fletcher, Kisler, & Reback, 2014). Homelessness also puts transwomen at risk of violence. One national report found that among those with a history of homelessness, 66% had experienced physical assault (Grant et al., 2011).

Protective Factors

Social Support

Social support definitions vary depending on the theoretical perspective and health outcome of interest. However, generally, social support is the idea that trusted family members and friends are encouraging healthy behaviors in order to achieve healthy outcomes, and it is typically viewed as a protective factor for a variety of health outcomes (Lakey & Cohen, 2000). The amount of social support transgender individuals receive has been related to health behaviors and health outcomes. For example, a lack of social support can negatively impact mental health, specifically depression (Nemoto, Bodeker, & Iwamoto, 2011) whereas the presence of social support can be protective against engaging in risky sexual behaviors. Golub et al. (2010) found that those with higher levels of social support were less likely to engage in high-risk sexual behaviors. Social support is highly needed for trans people. When comparing transgender adults to their cisgender siblings, Factor and Rothblum (2008) found transgender individuals reported less support from their family than their siblings. Additionally, peer support (i.e., support from other transgender or gender nonconforming individuals) could be another

potential protective factor. For instance, Bockting et al. (2013) found that peer support moderated the relationship between social stigma and mental health. Those who reported having more peer support reported less mental health issues.

Resiliency

Resiliency is the "ability to recover from or adjust easily to misfortune or change" (Merriam-Webster, 2015). This ability to recover could potentially be a protective factor regarding health status. If one is able to recover or adjust to a traumatic event or circumstance, then resiliency could potentially serve as a buffer to engaging in risky health behaviors. Singh and McKleroy (2011) conducted interviews with transwomen of color who had experienced a traumatic event in order to examine the resiliency strategies they used to recover from the event. They found that having pride in their multiple identities (i.e., race and gender), while also being able to recognize gender and racial oppression, helped them overcome difficult barriers or circumstances. Those whose family of origin accepted their trans identity reported that the acceptance was a great influence in their ability to deal with difficult circumstances. In another study, black transwomen sex workers reported higher levels of social support than their white counterparts. However, the reports of social support often referred to their friends, both transgender and cisgender, and not their families of origin (Nemoto et al., 2011). Another major resiliency strategy was the ability to afford and have access to "transgender-positive" health care. Finally, being part of a transgender community of color was another important contributor to their resiliency. Feeling part of something and connecting with other trans individuals gave them a sense of encouragement and support that they could get through the hard times, and also a

sense of purpose as they became more involved in transgender activism to create a better world for the trans community.

Gender Affirmation

Gender affirmation is the idea that a person's gender identity is supported through social interactions. Although this is a fairly new concept, it could be a promising protective factor against negative health outcomes for the transgender population, particularly transwomen of color. Sevelius (2013) proposed a framework on gender affirmation, and suggested the stigma of being a transwoman of color was the primary driver for engaging in high-risk behavior. However, if transwomen's gender identity is recognized and supported by their social networks and everyday interactions, they are less likely to report engaging in risky health behaviors such as unprotected sex, unsafe hormone/silicone injections, and substance use. Gender affirmation can come from a variety of social interactions, including medical professionals and intimate partners (Levitt & Ippolito, 2014), as well as access to hormone therapy (White Hughto & Reisner, 2016).

Chapter III: Methods and Procedures

African-American/Black transwomen were recruited using venue-based and snowball sampling methods with the assistance of transgender advocates and local community organizations serving transgender women. In order to participate, participants had to meet the following requirements: 1) 18 to 65 years of age, 2) assigned male sex at birth and self-identify as female, transgender, or other, and 3) reporting anal sex with a cisgender or non-transgender male within the past 6 months. After providing written informed consent, trained graduate research assistants conducted face-to-face interviews with participants and recorded their responses on a tablet using Qualtrics software. Data were collected from October 2014 to June 2015. The Institutional Review Board of Georgia State University approved the study.

Measures

Demographics

Participants reported their age, self-identified race/ethnicity, education status, employment status, annual income, current relationship status, point of transition, and their sexual/gender identity.

