Assessing Attitudes of Providers toward Transgender and Gender Nonconforming Individuals

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Abstract

Providers' implicit and explicit attitudes can influence and shape the quality of care of transgender individuals. While researchers have reported individuals who identify as transgender and gender nonconforming (TGNC) experience discrimination in the treatment setting, less is known about the current attitudes of providers towards individuals who identify as TGNC. Understanding the attitudes of providers towards individuals who identify as TGNC may improve quality of care, overall standard of care, help guide education, and aid in improving the overall experience of those who identify as TGNC. The present study assessed explicit attitudes, using the ATTI, and implicit attitudes, using a pair of Gender Identity-Implicit Association Tests (GI-IATs), of medical providers (n = 8) and mental health providers (n = 40) toward people who identify as TGNC. Medical providers displayed a preference for cisgender individuals that was significantly different from the preferences displayed by mental health providers. Additionally, the difference between implicit and explicit attitudes for medical providers was marginally significant and accounted for a large effect size. There was no significant difference between the explicit attitudes of the two provider groups.

Keywords: Transgender, Implicit Attitudes, Explicit Attitudes, Providers

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Chapter 1: Overview

With continuing changes in laws and regulations (e.g., bathroom laws, Executive Orders and Memoranda, and nondiscrimination policies; Transgender Law Center, N. D.), transgender and gender non-conforming (TGNC) issues such as rights (e.g., freedom of gender identity and expression) and quality of care (e.g., access to transaffirmative care and preventative care; see Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012) become increasingly more important. TGNC individuals are provided fewer protections from discrimination (Singh & Jackson, 2012) and are higher dropout rates due to discrimination than their cisgender peers (Grant et al., 2011). Furthermore, discrimination in the workplace coupled with discrimination in the education system (Grant et al., 2011) has likely contributed to the increased likelihood of TGNC individuals falling below the poverty line (Fredriksen-Goldsen et al., 2014). Within the healthcare system, TGNC individuals express concerns receiving quality care and note discrimination due to their gender identity (Grant et al., 2011).

Prior to 2017, the United States military had planned to roll back regulations that previously prevented TGNC individuals from serving within the military. However, in 2017 new regulations were enacted that prevented TGNC individuals from openly serving in the United States military without hiding their TGNC status. Despite these regulations, Shipherd and colleagues (2012) found three times as many TGNC individuals have served in a branch of the military compared to the rates of cisgender (i.e., individuals whose assigned gender at birth aligns with their current gender identity) who have served in a branch of the military. In addition, regulations within the military and the Veterans Health Administration (VA) have not always been conducive to the health and well-being of transgender veterans (Yerke & Mitchell, 2013)

and many TGNC individuals cite the VA as unwelcoming (Sherman et al., 2014b). Attitudes toward TGNC individuals can impact the quality of care they receive.

The literature has documented that a clinician's attitudes can influence the quality of care a client receives (APA, 2015; Greenwald & Banaji, 2017; Israel et al., 2008; Vasquez, 2007). Attitudes have been shown to be predictive of behavior (Greenwald & Banaji, 1995; Meyers, 1990) and impact a clinician's ability to build rapport and connect with their clients (Bess & Stabb, 2009; Rachlin, 2002). Attitudes are comprised of both implicit attitudes, the automatic judgments one has toward a given construct (e.g., race, gender, sexuality), and explicit attitudes, one's view that is outwardly expressed (Greenwald & Banaji, 1995; 2017; Greenwald et al., 1998; Moe et al., 2015). Implicit attitudes are developed throughout our lives and most often work outside of conscious awareness (Greenwald & Banaji 1995; 2017). The impact of these unconscious attitudes can be significant. In fact, implicit attitudes have been shown to influence hiring behavior, voting behavior, and jury verdicts (Greenwald & Banaji, 2017). The combination of implicit and explicit attitudes has been shown to directly affect the quality of care that vulnerable populations such as TGNC individuals receive (APA, 2015; Greenwald & Banaji, 2017; Israel et al., 2008; Vasquez, 2007). TGNC individuals express significant barriers to receiving care in healthcare settings.

TGNC individuals express difficulty in receiving necessary preventative care, such as gynecological services for trans men (Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012). Denial or long waiting periods for transaffirmative procedures, such as hormone therapy (APA, 2015; Nichols, 2018), and refusal of general treatment based on an individual's gender identity occur (Grant, et al., 2011). Additionally, TGNC individuals express a need to educate their providers on their unique concerns (Grant, et al., 2011) and fear inadequate care and

discrimination (Benson, 2013). Within the VHA, the largest single healthcare provider system, TGNC veterans reported feeling uncomfortable with discussing their medical needs with a VHA physician for fear of discrimination and of receiving poor treatment (Johnson & Federman, 2013; Sherman et al., 2014a; 2014b). Fear of discrimination by staff, providers, and other veterans as well as perceived lack of knowledge by providers regarding the specific concerns of TGNC individuals have been cited as barriers to seeking care at the VA by TGNC veterans (Johnson & Federman, 2013; Sherman et al., 2014b; Sherman et al., 2014; Shipherd et al., 2012). Additionally, mental health providers reported feeling uncomfortable asking questions regarding gender and sexuality issues unless initiated by the client first, and providers indicated that they are unable to address the concerns of their transgender clients due to inadequate training to properly address the concerns (Sherman et al., 2014).

While it is known that TGNC individuals experience discrimination while seeking healthcare (Grant et al., 2011) and perceive aspects of the healthcare setting as uninviting (Sherman et al, 2014b; Sherman et al., 2014; Shipherd et al., 2012), the current overall attitudes of providers towards TGNC individuals is not known. In their study, Sherman and colleagues (2014b) gathered data regarding providers' comfort with asking clients about sexual orientation; however, they did not gather data regarding providers' attitudes toward TGNC individuals. To date, providers' implicit attitudes toward TGNC individuals within has not been assessed. In addition, researchers have not examined explicit attitudes in the current sociopolitical climate that has been marked by significant changes in policy related to TGNC rights.

Due to the impact of attitudes and stigma on mental health and well-being (White Hughto et al., 2015), understanding the implicit attitudes of providers toward TGNC individuals may improve quality of care and the overall standard of care, help guide future trainings, and provide

a way to improve the climate of various healthcare settings for TGNC individuals. Through this understanding, researchers can identify ways to create a more inviting environment. A greater level of care may be provided for TGNC individuals if researchers are able to better meet the needs of transgender individuals. Further investigation may lead to identifying target areas in which better training could be provided; variance within the attitudes of different systems of providers can help elucidate areas to target for future trainings (APA, 2015; White Hughto et al., 2015).

Individuals Who Identify as TGNC

The term transgender is often used as an inclusive term referring to a subset of terms (RAND Corporation, 2016; Walch et al., 2012), which includes anyone that does not identify with the gender they were assigned at birth (APA, 2015). An estimated one million individuals identify as transgender within the United States; however, the true number is unknown as census data does not assess gender beyond the binary identification system of male and female categories. TGNC individuals have historically been "regarded as types of sexual perversion that were considered ethically objectionable" and thus have been relegated to a lesser role in society (Koh, 2012, p. 673). The presence of TGNC individuals in mainstream media has grown over the last decade. Through new bills governing which restrooms individuals who identify as transgender are allowed to use (Lipka, 2016), an executive order banning individuals who identify as transgender from serving in the military (O'Brien et al., 2017), social media outlets, and popular television series such as *I am Cait, I am Jazz,* and *Orange is the New Black,* awareness of the concerns of individuals identifying as transgender has increased. Despite this increased awareness and perhaps because of additional restrictive laws, TGNC continue to be

stigmatized, with that stigma continuing to impact the lives of individuals identifying as TGNC in many ways.

Stigma

Several studies have found stigma toward and discrimination against TGNC individuals (Gerhardstein & Anderson, 2010; Nadal et al., 2012; Norton & Herek, 2013). In fact, heterosexual, cisgender individuals found transgender individuals to be "considerably less favorable" than LGB individuals (Norton & Herek, 2013). Additionally, men were more likely to hold less positive attitudes toward transgender individuals than women (Gerhardstein & Anderson, 2010; Norton & Herek, 2013) regardless of identified affiliations, such as religion or political affiliation (Norton & Herek, 2013; Riggs et al., 2012). Greater rates of negative attitudes toward transgender individuals were found in individuals who identified with a binary belief of gender, higher levels of psychological authoritarianism, political conservatism, and anti-egalitarianism (Gerhardstein & Anderson, 2010; Norton & Herek, 2013). Religiosity was a predicting factor of negative attitudes toward individuals who identify as transgender for women (Gerhardstein & Anderson, 2010; Norton & Herek, 2013). However, social contact with transgender individuals has been shown to reduce rates of stigma and increase positive attitudes (Barbir et al., 2017). Transgender individuals whose appearance was perceived to align more closely with their self-identified gender were also looked upon more favorably (Gerhardstein & Anderson, 2010). The impact of stigma and discrimination can be further illustrated within specific settings.

TGNC individuals face unique challenges and stigma within schools, the workplace, and in healthcare (Grant et al., 2011). Individuals who identify as transgender have reported increased levels of discrimination and harassment within schools, and 15% of those surveyed

indicated leaving school early due to discrimination and harassment (Grant et al., 2011). Seventy-eight percent of respondents to a national survey assessing the experiences of individuals who identified as transgender reported experiencing discrimination and harassment in the workplace, and 90% reported their careers were adversely impacted due to stigma and discrimination (Grant et al., 2011). Likely as a result of difficulties in school and in the workplace, individuals who identify as transgender earn significantly less than their cisgender peers. Individuals who identify as transgender are four times more likely to make less than $10,000 a year when compared to cisgender individuals (APA, 2015) and 48% of transgender individuals surveyed reported an income less than or equal to 200% of the federal poverty line (Fredriksen-Goldsen et al., 2014). Garnering healthcare services can be difficult for individuals who identify as transgender (Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012), and health insurance is often linked to employment (Blavin et al., 2016). Therefore, TGNC individuals are at a greater risk of going without insurance, in part, due to higher rates of unemployment (Grant et al., 2011). Preventive procedures are often not covered due to gender identification (e.g., gynecological services for trans men; Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012) and transition-related care also is often not covered by insurance (APA, 2015). Additionally, negative experiences within military and VA settings have been noted despite the number of transgender men and women who have served in the military.

