Assessing Transgender Attitudes Toward Health Care: Can These Attitudes Help Predict Health Outcomes?

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ASSESSING TRANSGENDER ATTITUDES TOWARD HEALTH CARE: CAN THESE ATTITUDES HELP PREDICT HEALTH OUTCOMES?

By Sara M. Shane

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DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the thesis presented to us by Sara Shane on the 22nd day of May, 2014, in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is acceptable in both scholarship and literary quality.

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Abstract

Research has identified the fact that race/ethnicity, sexual orientation, gender identity, socioeconomic status, education level, geographic location, help seeking behaviors, and experiences of discrimination are associated with health outcomes. In addition, attitudes towards providers can also help determine health outcomes. The transgender community experiences barriers to health care services and therefore their overall health is affected. There is not a sufficient amount of literature that assesses, using standardized measure, the attitudes of the transgender community and their health. The present study will assess the attitudes of the transgender community toward health care (mental and medical health) and, using standardized measures, determine if these attitudes are related to their self-reported health outcomes using.
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Chapter 1

Statement of the Problem

The transgender community encounters discrimination in medical and mental health care (Sanchez, Sanchez, & Danoff, 2010; Clements-Noelle, Marx, Guzman, & Katz, 2001). This discrimination may have an impact on their attitudes toward these providers and may affect their help-seeking behaviors and health outcomes (Dean et al., 2000). To date, research on the attitudes of the transgender community toward health care providers is limited.

Attitudes toward health care providers have been examined for other minority groups (Sorkin, Ngo-Metzger, & De Alba, 2010). Research has demonstrated that racial and ethnic minorities (i.e., African-Americans, Asians, and Hispanics) have a negative view of the health care system due to discrimination from providers (Sorkin, Ngo-Metzger, & De Alba, 2010). The negative attitudes endorsed by these groups have negatively impacted their help-seeking behaviors and health outcomes (Benkert, Peters, Clark, & Keves-Foster, 2006; Blanchard & Lurie, 2004; Kandula, Hasnain-Wynia, Thompson, Brown, & Baker, 2009).

In terms of help-seeking behaviors, negative perceptions of health care have been associated with nonadherence to medical treatment, which includes not taking medications and not following the medical advice of a provider (Blanchard & Lurie, 2004; Van Houtven, Voils, Oddone, Weinfurt, Friedman, Schulman, & Bosworth, 2005). Research has also indicated that perceived discrimination in the health care system has a negative impact on the health outcomes of racial minorities (i.e., African-Americans, Hispanics, and Asians) (Williams, Neighbors, & Jackson, 2003; Krieger, 2000; Williams
Perceived discrimination was associated with hypertension, heart disease, psychological distress, depression, and anxiety in those minority groups (Williams, Neighbors, & Jackson, 2003).

The transgender community may have experiences similar to those of the minority groups within the health care system. Research demonstrates that the transgender community experiences the same health risks as the rest of society (National Coalition for LGBT Health, 2012). However, this community is more vulnerable to increased medical and psychological health risks due to experiencing discrimination and stigma (National Coalition for LGBT Health, 2012). These medical and psychological health risks include depression, anxiety, substance abuse, suicide, trauma, self-harm, HIV/AIDS, thromboembolism, liver disease, and heart disease (Meyer, 2003; Clementes-Noolle, Marx, Guzman, & Katz, 2001; Kenagy, 2002; Mizock & Lewis, 2008; Xavier et al., 2004; Gainer, 2000; Sperber, Landers, & Lawrence, 2005; van Kesteren et al., 1997; Ganley & Taylor, 1995; Kirk, 1996). Negative attitudes of health care providers resulting in discriminatory practices such as pathologizing gender identity, violating confidentiality, or a lack of respect for gender identity has likely shaped the attitudes of transgender patients toward health care providers in a negative fashion (Dean et al., 2000; Bockting, Robinson, Benner, & Scheltema, 2004). It is important to understand the attitudes of this community in order to promote access to appropriate health care services so that these risks can be addressed before they impact their mental and physical health (Gay and Lesbian Medical Association and LGBT Health Experts, 2010; Williams, Neighbors, & Jackson, 2003; Krieger, 2000).
Statement of Purpose

There is a similarity between the transgender community and existing minority groups due to the experiences of oppression and discrimination in health care services (Singh, Hays, & Watson, 2011). It is imperative to understand the attitudes of the transgender community in order to gain insight into their perceptions of health care providers since attitudes toward health care affect help-seeking behaviors and health outcomes (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Sorkin, Ngo-Metzger, & De Alba, 2010).

Research has explored the attitudes of both medical and psychological health care providers toward the transgender patient, but no research has examined the attitudes of the transgender community toward health care providers (Sanchez, Sanchez, & Danoff, 2010; Schatz & O’Hanlan, 1994; Bockting, Robinson, & Rosser, 1998). Therefore, it is imperative to assess the attitudes of the transgender community in order to improve help-seeking behaviors and health outcomes.
Chapter 2: Review of the Literature

This study aims to identify the attitudes of the transgender population towards the health care system, including both medical and psychological health care. The transgender population has not been studied as extensively as other minority groups in the domains both of physical and of psychological health even though this population experiences increased health risks, compared with the general population (National Coalition for LGBT Health, 2012). It is imperative to identify the attitudes of the transgender population to understand further how these are related to their help-seeking behaviors and health outcomes.

Health Disparities

Health disparities are defined as the differences in the burden of disease, injury, violence, or opportunities to achieve improved health for socially disadvantaged populations (Centers for Disease Control and Prevention, 2009). These populations can be characterized by race/ethnicity, education, income, geographic location, gender identity, or sexual orientation (Centers for Disease Control and Prevention, 2009). Health disparities are influenced by present inequalities in social, political, economic, and environmental resources (Centers for Disease Control and Prevention, 2009).

Research on Health Outcomes

Health disparities guide research on health outcomes as a way to understand the reasons why these disparities exist for certain groups of individuals. Health outcome research has identified that individuals who experience these disparities are members of socially disadvantaged groups based on race/ethnicity, socioeconomic status, education level, and geographic location (e.g., rural area or city area). Race and ethnicity was
found to be associated with mental and physical health outcomes. Specifically, individuals who identify as a racial or ethnic minority (i.e., African Americans or Asian Americans) were likely to have poor health outcomes due to perceived discrimination and increased psychological distress (Williams, Neighbors, & Jackson, 2003). In addition, socioeconomic status has been associated with health outcomes; it seems that individuals of lower socioeconomic status have poor health outcomes. Individuals of higher socioeconomic status have more available resources, access to appropriate health care services, and a supportive social network compared with those of lower socioeconomic status (Mirowsky et al., 2000; Robert & House, 2000). A study examining whether or not socioeconomic status was a determinant of colorectal cancer outcomes found that individuals who were of lower socioeconomic status had worse health related outcomes, compared with their more affluent counterparts (Hines, 2014). Related to socioeconomic status is education, which has been identified as being beneficial to health. In other words, individuals who have higher education levels may have cognitive advantages that result in healthier lifestyles (Mirosky & Ross, 2003; Cutler & Lleras-Muney, 2010).

Geographic location is another factor associated with health outcomes; individuals who reside in rural areas are at increased risk for psychosocial stressors that have a negative impact on health (Harvey, 2009). These psychosocial stressors include social isolation or limited access to health care services (Harvey, 2009).

**Sexual and Gender Minorities**

The health disparities for the gay, lesbian, bisexual, and transgender (GLBT) population are associated with their experience of societal stigma and discrimination (U.S. Department of Health and Human Services, 2012). Societal stigma refers to a
negative value assigned by society to a particular group that is associated with inferior status (Dean et al., 2000). Discrimination refers to the explicit behaviors including harassment or violence that express stigma (Dean et al., 2000). The GLBT commonly fear stigmatization in the health care system if they disclose their sexual or gender identities (Willging, Salvador, & Kano, 2006). GLBT individuals reported that they did not disclose their sexual orientation or gender identity to health care providers as a way to prevent the experience of stigma or discrimination (Willging, Salvador, & Kano, 2006).

Historically, health care providers have exhibited negative attitudes towards gay and lesbian patients, and gay and lesbian individuals have reported that the health care they receive is substandard (Mathews, Booth, Turner, & Kessler, 1986; Schatz & O’Hanlan, 1994; Dean et al., 2000). These negative attitudes held by providers have negatively impacted the treatment given to gay and lesbian individuals (Schatz & O’Hanlan, 1994). Health care providers reported discomfort when providing care to gay and lesbian patients, and therefore have exhibited discriminatory practices towards these patients (Mathews, Booth, Turner & Kessler, 1986; Schatz & O’Hanlan, 1994). Providers viewed gay and lesbian patients as unworthy of treatment or believed that they deserved the sickness, thus impacting the quality of care given to these patients (Schatz, & O’Hanlan, 1994). The experience of discrimination from health care providers produces negative health outcomes for the GLBT individual because these individuals may refuse to seek necessary health care in order to prevent or manage medical or psychological health issues.

The perception of discrimination from society and health care providers does not only impact the help seeking behaviors of the GLBT community, but it also has a direct,
negative impact on their physical and mental health (Pascoe & Smart-Richman, 2009).
Mental health outcomes of perceived discrimination include psychological distress,
depression, and anxiety (Williams, Neighbors, & Jackson, 2003; Paradies, 2006).
Physical health outcomes of perceived discrimination include high blood pressure,
increased heart rate, and increased cortisol levels (Clark, Anderson, Clark, & Williams,
1999). These negative physiological responses can have negative effects on physical
health over time; these responses include hypertension, heart disease, and a poor immune
system (Barnett, Marshall, & Sayer, 1997; Manuck, Cohen, & Kaplan, 1994; Marsland et
al., 1995; Mays, Cochran, & Barnes, 2007; Gee, Spencer, Chen, & Takuechi, 2007).

Perceived discrimination from a health care provider can also impact the
relationship between the patient and the provider. The patient-provider relationship is
based on communication, trust, and respect, all of which affect the quality of treatment
provided (Drabble, Keatley, & Marcelle, 2003; Roter & Hall, 1989). The patient-provider
relationship is especially important for the GLBT population due to their experience of
stigma and discrimination. The experience of discrimination diminishes trust in a
provider and negatively affects the relationship with that provider (Adegbembo, Tomar,
& Logan, 2006). Therefore these patients who hold negative attitudes toward providers
are less likely to seek help when needed, are less satisfied with quality of services, and
less likely to adhere to treatment (Bogart, Bird, Walt, Delahanty, & Figler, 2004). The
relationship with the provider is important for all patients, especially for the GLBT
population, in order to enhance help seeking behaviors and health outcomes.