Gender Discrimination

Gender discrimination was measured using seven items from Clements-Nolle, Marx, and Katz (2006) study on attempted suicide among transgender persons. Questions ranged from ever being fired from a job because of gender identity/presentation to ever being physically abused or beaten by a romantic or sexual partner because of gender identity/presentation, with response options of yes or no. This construct also included

three items assessing if participants had ever been in danger of physical violence or been hit or beaten due to not passing or disclosing their gender status, with response options of yes or no.

Gender Affirmation

Gender affirmation was measured using 18 items from the Transgender Role Scale (Docter & Fleming, 2001). Examples of questions included ability to pass in public places, men buying them drinks, having a driver's license with feminine picture. Response options were measured on a 5-point Likert scale, with 1 being "Strongly Disagree" to 5 "Strongly Agree." The 18 items from the Transgender Role Scale were added to create one variable to measure the construct of gender affirmation, with possible scores ranging from 18 to 90 (Chronbach's alpha = .923)

Quality of Life

Five items from the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) were used to measure participants' quality of life. Responses were measured on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree," and examples of questions included "In most ways I feel my life is close to ideal" and "I am satisfied with my life." Quality of Life (QOL) was measured by adding the five items from the Satisfaction of Life Scale, with possible scores ranging from 5 to 35 (Chronbach's alpha= .856).

HIV Status

HIV status was measured with a single item question "What is your current status?" with options of "Negative" and "Positive." The question was presented after asking participants if they knew their current HIV status.

Health Behaviors

Substance use was measured with five separate items assessing tobacco use ("Do you smoke tobacco products on a daily basis?," Yes/No), binge drinking ("In the past 30 days, how many times did you have 5 or more alcoholic drinks in one sitting?," open ended), injection drug use ("Have you ever in your life shot up or injected any drugs other than those prescribed for you?," Yes/No), and non-injection drug use ("In the past 12 months, have you used any non-injection drugs, other than those prescribed for you?," Yes/No).

Sexual behavior was measured using two items: one open-ended item assessing the number of male partners they had anal sex with in the past 6 months, and one item assessing how often they used a condom while being the receptive partner during anal intercourse within the past 6 months, measured using a scale from 1 ("Never") to 4 ("All of the time").

Analytic Strategy

All data were analyzed using IBM SPSS Statistics 22. To determine the sociodemographic variables to control for in an adjusted model, bivariate correlations were used to examine which sociodemographic variables correlated with the outcome variables (e.g., HIV

status, QOL) at $p < .20$. Logistic and linear regression analyses were run to determine the relationship between predictor and outcome variables. Finally, to determine if any interaction effects of gender discrimination and gender affirmation exist, the PROCESS macro for SPSS was used to run moderation analyses for the outcomes of HIV status and Quality of Life, testing gender affirmation as the moderating variable.

Chapter IV: Results

Participant characteristics

Seventy-seven African-American/Black male-to-female transgender women participated in the study. The mean age was 35 years (SD=10.65, range 18-65 years) and mean education level was high school. 40% of the sample was currently unemployed, and 61% reported an annual income of less than $10,000. Table 1 presents additional participant demographics.

Research question 1: Gender discrimination and HIV status

67% of the sample reported being HIV-positive and 87% have experienced some form of gender discrimination in their lifetime. See Table 2 for additional descriptive statistics for gender discrimination items. A logistic regression was performed to determine the effect of gender discrimination on HIV status, while controlling for age, employment status, and point of transition. One gender discrimination item significantly predicted HIV status. Participants who had ever been verbally abused or harassed by a family member or friend because of their gender identity or presentation were significantly less likely to have HIV than transwomen who were not verbally abused or harassed by a family member or friend (AOR=.103, 95% CI [.017, .640], $p <$ .05).

Research question 2: Gender discrimination and Quality of Life

The mean QOL score for the sample was 24 (SD = 7.78, Range = 6-35) A simple linear regression was calculated to predict Quality of Life based on Gender Discrimination, while controlling for education, current relationship status, and point in transition. Three gender

discrimination items significantly predicted levels of Quality of Life. Quality of Life was negatively associated with verbal abuse or harassment by a stranger in public due to gender identity or presentation (β = -.327, 95% CI [-9.63, -1.41], $p < .01$) and ever being in situations where not disclosing has put them in physical danger or harm (β = -.305, 95% CI [-8.95, -.862], $p < .05$). Additionally, Quality of Life was positively associated with having problems getting health or medical services due to gender identity or presentation (β = .268, 95% CI [.139, 11.9], $p < .05$).