In the Military. Military regulations have a history of excluding transgender individuals (APA, 2015; Johnson & Federman, 2013; Yerke & Mitchell, 2011). Prior to the 2011 *Directive for Providing Health Care for Transgender and Intersex Veterans,* identifying as TGNC was a disqualifier for service (Yerke & Mitchell, 2011). In 2016 the RAND Corporation, a nonprofit think tank that conducts research in order to aid the development of nonpartisan policy,

conducted a thorough analysis of the needs and costs of allowing transgender individuals to serve openly in the military. Based upon their results, the United States disseminated a plan to allow transgender individuals to serve openly as members of the various branches of the military (Welsh, 2016). However, in 2017, an Executive Memorandum (83 FR 13367) was enacted, again preventing transgender individuals from openly serving in the military (Tatum, 2018). Following this order, in 2018, regulations were expanded to include any individuals who were diagnosed with gender dysphoria (DoD, 2018; Tatum, 2018). As the Department of Veterans Affairs is part of the federal government, it is unsurprising that TGNC individuals have noted the presence of stigma within the VA setting.

In the VA Setting. In a study assessing the perceptions and barriers to accessing VA care by LGBT veterans, only 30% of respondents indicated that the VA was welcoming to LGBT veterans, despite 93% of respondents citing this as important (Sherman et al., 2014b). In their study of 141 transgender individuals, 43 of whom identified as veterans, Shipherd and colleagues (2012) found only 9% used the VA as their primary care provider despite approximately half believing they were eligible for services. In addition, 99% of participants indicated they sought gender identity counseling outside of the VA. Participants identified reactions by staff and providers regarding their gender identity and sexual orientation as barriers to their participation in VA services. VA providers identified four domains they believed to be barriers for LGBT veterans accessing care: 1) VA culture, including the perception and behaviors of other veterans toward LGBT veterans, how staff and providers interact with LGBT veterans, and how the administration regard LGBT veterans and the decisions they make concerning their well-being; 2) lack of resources such as programs, type of staff, trainings, and financial support; 3) need for more trainings available to providers; and 4) the concern of medical record information being

kept safe and confidential (Johnson & Federman, 2013). The barriers identified aligned with those expressed by LGBT veterans in a qualitative study of 58 LGBT veterans by Sherman and colleagues (2014a). LGBT veterans identified various barriers to participation in VA services: 1) fear of judgment and discrimination based upon their gender identity and sexual orientation; 2) fear of losing their benefits if they disclosed their gender identity or sexual orientation; 3) fear of denial of care based upon their gender identity or sexual orientation; 4) concern that provider documentation would lead to negative ramifications; and 5) negative treatment by staff, other veterans, and providers. Struggles related to stigma and discrimination have been associated with a negative impact on the mental health of individuals identifying as transgender.

Impact on Mental Health. Increased levels of stress and stigma experienced by TGNC individuals have been associated with elevated rates of suicidality (dickey et al., 2015; Goldblum et al., 2012; Testa et al., 2012). Yurksel et al. (2017) found that 29.8% of transgender individuals had attempted suicide, and 55.3% reported experiencing suicidal ideation over their lifetime. McDuffie and Brown (2010) found that 28.0% of their transgender participants experienced a mood disorder and 61% had a history of suicidal ideation. The culmination of these studies indicates a significant level of distress experienced by TGNC individuals; attitudes have been shown to impact the experiences of individuals, contributing to discrimination (Greenwald et al., 1995, 2017) as well as the quality of care provided (APA, 2003).

Attitudes

The construct of attitudes has long been the topic of discussion in the field of social psychology (Albarracin & Shavitt, 2018; Greenwald & Banaji, 1995, 2017). Research on attitudes has demonstrated their importance within the helping professions. Many factors contribute to the formation of attitudes.

Attitude Formation

Attitudes are "a person's evaluation of an object on a favorable to unfavorable continuum" (Albarracin & Shavitt, 2018, p. 300) and include both implicit and explicit components. Attitudes are hypothesized to be made up of explicit attitudes and implicit attitudes (Greenwald & Banaji, 1995). Explicit attitudes can be expressed directly by an individual and are consciously known to the individual (Greenwald & Banaji, 1995; 2017). These attitudes are based on both self-reflection and knowledge regarding past experiences (Greenwald & Banaji, 2017). Implicit attitudes are attitudes that are outside of an individual's conscious awareness (Greenwald & Banaji, 1995; Greenwald et al., 1998). These attitudes are characterized by an individual's immediate evaluation of a novel construct and are grounded in cognitive associations between mental representations of the construct and its attributes (Greenwald & Banaji, 1995).

Attitudes have been demonstrated to be shaped over the course of one's life through social contexts, individual experiences, and language (Greenwald & Banaji, 1995). Children and parents were surveyed when the child was at the age of one and again 18 years later. They found that development of conservative and liberal ideology was associated with the environment in which the children grew up. Authoritarian parenting styles most consistently resulted in children who were ideologically conservative (Fraley et al., 2013). Fraley and colleagues (2013) were able to demonstrate that social context (i.e., socio-political environment and parenting style) impacted one's attitudes toward political identification. An example of the influence of individual experiences can be seen in Greenwald and Banji's (1998) research where individuals held more positive attitudes toward flowers and less positive attitudes toward guns. Because individuals were more likely to have negative experiences with guns, they were more likely to

hold more negative attitudes toward them. Finally, the impact of language can be seen in the research on priming. Affective priming studies have shown words with congruently held evaluations (e.g., good and love) will be more strongly associated, evaluated more quickly and accurately by the participant, than words with incongruently held evaluations (e.g., good and bad; Klauer & Musch, 2008). Thus, attitude formation has been shown to be influenced by the cumulative impact of the context one lives in, one's experiences, and language. Various methods have been used to measure attitudes and their impact on behavior.

How Attitudes Are Measured

One way to measure explicit attitudes is through the use of self-report surveys. Self-report surveys can include answering questions in a variety of forms, such as responses on numerical rating scales, feelings thermometers, and semantic differential scales. Each of these types of measurements requires participants to evaluate their attitudes toward a construct. Attitudes are evaluated directly through a series of statements or questions. Direct measures such as these provide a measurement of a participant's explicit attitudes. However, explicit measures have displayed limited ability to predict future behavior (Oswald et al., 2013), particularly with regard to more sensitive topics (e.g., race and intergroup behavior) and instances of lower cognitive control (e.g., tired, taxed, hurried, unmotivated; Greenwald & Banaji, 2017).

The Implicit Association Test (IAT) developed by Greenwald, McGhee, and Schwartz (1998) is the most common measure of implicit attitudes (Oswald et al., 2013). The IAT consists of seven blocks, five practice and two experimental blocks. Stimuli are introduced in the practice blocks and constructs and attribute stimuli are paired to establish an association based on reaction time. Pairings correspond to either the left or right hand and are switched in block 5. Reaction times on the reversed blocks are compared to determine how closely a construct is

associated with an attribute category in a participant's cognitive representation of the construct. The observed association allows the IAT to infer a relative attitude toward a construct (Greenwald et al., 1998).

The IAT is able to circumvent one's natural tendencies to appear in a socially acceptable manner and provide insight into an individual's unfiltered attitudes toward a given construct (Greenwald et al., 1998). Similar to the Stroop task, which demonstrates a participant's reduction in response time when dealing with incongruent material (e.g., naming the color printed when the word is denoting a different color; Stroop, 1935), the IAT assesses the degree to which an evaluative dimension is congruent with a given construct such as race or gender (Greenwald & Banaji, 2017). Congruence allows the IAT to infer a strength of association between an evaluative dimension held by an individual and attitude toward a particular construct. Using various measures of attitudes have allowed researchers to assess the impact of attitudes on behavior.

Attitudes and Care

Attitudes have been found to aid in the prediction of behaviors (Myers, 1990). The attitudes held by individuals have demonstrated an impact on hiring behavior, voting behavior, and judgments in court cases (Greenwald & Banaji, 2017). After blind hiring practices were implemented by various orchestras in the United States, there was an increase in female hires from less than 20% in 1975 to approximately 40% in 1990 (Goldin & Rouse 2000). Attitudes held by providers have been found to impact quality of care and the ability to build rapport with clients from different cultural backgrounds (APA, 2003). Personal beliefs and biases held toward individuals of another race, sexual minorities, gender, and age have all been shown to have a significant impact on a provider's ability to provide quality care. Additionally, an awareness of

one's attitudes is an important factor in mitigating the potential effects of the attitudes, particularly in cases with a low opportunity to assess and process attitudes (e.g., moments of high demand, when fatigue is present, moments requiring quick responses; Fazio, 1990). Due to the potential effects of attitudes on behaviors, assessing the impact of attitudes of VA providers toward transgender veterans is important.

Few studies have examined attitudes of VA providers toward transgender veterans. Sherman et al. (2014) examined the attitudes of providers toward LGBTQ veterans by looking at three domains: education, beliefs, and practices. They found that 47% of providers had received training in treating LGBTQ clients while in school, 43% had received some form of post-graduate training on treating LGBTQ clients, and 45% reported having a discussion regarding LGBTQ issues within a meeting 0 – 1 times over the last year. In addition, transgender veterans have reported feeling "unwelcome" and "uncomfortable" within the VA setting (Sherman et al., 2014; Shipherd et al., 2012). Transgender veterans further expressed concern discussing their health needs with medical providers that exceeded the level of discomfort experienced when meeting with mental health providers (Sherman et al., 2014; Shipherd et al., 2012). However, no studies were found looking at explicit attitudes expressly endorsed by VA providers or implicit attitudes.