The transgender population and other sexual minorities experience discrimination
and stigma; however, the transgender population has other health risks specific to their
gender identity. These risks will be identified in order to highlight the importance for the transgender community to seek health care services.

**Transgender Population**

It is important to understand the types of individuals that are a part of the transgender community in order to understand their associated health risks. The term transgender is an umbrella term to describe all individuals who have a nonconforming gender identity, expression, or behavior that is not aligned with their birth sex (American Psychological Association (APA), 2012). Gender identity is the way in which one internally perceives his or her gender; gender expression refers to the way in which one displays his or her gender identity to the world (APA, 2012). Because the term transgender encompasses many forms of gender expression and identities, it is helpful to understand the different individuals that fall along the transgender continuum.

Individuals that identify as transgender may fall into various categories including transsexual, cross-dressing, drag queen or king, genderqueer, androgynous, multi-gendered, gender nonconforming, third gender, or two spirited (APA, 2012). Transsexual refers to an individual whose birth sex differs from his or her perceived gender identity and who seek hormonal or surgical interventions to match his or her physical sex with the perceived gender (APA, 2012). Specifically, transsexuals can be further classified as female to male (FTM/trans man) or male to female (MTF/trans woman) depending on the transition process (APA, 2012).

Although the transsexual identity is the category primarily associated with the term transgender, there are other individuals whose gender expression can be classified under this term. Individuals who cross-dress are those who prefer to wear clothing that is
traditionally worn by members of another gender (APA, 2012). Drag queen or drag king are individuals who entertain others by dressing in clothing of the opposite gender; (i.e., a drag queen is a male who dresses as a female and a drag king is a female who dresses as a male) (APA, 2012). Genderqueer refers to individuals who identify their gender identities as falling somewhere along a continuum between male and female or differing completely from those terms (APA, 2012). Androgynous, multi-gendered, gender nonconforming, third gender, or two spirited describe individuals who prefer to describe their gender identities as those that are blended or can change over time. These individuals view the gender terms male and female as restrictive and create their own definitions of how their gender identities are defined (APA, 2012). Therefore, individuals in the transgender population may choose any one of these terms to describe their gender identities, depending on their preferences.

Physical Health Risks for the Transgender Population

Despite the varying definitions, any individual who identifies his or her gender identity as characterized by the transgender term may encounter physical health risks. These physical health risks may be associated with hormonal or surgical treatments (Mail & Safford, 2003). These associated medical health risks include thromboembolism, liver disease, heart disease, breast carcinoma, endometrial hyperplasia, endometrial carcinoma, endometrial cancer, prostate cancer, and sexual dysfunction (Ganley & Taylor, 1995; Kirk, 1996; Speber, Landers, & Lawrence, 2005; van Kesteren, Asscheman, & Megens, 1997).

Hormone Treatments. Hormone therapy is used as part of transition process to obtain either feminine or masculine features for the transgender person. Feminizing
hormone treatments involve doses of estrogen that are associated with increased risk of blood clots, high blood pressure, or elevated blood sugar (Allison, 2012). Masculinizing hormone treatments involve doses of anti-androgens or testosterone that are associated with increased risk for heart disease, endometrial carcinoma, endometrial hyperplasia, or liver damage (Mail & Safford, 2003; Allison, 2012).

These increased risks may be related to the fact that some transgender individuals use hormone treatments without the supervision of a physician (Allison, 2012; Lombardi, 2001; Kosenko, 2011). The transgender individual may find an alternative means to alter his or her gender identity, including obtaining hormones from unauthorized sources (i.e., street vendors, the Internet, or friends), using hormones without the supervision of a physician, or seeking services from unqualified health care providers (Dean et al., 2000; Sanchez, Sanchez, & Danoff, 2009). These alternative means of hormone use place a transgender individual at an increased risk of administering high doses of hormones, taking a combination of multiple hormones, or using needles in an unsafe manner such as sharing needles or improper administration of hormones (Allison, 2012; Moore, Wisniewski, & Dobs, 2003, Sanchez, Sanchez, & Danoff, 2009). Unsupervised hormone use also places a transgender individual at risk for HIV infection (Center for Disease Control (CDC), 2011; Allison, 2012). HIV seroconversion that results from unsupervised administration of hormones or needle sharing during illicit drug use is common in a subset of transgender women (Sanchez, Sanchez, & Danoff, 2009). The prevalence rate of unsupervised hormone use among the MTF transgender population ranged from 29% to 63% (Xavier, 2000; Clements-Noelle et al., 2001; McGowan, 1999).
Commercial Sex Work. The risk for HIV infection or other sexually transmitted diseases is also increased if a transgender individual engages in risky sexual behaviors; (i.e., having multiple partners or unprotected sexual intercourse) (CDC, 2011; Allison, 2012). Commercial sex work is a type of employment in which these risky sexual behaviors are prevalent. Some individuals in the transgender population resort to commercial sex work, therefore engaging in risky sexual behaviors that can be dangerous to their health.

Commercial sex work has been identified as a means of survival for transgender women (Clements-Noelle, Wilkinson, Kitano, & Marx, 2001; Sausa, Keatley, & Operario, 2007). Many transgender women engage in this risky work as a result of experiencing employment discrimination and the inability to obtain any other employment positions. Transgender women may also engage in this work as a way to afford hormone or surgical treatments because these treatments are expensive (Clements-Noelle, Wilkinson, Kitano, & Marx, 2001; Sausa, Keatley, & Operario, 2007).

This type of work places the transgender woman at risk for infection and transmission of HIV and sexually transmitted diseases (Herbst et al., 2008; Dean et al., 2000). The HIV prevalence rates for MTF transgender population was reported to range from 11% to 78% (Garofalo, Deleon, Osmer, Doll, & Harper, 2006). Research has revealed an incidence rate of 28% for HIV in a sample of MTF transsexuals (Herbst et al., 2008). This prevalence rate is higher than the 0.3% prevalence rate of HIV in the general population (Kenagy, 2005). This high prevalence rate for HIV, among the many physical health risks associated with the transgender community highlight the necessity
of health care services to diminish these health risks and to promote positive health outcomes.

*Psychological Health Risks for the Transgender Population*

The transgender population is more vulnerable to increased psychological health risks due to societal transphobia (i.e., discrimination against a person who identifies as transgender) (Currah, Juang, & Minter, 2006, Mail & Safford, 2003). These psychological health risks include depression, suicide, trauma, and substance abuse (Mail & Safford, 2003; Gainor, 2000; Clement-Noelle, Marx, Guzman, & Katz, 2001; Kenagy, 2002; Mizock & Lewis, 2008; Xavier et al., 2004). It is important for the transgender community to obtain treatment for the prevention and management of present psychological health risks in order to promote the best health outcomes.

*Depression.* Depression is a mood disorder characterized by depressed mood, disturbance in appetite, disrupted sleep patterns, low self-worth, decreased energy, and suicidal ideation (Cassano & Fava, 2002). A combination of biological, psychological, and environmental factors can cause an individual to experience depression, which may also be triggered by life events that create distress including trauma experiences (National Institute of Mental Health, 2012). Discrimination and stigma towards sexual minority groups (i.e., gay or lesbian communities) are associated with a hostile and stressful social environment that may contribute to the development of psychological symptoms of depression and anxiety (Clements-Noelle, Marx, & Katz, 2006). The transgender population also encounters discrimination and stigma referred to as transphobia (Currah, Juang, & Minter, 2006, Mail & Safford, 2003; Nemoto et al., 2004). Transphobia has
been identified as a strong contributor to the development of depression (Nemoto et al., 2004). 

A relationship between transphobia and depression was identified for a sample of transgender women (Nemoto, Bodeker, & Iwamoto, 2011). Individuals with depression and a history of suicidal ideation reported frequent exposure to transphobia during their lifetimes (Nemoto et al., 2011). The influence of discrimination on suicide attempts was evaluated for a sample of transgender individuals in San Francisco (Clements-Noelle, Marx, & Katz, 2006). Suicide attempts, with a prevalence rate of 32%, for this sample were associated with discrimination as well as with other factors including depression (Clements-Noelle, Marx, & Katz, 2006). Therefore, exposure to transphobia has a negative impact on the psychological well-being of a transgender individual because depression and suicidality were associated with transphobia. 

Trauma and Hate Crimes. Individuals from a particular racial, religious, sexual, or other marginalized group may encounter acts of violence referred to as hate crimes, a severe form of discrimination (Mason, 2007). Generally, hate crimes are defined as criminal conduct that is motivated by prejudice or hatred towards a particular group (Jacobs & Potter, 1998). Perpetrators of hate crimes are motivated by prejudice towards an individual based solely on his or her affiliation with the targeted group or presumed membership of the group (Mason, 2007). Individuals in the transgender community are at increased risk for violent hate crimes due to their gender expression or gender identity (National Coalition of AntiViolence Programs, 2011). The frequency of hate crimes towards the transgender community has been compared with the similar level of violence against Muslims after the 9/11 terrorist attacks in the United States (Stotzer, 2007).
The violence associated with these hate crimes plagues the transgender population. Research has indicated that between 16 to 60% of transgender individuals were victims of physical violence and 13 to 66% were victims of sexual assault (The Substance Abuse and Mental Health Services Administration for Lesbian, Gay, Bisexual, and Transgender, 2012). Over half of a sample of transgender individuals (64%) reported that they had experienced some form of violence (i.e., sexual assault, sexual harassment, and intimidation because of their gender identity) (Dew, 2007). The findings of a Los Angeles study indicated that the majority of the crimes towards transgender individuals involved violence (i.e., physical assault) (Stotzer, 2008). Half of a sample of 401 transgender individuals experienced harassment or violence in their lifetimes and a quarter of that sample reported experiencing a violent attack in their lifetimes (Lombardi, Wilchins, Priesing, & Malouf, 2001). This information provides a way to highlight the fact that the transgender community is plagued by violence because of their gender identity and this violence makes the community more vulnerable to the development of psychological distress or disorders (Berg, 2006).

The psychological consequences of hate crimes were examined for other sexual minority groups (i.e., gay, lesbian, and bisexual). Gay, lesbian, and bisexual victims of hate crimes experienced more severe negative psychological distress than victims of non-biased crimes (Herek, Cogan, & Gillis, 2002; Herek, Gillis, Cogan, 1999; Herek, Gillis, Cogan, & Glunt, 1997). Gay men who have survived hate crimes reported that the psychological distress related to the hate crime had lasting effects for months and years after the event (Willis, 2008). The transgender community also encounters similar negative consequences as a result of hate crimes; these include depression, anxiety, post-
traumatic stress disorder, anger, and fear (Couch et al., 2007; Mizok & Lewis, 2008; Willis, 2008).