Research question 3a: Gender discrimination and substance use

48% of the sample reported using tobacco products on a daily basis, 12% have used non-prescribed injection drugs in their lifetime, 29% have used non-prescribed non-injection drugs in the preceding 12 months, and 26% reported binge drinking at least once in the past 30 days. Three binary logistic regressions were calculated to assess the effect of gender discrimination on tobacco, injection drug, and non-injection drug use, respectively. Education, employment status, point in transition, sexual/gender identity, and current relationship status were controlled for when examining tobacco use. Age, education, employment, and current relationship status were controlled for when examining injection drug use, and age and current relationship status were controlled for when examining non-injection drug use. A simple linear regression was calculated to predict binge drinking based on gender discrimination, while controlling for employment status. Transwomen who reported ever being verbally abused or harassed by a stranger in public due to gender identity or presentation were more likely to engage in non-injection drug use than those who had not experienced verbal harassment by strangers in public (AOR = 6.50, 95% CI [1.15, 36.6] $p < .05$).

Research question 3b: Gender discrimination and sexual behavior

Participants reported an average of four male partners with whom they have had anal intercourse with in the past 6 months (SD = 8.12, Range = 0-50). A simple linear regression was calculated to predict number of male partners based on gender discrimination, while controlling for age, income, education, and current relationship status. Number of partners was positively associated with experiencing problems getting a job because of gender identity or presentation (β = .303, 95% CI [.247, 9.74], $p < .05$).

On average, participants reported using a condom most of the time as the receptive partner during anal intercourse in the past 6 months. A simple linear regression was calculated to assess the effect of gender discrimination on condom use as the receptive partner during anal intercourse with a male partner, while controlling for current relationship status. Condom use was positively associated with ever experiencing problems getting a job because of gender identity or presentation (β = .312, 95% CI [.005, 1.35], $p < .05$).

Research question 4: Gender affirmation and gender discrimination

The mean level of gender affirmation reported was 74 (SD = 12.9, Range = 30-90). Ten binary logistic regressions were calculated to assess the effect of gender affirmation on gender discrimination. Each gender discrimination item was assessed as a separate dependent variable, while controlling for the covariates for each item. There was a positive association between gender affirmation and ever being in situations where not disclosing put them in danger or physical harm (AOR = 1.06, 95% CI [1.006, 1.108], $p < .05$).

Research question 5a: Gender affirmation and HIV status

A logistic regression was performed to ascertain the effect of gender affirmation on HIV status, while controlling for age, employment status, and point in transition. Gender affirmation did not predict HIV status.

Research question 5b: Gender affirmation and Quality of Life

A simple linear regression was calculated to predict Quality of Life based on gender affirmation, while controlling for current relationship status, point in transition, and education level, and no significant results were found.

Research question 6: Interactions of gender affirmation and gender discrimination

Moderation Analysis: HIV

There was a significant interaction effect of gender affirmation and ever been verbally abused or harassed by a stranger in public because of gender identity or presentation (b = .235, 95% CI [.006, .464], $p < .05$), indicating the relationship between verbal harassment by strangers and HIV status is moderated by gender affirmation. A simple slopes analysis revealed no significant relationships when gender affirmation is low, high, or at the mean level (see Figure 1).

Moderation Analysis: Quality of Life

There was a significant interaction effect of gender affirmation and ever being hit or beaten after disclosing (b = .695, 95% CI [.394, .997], $p < .001$). This indicates the relationship between physical violence after disclosing gender status and quality of life is moderated by gender affirmation (see Figure 2).

A simple slopes analysis revealed when gender affirmation is low, there is a significant negative relationship between physical violence after disclosing and quality of life (b = -7.05, 95% CI [-12.3, -1.77], $p < .01$). However, when gender affirmation is high, there is a significant positive relationship between physical violence after disclosing and quality of life (b = 11.0, 95% CI [4.33, 17.7], $p < .01$).

Chapter V: Discussion and Conclusion

The goal of the present study was to determine how gender discrimination relates to HIV status, affects quality of life, and influences engaging in risky sexual behaviors or substance use. Additionally, the link between gender discrimination and gender affirmation was assessed and whether gender affirmation moderated the relationships between gender discrimination and HIV or quality of life.