Due to the relative sensitivity of the topic and a general social desirability bias, the IAT lends itself as a useful tool to assess implicit attitudes toward transgender veterans. The IAT is able to circumvent one's natural tendencies to appear in a socially acceptable manner and provide insight on an individual's unfiltered attitudes toward a given construct. In fact, these filters are often cited for the relatively low correlation strength between implicit attitudes and explicit attitudes (Greenwald et al., 1998). Measures exist to assess the attitudes toward

transgender individuals (Walch et al., 2012; Wang-Jones et al., 2017). The Attitudes toward Transgendered Individuals Scale (ATTI; Walch et al., 2012) was designed to assess for explicit attitudes toward individuals who identify as transgender. Additionally, a pair of IATs (GI-IATs) were developed to assess for implicit attitudes toward trans men (Trans men GI-IAT) and trans women (GI-IAT) respectively (Wang-Jones et al., 2017). From the culmination of the literature, several suggested hypotheses are made.

Hypotheses

The present study utilizes previously constructed IAT instruments designed to assess attitudes toward transgender individuals as well as an explicit measure of attitudes toward transgender individuals to create a holistic picture of the attitudes of providers toward transgender individuals. Based on the review of the literature, this study posits three hypotheses.

Hypothesis One

When assessed concurrently, IAT and explicit measures of attitudes have not been strongly correlated. Meta-analyses of implicit attitude research found weak correlations between the IAT and explicit measures for socially sensitive topics (Greenwald et al., 2009; Oswald et al., 2013). Based on the findings of previous literature assessing the correlation between implicit and explicit measures, it is expected that:

(1) Implicit attitudes of providers toward TGNC individuals will be weakly correlated to explicit attitudes of providers.[1]

H_1: *r* will approach 0

[1] Hypothesis one was changed following data collection as it was realized that the initial hypothesis, H1: $\bar{X}ip \neq \bar{X}ep$, could not be meaningfully assessed.

Hypotheses Two and Three

Previous studies have found the majority of medical providers identify with political conservatism (Bonica, et al., 2014; U.S. Census Bureau, 2017), which is associated with negative attitudes toward TGNC individuals (Norton & Herek, 2013). Additionally, TGNC individuals have reported more difficulty in seeking care from their medical providers than mental health providers (Johnson & Federman, 2013; Sherman et al., 2014a, 2014b). Based on these findings, it was believed that:

(2) The explicit attitudes of medical providers toward TGNC individuals will be less positive than the explicit attitudes of mental health providers toward TGNC individuals.

$$H_2: \bar{X}_{em} < \bar{X}_{eb}$$

(3) The implicit attitudes of medical providers toward TGNC individuals will be less positive than the implicit attitudes of mental health providers toward TGNC individuals.

$$H_3: \bar{X}_{im} < \bar{X}_{ib}$$

Method

Participants

An email was sent to 100 clinicians and seven professional listservs asking them to request the participation of all providers under their supervision. Initially, 66 participants completed at least part of the survey. Two participants' data were excluded based on the advanced scoring protocol for the IAT outlined by Greenwald, Nosek, and Banaji (2003) and 16 participants' data were excluded because they did not complete both IATs, they did not complete the ATTI, or they did not identify whether they were a medical provider or a mental health provider. Forty-eight total providers (34 women [70.8%], 12 men [25%], 2 TGNC [4.2%]; see Table 1) were retained for final analysis consisting of 40 mental health providers (83.3%) and 8 medical providers (16.7%). Participants reported being between 22 and 73 years of age with an average age of 37 and a standard deviation of 11.54. The majority of participants identified as Caucasian/European American/White (n = 37, 77%), followed by Hispanic, Latino/a, Chicano/a American (n = 5, 10.4%), and African American (n = 2, 4.2%). Regarding sexual orientation, 66.7% (n = 32) participants identified as heterosexual and 33.3% (n = 16) identified as a sexual minority (see Table 1 for all demographics). Participants were emailed a survey code that was completed through Qualtrics, an online data collection tool.

Table 1
Frequency Table for Demographics

Variable		*n*	Percentage
	Total Sample	48	
Gender			
	Female	34	70.8%
	Male	12	25.0%
	TGNC	2	4.2%
Ethnicity			
	Caucasian/European American/White	37	77.0%
	Hispanic, Latino/a, Chicano/a American	5	10.4%
	African American	2	4.2%
	Multi-Ethnic	2	4.2%
	Pacific-Islander American	1	2.1%
	Middle-Eastern/North-African American	1	2.1%
Relationship Status			
	Married	30	62.4%
	Single	7	14.6%
	Exclusive Relationship	5	10.4%
	Engaged	3	6.3%
	Casual Relationship	3	6.3%
Sexual Orientation			
	Heterosexual	32	66.7%
	Bisexual	10	20.8%
	Queer	4	8.3%
	Gay/Lesbian	2	4.2%
Specialty			
	Mental Health	40	83.3%
	Medical	8	16.7%
TGNC Friends			
	None	31	64.6%
	More Than One	11	22.9%
	One	6	12.5%
TGNC Acquaintances			
	More Than One	35	72.9%
	One	7	14.6%
	None	6	12.5%
Care of Transgender Individuals Training			
	Yes	32	66.7%
	No	16	33.3%
Time since Last Training			
	2 – 5 years	16	50.0%
	0 – 1 years	14	43.8%
	6 – 10 years	2	6.3%

Measures

All measures were presented to participants via the online survey system Qualtrics (Qualtrics Inc., Provo, UT). Each participant completed a demographics survey (Appendix A), an explicit measure of attitudes toward TGNC individuals (Attitudes Toward Transgender Individuals scale; Appendix B), the trans women gender identity IAT (Appendix C), and the trans men gender identity IAT (Appendix D).

Demographics. Gender, ethnicity, age, relationship status, sexual orientation, specialty, type of facility they worked at, political conservatism, interaction with TGNC clients, and time since last training related to TGNC care were assessed via a demographic questionnaire. Demographics were assessed to control for potential confounding variables.

Explicit Attitudes Toward TGNC Individuals. The Attitudes toward Transgendered Individuals Scale (ATTI; Walch et al., 2012) is a 20-item self-report measure designed to assess attitudes and stigma toward TGNC individuals. The ATTI is set to a 5-point numerical rating scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree.* Scores on the ATTI range from 20 – 100 with higher scores indicating positive attitudes toward TGNC individuals and lower scores indicating less positive attitudes toward TGNC individuals. The ATTI was used to assess explicit attitudes of both medical providers and mental health providers toward TGNC individuals in the current study. The ATTI has been found to be internally consistent and displayed evidence of validity in previous studies of college students ages ranging 18 – 64 (Walch et al., 2012).

Implicit Attitudes Toward TGNC Individuals. Implicit attitudes of providers toward TGNC individuals were measured using two separate gender identity IATs (GI-IATs), one for trans men and another for trans women (Wang-Jones et al., 2017). The two GI-IATs consist of

three words that represent either trans men (trans men GI-IAT) or trans women (trans women GI-IAT), three words that represent either cisgender men (trans men GI-IAT) or cisgender women (trans women GI-IAT), five words that are positively valanced, and five words that are negatively valanced. The two GI-IATs are designed to assess implicit attitudes toward trans men and trans women, respectively. Both GI-IATs were found to be internally consistent and displayed evidence of validity in a sample of 344 adults from the United States (Wang-Jones et al., 2017).

Each IAT consisted of seven blocks, five practice blocks consisting of 20 trials and two experimental blocks consisting of 40 trials. The practice block immediately following the reversal (i.e., block 5) consists of 40 trials in order to eliminate the order effect (Carpenter et al., 2019; Nosek et al., 2005). Words representing the construct categories (e.g., transsexual men or biological men) appeared in the center of the participant's computer screen. Participants were required to sort these words into the proper category based on the reminders displayed at the top of the screen using either the "E" key (representing the left side of the screen) or the "I" key (representing the right side of the screen). The following block repeated this procedure for the attribute stimuli (i.e., good or bad). Next, the construct categories were paired with the attribute stimuli and participants were required to sort both in the same procedure. The combined block was repeated in block 4, this time for 40 trials. For block 5, the attribute stimuli were again displayed; however, reminders reversed sides of the screen. The following two blocks were combined blocks with constructs paired with the opposite attribute category.

Both GI-IATs were scored using the Greenwald, Nosek, and Banaji (2003) improved scoring algorithm. This algorithm improves upon the original scoring procedures by increasing the overall power of the IAT, thus reducing the total number of participants needed for a study,

reduced likelihood of contamination by extraneous variables such as extreme scores, and provides a more nuanced score that better illustrates individual differences (Greenwald et al., 2003). All combined blocks (i.e., blocks 3, 4, 6, 7) are used when calculating the final difference score. When scoring the IATs, trials with latencies greater than 10,000 ms were eliminated and participants who had greater than 10% of their trials with a reaction time less than 300 ms were eliminated (Greenwald et al., 2003). The mean latencies of all correctly sorted trials are calculated and a pooled standard deviation is calculated for all trials in blocks 3 and 6 as well as blocks 4 and 7. Each error latency (i.e., how long a participant took to make an incorrect sort) is replaced by the calculated mean latency plus 600 ms. Next, the values of each of the four blocks are averaged. Then, the difference of the averaged scores is computed for blocks 6 and 3 (B6 – B3) and again for blocks 7 and 4 (B7 – B4). The difference scores are then each divided by the pooled standard deviation for its respective set of blocks (e.g., difference score for B6 and B3 were divided by the pooled *SD* of B6 and B3). The quotients are then averaged creating a final D score that represents the results on the IAT. In the present study, positive scores for an individual are indicative of a faster response time for the incompatible block (i.e., trans good with biological bad), denoting a preference for TGNC individuals, and negative scores for an individual are indicative of a faster response time for the compatible block (i.e., trans and bad with biological good), denoting a preference for cisgender individuals. The described procedure is repeated for both the trans women and trans men GI-IATs.