*Substance Abuse.* Substance abuse is also identified as a concern for the transgender population (Clements-Noelle et al., 2001; Nemoto et al., 2004). Alcohol, tobacco, marijuana, powder cocaine, and prescription drugs (i.e., opiates and benzodiazepines) were the most common substances used by a sample of transgender individuals (Bradford et al., 2007). In the sample, FTM individuals exhibited more substance use than the MTF individuals (Bradford et al., 2007). Tobacco use among the transgender population was found at high rates, ranging from 45 to 74 percent (U.S. Department of Health and Human Services, 2012). Research studies have identified the use of substances as a coping mechanism for the transgender individual to negate the experiences of transphobia (Neomoto et al., 2004; Mizock & Lewis, 2008; Xavier, 2000).

**Barriers to Health Care for Transgender Population**

Despite serious psychological and physical health risks, the transgender community experiences many barriers to accessing health care services (Dean et al., 2000). These barriers include financial difficulties, lack of health insurance, minimal health care services available for transgender-specific needs, and discrimination by health care providers (Dean et al., 2000; Frazer, 2009). These barriers negatively impact the help seeking behaviors of the transgender community (Frazer, 2009).

**Financial Issues**

The transgender community experiences economic marginalization as a result of unemployment (Dean et al., 2000). Unemployment rates for the transgender population were close to double that of the national average (National Center for Transgender
Equality & the National Gay and Lesbian Task Force, 2009). The reasons for unemployment included loss of employment or difficulty obtaining employment due to gender expression or identity (National Center for Transgender Equality & the National Gay and Lesbian Task Force, 2009). The transgender population has higher rates of poverty when compared with the general population (National Center for Transgender Equality & the National Gay and Lesbian Task Force, 2009). The transgender community members also encounter difficulty in obtaining housing security due to their gender identities and many become homeless as a result (National Center for Transgender Equality & the National Gay and Lesbian Task Force, 2009). Health care services can be expensive making it difficult for those who are unemployed, impoverished, or homeless to access or utilize health care (Dean et al., 2000).

**Health Insurance**

The transgender community may not have health insurance due to unemployment, homelessness, or poverty (Dean et al., 2000; National Center for Transgender Equality & the National Gay and Lesbian Task Force, 2009). Adults without insurance are less likely to receive preventative health care services, which may result in poor health outcomes, decreased quality of life, or premature death (Institute of Medicine of the National Academies, 2009). Individuals without health insurance are more likely to be diagnosed with late stage cancers that could have been prevented by early screenings or perhaps they may die from heart attack or stroke (Institute of Medicine of the National Academies, 2009). Congestive heart failure, hypertension, and diabetes are associated health risks for individuals without insurance (Institute of Medicine of the National Academies, 2009). An individual without health insurance is also less likely to seek a
health care provider for care or obtain medication management to manage these health risks (Institute of Medicine of the National Academies, 2009). Therefore, the uninsured transgender community is also at risk for negative health outcomes due to their disadvantaged health care status.

Health insurance also plays a part in the ability to access to transgender specific health care services including hormone therapy, surgical procedures, and mental health services for the resolution of gender identity issues. These services are not necessarily covered by insurance policies and have high costs associated with them (Transgender Law Center, 2004). Insurance companies consider these services cosmetic or experimental and exclude coverage for these services (Transgender Law Center, 2004). The high costs associated with these services and exclusion from insurance coverage make it difficult for a transgender individual to transition to his or her desired gender identity.

Individuals that are transitioning to their desired gender identities may have difficulty obtaining health care coverage for services specific to men or women (Transgender Law Center, 2004). Female to male (FTM) transgender individuals may still require gynecological care including PAP smears, cervical or uterine cancer screenings, and breast examinations (Transgender Law Center, 2004). Male to female (MTF) transgender individuals may still require prostate cancer screenings (Transgender Law Center, 2004). Health insurance companies may deny coverage for these services if they find that the individual is transgender because his or her documented gender does not correspond with the gender-specific service required (Transgender Law Center, 2004).
In sum, health insurance issues create many obstacles for the transgender community when they access health care services. It especially impacts their ability to obtain transgender specific health care services required for their specific health care needs.

*Transgender Specific Health Care*

Another barrier for the transgender population is the lack of specific transgender health care services. Many health care providers do not have the knowledge and training to address the specific needs of the transgender patient. Therefore, it is the responsibility of the transgender individual to provide education and information to providers who are less competent in caring for the health of transgenders (Dean et al., 2000). The lack of well-trained providers was described as an issue when accessing health care services for a sample of transgender individuals (Frazer, 2009). Medical schools do not require a great amount of training on transgender health, making it difficult for the transgender community to find providers who are able to offer services for their unique health needs (Obedin-Maliver, 2011).

*Discrimination by Health Care Providers*

The psychological and medical health risks encountered by the transgender community highlight the importance of seeking preventative health care from providers. Preventative health care may not be accessed for fear that a health care provider may engage in unfair practices or refuse to care for the transgender individual based on his or her gender identity (Drabble, Keatley, & Marcelle, 2003; Feinberg, 2001). These unfair practices and improper care will be further discussed to increase awareness of the present challenges the transgender community encounters in the health care system.
The transgender population may not engage in preventative care for current physical health concerns (Centers for Disease Control (CDC), 2011; Allison, 2012). Preventative care can include seeing a physician for routine health care services including immunizations, physical examinations, screenings for cancer, assessments of health, or management of present medical conditions such as high blood pressure, diabetes, or asthma (Centers for Disease Control (CDC), 2011; Allison, 2012; Mail & Safford, 2003). Transgender individuals may face discomfort when seeking medical health care services for present health concerns (Drabble, Keatley, & Marcelle, 2003). This discomfort may be related to the possibility that a health care provider may be insensitive to or discriminatory toward the transgender individual (Drabble, Keatley, & Marcelle, 2003; Feinberg, 2001). Discriminatory conduct by a health care provider may include incorrect use of pronoun, inappropriate questions regarding genitalia or transgender status, or denial of services on the basis of transgender identity (Transgender Law Center, 2004). Discomfort with a health care provider may also be due to mistreatment from a health care provider in the past (Drabble, Keatley, & Marcelle, 2003; Feinberg, 2001). This concern may prevent the transgender person from seeking preventative care from health care providers (Clements, Wilkinson, Kitano, & Marx, 1999).

Leslie Feinberg, a transgender author and activist, provided an explanation for discomfort with health care among transgender individuals. Feinberg provides anecdotal evidence and stories of other transgender individuals who encountered discrimination by providers (Feinberg, 2001). Feinberg (2001) described a negative experience with front office staff during a physician visit. The office staff violated confidentiality by making comments regarding medical files so that everyone in the waiting area was able to hear
and Feinberg became more fearful of the appointment (Feinberg, 2001). The author described another negative experience in a hospital emergency room where a physician refused treatment after discovery of the author’s transgender identity (Feinberg, 2001).

Many transgender individuals encountered similar negative experiences in health care. After a motor vehicle accident, a transgender woman died after her treatment was suspended when paramedics discovered she had male genitalia (Feinberg, 2001). A transgender man was refused treatment for ovarian cancer due to his gender identity (Feinberg, 2001). This information provides specific incidents of discrimination from health care providers and the negative consequences of improper medical treatment towards the transgender community.

Psychological health care providers may also engage in practices of discrimination towards the transgender community. For example, assumptions made on behalf of the psychological health provider regarding the reason for present psychological distress may be inaccurate (Bess & Stabb, 2009). This inaccuracy may stem from a provider assuming that an individual who identifies as transgender is seeking services only because of his or her gender identity (Bess & Stabb, 2009). The transgender population may seek psychological health services for presenting symptoms of mental distress such as depression, anxiety, posttraumatic stress disorder, or substance abuse which may or may not be related to their gender identities (Mail & Safford, 2003; Gainor, 2000; Clement-Noelle, Marx, Guzman, & Katz, 2001; Kenagy, 2002; Mizock & Lewis, 2008; Xavier et al., 2004). Transgender individuals seek mental health therapists when their social, occupational, or academic functioning is impacted by the experiences of personal distress, defined as depression or substance abuse, rather than specifically
related to their gender expressions or identities (Denny & Green, 1996). The transgender individual will seek professional help for his or her personal distress and seek a professional that he or she can trust to be of help. This trust is determined by the therapeutic alliance between the mental health professional and the transgender individual. The therapeutic alliance has been described as the foundation for successful therapy because it has been associated with positive therapy outcomes in the literature (Horvath & Greenberg, 1989; Gelso & Carter 1994). The collaboration between a provider and client regarding treatment enhances the therapeutic relationship by creating a sense of safety and trust that is important to promote participation in the therapy process (Horvath & Luborsky, 1993). Therefore, an inaccurate assumption made by a provider working with a transgender individual would have a negative impact on the therapeutic relationship, treatment outcome, and future psychological help seeking.

Psychological health services are required for the preparation for hormone or surgical treatments for gender transition (Bess & Stabb, 2009). The World Professional Association of Transgender Health requires a person who is seeking these treatments to obtain letters of recommendation from mental health professionals who have evaluated and determined if the individual is ready for those treatments (World Professional Association of Transgender Health, 2012). It is for this reason that the transgender community views mental health providers as gatekeepers in this process because providers are the ones who have the power to approve or deny a person’s request for the treatment (Bess & Stabb, 2009). The gatekeeper role contributes to a lack of trust for psychological health care providers and is another reason the transgender population may
not seek psychological health care services (Cole, Denny, Eyler, & Samons, 2000; Gainor, 2000; Israel & Tarver, 1997).

In summary, the health disparities for the transgender community are largely the result of barriers to accessing health care services. These barriers do not identify all of the reasons why the transgender community does not seek health care services to improve their physical and mental health. Identifying the attitudes held by the transgender population toward these health care services (both medical and mental health care) may further explain the reasons for not seeking services.

**Attitudes and Behaviors**

One of the ways in which to understand the reasons why the transgender community may not seek preventative care for their present health risks may be explained by the attitudes they have towards health care. Social psychologists have studied attitudes in an attempt to further explain a person’s thoughts, feelings, or behaviors (Bordons & Horowitz, 2008). Attitudes can be defined as a mental state of readiness that influences a person’s behaviors, based on previous learning experiences (Bordons & Horowitz, 2008). The basic structure of an attitude includes cognitive, affective, and behavioral components that are connected to one another (Allport, 1935; Bordons & Horowitz, 2008). If a person’s thoughts, feelings, and behaviors are related to form an attitude, then a change on one component of that attitude can influence a change in another component (Bordons & Horowitz, 2008). For example, a change in a person’s thought can influence a change in a behavior. Therefore it is important to have an understanding about a person’s attitudes to explore avenues for behavioral changes.