Consistent with previous findings (Lombardi et al., 2001), verbal abuse or harassment was the most reported form of gender discrimination (see Table 2). Verbal abuse or harassment by strangers in public seems to influence health outcomes and behaviors of African American transwomen the most. Those who reported experiencing this type of discrimination reported lower quality of life and higher rates of non-injection drug use. Additionally, there was a significant interaction effect of HIV status, gender affirmation, and verbal abuse or harassment by strangers in public, indicating the relationship between HIV status and verbal abuse/harassment by strangers is moderated by gender affirmation.

Experiencing problems when getting a job due to gender discrimination was the only item that predicted sexual behavior. Those who reported experiencing discrimination when getting a job reported more male partners, but also higher rates of condom use. As indicated previously, sex work is one mechanism transgender women use to survive (Sausa et al., 2007). The increased number of partners could potentially be due to turning to sex work when they are not able to get a different job due to gender discrimination (Sausa et al., 2007).

Gender discrimination seemed to have the largest effect on quality of life, compared to other outcomes examined. Those who reported experiencing verbal abuse or harassment by a stranger in public or being in situations where non-disclosure put them in danger or physical harm, reported lower levels of quality of life. Surprisingly, however, those who experienced discrimination when accessing health or medical services reported higher levels of quality of life. Additionally, it was discovered that gender affirmation moderates the relationship between physical violence after disclosing and quality of life. Among those who had been hit or beaten after disclosing, those with higher levels of gender affirmation had significantly higher levels of quality of life than those who reported low levels of gender affirmation. This indicates that gender affirmation could be a protective factor for quality of life when experiencing physical violence after disclosing.

Another surprising result is that transwomen who reported ever being verbally abused or harassed by a family member or friend were less likely to report having HIV than those who had not. However, HIV-positive transwomen may have access to more resources and support than HIV-negative transwomen, which could explain this result. Because there are limited services available for HIV-negative transwomen, this could make them more susceptible to discrimination. However, it is not clear why discrimination by family and friends would be inversely associated with HIV status, so future research could examine transwomen's relationships with family and friends, and how HIV status influences that relationship.

Although gender affirmation did not predict HIV status or quality of life, there was a positive association between gender affirmation and ever being in situations where not disclosing put them in danger or physical harm. This could be attributed to traditional gender roles in our

society. For instance, if a transwoman does not disclose her gender status before a sexual encounter, her sexual partner may get angry, which would put her at risk of being harmed.

Limitations

The biggest limitation of the study is it is cross-sectional, meaning that we cannot determine temporality. For instance, we do not know when the women became HIV positive and when they experienced discrimination, and may have contracted HIV before experiencing discrimination. Additionally, the data were collected via self-report, which could potentially introduce self-report bias. The sample was a convenience sample and relatively small, so our findings may not generalizable to other transgender populations. Finally, gender affirmation was measured using the summed items from the Transgender Role Scale (Docter & Fleming, 2001). This scale is not considered a "gender affirmation" scale, but currently there is no standardized scale to measure gender affirmation. If gender affirmation had been measured differently, the results could potentially be different.

Future Research

A standardized measure for gender affirmation needs to be developed in order to understand if in fact it could be a protective measure. Based on the results of the present study, gender affirmation may not be as much of a protective factor as previously suggested (Sevelius, 2013). Once a reliable and valid measure for gender affirmation is developed and tested in transgender populations across the nation, it can be determined what effect, if any, it has on health outcomes and behaviors for transgender women.

Additionally, more resources should be made available to transgender women, regardless of HIV status. There are more resources available to transgender women who are HIV-positive than for those who are HIV-negative. HIV-positive transwomen have access to a social network, a source of support, housing programs, job opportunities, and healthcare that HIV-negative transwomen do not have access to. Very few (if any) resources are available for HIV-negative transwomen. It should be easier for transwomen to attain gender affirmation, which could be achieved through legal processes (e.g., name change, driver's license sex change) and through increased transgender-positive healthcare (e.g., trans-friendly doctors, safe hormone injections).