The two GI-IATs were strongly correlated, $r(46) = .55$, $p < .01$. D scores for the GI-IATs were obtained using IATGEN'S data analysis tool. All data were then inputted into SPSS for detailed analysis. A reliability analysis was used to determine current reliability of the measures used. D scores for GI-IATs were averaged for each participant to create a composite implicit

attitude score. Z-scores were created for the results of the implicit attitude score and the results of the ATTI.

Procedure

Approval for this study was obtained from the University Institutional Review Board. This study garnered participation from medical and mental health providers in order to assess their attitudes toward TGNC individuals. Providers worked in a range of settings including state, federal, and private practice settings. Participants were recruited through snowball sampling methods and self-selected based upon their identification as either a medical or mental health provider. Providers were recruited through membership in either a university listserv or in a professional listserv managed by the American Psychological Association, the American Medical Association, the Society for the Scientific Study of Sexuality, or the Veterans Health Administration. After providing informed consent, each participant completed a demographic survey, the ATTI, and both GI-IATs.

Recruitment

In order to recruit providers, an email containing the survey link on Qualtrics was sent to clinicians and listservs specifically for medical and mental health providers asking them to distribute the survey to all medical and mental health providers (see Appendix H for participation recruitment email). Participants were informed of the nature of this study and were offered to enter for a chance to be randomly selected for one of 10 $20 Amazon gift cards. Participation was voluntary and anonymous. All responses were recorded electronically through Qualtrics. Qualtrics administration was chosen in order to facilitate ease of access for participants as well to allow for greater level of recruitment for a specialty population.

Analysis

Data from the survey were cleaned, removing participants that did not complete an attitude measure or report a provider type, and coded by the researcher. Pearson's correlations were used to test Hypothesis 1 and Mixed Model Repeated Measures Factorial ANOVA analyses were conducted to text Hypotheses 2 and 3.

Results

Explicit Attitudes

Scores on the ATTI were summed with the necessary items recoded in order to create an explicit attitudes score. An analysis of internal consistency was conducted and an alpha of .91 was found. The average score was 91.63 with a standard deviation of 9.35 and scores ranged from 64 to 100. Scores were indicative of positive explicit attitudes toward TGNC individuals. A one-way ANOVA compared the ATTI scores for mental health and medical providers. There was no significant difference in the ATTI scores between mental health ($M = 91.70$, $SD = 9.99$) and medical providers ($M = 91.25$, $SD = 5.55$), $F(1, 46) = .02$, $p = .903$, $\eta^2 = .00$. Scores were then transformed to Z-scores in order to create a standard score for later comparisons. The mean score on the ATTI for medical providers was -.04 with a standard deviation of .59, which was indicative of positive attitudes toward TGNC individuals. The mean score on the ATTI for mental health providers was .01 with a standard deviation of 1.07, which was indicative of positive attitudes toward TGNC individuals.

Implicit Attitudes

D scores for the IATs were obtained using IATGen's data analysis tool (Carpenter et al., 2019) and following Greenwald, Nosek, and Banaji's (2003) advanced scoring procedure. An analysis of internal consistency was conducted and an alpha of .89 was found for both the Trans

women GI-IAT and the Trans men GI-IAT. The mean score on the Trans women GI-IAT was -.008 with a standard deviation of .479, which was indicative of no relative preference for trans women or cisgender women, by all providers. The mean score on the Trans men GI-IAT was -.023 with a standard deviation of .465, which was indicative of no relative preference for trans men or cisgender men, by all providers. Implicit attitudes toward trans women and trans men were significantly correlated, $r(46) = .55$, $p < .01$. Next, a composite score was created to assess overall implicit attitudes.

The D scores for each GI-IAT were averaged together for each participant to create a total implicit attitude toward TGNC individuals score ($M = -.01$, $SD = .42$) ranging from -1.21 to .95. The mean combined implicit attitude score for medical providers was -.29 with a standard deviation of .42, which was indicative of a slight to moderate preference for cisgender individuals. The mean combined implicit attitude score for mental health providers was .05 with a standard deviation of .4, which was indicative of no relative preference for TGNC individuals or cisgender individuals; however, preferences trended toward TGNC individuals.

Next, scores were converted into Z-scores in order to create a standard score for later comparison. The mean combined implicit attitude score for medical providers was -.68 with a standard deviation of 1, which was indicative of neutral implicit attitudes toward TGNC individuals. The mean combined implicit attitude score for mental health providers was .14 with a standard deviation of .96, which was indicative of neutral attitudes toward TGNC individuals; however, it was relatively positive when compared to the sample as a whole. Z-scores for both the implicit and explicit attitudes were then used for the analysis of variance.

Analysis

Pearson's correlations were obtained to determine whether the implicit attitudes of providers were correlated with their explicit attitudes. Implicit and explicit attitudes displayed a significant strong, positive correlation, $r(46) = .53$, $p < .01$, thus suggesting that implicit attitudes and explicit attitudes were related. Next, a 2 (implicit attitudes vs. explicit attitudes; within subjects) x 2 (mental health provider vs. medical provider; between subjects) Mixed Model Repeated Measures Factorial ANOVA analysis was conducted (see Table 2). The main effect for type of attitude (implicit vs. explicit attitudes) was not significant, $F(1, 46) = 1.99$, $p = .165$, $\eta^2_{partial} = .04$. This indicated that there was no significant difference between implicit ($M = 0$, $SD = 1$)[2] and explicit attitudes ($M = 0$, $SD = 1$)[3]; however, 4% of the variance was accounted for in spite of the small sample size. The main effect for provider type (medical vs. mental health) was not significant, $F(1, 46) = 1.64$, $p = .207$, $\eta^2_{partial} = .03$. This indicated that the attitudes toward TGNC individuals, implicit or explicit, of medical providers (Estimated Marginal Mean = -.36, $SE = .31$) and mental health providers (Estimated Marginal Mean = .07, $SE = .14$) were not significantly different. The interaction effect for implicit vs. explicit attitudes within subjects was significant, $F(1, 46) = 4.48$, $p = .040$, $\eta^2_{partial} = .09$. Simple effects tests were conducted to probe the interaction (see Table 3).

[2] Estimated Marginal Mean = -.27 $SE = .19$, when controlling for the effects of provider type
[3] Estimated Marginal Mean = -.02 $SE = .20$, when controlling for the effects of provider type

Table 2
The Effects of Attitude Type (Implicit vs. Explicit) and Provider Type (Medical vs. Mental Health) on Attitudes toward TGNC Individuals

Effect	*SS*	*df*	*F*	*p*	$\eta^2_{partial}$
Attitude Type	0.87	1	1.99	.165	.04
Provider Type	2.48	1	1.64	.207	.03
Interaction	1.96	1	4.48	.040	.09
Error Within Subjects	20.10	46			
Error Between Subjects	69.46	46			

A repeated measures ANOVA was conducted comparing implicit attitudes and explicit attitudes of medical providers. There was a marginally significant difference between implicit attitudes and explicit attitudes (see Table 3) and nearly 40% of the variance was accounted for in spite of the small sample size. The discrepancy between medical providers' implicit attitudes toward TGNC individuals and the implicit attitudes reported by the overall sample was significantly larger than the discrepancy between medical providers' explicit attitudes and the explicit attitudes and the overall sample. Next, a repeated measures ANOVA was conducted comparing implicit attitudes and explicit attitudes of mental health providers. There was no significant difference between implicit attitudes and explicit attitudes. A one-way ANOVA was conducted comparing the explicit attitudes of medical providers and mental health providers. There was no significant difference for explicit attitudes between medical providers and mental health providers (see Table 3). Another one-way ANOVA was conducted comparing the implicit attitudes of medical providers and mental health providers. There was a significant difference for implicit attitudes between medical providers and mental health providers, accounting for 9% of the total variance (see Table 3). Medical providers displayed lower implicit attitudes toward TGNC individuals than mental health providers. The next section applied the results directly to the proposed hypotheses.

Table 3
Implicit Attitudes and Explicit Attitudes by Provider Type

	Stimulus Type		
	Medical Provider (n = 8)	Mental Health Provider (n = 40)	$F_{\text{simple effect}}$ (η_p^2)
Implicit Attitudes	-.68	.14	4.77*
	(1.00)	(.96)	(.09)
Explicit Attitudes	$-.4_a$	$.01_a$	0.02
	(.59)	(1.07)	(.00)
$F_{\text{simple effect}}$ (η_p^2)	4.49†	0.72	
	(.39)	(.02)	

Note. †= $p \leq .10$, * = $p \leq .05$. *df* for Stimulus Type simple effects = 7, 39. *df* for Attitudes simple effects = 1, 46. Standard deviations appear in parentheses below recorded means.

Discussion

Hypothesis 1 was partially supported as implicit attitudes and explicit attitudes of providers toward TGNC individuals were strongly correlated but not a perfect correlation. The observed correlation between implicit attitudes and explicit attitudes was not consistent with previous IAT literature indicating that attitude types for socially sensitive topics were only weakly correlated (Greenwald et al., 2009). Providers may be a unique population as they are under more pressure to hold positive attitudes toward TGNC individuals and are held to a higher standard by ethical codes and oaths (e.g., APA, 2017; AMA, 2016). Additionally, the assumption that this topic was more socially sensitive may not be accurate for providers, resulting in the strong correlation between implicit and explicit measures (Greenwald et al., 2009).