*Theory of Planned Behavior*
One way to understand how attitudes are related to behaviors is to understand The Theory of Planned Behavior (TPB). TPB explains that the immediate predictor of behavior involves intentions that are composed of an attitude, subjective norm, and perceived behavioral control (Fishbein & Ajzen, 1975; Conner & Sparks, 1996). Attitudes are an individual’s evaluation of a behavior; subjective norm refers to the person’s beliefs. Perceived behavioral control is the perception of control of engaging in a behavior. TPB has been applied to health behaviors including seat belt use and helmet use among teenagers. Attitudes regarding seat belt use were highly associated with intentions to use a seat belt (Budd, North, & Spencer, 1984). All components of the TPB were significantly related to the intention of a teenager to use a helmet (Lajunen & Rasanen, 2004). Therefore, TPB can provide information regarding the relationship between attitudes and behaviors.

**Health Belief Model**

The Health Belief Model (HBM; Rosenstock, 1966) is another conceptual framework utilized to understand health beliefs and their influence on health behaviors. The HBM comprises the following components: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and health motivation (Sheeran & Abraham, 1996; Guvenc, Akyuz, & Acikel, 2010).

Perceived susceptibility refers to an individual’s perception of experiencing a condition that would affect his or her health. Perceived severity refers to the individual’s perception of the intensity of the condition and how it will affect his or her functioning (Sheeran & Abraham, 1996; Guvenc, Akyuz, & Acikel, 2010). Perceived benefits are the available options either for taking preventative measures to address the condition or for
ATTITUDES PREDICT HEALTH OUTCOMES

simply managing the condition. Perceived barriers are obstacles that make it difficult to obtain preventative treatment for conditions (Sheeran & Abraham, 1996; Guvenc, Akyuz, & Acikel, 2010). Cues to action refer to triggers to engaging in health behaviors to address the health condition. These could include social influences or promotion campaigns for healthy behaviors (Simsekoglu & Lajunen, 2008). Last, health motivation refers to a readiness to engage in health behaviors to maintain or improve health (Guvenc, Akyuz, & Acikel, 2010).

The components of the HBM have been applied to health behaviors including seat belt use, cancer screenings, and helmet use (Begg & Langley, 2001; Fockler & Cooper, 1990; Guvenc, Akyuz, & Acikel, 2010; Lajunen & Rasanen, 2004). Negative attitudes and beliefs about seat belt use negatively influenced actual seat belt use (Begg & Langley, 2000; Fockler & Cooper, 1990). The health beliefs of women affected their decisions to obtain cancer screenings (Guvenc, Akyuz, & Acikel, 2010). Helmet use among teenagers was predicted by perceived barriers and cues to action in the HBM (Lajunen & Rasanen, 2004). Therefore, the components of the HBM are predictive of health behaviors and can help to understand that attitudes play an important role in help seeking behaviors.

Attitudes and Health Behaviors

Both the TPB and HBM highlight the relationship between health attitudes and behaviors. An understanding about a patient’s attitude about health care can provide information about health behaviors that include satisfaction with health care services, treatment adherence, relationship with health care providers, and help seeking behaviors (Betancourt, Green, Carrillo, and Ananeh-Firempong, 2003; Bogart, Bird, Walt,
Delahanty, & Figler, 2004). Positive attitudes held by patients influenced their decision to seek help from mental health care professionals (Mackenzie, Gekoski, & Knox, 2006). Negative attitudes towards mental health care accounted for the underutilization of mental health services and poor treatment outcomes (Obasi & Leong, 2009). These poor treatment outcomes are the result of premature termination from services because of negative attitudes held by patients (Obasi & Leong, 2009). The attitudes held by patients with HIV were assessed as a way to promote health behavior change for this population because nonadherence to medications and failures to attend appointments were common issues (Bodenlos et al., 2004). The results of the attitude assessment determined that negative attitudes towards health care providers contributed to the common issues and had a negative impact on their health behaviors (Bodenlos et al., 2004).

This research on the influence of attitudes on health behaviors is important to learn how patients view health care as a way to promote improved help seeking behaviors and therefore enhance health outcomes for patients. Therefore, identifying the attitudes of the transgender community towards health care can be informative in understanding their help seeking behaviors and improving their health outcomes.

**Attitudes of the Transgender Population**

There is minimal research that assesses the attitudes of the transgender population. The attitudes of the transgender population were identified in needs assessment studies that utilized focus groups or obtained information using qualitative methods (Bockting, Robinson, Benner, & Scheltema, 2004; Frazer, 2009). One needs assessment survey identified information regarding attitudes of a sample of transgender
individuals regarding barriers to health care (Frazer, 2009). The sample of transgender individuals identified the fact that they were fearful of being discriminated by a health care provider (Frazer, 2009). The sample also reported that encountering stigma in the community contributed to their difficulties in accessing health care services (Frazer, 2009). Although this study identified attitudes of the transgender population, the methods used did not include specific measures to assess for these attitudes; information was obtained from focus groups with both professionals and transgender individuals.

The attitudes of the transgender population regarding health care were assessed as part of a patient satisfaction survey for a sexual health clinic (Bockting, Robinson, Benner, & Scheltema, 2004). This survey obtained information regarding patient satisfaction with services, patient perception of problem improvement, provider competence, experience with office staff, and associated health care costs. The results of the study identified the fact that a high percentage of transgender patients at this sexual health clinic were satisfied with the services provided and had positive attitudes towards the health care services at this clinic (Bockting, Robinson, Benner, & Scheltema, 2004). While this study identified transgender attitudes towards health care, it was only specific to this sexual health clinic and not a generalized measure of their attitudes towards health care. This limited research available on the attitudes of the transgender population towards health care makes it important to assess the attitudes of the transgender population in the current study.

In summary, the current research available on attitudes of the transgender population is limited. Research has identified attitudes of the transgender population; however, the methodology of the studies did not include the use of specific attitude
measures. The current study will provide a standardized way to assess the attitudes of the transgender population towards health care, using specific measures that are reliable and valid.

The transgender population encounters tremendous barriers to accessing health care even with apparent health risks present. The transgender health disparities are related to other factors present for other minority groups that negatively impact health outcomes. These risk factors, in addition to the identification of attitudes, may help predict the health outcomes for the transgender population. The current study will aim to identify the attitudes of the transgender population and determine if they can provide information about their help seeking behaviors and health outcomes.
Chapter 3: Hypotheses

Justification for Hypotheses

In the literature regarding health outcomes, it has been determined that demographic variables such as, socioeconomic status or race/ethnicity have been associated with health outcomes (Mensah et al., 2005, Obasi & Leong, 2009; Shavers, 2007. Specifically, low socioeconomic status, unemployment, lower education level, lack of health insurance, minority status, residing in rural areas, discrimination, and poor help seeking behaviors have been linked to poor health outcomes (Bodenlos et al., 2004; Mackenzie, Gekoski, & Knox, 2006; Harvey, 2009; Mail & Safford, 2003; Mays, Cochran, & Barnes, 2007; Mensah et al., 2005; Obasi & Leong, 2009; Shavers, 2007; Winkleby, Jatulis, Frank, & Fortmann, 1992; Zuvekas & Taliaferro, 2003). In addition, research has demonstrated that negative attitudes towards health care have negative impacts on patients’ help seeking behaviors and their health outcomes (Benkert, Peters, Clark, & Keves-Foster, 2006; Blanchard & Lurie, 2004). Therefore, the addition of attitudes along with known demographic variables that predict health outcomes can help provide more predictive power to determine the health outcomes for the transgender population.

Research Question One

Is there any relationship between the attitudes of a transgender individual towards health care, both mental and medical, and their self-reported health outcomes?

Research Question Two

Do the attitudes of a transgender individual toward health care significantly add to the prediction of his or her health outcomes when other variables, known to have an
effect on health outcomes are considered (i.e., transgender identity, socioeconomic status, race/ethnicity, health insurance, education, help seeking behaviors, and experience of discrimination in health care)?

**Hypothesis One**

Negative attitudes towards mental health care in addition to other variables associated with health outcomes (i.e., transgender identity, socioeconomic status, race/ethnicity, health insurance, education, help seeking behaviors, and experience of discrimination in health care) will predict higher ratings of mental health symptoms on the self-reported health outcome measure (lower scores on the Mental Health Inventory).

**Hypothesis Two**

Negative attitudes toward medical health care, in addition to other variables associated with health outcomes (i.e., transgender identity, socioeconomic status, race/ethnicity, health insurance, education, help seeking behaviors, and experience of discrimination in health care) will predict higher ratings of physical health symptoms on the self-reported health outcome measure (lower scores on the Health Perceptions Questionnaire).
Chapter 4: Methodology

Overview

The following study aims to identify the attitudes of the transgender population towards the medical and the mental health care professionals to examine the relationship with their health outcomes. Transgender participants were recruited from online forums. Participants completed measures that assessed for their attitudes towards mental and medical health care professionals, and also questionnaires on their health outcomes. The data collected in this study were analyzed to determine if attitudes are related to health outcomes for the transgender population.

Design and Design Justification

A quantitative survey method was used to identify these attitudes, the help seeking behaviors, and the health outcomes for the transgender population. A survey method allowed information to be obtained from the population anonymously and was in electronic form.

Participants

Inclusion Criteria

Individuals who identify themselves as transgender including identification with one or more of the following groups: cross dresser, drag queen/king, transsexual (FTM or MTF), genderqueer, androgynous, two spirited, multigendered, gender nonconforming, third gender, and any other gender variant identity were eligible. Specifically, individuals chose either a trans male or trans female identity for purpose of this study.
Exclusion Criteria

Individuals who do not identify themselves under the transgender umbrella term, those under the age of eighteen, and individuals who are unable to read/write in the English language were excluded from the study.

Recruitment

Participants were recruited through online databases including internet based groups composed of transgender individuals (i.e., Yahoo groups). The participants were provided with an electronic flyer by the researcher (Refer to Appendix A for recruitment flyer) that contained the website link for the survey. Snowball sampling method occurred because transgender individuals were encouraged to spread the word about this study to obtain more participants.

Measures

Demographic questionnaire

The demographic questionnaire was administered to obtain different types of information regarding the participants. The information gathered will include age, racial/ethnic background, sexual orientation, gender identity, socioeconomic status, education level, employment status, housing status, geographical location of residence, and health insurance.