Finally, the ultimate goal should be to eliminate transphobia in our society. Transphobia could be decreased through changing traditional gender norms and increase awareness and knowledge about transgender women. We are currently moving in a better direction as more gender-neutral clothing, toys, and home décor are being introduced (Leinbach-Reyhle, 2016), parents begin choosing gender-neutral names (Robertson, 2015), and younger generations begin rejecting the current gender binary structure (Laughlin, 2016).

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Table 1. *Participant characteristics*

Variable	**N (%)**
Highest education level	
Grades 1-8	1 (1)
Grades 9-11	12 (16)
Grade 12/GED	29 (38)
Some College, Associate's Degree, or Technical Degree	26 (34)
Bachelor's Degree	7 (9)
Any Post-Graduate Studies	2 (3)
Employment status	
Employed full-time	16 (21)
Employed part-time	9 (12)
A full-time student	5 (7)
Disabled for work	13 (17)
Unemployed	31 (40)
Other	3 (4)
Annual income	
Less than $10,000	47 (61)
$10,000-$14,999	6 (8)
$15,000-$19,999	7 (9)
$20,000-$29,999	4 (5)
$30,000-$39,999	4 (5)
$40,000-$49,999	4 (5)
$50,000 or more	2 (3)
Don't know	3 (4)
Current relationship status	
Not in a relationship	44 (57)
In a relationship	33 (43)
Stage of transition process	
I have not started the transition process yet	8 (11)
I recently started the transition process	13 (17)
I have somewhat transitioned to being female	19 (25)
I have mostly transitioned to being female	22 (29)
I have completed the transition process	14 (18)
Sexual/gender identity to others	
Heterosexual woman	53 (69)
Lesbian woman	2 (3)
Heterosexual man	0 (0)
Gay man	7 (9)
Bisexual woman	3 (4)
Bisexual man	1 (1)
Other – included answers such as transgender, transwoman, no label	11 (14)
HIV status	
HIV-negative	24 (33)
HIV-positive	48 (67)

Table 2. *Descriptive Statistics for Gender Discrimination Items*

Gender Discrimination Item	**N (%)**	**Mean**	**SD**
Have you ever been fired from a job because of your gender identity or presentation?	13 (17)	1.17	.379
Have you ever experienced problems getting a job because of your gender identity or presentation?	34 (45)	1.45	.501
Have you ever been denied or evicted from housing because of your gender identity or presentation?	11 (14)	1.14	.352
Have you ever experienced problems getting health or medical services because of your gender identity or presentation?	10 (13)	1.13	.338
Have you ever been verbally abused or harassed by a stranger in public because of your gender identity or presentation?	52 (68)	1.68	.471
Have you ever been verbally abused or harassed by a family member or friend because of your gender identity or presentation?	41 (53)	1.53	.502
Have you ever been physically abused or beaten by a romantic or sexual partner because of your gender identity or presentation?	11 (14)	1.14	.352
Have you ever been in situations where not passing has put you in danger or physical harm?	31 (41)	1.41	.495
Have you ever been in situations where not disclosing has put you in danger or physical harm?	27 (36)	1.36	.483
Have you ever been hit or beaten after you disclosed?	7 (9)	1.09	.291

Note: Response options were coded 1 = “No”, 2 = “Yes”

Table 3. *Summary of Logistic Regression Analysis for Variables Predicting HIV Status*

Predictor	**B**	**S.E.**	**AOR**	**95% CI**
Have you ever been fired from a job because of your gender identity or presentation?	.958	1.17	2.61	.264 - 25.7
Have you ever experienced problems getting a job because of your gender identity or presentation?	-1.48	.897	.228	.039 - 1.32
Have you ever been denied or evicted from housing because of your gender identity or presentation?	.049	1.086	1.05	.125 - 8.83
Have you ever experienced problems getting health or medical services because of your gender identity or presentation?	.579	1.504	1.79	.094 - 34.0
Have you ever been verbally abused or harassed by a stranger in public because of your gender identity or presentation?	.926	.921	2.52	.415 - 15.3
Have you ever been verbally abused or harassed by a family member or friend because of your gender identity or presentation?	**-2.273**	**.932**	**.103***	**.017 - .640**
Have you ever been physically abused or beaten by a romantic or sexual partner because of your gender identity or presentation?	-.120	1.05	.887	.114 - 6.88
Have you ever been in situations where not passing has put you in danger or physical harm?	1.534	.897	4.638	.799 - 26.9
Have you ever been in situations where not disclosing has put you in danger or physical harm?	.171	.820	1.186	.238 - 5.92
Have you ever been hit or beaten after you disclosed?	-1.642	1.431	.194	.012 - 3.20
Age	.097	.045	1.10	1.01 – 1.20
Employment status	.304	.145	1.36	1.02 – 1.80
Point in transition	-1.00	.405	.367	.166 - .812