No significant difference was found between the explicit attitudes of the two provider groups based on an ANOVA (i.e., Hypothesis 2). Overall, explicit attitudes of providers were quite positive toward TGNC individuals. It was believed that medical providers would display significantly less positive attitudes toward TGNC individuals based upon the propensity of medical providers to be more politically conservative and religious (Bonica, et al., 2014; U.S.

Census Bureau, 2017), which is associated with more negative attitudes toward TGNC individuals (Norton & Herek, 2013). However, the sample in this study was primarily politically liberal, scored lower on religiosity, and had contact with the TGNC population, making them more likely to hold positive attitudes toward TGNC individuals (Barbir et al., 2017; Norton & Herek, 2013). It is possible that no differences were observed in explicit attitudes due to the supportive make-up of the sample.

Furthermore, medical providers displayed a preference for cisgender individuals, which was significantly different from the observed preferences of mental health providers, lending support to Hypothesis 3. Additionally, the observed difference between implicit and explicit attitudes for medical providers was marginally significant and a large effect size was observed. Medical providers displayed a slight to moderate preference for cisgender individuals over TGNC individuals, potentially resulting in implicit biases that may result in micro- or macro-aggressions (APA, 2015).

Implications

Based on the results of the study, implications for real world practice can be made. First, based upon Alport's (1938) contact hypothesis and the results of Barbir and colleagues' (2017) study, it is recommended that efforts be made to engage in positive interactions with members of the TGNC communities. Participants in the present study held positive attitudes toward TGNC individuals and may have been predisposed to do so based on the high rate of contact with TGNC individuals. While it cannot be determined that positive attitudes were due to increased contact, it does provide further support for the previously established literature.

It is recommended that multicultural awareness trainings continue to be offered. The majority of the providers in the present study indicated participation in trainings specific to

transgender care. Majumdar, Browne, Roberts, and Carpio (2004) found that cultural sensitivity training improved healthcare providers' cultural awareness, increased open mindedness, and improved communication with patients from a minority group; thus, it is expected that a similar effect would be observed in relation to TGNC individuals. Participation in transaffirmative trainings may partially explain the positive attitudes toward the TGNC population observed in the present study.

While the majority of providers indicated they had participated in TGNC specific trainings, providing more opportunities for trainings related to TGNC care is an area of need. Thirty-three percent of respondents reported they had never had a training related to TGNC care. Of those who had completed a population specific training, over half reported their training was two or more years ago with 6.3% indicating it had been at least six years since their last training. It is important to note that significant change in standards of care and appropriate language is likely to occur in a six or more year period. Providing more opportunities for training and exposure to population specific information can allow for a greater level of care and knowledge, which is particularly important as many TGNC individuals have shared feeling a need to educate their providers (Grant et al., 2011). While the majority of providers indicated participation in TGNC specific trainings, the fluidity of knowledge may make it necessary to continue to participate in such trainings.

Limitations

Only 48 providers were retained for the final analysis, of which, only 8 were medical providers. This limited the interpretability and generalizability of the data. Additionally, the sample was predominantly Caucasian female, further limiting the representative nature of the data. Another limiting factor was the limited availability of measures. Few explicit attitude

measures exist assessing the attitudes toward TGNC individuals and only one implicit measure existed at the time of this study. Additionally, these measures often used outdated or less inclusive language to represent the population. Furthermore, in order to measure implicit attitudes toward TGNC individuals, two separate implicit measures were used and their data averaged. This potentially skewed results, particularly if a participant had stronger valanced attitudes toward one subgroup (e.g., trans men). Finally, the design of the IAT is a limiting factor. The IAT requires two categories be set in opposition in order to determine a relative preference (Greenwald et al., 1998), making it difficult to ascertain absolute attitudes toward a construct.

Strengths

The present study was the first known to assess implicit attitudes of providers. Implicit attitudes have been shown to be an underlying factor in determining the quality of care a patient receives. Additionally, the present study made efforts to look at attitudes from a holistic perspective, providing further support for potential avenues of improving care for TGNC individuals. Finally, the present study assessed the attitudes of providers in an effort to improve care for TGNC individuals. Very few studies have been conducted assessing the viewpoint of the providers, elucidating an important path to improving patient care.

Future Research

Based upon the results of the present study, multiple recommendations for future research can be made. Due to the findings suggesting less awareness of implicit biases in medical professionals, one potential study could look at the impact of multicultural interventions or awareness training on providers. A deeper analysis of this intervention may give greater insight on how to improve awareness and attitudes toward TGNC individuals. A study specifically targeting the attitudes of medical providers may provide further insight regarding this observed

separation between implicit and explicit attitudes. Another area of interest may be comparing the attitudes of providers in various settings, such as private practice, hospitals, VAs, and rural providers versus urban providers. It is possible that different types of providers may gravitate to different types of settings influencing their experiences and attitudes toward TGNC individuals. Finally, future research endeavors would benefit from larger samples with a greater level of representation from diverse groups.

References

Albarracin, D., & Shavitt, S., (2018). Attitudes and attitude change. *Annual Review of Psychology, 69*(4), 1–29. https://doi.org/10.1146/annurev-psych-122216-011911

American Medical Association. (2016). AMA principles of medical ethics. https://www.ama-assn.org/delivering-care/ama-principles-medical-ethics

American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist*, *58*(5), 377–402. https://doi.org/10.1037/0003-066X.58.5.377

American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist, 70*(9), 832–864. http://dx.doi.org/10.1037/a0039906

American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. http://www.apa.org/ethics/code/index.html

Barbir, L. A., Vandevender, A. W., & Cohn, T. J. (2017). Friendship, attitudes, and behavioral intentions of cisgender heterosexuals toward transgender individuals. *Journal of Gay and Lesbian Mental Health*, *21*(2), 154–170. https://doi.org/10.1080/19359705.2016.1273157

Benson, K. (2013). Seeking support: Transgender client experiences with mental health services. *Journal of Feminist Family Therapy, 25*(1), 17–40. https://doi.org/10.1080/08952833.2013.755081

Bess, J. A., & Stabb, S. D. (2009). The experiences of transgendered persons in psychotherapy: Voices and recommendations. *Journal of Mental Health Counseling*, *31*(3), 264–282. https://doi.org/10.17744/mehc.31.3.f62415468l133w50

Blavin, F., Shartzer, A., Long, S. K., & Holahan, J. (2016). Employer-sponsored insurance stays strong, with no signs of decay under the ACA: Findings through March 2016. *Urban Institute*. http://hrms.urban.org/briefs/employer-sponsored-insurance-stays-strong.pdf

Department of Defense. (2011). DoD Instruction 4715.15, December 11, 2006; Incorporating change 1, May 10, 2011. *Executive Services Directorate.* Retrieved from http://www.dtic.mil/whs/directives/corres/pdf/471515p.pdf

Department of Defense. (2018). Department of Defense report and recommendations on military service by transgender persons. *Executive Services Directorate.* https://media.defense.gov/2018/Mar/23/2001894037/-1/-1/0/MILITARY-SERVICE-BY-TRANSGENDER-INDIVIDUALS.PDF

dickey, l. m., Reisner, S. L., & Lee Juntunen, C. (2015). Non-suicidal self-injury in a large online sample of transgender adults. *Professional Psychology: Research and Practice*, *46*(1), 3–11. https://doi.org/10.1037/a0038803

Fazio, R. H. (1990). Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 75-109). Academic Press.

Fraley, R. C., Griffin, B. N., Belsky, J., & Roisman, G. I. (2012). Developmental antecedents of political ideology: A longitudinal investigation from birth to age 18 years. *Psychological Science, 23*(11), 1425–1431. https://doi.org/10.1177/0956797612440102

Fredriksen-Goldsen, K. I., Cook-Daniels, L., Kim, H. J., Erosheva, E. A., Emlet, C. A., Hoy-Ellis, C. P., Goldsen, J., & Muraco, A. (2014). Physical and mental health of transgender older adults: An at-risk and underserved population. *Gerontologist*, *54*(3), 488–500. https://doi.org/10.1093/geront/gnt021

Gerhardstein, K. R., & Anderson, V. N. (2010). There's more than meets the eye: Facial appearance and evaluations of transsexual people. *Sex Roles*, *62*(5–6), 361–373. https://doi.org/10.1007/s11199-010-9746-x

Goldblum, P., Testa, R. J., Pflum, S., Hendricks, M. L., Bradford, J., & Bongar, B. (2012). The relationship between gender-based victimization and suicide attempts in transgender people. *Professional Psychology: Research and Practice, 43*(5), 468–475. https://doi.org/10.1037/a0029605

Goldin, C., & Rouse, C. (2000). Orchestrating impartiality: The impact of "blind" auditions on female musicians. *American Economic Review, 90*, 715–741. http://dx.doi.org/10.1257/aer.90.4.715

Grant, J. M., Mottet, L. A., Tanis, J. D., Harrison, J., Herman, J. L., & Keisling, M. (2011). *Injustice at every turn: A report of the national transgender discrimination survey.* National Center for Transgender Equality and National Gay and Lesbian Task Force.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*(1), 4–27. https://doi.org/10.1037/0033-295X.102.1.4

Greenwald, A. G., & Banaji, M. R. (2017). The implicit revolution: Reconceiving the relation between conscious and unconscious. *American Psychologist*, *72*(9), 861–871. https://doi.org/10.1037/amp0000238

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, *74*(6), 1464–1480. https://doi.org/10.1037/0022-3514.74.6.1464

Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology, 85*(2), 197–216. https://doi.org/10.1037/0022-3514.85.2.197

Israel, T., Gorcheva, R., Burnes, T. R., & Walther, W. A. (2008). Helpful and unhelpful therapy experiences of LGBT clients. *Psychotherapy Research*, *18*(3), 294–305. https://doi.org/10.1080/10503300701506920

Johnson, L., & Federman, E. J. (2013). Pathways and barriers to care for LGBT veterans in the U.S. Department of Veterans Affairs (VA). *Journal of LGBT Issues in Counseling*, *7*(3), 218–235. https://doi.org/10.1080/15538605.2013.812928

Klauer, K. C., & Musch, J. (2008). Affective priming: Findings and theories. In J. Musch & K. C. Klauer (Eds.), *The psychology of evaluation: Affective processes in cognition and emotion* (pp. 9–50). Lawrence Erlbaum Associates, Publishers.