Help seeking behaviors were assessed using questions to determine whether or not a participant sought health care services from a mental or medical professional, the frequency of his or her health care visits, the type of treatment provided, and experience of discrimination in the health care setting. See Appendix B for full demographic questionnaire.
The Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH; Fisher & Turner, 1970) is a 29-item self report measure that assesses the attitudes of an individual towards seeking professional help for psychological issues. The measure examines four factors related to seeking professional help, including recognition for psychotherapeutic help, stigma tolerance, interpersonal openness, and confidence in mental health professional (Fisher & Turner, 1970). The ATSPPH uses a 4-point Likert scale (1-4) to rate each response. The ratings include Strongly Disagree, Disagree, Agree, and Strongly Agree. Higher scores indicate a positive attitude toward seeking professional help. The internal consistency for the ATSPPH is demonstrated with Cronbach’s α coefficient that ranges from .83 to .86 (Fisher & Turner, 1970). Fisher and Turner (1970) also reported test-retest reliability that ranges from .73 to .89. See Appendix C for full scale.

The Patient-Practitioner Orientation Scale (PPOS; Krupat et al., 2000) is an 18-item self report measure that assesses the attitudes of an individual towards medical doctors. The PPOS, which uses a 6-point Likert scale (range 1-6) to rate each response, included strongly agree, agree, disagree, and strongly disagree as ratings (Krupat et al., 2000). A total score is calculated and the total score ranges from patient-centered to doctor-centered with regard to the interaction between a physician and patient (Krupat et al., 2000). The higher scores reflect more patient-centered beliefs and lower scores reflect more doctor-centered beliefs (Krupat et al., 2000). The first nine-item sub-scale, Sharing,
includes items that assess whether or not a patient believes that he or she is involved in
the decision making process and desires information (Krupat et al., 2000). The second
nine-item sub-scale, Caring, includes items that assess whether or not the patient’s
expectations, feelings, and life circumstances are critical factors in the treatment process
(Krupat et al., 2000). The internal consistency and construct validity has been explored
for this scale. Research has shown that the PPOS has good reliability and validity. The
reliability is demonstrated with a Cronbach’s α coefficient that ranges from .75 to .88
(Haidet et al., 2001; Krupat, Putnam, & Yeager, 1996; Krupat et al., 2000). See Appendix
D for full scale.

*The Mental Health Inventory* (MHI; Ware, Johnson, Davies-Avery, & Brook, 1979)

The Mental Health Inventory (MHI; Ware et al., 1979) is a 38-item self-report
health outcome measure that assesses general mental health in terms of psychological
distress and psychological well-being. The MHI uses both a 6-point (range 1-6) and a 5-
point Likert scale (range 1-5) to rate items. The MHI is aggregated into six subscales
(anxiety, depression loss of behavioral/emotional control, general positive affect,
emotional ties and life satisfaction), two global scales (psychological distress and
psychological well-being), and a global Mental Health Index score. Higher scores on the
global index score suggest greater psychological well-being and decreased psychological
distress (McDowell, 2006; Ware, Johnson, Davies-Avery, & Brook, 1979). Internal
consistency coefficients ranged from 0.83 to 0.92 and validity ranged from 0.48 to 0.58.
See Appendix E for full scale
Health Perceptions Questionnaire (HPQ; Ware, 1976)

The Health Perceptions Questionnaire (Ware, 1976) is a 33 item self-report health outcome measure that records perceptions of past, present, and future physical health (Ware, 1976). In the literature, it has been used both as a health outcome measure and as a predictor of use of care (McDowell, 2006; Ware, 1976). The HPQ contains items rated on a Likert scale (1-5) that fall into six subscales including current health, prior health, health outlook, resistance to illness, health worry/concern, an sickness orientation. There are six items that are not included in the subscales, including attitudes toward going to the doctor and rejection of the sick role. Items are used in forming an overall General Health Rating Index score and higher scores reflect physical health that is good. This measure has been shown to have reliability and validity. Test reliability ranged from 0.56 to 0.67 and validity ranged from 0.30 to 0.60 (McDowell, 2006). See Appendix F for full scale.

Procedure

Participants in this study were recruited by flyers that were posted on various internet forums (i.e., Yahoo groups) specifically for the transgender population. The flyer contained information regarding the nature of the research and the researcher’s contact email address; it also included the website link to access the survey measures on an electronic survey system, Survey Monkey. Individuals interested in participating accessed the electronic survey system by the website link on the flyer or participants received the website link via another participant.

Participants accessed the electronic survey system via the website link. The survey began by providing a description of the study, an explanation that all responses would be anonymous, and the amount of time it would take to complete the survey. An
agreement of participation was obtained before the survey measures were introduced. After the participants read through the information and agreed to participate in the survey, they were guided through the various measures, one at a time, on the online survey system. Participants were given instructions before beginning each measure to insure successful completion of the survey. The instructions included information regarding how to respond to questions on the measures and the importance of answering all questions without skipping items. After the all measures were completed a thank you message was presented to the participants thanking them for their time and participation in the study. A debriefing message followed to provide information regarding the purpose of the study and how the researcher would utilize the information obtained.
Chapter 5: Results

Demographic Characteristics of Participants

The total sample consisted of 131 participants. Participants with more than five percent of data missing on any of the independent variables (i.e., demographic variables, Attitudes Toward Seeking Professional Psychological Help, and Patient-Practitioner Orientation Scale) or self-reported health outcome measures (i.e., Mental Health Inventory and Health Perceptions Questionnaire) were excluded from the analysis through the pairwise deletion method (Scholmer, Bauman, & Card, 2010). In addition, missing data that did not meet the cutoff were determined to be missing completely at random, via an inspection of the frequency distribution across each item. A mean imputation method was used to input remaining missing data points for analysis (Scholmer, Bauman, & Card, 2010). Because of the exclusion of participants via the pairwise deletion method, the total sample size decreased to 95 participants.

Table 1 depicts the sample size and the percentage of the sample for the following demographic variables: age, race/ethnicity, transgender identity, area of residence, education level, socioeconomic status, health insurance, help seeking from a health care provider, and perceived discrimination from a health care provider.
Table 1

*Frequencies of Demographic Independent Variables (N = 95)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>6</td>
<td>6.3</td>
</tr>
<tr>
<td>25-34</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td>35-44</td>
<td>14</td>
<td>14.7</td>
</tr>
<tr>
<td>45-54</td>
<td>23</td>
<td>24.2</td>
</tr>
<tr>
<td>55-64</td>
<td>33</td>
<td>34.7</td>
</tr>
<tr>
<td>65 and older</td>
<td>9</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Caucasian</td>
<td>77</td>
<td>81.1</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>6</td>
<td>6.3</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>11.6</td>
</tr>
<tr>
<td><strong>Transgender Identity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transgender female</td>
<td>72</td>
<td>75.8</td>
</tr>
<tr>
<td>Transgender male</td>
<td>23</td>
<td>24.2</td>
</tr>
<tr>
<td><strong>Area of Residence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban area</td>
<td>34</td>
<td>35.8</td>
</tr>
<tr>
<td>Suburban area</td>
<td>38</td>
<td>40.0</td>
</tr>
<tr>
<td>Rural area</td>
<td>23</td>
<td>24.2</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non College Graduate</td>
<td>40</td>
<td>42.1</td>
</tr>
<tr>
<td>College Graduate</td>
<td>55</td>
<td>57.9</td>
</tr>
<tr>
<td><strong>Socioeconomic Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$30K or less</td>
<td>49</td>
<td>51.6</td>
</tr>
<tr>
<td>More than $30K</td>
<td>46</td>
<td>48.4</td>
</tr>
<tr>
<td><strong>Health Insurance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>81</td>
<td>85%</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>14.7</td>
</tr>
<tr>
<td><strong>Help Seeking for Mental Health (MH)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>53</td>
<td>55.8</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>42.1</td>
</tr>
<tr>
<td><strong>Help Seeking for Medical Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>85</td>
<td>89.5</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Discrimination from MH Provider</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>22.1</td>
</tr>
<tr>
<td>No</td>
<td>74</td>
<td>77.9</td>
</tr>
<tr>
<td><strong>Discrimination from Medical Provider</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40</td>
<td>42.1</td>
</tr>
<tr>
<td>No</td>
<td>55</td>
<td>57.9</td>
</tr>
</tbody>
</table>
Method of Analysis

Prior to analysis, demographic variables that consisted of more than two levels were dummy coded to make them dichotomous. A series of multiple regression analyses were conducted to test each hypothesis. These analyses involved the use of self-reported health outcome variables (i.e., via scores on the Mental Health Inventory and scores on the Health Perceptions Questionnaire) as the dependent variables for each analysis; the independent (predictor) variables for both analyses consisted of transgender identity, area of residence, education level, socioeconomic status, health insurance, help seeking behaviors from a mental health provider for mental health issues, help seeking behaviors from a medical provider for medical issues, perceived discrimination from a mental health provider, perceived discrimination from a medical health provider, attitudes toward mental health providers (i.e., via scores on the Attitudes Toward Seeking Professional Psychological Help Scale), and attitudes toward medical providers (i.e., via scores on the Patient Practitioner Orientation Scale).

Upon initial examination of the predictor variables, it was noted that the assumption of multicollinearity was not violated because none of the correlations between any of the variables was above 0.80 or 0.90.

A table of the means and standard deviations for the Attitudes Towards Seeking Professional Psychological Help Scale, the Patient-Practitioner Orientation Scale, the Mental Health Inventory, and the Health Perceptions Questionnaire can be found in Table 2 and Table 3.
Table 2
Means and Standard Deviations of Independent Variables (N =95)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes Towards Seeking Professional Psychological Help Scale (ATSPPH)</td>
<td>67.98</td>
<td>5.22</td>
</tr>
<tr>
<td>Patient-Practitioner Orientation Scale (PPOS)</td>
<td>53.87</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Table 3
Means and Standard Deviations of Dependent Variables (N =95)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Inventory (MHI)</td>
<td>114.25</td>
<td>14.26</td>
</tr>
<tr>
<td>Health Perceptions Questionnaire (HPQ)</td>
<td>74.04</td>
<td>8.85</td>
</tr>
</tbody>
</table>

Hypothesis One: Correlations

The intercorrelations among all variables in the analysis to test hypothesis 1 can be found in Table 4.