* $p < .05$

Table 4. *Summary of Linear Regression Analysis for Variables Predicting Quality of Life*

Predictor	**B**	**β**	**S.E.**	**95% CI**
Have you ever been fired from a job because of your gender identity or presentation?	2.33	.115	2.66	-2.99 – 7.65
Have you ever experienced problems getting a job because of your gender identity or presentation?	-.332	-.021	2.13	-4.59 – 3.93
Have you ever been denied or evicted from housing because of your gender identity or presentation?	1.80	.083	2.80	-3.80 – 7.40
Have you ever experienced problems getting health or medical services because of your gender identity or presentation?	**6.04**	**.268***	**2.95**	**.139 – 11.9**
Have you ever been verbally abused or harassed by a stranger in public because of your gender identity or presentation?	**-5.52**	**-.327****	**2.05**	**-9.63 – -1.41**
Have you ever been verbally abused or harassed by a family member or friend because of your gender identity or presentation?	-.507	-.033	1.98	-4.47 – 3.46
Have you ever been physically abused or beaten by a romantic or sexual partner because of your gender identity or presentation?	-1.36	-.060	2.78	-6.91 – 4.18
Have you ever been in situations where not passing has put you in danger or physical harm?	-1.69	-.108	1.92	-5.53 – 2.15
Have you ever been in situations where not disclosing has put you in danger or physical harm?	**-4.91**	**-.305***	**2.02**	**-8.95 – -.862**
Have you ever been hit or beaten after you disclosed?	5.74	.218	3.61	-1.49 – 13.0
Education level	.609	.077	.941	-1.27 – 2.49
Current relationship status	2.01	.127	1.76	-1.51 – 5.53
Point in transition	1.35	.217	.733	-.117 – 2.82

*$p < .05$, **$p < .01$

Table 5. *Summary of Linear Regression Analysis for Variables Predicting Sexual Behavior*

	B (β)		**S.E.**		**95% CI**	
	# Partners	Condom use	# Partners	Condom use	# Partners	Condom use
Predictor						
Have you ever been fired from a job because of your gender identity or presentation?	.425 (.020)	-.042 (-.015)	3.01	.405	-5.60 - 6.45	-.853 - .769
Have you ever experienced problems getting a job because of your gender identity or presentation?	**4.99 (.303)***	**.677 (.312)***	**2.37**	**.336**	**.247 – 9.74**	**.005 – 1.35**
Have you ever been denied or evicted from housing because of your gender identity or presentation?	-3.18 (-.140)	-.471 (-.159)	3.13	.434	-9.46 – 3.09	-1.34 - .399
Have you ever experienced problems getting health or medical services because of your gender identity or presentation?	-5.70 (-.241)	-.006 (-.002)	3.24	.458	-12.2 - .778	-.923 - .912
Have you ever been verbally abused or harassed by a stranger in public because of your gender identity or presentation?	1.95 (.109)	-.189 (-.079)	2.25	.329	-2.56 – 6.47	-.848 - .469
Have you ever been verbally abused or harassed by a family member or friend because of your gender identity or presentation?	3.96 (.241)	-.152 (-.069)	2.34	.322	-.733 – 8.66	-.797 - .494
Have you ever been physically abused or beaten by a romantic or sexual partner because of your gender identity or presentation?	-4.88 (-.207)	.316 (.103)	3.11	.435	-11.1 – 1.35	-.556 – 1.19
Have you ever been in situations where not passing has put you in danger or physical harm?	-2.35 (-.142)	-.175 (-.080)	2.24	.316	-6.83 – 2.13	-.807 - .457
Have you ever been in situations where not disclosing has put you in danger or physical harm?	2.68 (.158)	.050 (.022)	2.18	.311	-1.69 – 7.04	-.573 - .673
Have you ever been hit or beaten after you disclosed?	-2.04 (-.074)	.913 (.254)	3.84	.551	-9.73 – 5.65	-.190 – 2.02
Age	.012 (.015)	N/A	.101	N/A	-.191 - .214	N/A
Current relationship status	-3.59 (-.216)	-.482 (-.215)	1.94	.277	-7.48 - .288	-1.04 - .073
Education level	.355 (.041)	N/A	1.10	N/A	-1.84 – 2.55	N/A
Annual income	1.24 (.264)	N/A	.572	N/A	.095 – 2.39	N/A