Koh, J. (2012). The history of the concept of gender identity disorder. *The Japanese Society of Psychiatry & Neurology, 114*(6), 673–680. https://www.jspn.or.jp/modules/english/index.php?content_id=1

Lipka, M. (2016, October 3). Americans are divided over which public bathrooms transgender people should use. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2016/10/03/americans-are-divided-over-which-public-bathrooms-transgender-people-should-use/

Lambda Legal. (2012). Professional organization statements supporting transgender people in health care. http://www.lambdalegal.org/sites/default/files/publications/downloads/fs_professional-org-statements-supporting-trans-health_1.pdf

McDuffie, E., & Brown, G. R. (2010). 70 U.S. veterans with gender identity disturbances: A descriptive study. *International Journal of Transgenderism*, *12*(1), 21–30. https://doi.org/10.1080/15532731003688962

Moe, J. L., Finnerty, P., Sparkman, N., & Yates, C. (2015). Initial assessment and screening with LGBTQ clients: A critical perspective. *Journal of LGBT Issues in Counseling*, *9*(1), 36–56. https://doi.org/10.1080/15538605.2014.997332

Myers, D. G. (1990). *Social psychology* (3rd ed.). McGraw-Hill.

Nadal, K. L., Skolnik, A., & Wong, Y. (2012). Interpersonal and systemic microaggressions toward transgender people: Implications for counseling. *Journal of LGBT Issues in Counseling*, *6*(1), 55–82. https://doi.org/10.1080/15538605.2012.648583

Nicolls, D. (2018). Transgender & gender non-conforming (TGNC) clients: Clinical issues and treatment strategies. *PESI.*

Norton, A. T., & Herek, G. M. (2013). Heterosexuals' attitudes toward transgender people: Findings from a national probability sample of U.S. adults. *Sex Roles*, *68*, 738–753. https://doi.org/10.1007/s11199-011-0110-6

Oswald, F. L., Mitchell, G., Blanton, H., Jaccard, J., & Tetlock, P. E. (2013). Predicting ethnic and racial discrimination: A meta-analysis of IAT criterion studies. *Personality and Social Psychology*, *105*(2), 171–192. http://dx.doi.org/10.1037/a0032734

Rachlin, K. (2002). Transgender individuals' experiences of psychotherapy. *International Journal of Transgenderism*, *6*(1). Retrieved from http://www.symposion.com/ijt/ijtvo06no01_03.htm

RAND Corporation. (2016). *Assessing the implications of allowing transgender personnel to serve openly.* RAND Corporation. https://www.rand.org/pubs/research_reports/RR1530.html

Sherman, M. D., Kauth, M. R., Ridener, L., Shipherd, J. C., Bratkovich, K., & Beaulieu, G. (2014). An empirical investigation of challenges and recommendations for welcoming sexual and gender minority veterans into VA care. *Professional Psychology: Research and Practice*, *45*(6), 433–442. https://doi.org/10.1037/a0034826

Sherman, M. D., Kauth, M. R., Shipherd, J. C., & Street, R. L. (2014a). Communication between VA providers and sexual and gender minority veterans: A pilot study. *Psychological Services*, *11*(2), 235–242. https://doi.org/10.1037/a0035840

Sherman, M. D., Kauth, M. R., Shipherd, J. C., & Street, R. L. (2014b). Provider beliefs and practices about assessing sexual orientation in two veterans health affairs hospitals. *LGBT Health*, *1*(3), 185–191. https://doi.org/10.1089/lgbt.2014.0008

Shipherd, J. C., Mizock, L., Maguen, S., & Green, K. E. (2012). Male-to-Female transgender veterans and VA health care utilization. *International Journal of Sexual Health*, *24*(1), 78–87. https://doi.org/10.1080/19317611.2011.639440

Singh, A. A., & Jackson, K. (2012). Queer and transgender youth: Education and liberation in our schools. In E. R. Meiners & T. Quinn (Eds.), *Sexualities in education: A reader* (pp. 175–186). Peter Lang.

Stroop, J. R. (1935). Studies of interference in serial verbal reactions. *Journal of Experimental Psychology, 18*(6), 643–662. https://doi.org/10.1037/h0054651

Tatum, S. (2018, March 24). White house announces policy to ban most transgender people from serving in military. *CNN*. https://www.cnn.com/2018/03/23/politics/transgender-white-house/index.html

Testa, R. J., Sciacca, L. M., Wang, F., Hendricks, M. L., Goldblum, P., & Bradford, J. (2012). Effects of violence on transgender people. *Professional Psychology: Research and Practice, 43*(5), 452–459. https://doi.org/10.1037/a0029604

Transgender Law Center. (N. D.). Ideas of change. https://transgenderlawcenter.org/

Vasquez, M. J. T. (2007). Cultural difference and the therapeutic alliance: An evidence-based analysis. *American Psychologist*, *62*(8), 878–885. https://doi.org/10.1037/0003-066X.62.8.878

Walch, S. E., Ngamake, S. T., Francisco, J., Stitt, R. L., & Shingler, K. A. (2012). The attitudes toward transgendered individuals scale: Psychometric properties. *Archives of Sexual Behavior*, *41*(5), 1283–1291. https://doi.org/10.1007/s10508-012-9995-6

Wang-Jones, T. S., Alhassoon, O. M., Hattrup, K., Ferdman, B. M., & Lowman, R. L. (2017). Development of gender identity implicit association tests to detect attitudes toward transmen and transwomen. *Psychology of Sexual Orientation and Gender Diversity, 4*(2), 169–183. http://dx.doi.org/10.1037/sgd0000218

Welsh, T. (2016). Military lifts transgender ban. Retrieved May 15, 2018, from http://www.mcclatchydc.com/news/nation-world/national/article86902072.html

White Hughto, J. M., Reisner, S. L., & Pachankis, J. E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine, 147*, 222–231. https://doi.org/10.1016/j.socscimed.2015.11.010

Yerke, A. F., & Mitchell, V. (2013). Transgender people in the military: Don't ask? Don't tell? Don't enlist! *Journal of Homosexuality*, *60*(2–3), 436–457. https://doi.org/10.1080/00918369.2013.744933

Chapter 2: Introduction and Literature Review

With constant changes in laws and regulations (e.g., bathroom laws, executive orders, and nondiscrimination policies; Transgender Law Center, N. D.), transgender and gender non-conforming (TGNC) issues such as rights (e.g., freedom of gender identity and expression) and quality of care (e.g., access to transaffirmative care and preventative care; see Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012) become increasingly more important. Individuals who identify as TGNC do not benefit from many of the same laws that protect other minority populations (Singh & Jackson, 2012) and as such often experience discrimination and stigma based upon their gender identity (Grant et al., 2011). Additionally, these inequalities are present in multiple settings including the education system, healthcare, levels of the government, and the military.

TGNC individuals are provided fewer protections within the education system and experience higher levels of discrimination than their cisgender peers (i.e., individuals whose assigned gender at birth aligns with their current gender identity; Singh & Jackson, 2012), leading to higher dropout rates (Grant et al., 2011). Grant and colleagues (2011) found TGNC individuals were likely to experience continued discrimination in the workplace and more likely to fall below the poverty line than their cisgender peers (Fredriksen-Goldsen et al., 2014). Within the healthcare system, TGNC individuals express concerns receiving quality care and note discrimination due to their gender identity (Grant et al., 2011). Prior to 2017, the military had planned to repeal regulations that previously prevented TGNC individuals from serving within the military. However, new regulations were enacted in 2017 that prevented TGNC individuals from openly serving in the United States military without hiding their TGNC status (Tatum, 2018). Despite these regulations, Shipherd and colleagues (2012) found three times as many

TGNC individuals have served in a branch of the military compared to the rates of cisgender who have served in a branch of the military. In addition, regulations within the military and the Veteran's Health Administration (VA) have not always been conducive to the health and well-being of transgender veterans (Yerke & Mitchell, 2013). Current regulations issued by the Department of Defense (DoD, 2011) delineating who is eligible to serve in the U.S. military make it challenging for transgender veterans to serve openly as their identified gender or receive the same quality of care as other veterans while serving. Regulations have created a "policy of exclusion and rejection" (p. 436) and more recent changes such as the repeal of *Don't Ask Don't Tell* have done little to alleviate what Yerke and Mitchell called (2013) a state of "fear and secrecy" (p. 436) felt by TGNC people. The change in regulations has done little to improve the environment for TGNC individuals (Yerke & Mitchell, 2013). Attitudes toward TGNC individuals can impact the quality of care they receive.

The literature has documented that a clinician's attitudes can influence the quality of care a client receives (APA, 2013; Greenwald & Banaji, 2017; Israel et al., 2008; Vasquez, 2007). Attitudes, defined as "a person's evaluation of an object on a favorable to unfavorable continuum" (Albarracin & Shavitt, 2018, p. 300), have been shown to aid in predicting behavior (Greenwald & Banaji, 1995; Meyers, 1990) and can impact a clinician's ability to build rapport and connect with their clients (Bess & Stabb, 2009; Rachlin, 2002). Attitudes are comprised of both implicit attitudes, the automatic judgments one has toward a given construct (e.g., race, gender, sexuality), and explicit attitudes, one's view that is outwardly expressed (Greenwald & Banaji, 1995, 2017; Greenwald et al., 1998; Moe et al., 2015). Implicit attitudes are developed throughout an individual's life and most often work outside of one's conscious awareness (Greenwald & Banaji, 1995, 2017). The impact of these unconscious attitudes can be significant.