Table 4
Intercorrelations Among Predictor Variables and the Mental Health Inventory (N =95)

<table>
<thead>
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<th>Variable</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Inventory</td>
<td>-.02</td>
<td>.35*</td>
<td>-.07</td>
<td>-.30*</td>
<td>.02</td>
<td>-.35*</td>
<td>-.03</td>
<td>.03</td>
</tr>
</tbody>
</table>

Independent Variables

1. Transgender Identity    --   -.21* | .13 | -.06 | -.03 | -.15 | -.08 | -.01 |
2. Area of Residence       --   -.12 | -.06 | .11  | .00  | .04  | -.08 |
3. Education Level         --   .34  | -.07 | .03  | -.11 | -.33 |
4. Socioeconomic Status    --   -.29* | .24  | .01  | -.17 |
5. Health Insurance        --   .06  | .06  | .16  |
7. Discrimination MH       --   .11  |
8. Attitudes (ATSPPH)      --   |

*p < .05
Correlational analyses revealed significant correlations, although weak, between the Mental Health Inventory and three of the independent variables (i.e., area of residence, socioeconomic status, and help seeking for mental health). Unexpectedly, participants residing in rural areas scored higher on the Mental Health Inventory (on which higher scores reflect greater psychological well-being), compared with those who reside in non-rural areas, \( t(93) = -3.51, p < .01 \). Also unexpectedly, it was determined that participants who reported a yearly salary of $30K or less scored higher on the Mental Health Inventory, compared with those who made more than $30K, \( t(93) = 3.12, p < .01 \).

A significant correlation between seeking services from a mental health provider for mental health issues emerged, indicating that participants who sought services from a mental health care provider for mental health issues in the previous year reported higher scores on the Mental Health Inventory, compared with those who did not seek services, \( t(91) = 3.59, p < .01 \).

Furthermore, several significant correlations between the independent variables were found. There was a significant correlation between transgender identity and area of residence, indicating that transgender females were overrepresented in rural areas, \( X^2(1, N = 95) = 3.98, p < .05 \). A significant relationship between socioeconomic status and health insurance was also found; participants earning more than $30,000/year were underrepresented as having health insurance, \( X^2(1, N = 95) = 7.66, p < .01 \).

Related to an inspection of correlations among variables to test for the violation of the assumption of multicollinearity is the variance inflation factor (VIF), which measures whether or not a predictor has a strong linear relationship with the other predictors. A value of 10 or above indicates a violation of this assumption. The model does not violate
the assumption of multicollinearity because each of the predictor VIF values ranged between 1.04 and 1.34. In addition, the Durbin-Watson statistic, which specifically tests the assumption of independent errors, revealed that the residual terms were uncorrelated, or independent, as reflected by core of 2.00.

The model also met the requirements for homoscedasticity, because the residuals at each level of the predictors were found to have the same variance. A visual inspection of scatterplot graphs demonstrated that the residuals were independent, with the majority of residuals falling near zero. The graphs also reveal linearity and homoscedasticity as evidenced by the randomly dispersed residuals and normally distributed errors.

**Hypothesis One: Predictors of Mental Health Outcomes**

A hierarchical regression was conducted to test the hypothesis that negative attitudes towards mental health providers on the Attitudes Towards Seeking Professional Psychological Help Scale, in tandem with known variables associated with health outcomes (transgender identity, area of residence, education level, socioeconomic status, help seeking behavior for mental health issues, and discrimination from a mental health provider) would predict the dependent variable of poor self-reported mental health (lower scores on the Mental Health Inventory).

Using a hierarchical multiple regression analysis, on which known predictor variables were entered in step one of the analysis, and the main variable of interest, the Attitudes Towards Seeking Professional Psychological Help Scale, was entered in step two of the analysis, two models emerged whereby the unique proportion of variance explained by the variable of interest can be ascertained. In Model 1, which includes the following predictor variables: transgender identity, area of residence, education level,
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socioeconomic status, seeking help from a mental health care provider for mental health issues, discrimination from mental health provider, 30% of the variance of the dependent variable, self-reported mental health, was explained, $R^2 = .30$, $F(7, 85) = 5.10, p < .01$ (A Bonferroni correction was implemented where $p$ was set to .025 because two analyses were planned.). Again, the literature has established these variables as ones known to have predictive utility, so this significant model further supports previous literature (Clements, Wilkenson, Kitano, & Marx, 1999; Harvey, 2009; Mays, Cochran, & Barnes, 2007; Mail & Safford, 2003; Shavers, 2007;). Model 2 includes the same predictor variables as Model 1 with the addition of the Attitudes Towards Seeking Professional Psychological Help Scale in order to determine how much this variable contributes to explaining above and beyond the already established model. Model 2, however, was not significant, $R^2 = .30$, $F(1, 84) = .92, p = .34$. This means that no predictive power was added to the existing model (Model 1) via the addition of the Attitudes Towards Seeking Professional Psychological Help Scale as a predictor (Model 2). A hierarchical regression summary table for mental health outcomes can be found in Table 5.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transgender Identity</td>
<td>-.56</td>
<td>3.11</td>
<td>-.02</td>
</tr>
<tr>
<td>Area of Residence</td>
<td>11.90</td>
<td>3.12</td>
<td>.36*</td>
</tr>
<tr>
<td>Education Level</td>
<td>2.77</td>
<td>2.98</td>
<td>.10</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>-6.80</td>
<td>2.98</td>
<td>-.24*</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>-3.03</td>
<td>3.84</td>
<td>-.08</td>
</tr>
<tr>
<td>Help Seeking MH</td>
<td>-8.83</td>
<td>2.79</td>
<td>-.31*</td>
</tr>
<tr>
<td>Discrimination from MH</td>
<td>.49</td>
<td>3.27</td>
<td>.01</td>
</tr>
<tr>
<td>Attitudes (ATSPPH)</td>
<td>.26</td>
<td>.27</td>
<td>.10</td>
</tr>
</tbody>
</table>

Note: $R^2 = .30$, $F(1, 84) = .92, p = .34$
*p < .05
Three predictor variables were found to be significant predictors of scores on the Mental Health Inventory: area of residence, socioeconomic status, and help seeking for mental health issues. These results suggest that participants who reside in rural areas, who have a yearly income of $30K or less, and/or who sought services from mental health care provider in the previous year for mental health issues were more likely to endorse greater psychological well-being on the Mental Health Inventory. Support for the hypothesis that attitudes toward mental health providers would be predictive of mental health outcomes, however, was not found. Although approximately 30% of the variance was accounted for in Model 1, which included previously established predictor variables, the current results should be interpreted with caution, considering the correlations between variables were small and the small sample size.

Hypothesis Two: Correlations

The intercorrelations among all variables in the analysis to test hypothesis 2 can be found in Table 6.

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Intercorrelations Among Predictor Variables and the Health Perceptions Questionnaire (N = 95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>1</td>
</tr>
<tr>
<td>Health Perceptions Questionnaire (HPQ)</td>
<td>.06</td>
</tr>
<tr>
<td>Predictor Variable</td>
<td></td>
</tr>
<tr>
<td>1. Transgender Identity</td>
<td>--</td>
</tr>
<tr>
<td>2. Area of Residence</td>
<td>--</td>
</tr>
<tr>
<td>3. Education Level</td>
<td>--</td>
</tr>
<tr>
<td>4. Socioeconomic Status</td>
<td>--</td>
</tr>
<tr>
<td>5. Health Insurance</td>
<td>--</td>
</tr>
<tr>
<td>6. Help Seeking Medical</td>
<td>--</td>
</tr>
<tr>
<td>7. Discrimination Medical</td>
<td>--</td>
</tr>
<tr>
<td>8. Attitudes (PPOS)</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05
Correlational analysis did not reveal significant correlations between the Health Perceptions Questionnaire and the independent variables. Furthermore, several correlations between the independent variables were found. Participants who resided in non-rural areas scored higher on the Patient-Practitioner Orientation Scale (where higher scores reflect a positive view of medical providers and that these providers have a patient centered approach) compared with those who reside in rural areas, \( t (93) = 2.35, p < .01 \). There was a significant correlation between help seeking from medical providers and health insurance; it appears that the insured were more likely to seek services from a medical provider for medical issues, \( X^2 (1, N = 95) = 11.06, p < .01 \).

Related to an inspection of correlations among variables to test for the violation of the assumption of multicollinearity is the variance inflation factor (VIF), which measures whether or not a predictor has a strong linear relationship with the other predictors. A value of 10 or above indicates a violation of this assumption. The model does not violate the assumption of multicollinearity because each of the predictor VIF values ranges between 1.04 and 1.34. In addition, the Durbin-Watson statistic, which specifically tests the assumption of independent errors, revealed that the residual terms were uncorrelated or independent, as reflected by score of 2.00.

**Hypothesis Two: Predictors of Physical Health Outcomes**

A hierarchical regression was conducted to test the hypothesis that negative attitudes towards medical health providers on the Patient-Practitioner Orientation Scale, in tandem with known variables associated with health outcomes (transgender identity, area of residence, education level, socioeconomic status, help seeking behavior for medical issues, and discrimination from a medical health provider) would predict the
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dependent variable of poor self-reported physical health outcomes (lower scores on the Health Perceptions Questionnaire).

Using a hierarchical multiple regression analysis, where known predictor variables were entered in step one of the analysis, and the main variable of interest, the Patient-Practitioner Orientation Scale, was entered in step two of the analysis, two models emerged, whereby the unique proportion of variance explained by the variable of interest can be ascertained. Model 1, which includes the following predictor variables: transgender identity, area of residence, education level, socioeconomic status, seeking help from a mental health care provider for mental health issues, perceived discrimination from medical provider, was not significant, $R^2 = .05$, $F (7, 87) = .60, p = .75$. Model 2 includes the same predictor variables as Model 1 with the addition of the Patient-Practitioner Orientation Scale. Model 2, was also not significant, $R^2 = .02$, $F (2, 85) = .89, p = .41$. A hierarchical regression summary table for physical health outcomes can be found in Table 7.

Table 7
Hierarchical Multiple Regression Analysis Summary for the Independent Variables Predicting Physical Health Outcomes ($N = 95$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transgender Identity</td>
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<td>2.25</td>
<td>.04</td>
</tr>
<tr>
<td>Area of Residence</td>
<td>-2.45</td>
<td>2.33</td>
<td>-.12</td>
</tr>
<tr>
<td>Education Level</td>
<td>-.14</td>
<td>2.12</td>
<td>-.01</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.11</td>
<td>2.05</td>
<td>.01</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>3.70</td>
<td>2.91</td>
<td>.15</td>
</tr>
<tr>
<td>Help Seeking Medical</td>
<td>-1.54</td>
<td>3.33</td>
<td>-.05</td>
</tr>
<tr>
<td>Discrimination from Medical</td>
<td>.09</td>
<td>1.92</td>
<td>.01</td>
</tr>
<tr>
<td>Attitudes (PPOS)</td>
<td>.01</td>
<td>.13</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note: $R^2 = .02$, $F (2, 85) = .89, p = .414$.