*$p < .05$

Figure 1. Interaction of verbal harassment by strangers, gender affirmation, and HIV status

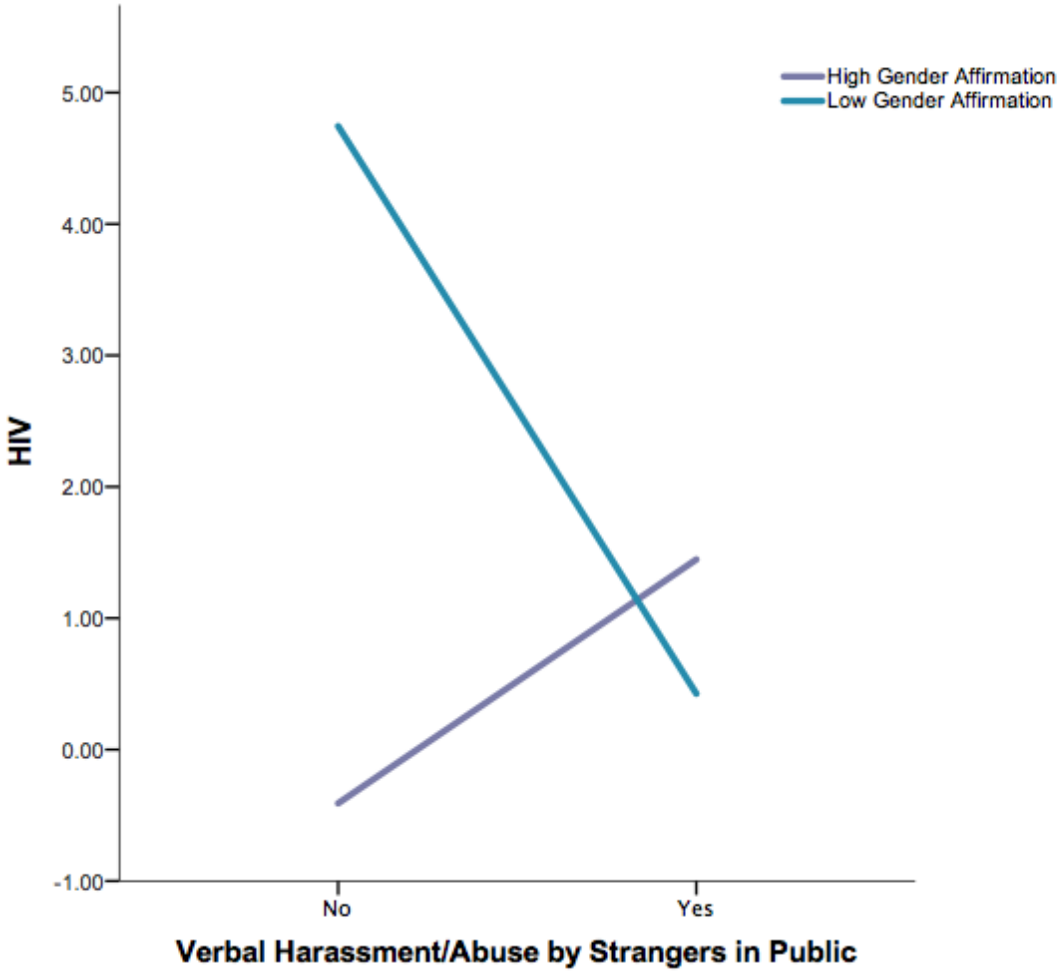

Figure 2. Interaction of ever being hit or beaten after disclosing, gender affirmation, and quality of life