In fact, implicit attitudes have been shown to influence hiring behavior, voting behavior, and jury verdicts (Greenwald & Banaji, 2017). The combination of implicit and explicit attitudes has been shown to directly affect the quality of care that vulnerable populations—such as TGNC individuals—receive (APA, 2013; Greenwald & Banaji, 2017; Israel et al., 2008; Vasquez, 2007). However, the implicit attitudes of providers toward TGNC individuals is currently unknown. As the largest single healthcare system in the United States and due to the large population of TGNC individuals who have served in the military, the VA has contributed significantly to the body of research on care of TGNC individuals.

Recently, researchers have conducted studies to assess how TGNC veterans perceive the VA. In a survey of LGBT veterans, 93% shared a belief that it was important for the VA to be a welcoming environment to its patients; however, 34% of the same sample identified it as unwelcoming (Sherman et al., 2014b). Shipherd and colleagues (2012) found that only 30% of TGNC veterans surveyed who believed they were eligible for VA services actually sought care at a VA facility. Difficulty of use and fear of discrimination were the primary reasons cited for not using VA services (Shipherd et al., 2012). Furthermore, TGNC veterans reported feeling uncomfortable with discussing their medical needs with a VA physician for fear of discrimination and of receiving poor treatment (Johnson & Federman, 2013; Sherman et al., 2014a, 2014b). Fear of discrimination by staff, providers, and other veterans as well as perceived lack of knowledge by providers regarding the specific concerns of TGNC individuals have been cited as barriers to seeking care at the VA by TGNC veterans (Johnson & Federman, 2013; Sherman et al., 2014b; Sherman et al., 2014; Shipherd et al., 2012). In review of the literature on mental health providers, the concerns expressed by TGNC veterans appears justified.

TGNC individuals' concerns are supported when looking at related concerns expressed by providers. Mental health providers reported feeling uncomfortable asking questions regarding gender and sexuality issues unless initiated by the client first, and providers indicated that they are unable to address the concerns of their transgender clients due to inadequate training to properly address the concerns (Sherman et al., 2014). However, the VA has taken steps in order to remedy these concerns. Shipherd, Kauth, and Matza (2016) described an e-consultation program available for VA providers in an effort to improve the overall standard of care for transgender patients. The national interdisciplinary transgender e-consultation program, started in 2014, was designed to provide all VA providers with access to an interdisciplinary team of providers via remote consultation (Shipherd et al., 2016). The program's goal was to provide practitioners with access to a multi-disciplinary team in order to answer specific questions related to caring for clients identifying as TGNC. Although teams varied in their construction, they consisted of at least four members from varying fields (e.g., primary care physician, psychologist, psychiatrist, pharmacist, endocrinologist, social worker, or nurse). In the first 17 months of the program, 303 consultations had been completed from 130 different VA facilities across the country. Of these 303 consultations, 230 were for unique veterans. Questions ranged from medication concerns, comorbid diagnoses, questions about psychotherapy, and questions surrounding gender confirming surgeries. Although the e-consultation program has added additional resources for providers and been shown to be feasible based upon the response time, quality, and cost (Shipherd et al., 2016), no outcome data regarding user satisfaction, how the program has impacted treatment planning, or patient outcomes has been collected. Additional information regarding the impact of this program should be conducted in order to better understand its usefulness as well as provide direction for how to adapt the program to better meet

the needs of the providers and clients. However, the VA is not alone in these findings, TGNC individuals express significant barriers to care in community healthcare settings as well.

TGNC individuals express difficulty in receiving necessary preventative care, such as gynecological services for trans men (Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012). Denial or long waiting periods for transaffirmative procedures, such as hormone therapy (APA, 2015; Nichols, 2018), and refusal of general treatment based on an individual's gender identity occur (Grant et al., 2011). Additionally, TGNC individuals express a need to educate their providers on their unique concerns (Grant et al., 2011) and express fear of inadequate care and discrimination (Benson, 2013).

While it is known that TGNC individuals experience discrimination while seeking healthcare (Grant et al., 2011) and perceive aspects of the healthcare setting as uninviting (Sherman et al., 2014b; Sherman et al., 2014; Shipherd et al., 2012), the current overall attitudes of providers towards TGNC individuals is not known. In their study, Sherman and colleagues (2014b) gathered data regarding providers' comfort with asking clients about sexual orientation; however, they did not gather data regarding providers' attitudes toward TGNC individuals. To date, providers' implicit attitudes toward TGNC individuals within has not been assessed. In addition, researchers have not examined explicit attitudes in the current sociopolitical climate that has been marked by significant changes in policy related to TGNC rights.

Due to the impact of negative attitudes and stigma on mental health and well-being (White Hughto et al., 2015), understanding the implicit attitudes of providers toward TGNC individuals may improve quality of care and the overall standard of care, help guide future trainings, and provide a way to improve the climate of various healthcare settings for TGNC individuals. Through this understanding, researchers can identify ways to create a more inviting

environment. A greater level of care may be provided for TGNC individuals if researchers are able to better meet the needs of transgender individuals. Further investigation may lead to identifying target areas in which better training could be provided; variance within the attitudes of different systems of providers can help elucidate areas to target for future trainings (APA, 2015; White Hughto et al., 2015). Before further discussion of the current project, it is important to introduce the important terms used and how they are used.

Key Terms and Definitions

In the present section, important terms are defined. Though many definitions may exist, the following provides their current operationalization.

Gender Identity

The generally accepted definition for gender identity throughout the literature is a person's internal sense of self, related to being male, female, or an alternative gender (APA, 2015). Gender identity does not always align with appearance, sexual characteristics, or assigned gender at birth (APA, 2015).

Transgender

Within the body of literature, the term transgender refers to a collection of terms (RAND Corporation, 2016; Walch et al., 2012) that refers to an individual whose gender identity does not align with the gender assigned at birth (e.g., transsexual, gender non-conforming, cross dressing, and intersex; APA, 2013).

Transgender and Gender Non-Conforming (TGNC)

In their guidelines for practicing with TGNC clients, APA (2015) began using TGNC as a more inclusive term to indicate individuals who do not identify with the binary system of gender. As gender non-conforming falls underneath the transgender umbrella of terms, the terms TGNC

and transgender have been used interchangeably within the present paper to reflect the practice established by the APA (2015).

Cisgender

Cisgender refers to an individual whose gender identity matches assigned gender at birth (APA, 2015). Throughout the literature, this definition for cisgender is used consistently.

Transaffirmative Care

Transaffirmative care is a type of care that is "respectful, aware and supportive of the needs of TGNC people" (APA, 2015, p. 863) and can be characterized by providers being knowledgeable about issues faced by individuals who are transgender, as well as gender affirming behaviors (e.g., using the appropriate pronoun with the client; Korell & Lorah, 2007).

Attitudes

Attitudes are "a person's evaluation of an object on a favorable to unfavorable continuum" (Albarracin & Shavitt, 2018, p. 300) and include both implicit and explicit components. Many definitions have been used over the last century; however, this definition captures the breadth of research to date.

Explicit Attitudes

These consist of a person's known evaluations of an object. These are often filtered by social desirability and accessed only after self-reflection (Greenwald & Banaji, 2017; Nesbitt & Wilson, 1977).

Implicit Attitudes

Implicit attitudes are evaluations of a person, place, or object that are outside of an individual's conscious awareness (Greenwald & Banaji, 1995).

Chapter Overview

The following sections will discuss the experiences of TGNC individuals, including the impact of stigma, mental health concerns, and disproportionate representation within the U.S. armed forces. Next, a review of the relevant research regarding attitudes, what they are and how they are measured, how attitudes impact care of clients, why attitudes are of particular importance, areas of research where attitudes of providers have impacted the care of clients, and how the attitudes of mental health providers differ from the attitudes of medical providers will be discussed. Finally, hypotheses guided by the review of the literature are posited.

Individuals Who Identify as TGNC

The presence of fluid gender ideology stems back to the Greek myth *Metamorphoses* (8; 1989) that tells the story of a woman being transformed into a man. The story illustrates that the idea of non-conformity with one's assigned gender is not a new one (Koh, 2012). Through much of the 20th century, gender was typically conflated with sexuality, and individuals who identified as TGNC were either not studied, leading to a lack of knowledge regarding the experiences of TGNC individuals, or were grouped together with individuals who identified as lesbian, gay, and bisexual (APA, 2015). In the early decades of the 20th century, the view toward individuals identifying as transgender began to shift from believing they chose to live life as an alternate gender, to a view that accepted the possibility of a biological explanation (White Hughto et al., 2015). The shift in ideology led to medical treatments such as hormone therapy and gender reassignment surgery in the mid 1900s; however, support for these treatments was still limited (White Hughto et al., 2015). Despite a shift in view of the experiences of TGNC individuals, a binary conceptualization of gender persisted. The current conceptualization of transgender stems

from its classification in the Diagnostic and Statistical Manual of Mental Disorder (DSM; APA, 2015).

Early iterations of the DSM pathologized gender non-conformity. Gender Identity Disorder first appeared in the DSM-II (APA, 1968) and characterized non-conforming gender expressions or identities as disordered. Additionally, the classification of Gender Identity Disorder may have contributed to stigma and negative attitudes toward those identifying as transgender by characterizing TGNC individuals as "medically disordered" (Koh, 2012; White Hughto et al., 2015, p. 224). The latest version, the DSM-V, has taken steps to depathologize those identifying as transgender by emphasizing the need for significant distress in one's daily life directly due to one's gender assigned at birth not aligning with their identified gender in order to meet diagnosis for gender dysphoria. However, it has been argued that the classification of symptoms further adds to the stigma felt by TGNC individuals (White Hughto et al., 2015).