None of the independent variables was found to be a significant predictor of scores on the Health Perceptions Questionnaire, thus there was no support for the
hypothesis that attitudes toward medical health providers would be predictive of physical health outcomes.
Chapter 6: Discussion

Summary of Findings

This study aimed to understand the relationship between attitudes of the transgender population towards health care and their self-reported health outcomes. In addition, variables known to be associated with health outcomes (i.e., transgender identity, area of residence, education level, socioeconomic status, health insurance, help seeking behaviors, and discrimination from providers) were investigated to determine whether or not a relationship existed between those variables and self-reported health outcomes. By exploring these relationships, the aim was to advance the growing body of literature on predictors of health outcomes and provide a voice to the transgender population in health care. The purpose of the current study was also to provide suggestions for future directions to improve health care services for the transgender population.

A series of hierarchical regression analyses were conducted to test the hypothesized models of health outcomes among the transgender population. Findings from the analyses only partially supported hypothesis one, because variables already associated with mental health outcomes in the literature were supported. Area of residence, socioeconomic status, and help seeking behaviors demonstrated a significant relationship, although weak, with self-reported mental health. Specifically, participants who resided in rural areas reported greater psychological well-being than those who resided in non-rural areas. These results are different from research on the relationship between geographic location and health outcomes. Research suggests that individuals residing in rural areas have limited access to health care providers or are less likely to
have access to quality care providers than those who reside in an urban location (Harvey, 2009). It could be that participants who reside in urban areas are more highly or more frequently exposed to psychological health risks including commercial sex work or substance abuse, therefore reporting higher levels of mental health symptoms. This may explain the reasons why current findings found fewer mental health symptoms reported by individuals in rural areas.

Participants who had a yearly income less than $30,000 reported greater psychological well-being than those whose income was $30,000 or more per year. Participants reported greater psychological well-being if they had sought mental health care services for mental health issues in the previous year. These relationships, however, should be interpreted with caution, given the small correlations among these variables. Furthermore, the main interest of hypothesis one, that attitudes of the transgender population towards mental health care providers would have a significant relationship with self-reported mental health, was not supported.

Hypothesis two, which states that attitudes toward medical providers will predict self-reported physical health, was also unsupported. Similar to the results of the first set of analyses, there were several significant, though weak, relationships identified between or among the following variables: attitudes towards medical providers, area of residence, help seeking behavior from medical providers, and health insurance. Participants who resided in non-rural areas held a positive view of medical providers compared with those who resided in rural areas. In addition, participants who had health insurance were more likely to seek services from a medical provider for medical issues in the previous year than those who did not have health insurance.
In conclusion, the main results of the current study did not lend support for the notion that attitudes toward health care professionals among the transgender population would be predictive of self-reported health outcomes.

Limitations

There are several limitations to the current study. The generalization of the current study’s findings to the general transgender population is limited by distinct characteristics of the sample. First, the sample included only two categories for transgender identity (i.e., transgender female identified and transgender male identified). As stated previously, transgender is an umbrella term that is used to describe all individuals who have a nonconforming gender identity, expression or behavior that is not aligned with their birth sex (APA, 2012). Therefore the term transgender encompasses many forms of gender expression and identities that fall along the transgender continuum. Therefore, the limited gender identity categories included in this study do not capture the many forms of gender identity within the community. This means that results of this study cannot be generalized to the entire transgender community because the sample is only a small representation of individuals falling along the transgender continuum. Moreover, the sample was unbalanced across transgender identity because more participants identified as transgender female than transgender male and thus added another barrier to generalizing the results. In addition, the sample is heavily unbalanced across ethnicity and age, with the majority of the sample identifying as Caucasian and in the 55-64 years of age bracket. For that reason, the sample was representative only of participants who fell into these categories rather than a sample representing all
race/ethnicity and age equally, which would have improved the external validity of the study.

Another limiting factor is statistical power. Many participants did not complete the survey or completed only a portion of it. Therefore, the missing data had to be removed from the analysis by the pairwise deletion method as previously discussed. The sample size decreased by a large amount and thus decreased statistical power, thereby minimizing the likelihood of obtaining any significant results.

Another limitation lies in the measures used in this study, including the Attitudes Towards Seeking Professional Psychological Help Scale, Patient-Practitioner Orientation Scale, Mental Health Inventory, and Health Perceptions Questionnaire. Not all of these measures were normed for the transgender population, which may be a contributing factor to the null results obtained in the current study. As demonstrated in the literature, the transgender community is a diverse group with unique health care needs (Dean et al., 2000; Frazer, 2009). The measures utilized in this study may not have been sensitive to the unique needs of this population and possibly may have failed to capture both attitudes towards health care and self-reported health outcomes accurately. Recommendations for future work should be focused in scale development specifically normed for the transgender population. Furthermore, there was a large standard deviation for the self-reported mental health outcome measure, the Mental Health Inventory. This measure produced a standard deviation of seventy-four points, making the results skewed due to presence of outliers. Thus this measure may not accurately reflect self-reported outcomes of the participants.
In addition, the discrimination question included in the demographic questionnaire has its own limitations. The experience of discrimination by a health care provider was assessed using only one question with a yes or no response. The yes or no response forces a participant to choose a response that best describes his or her experience without the option to explain that choice further. Therefore it is not an accurate representation of the participant’s experience of discrimination. Future research can better operationalize the terms perceived discrimination by using more specific questions that are tailored to the transgender community’s experience in health care. These questions can allow the participant to choose between examples of perceived discrimination that are specific to the community or give each one a chance to explain his or her experience with an open ended question.

Last, the findings of this study may be limited because of the nature of self-report measures. Self-report measures have been criticized in the literature due to threats of construct validity, including common method variance or social desirability responding by participants (Campbell & Fiske, 1959). Common method variance is a phenomenon whereby the measurement method is responsible for the variance observed rather than a reflection of the construct it was intended to measure (Campbell & Fiske, 1959). Therefore, the results of the current study may be biased and not a true estimation of the constructs of interest (Chan, 2009). Social desirability responding is a tendency of a participant to “fake good” or appear socially desirable in the way that he or she answered questions (Chan, 2009). Because of these drawbacks to self-report measures, it is possible that some of the results of this study are not reflective of the variables being measured (i.e., attitudes and health outcomes). It is difficult to assess how participants
interpreted the questions, how comfortable they felt with disclosing information, or how their levels of insight into their health may have affected their responses. In conclusion, results from self-report measures should always be interpreted with a degree of caution.

**Suggestions for Future Work**

Despite the presented limitations to this study and null results, this study can provide some information for future research. One factor that may have had an impact on the results was the measures selected to assess attitudes towards both mental and medical health providers. These measures, although valid, were not able to capture these attitudes in a way that was predictive of health outcomes for the transgender population. Future research can investigate attitudes of the transgender population towards health care either with different measures or with newly constructed and properly normed measures in order to determine if these measures are more efficacious. The incorporation of implicit attitude measures is one way to minimize the pitfalls of self-report/direct measures because they provide an indirect way to measure a participant’s attitude (Hahn et al., 2013). Implicit attitude measures have been used successfully in many domains of attitudinal research, including sexual minority research (Devos & Jones, 2013; Rudman, Feinberg, & Fairchild, 2002).

Assessing the attitudes of the transgender population with psychometrically sound measures can provide information regarding how they view health care providers, which can be helpful to providers both in the fields of mental health care and medical health care. This is especially important data to gather, given the fact that the transgender community is a marginalized group in the health care system. Understanding their experience within the health care system and how they perceive the services they receive
is critical to providing individualized patient-centered care specific to unique transgender health care needs.

Another recommendation for future research is to replicate the current design and reach a significantly larger sample size because the current study had a smaller than anticipated sample. The larger sample size will increase statistical power and may determine if the measures used are predictive of health outcomes when statistical power is enhanced. In addition, future studies can account for the many variations of gender identity within the transgender community to make the results more generalizable to the entire transgender community. Moreover, gaining a more representative sample of race/ethnicity and age can be further explored. With regard to age, this study recruited participants who were eighteen years of age or older. It would also be important to identify the attitudes of individuals who identify as transgender and are under the age of eighteen.

Finally, future research may be able to identify other predictive variables such as age, employment status, or health literacy that were not discussed in the current study in order to determine how these influence the health outcomes of the transgender population.

**Summary and Conclusions**

In conclusion, the present study was conducted to identify the attitudes of transgender population toward health care and to determine how these impact their health outcomes. Although the results of this study did not identify a significant relationship between attitudes and health outcomes, the information collected can be used to further
enhance the minimal research on transgender health and to identify many areas of future research.
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Appendix A

ATTENTION
TRANSGENDER COMMUNITY

✓ Have you experienced difficulties accessing health care services?
✓ Are you interested in providing information regarding your views on health care as a way to help providers learn more about your health care needs?

If you answered YES to these question, You may be interested in filling out an anonymous survey! This survey aims to identify transgender views on health care and how these views can help improve the quality of health for the transgender community.

Click on the following link to access the online survey
[insert survey monkey link here]

PSYCHOLOGY STUDENT LOOKING FOR VOLUNTEERS TO PARTICIPATE IN RESEARCH SURVEY

PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

SARA M. SHANE
Appendix B

**Demographic Questionnaire**

1. How would you describe your transgender identity? (transgender female identified or transgender male identified)

2. How would you describe your sexual orientation? (heterosexual, gay, lesbian, bisexual, queer, or other)

3. How would you described your racial or ethnic background? (Caucasian, African American, Hispanic/Latino, Asian American, or other)

4. Please select category that best represents your age? (18-24, 25-34, 35-44, 45-54, 55-64, 65 or older)

5. How would you describe the area in which you live? (rural, suburban, or urban)?

6. How would you describe your current living arrangement? (own, rent, live with family/friend, live in assisted housing, or other)

7. What is the highest education you have completed? (8th grade or less, some high school (no diploma), high school graduate/GED, technical certificate/Associate’s degree, some college (no degree), college graduate, some graduate school (no degree), graduate or professional degree)
8. What is your average yearly income? (no source of income, less than $10,000, $10,000-$30,000, $40,000-$60,000, $70,000-$90,000, or greater than $90,000)

9. Do you currently have health insurance? Yes or No

10. If you have health insurance, what type of insurance do you have? (Medicare, Medicaid, Private, or other)

11. Have you sought services from a medical health care provider (i.e., primary care physician, medical specialist, surgeon, or nurse) for medical issues in the last year?

12. If you have sought services from a medical health care provider, how often do you see that professional? (I see them for routine medical care, I see them regularly for specific medical condition, or I only see them as needed)

13. Have you sought services from a mental health care provider (i.e., mental health therapist/counselor, social worker, psychologist, or psychiatrist) for mental health issues in past year?
14. If you have sought services from a mental health care provider, how often do you see that professional? (I see them for routine mental health care, I see them regularly for specific mental health concerns, or I only see them as needed)

15. Have you ever experienced discrimination from a medical health care provider (i.e., primary care physician, medical specialist, surgeon, nurse, or office staff)?
   Yes or No

16. Have you ever experienced discrimination from a mental health provider (i.e., mental health therapist/counselor, social worker, psychologist, or psychiatrist)?
   Yes or No
Appendix C

Attitudes Toward Seeking Professional Help Scale

Read each statement and rate your level of agreement using the following rating scale: strongly disagree, disagree, agree, or strongly agree

1. Although there are clinics for people with mental troubles, I would not have much faith in them.
2. If a good friend asked my advice about a mental problem, I might recommend that he see a psychiatrist.
3. I would feel uneasy going to a psychiatrist because of what some people would think.
4. A person with a strong character can get over mental conflicts by himself, and would have little need of a psychiatrist.
5. There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem.
6. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.
7. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.
8. I would rather live with the certain mental conflicts than go through the ordeal of getting psychiatric treatment.
9. Emotional difficulties, like many things, tend to work out by themselves.
10. There are certain problems which should not be discussed outside of one’s family.
11. A person with a serious emotional disturbance would probably feel most secure in a good mental hospital.

12. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

13. Keeping one’s mind on a job is a good solution for avoiding personal worries and concerns.

14. Having been a psychiatric patient is a blot on a person’s life.

15. I would rather be advised by a close friend than by a psychologist, even for an emotional problem.

16. A person with an emotional problem is not likely to solve it alone; he/she is likely to solve it with professional help.

17. I resent a person, professionally trained or not, who wants to know about my personal difficulties.

18. I would want to get a psychiatric attention if I was worried or upset for a long period of time.

19. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

20. Having been mentally ill carries with it a burden of shame.

21. There are experiences in my life I would not discuss with anyone.

22. It is probably best not to know everything about oneself.

23. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.
24. There is something admirable in the attitude of a person who is willing to cope
with his/her conflicts and fears without resorting to professional help.

25. At some future time I might want to have psychological counseling.

26. A person should work out his/her own problems; getting psychological counseling
would be a last resort.

27. Had I received treatment in a mental hospital, I would not feel that it ought to be
“covered up”.

28. If I thought I needed psychiatric help, I would get it no matter who knew about it.

29. It is difficult to talk about personal affairs with highly educated people such as
doctors, teachers, and clergy.
Appendix D

**Patient-Practitioner Orientation Scale**

Read each statement and rate your level of agreement using the following rating scale:

Strongly agree, somewhat agree, agree, disagree, somewhat disagree, strongly disagree

1. The doctor is the one who should decide what gets talked about during a visit.

2. Although health care is less personal these days, this is a small price to pay for medical advances.

3. The most important part of the standard medical visit is the physical exam.

4. It is often best for patients if they do not have a full explanation of their medical conditions.

5. Patients should rely on their doctor’s knowledge and not try to find out about their conditions on their own.

6. When doctors ask a lot of questions about a patient’s background, they are prying too much into personal matters.

7. If doctors are truly good at diagnosis and treatment, the way they relate to patients is not that important.

8. Many patients continue asking questions even though they are not learning anything new.

9. Patients should be treated as if they were partners with the doctor, equal in power and status.

10. Patients generally want reassurance rather than information about their health.

11. If a doctor’s primary tools are being open and warm, the doctor will not have a lot of success.
12. When patients disagree with their doctors, this is a sign that the doctor does not have the patient’s respect and trust.

13. A treatment plan cannot succeed if it is in conflict with a patient’s lifestyle or values.

14. Most patients want to get in and out of the doctor’s office as quickly as possible.

15. The patient must always be aware that the doctor is in charge.

16. It is not important to know a patient’s culture and background in order to treat the person’s illness.

17. Humor is a major ingredient in the doctor’s treatment of the patient.

18. When patients look up medical information on their own, this usually confuses more than it helps.
Appendix E

Mental Health Inventory

Please read each question and choose one statement that best describes how things have been for you during the past month. There are no right or wrong answers.

1. How happy, satisfied, or pleased have you been with your personal life during the past month? Extremely happy or could not have been more satisfied/pleased; very happy most of the time; generally satisfied or pleased; sometimes fairly satisfied or sometimes fairly unhappy; generally dissatisfied or unhappy; very dissatisfied or unhappy most of the time

2. How much of the time have you felt lonely during the past month? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

3. Have you often become nervous or jumpy when faced with excitement or unexpected situations during the past month? Always; very often; fairly often; sometimes; almost never; never

4. During the past month, how much of the time have you felt that the future looks hopeful and promising? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

5. How much of the time, during the past month, has your daily life been full of things that were interesting to you? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time
6. How much of the time, during the past month, did you feel relaxed and free from tension? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

7. During the past month, how much of the time have you generally enjoyed the things you do? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

8. During the past month, have you had any reason to wonder if you were losing your mind, losing control over the way you act, talk, think, feel, or of your memory? No, not at all; maybe a little, yes, but not enough to be concerned or worried about; yes and I have been a little concerned; yes, and I am quite concerned; yes, I am very much concerned about it

9. Did you feel depressed during the past month? Yes, to the point that I did not care about anything for days at a time; yes, very depressed almost every day; yes, quite depressed several times; yes, a little depressed now and then; no, never felt depressed at all

10. During the past month, how much of the time have you felt loved and wanted? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

11. How much of the time, during the past month, have you been a very nervous person? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time
12. When you have got out of bed in the morning, during this past month, about how often did you expect to have an interesting day? Always; very often; fairly often; sometimes; almost never; never

13. During the past month, how much of the time have you felt tense or “high-strung”? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

14. During the past month, have you been in firm control of your behavior, thoughts, emotions or feelings? Yes, very definitely; yes, for the most part; yes. I guess so; no, not too well; no and I am somewhat disturbed; no and I am very disturbed

15. During the past month, how often did you hands shake when you tried to do something? Always; very often; fairly often; sometimes; almost never; never

16. During the past month, how often did you feel that you had nothing to look forward to? Always; very often; fairly often; sometimes; almost never; never

17. How much of the time, during the past month, have you felt calm and peaceful? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

18. How much of the time, during the past month, have you felt emotionally stable? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

19. How much of the time, during the past month, have you felt downhearted and blue? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time
20. How often have you felt like crying, during the past month? Always; very often; fairly often; sometimes; almost never; never

21. During the past month, how often have you felt that others would be better off if you were dead? Always; very often; fairly often; sometimes; almost never; never

22. How much of the time, during the past month, were you able to relax without difficulty? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

23. How much of the time, during the past month, did you feel that your love relationships, loving and being loved were full and complete? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

24. How often, during the past month, did you feel nothing turned out for you the way you wanted it to? Always; very often; fairly often; sometimes; almost never; never

25. How much have you been bothered by nervousness, or your “nerves”, during the past month? Extremely so; to the point where I could not take care of things; very much bothered; bothered quite a bit by nerves; bothered some, enough to notice; bothered just a little by nerves; not bothered at all by this

26. During the past month, how much of the time has living been a wonderful adventure for you? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time
27. How often, during the past month, have you felt so down in the dumps that nothing could cheer you up? Always; very often; fairly often; sometimes; almost never; never

28. During the past month, did you thing about taking your own life? Yes, very often; yes, fairly often; yes, a couple of times; yes, at one time; no, never

29. During the past month, how much of the time have you felt restless, fidgety, or impatient? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

30. During the past month, how much of the time have you been moody or brooded about things? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

31. During the past month, how much of the time have you felt cheerful, lighthearted? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

32. During the past month, how often did you get rattled, upset, or flustered? Always; very often; fairly often; sometimes; almost never; never

33. During the past month, have you been anxious or worried? Yes, extremely so to the point of being sick or almost sick; yes, very much so; yes, quite a bit; yes, some time enough to bother me; yes, a little bit; no, not at all

34. During the past month, how much of the time were you a happy person? All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time
35. How often during the past month did you find yourself trying to calm down?
Always; very often; fairly often; sometimes; almost never; never

36. During the past month, how much of the time have you been in low or very low spirits?
All of the time; most of the time; a good bit of the time; some of the time; a little of the time; none of the time

37. How often, during the past month, have you been waking up feeling fresh and rested?
Always, every day; almost every day; most days; some days but usually not; hardly ever; never wake up feeling rested

38. During the past month, have you been under or felt you were under any strain, stress, or pressure?
Yes, almost more than I could stand or bear; yes, quite a bit of pressure; yes, some more than usual; yes, some but about normal; yes, a little bit; no not at all
Appendix F

Health Perceptions Questionnaire

Read each statement and rate your level of agreement using the following rating scale: definitely true, mostly true, mostly false, or definitely false. Some statements may look or seem like others but each statement is different and should be rated by itself.

1. According to the doctors I’ve seen, my health is now excellent.
2. I try to avoid letting illness interfere with my life.
3. I seem to get sick a little easier than other people.
4. I feel better now than I ever have before.
5. I will probably be sick a lot in the future.
6. I never worry about my health.
7. Most people get sick a little easier than I do.
8. I don’t like to go to the doctor.
9. I am somewhat ill.
10. In the future, I expect to have better health than other people I know.
11. I was so sick once I thought I might die.
12. I’m not as healthy now as I used to be,
13. I worry about my health more than other people worry about their health.
14. When I’m sick, I try to just keep going as usual.
15. My body seems to resist illness very well.
16. Getting sick once in a while is a part of my life.
17. I’m as healthy as anybody I know.
18. I think my health will be worse in the future than it is now.
19. I’ve never had an illness that lasted a long period of time.

20. Others seem more concerned about their health than I am about mine.

21. When I’m sick, I try to keep it to myself.

22. My health is excellent.

23. I expect to have a very healthy life.

24. My health is a concern to my life.

25. I accept that sometimes I’m just going to be sick.

26. I have been feeling bad lately.

27. It doesn’t bother me to go to a doctor.

28. I have never been seriously ill.

29. When there is something going around, I usually catch it.

30. Doctors say that I am now in poor health.

31. When I think I am getting sick, I fight it.

32. I feel about as good now as I ever have.

During the past 3 months, how much has your health worried or concerned you? Has it worried you a great deal, somewhat, a little, or not at all?