The term transgender is often used as an inclusive term referring to a subset of terms (RAND Corporation, 2016; Walch et al., 2012), which includes anyone who does not identify with the gender assigned at birth (APA, 2013). Under the current conceptualization of transgender, Meerwijk and Sevelius (2017) used data from a collection of national surveys to estimate the current number of American adults who identify as transgender at one million. Transgender individuals are adversely impacted by stigma and discrimination in their daily lives (APA, 2015; Grant et al., 2011). The following sections discuss how stigma is experienced by TGNC individuals, the impact of discrimination in multiple settings, and the mental health consequences.

Stigma

TGNC individuals experience discrimination and stigma (APA, 2013; Grant et al., 2011). Discrimination and stigma toward TGNC people can take many forms such as assuming an individual possesses psychopathology due to their gender expression, ignoring preferred name or pronoun when referring to an individual, assuming assigned gender at birth is the gender that aligns with their current gender identity, or asking inappropriate questions about one's bodies (APA, 2015; Nadal et al., 2010; Nadal et al., 2012). Effects of stigma and discrimination can adversely impact one's success in school, at work, and overall well-being (APA, 2015; Grant et al., 2011; Reason & Rankin, 2006). TGNC individuals do not benefit from many of the policies and protections, such as non-discrimination and freedom of expression, that other groups do (e.g., racial and ethnic minorities, individuals who identify as LGB; Currah & Minter, 2000; Spade, 2011). Gender identity and expression are not universally protected, and those who are non-conforming are often the target of discrimination and stigma (National LGBTQ Task Force, 2013; Taylor, 2007).

In a national survey of 6,450 TGNC individuals in the United States, 63% reported experiencing a serious act of discrimination, an event that severely impacted quality of life (Grant et al., 2011). These events ranged from loss of job due to bias to homelessness and incarceration due to gender expression (Grant et al., 2011). Furthermore, 23% of respondents to this national survey reported catastrophic levels of discrimination—defined as experiencing three or more life-altering events due to bias or discrimination (Grant et al., 2011). Stigma and discrimination have led to negative attitudes toward TGNC individuals.

Several studies have found negative attitudes toward TGNC individuals (Gerhardstein & Anderson, 2010; Nadal et al., 2012; Norton & Herek, 2013). In fact, heterosexual, cisgender (i.e.,

an individual whose gender assigned at birth aligns with their personal gender identity; APA, 2015) individuals held greater levels of negative attitudes toward TGNC individuals rating them as "considerably less favorable" than LGB individuals (Norton & Herek, 2013). Men were more likely to hold less positive attitudes toward transgender individuals than women (Gerhardstein & Anderson, 2010; Norton & Herek, 2013), regardless of identified affiliations such as religion or political stance (Norton & Herek, 2013; Riggs et al., 2012). Individuals who identified with a binary belief of gender, higher levels of psychological authoritarianism, political conservatism, or anti-egalitarianism were most likely to display negative attitudes toward TGNC individuals (Norton & Herek, 2013). Religiosity was associated with higher rates of negative attitudes toward TGNC individuals for women; however, this difference was not found for men (Norton & Herek, 2013).

In Schools. Negative attitudes have contributed to violence and discrimination of transgender individuals in school settings. Nondiscrimination policies at schools often do not include gender identity and expression (Singh & Jackson, 2012). In Kosciw and colleagues' (2014) survey of 7,898 LGBT youth, 55.2% of participants reported experiencing verbal harassment, 22.7% reported experiencing physical harassment, and 11.4% reported experiencing physical assault as a result of their gender expression. Fifteen percent of respondents in a national survey reported leaving school early due to harassment (Grant et al., 2011).

In the Workplace. In addition to negative school experiences, stigma has likely contributed to discrimination experienced in the workplace. Stigma may lead to further discrimination in the workplace (Bender-Baird, 2011). In Grant and colleagues' (2011) national survey of TGNC individuals, 90% of respondents reported having their careers or well-being adversely impacted as a result of harassment, mistreatment, or their response to these in the

workplace. These individuals felt they were forced to hide parts of themselves in order to avoid negative consequences in the workplace. In addition, 78% of participants reported experiencing discrimination and mistreatment in the workplace (Grant et al., 2011). Stigma and discrimination in both school and work settings has likely impacted the income of TGNC individuals.

Effects on Income. Increased levels of stigma in various settings have been associated with lower income for TGNC individuals (APA, 2015). In their cross-sectional sample consisting of 174 TGNC older adults, Fredriksen-Goldsen and her team (2014) found 48% of TGNC individuals' total income is less than or equal to 200% of the federal poverty line. In addition, TGNC individuals were found to be four times more likely to have a collective household income of less than $10,000 than their cisgender counterparts (APA, 2015).

In the Military. In addition to negative impacts on income, stigma and discrimination toward TGNC individuals can be seen within the military. Military regulations have a history of exclusion with transgender individuals (APA, 2015; Johnson & Federman, 2013; Yerke & Mitchell, 2011). Prior to the 2011 *Directive for Providing Health Care for Transgender and Intersex Veterans* (VHA Directive 2011-024), identifying as TGNC was a disqualifier for service (Yerke & Mitchell, 2011). In 2016, the RAND Corporation conducted a thorough analysis of the needs and costs of allowing transgender individuals to serve openly in the military. The RAND Corporation is a nonprofit think tank that conducts research in order to aid the development of nonpartisan policy. Based upon their results, the United States Federal government introduced a plan to allow transgender individuals to serve openly as members of the various branches of the military (Welsh, 2016). However, an Executive Memorandum (83 FR 13367) was enacted in 2017, which again prevented transgender individuals from openly serving in the military (Tatum, 2018). Following this order, regulations were expanded in 2018 to include any individuals who

were diagnosed with gender dysphoria (Tatum, 2018). In their list of recommendations on the service of transgender persons, the Department of Defense (DoD, 2018, pp. 32-42) introduced the following regulations for transgender individuals to serve within the United States military:

a) Transgender persons without a history or diagnosis of Gender Dysphoria, who are otherwise qualified for service, may serve, like all other service members, in their biological sex.
b) Transgender persons who require or have undergone gender transitions are disqualified.
c) Transgender persons with a history or diagnosis of Gender Dysphoria are disqualified, except under limited circumstances.

In the VA Setting. TGNC individuals have identified several barriers to pursuing care within the VA setting. In a study assessing the perceptions and barriers to accessing VA care by LGBT veterans, only 30% of respondents indicated that they perceived that the VA was welcoming to LGBT veterans despite 93% of respondents indicating the importance of the VA being welcoming (Sherman et al. 2014b). In their study of 141 transgender individuals, 43 of whom identified as veterans, Shipherd and colleagues (2012) found only 9% used the VA as their primary care provider despite approximately half believing they were eligible for services. In addition, 99% of participants indicated they sought gender identity counseling outside of the VA. Participants identified negative reactions by staff and providers regarding their gender identity and sexual orientation as barriers to their participation in VA services with all barriers being endorsed more frequently for medical services than mental health services. In a qualitative study of 58 LGBT veterans conducted by Sherman and colleagues (2014a), LGBT veterans identified various barriers to participation in VA services. The barriers identified by LGBT veterans were 1)

fear of judgment and discrimination based upon their gender identity and sexual orientation; 2) fear of losing their benefits if they disclosed their gender identity or sexual orientation; 3) fear of denial of care based upon their gender identity or sexual orientation; 4) concern that provider documentation would lead to negative ramifications; and 5) negative treatment by staff, other veterans, and providers (Sherman et al., 2014a). Additionally, VA providers were asked to identify what they believed to be barriers for LGBT veterans accessing care at the VA.

The barriers identified by providers aligned with those expressed by LGBT veterans. VA providers identified four domains they believed to be barriers for LGBT veterans accessing care: 1) VA culture, including the perception and behaviors of other veterans toward LGBT veterans, how staff and providers interact with LGBT veterans, and how the administration regard LGBT veterans and the decisions they make concerning their well-being; 2) lack of resources such as programs, type of staff, trainings, and financial support; 3) need for more trainings available to providers; and 4) the concern of medical record information being kept safe and confidential (Johnson & Federman, 2013).

In Healthcare. Another area impacted by stigma and discrimination is healthcare coverage. Due to discrimination and stigma, TGNC individuals have difficulty garnering healthcare coverage (Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012). Preventative care, such as gynecological services for trans men, can be difficult to access as many of these services are only considered medical necessity for those who are assigned a specific gender at birth (Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012) and obtaining gender affirming documentation (e.g., driver's license reflecting identified gender and desired name) may be difficult or impossible (APA, 2015). Not all TGNC individuals take steps to transition. However, for TGNC individuals who do take steps to transition, services such as hormone therapy and

reassignment surgery are often excluded from insurance plans (APA, 2015). Multiple surgeries may be required for an individual to transition (e.g., facial feminization surgery, phalloplasty, orchidectomy), the cost of which can be greater than $100,000. Long waiting periods and high costs have led many to seek care outside of the United States in places such as Thailand (Nichols, 2018), creating another barrier to a self-affirming identity and leading to greater mental health risks. High rates of stigma and discrimination have negative impacts on mental health (White Hughto et al., 2015).

Mental Health Risks

Greater levels of stigma and discrimination likely lead to negative mental health outcomes. In a sample of 6,727 U.S. Amazon Mechanical Turk workers, the rates of self-reported depression, anxiety, and ADHD were compared between individuals identifying as TGNC and individuals identifying as cisgender (Dawson et al., 2017). Dawson and colleagues (2017) found 70.4% of TGNC individuals indicated a lifetime prevalence of ADHD compared to 40.9% of cisgender individuals. TGNC individuals were more likely to have a diagnosis of depression in their lifetime than cisgender individuals, and TGNC individuals were five times more likely to have two or three of these diagnoses (i.e., ADHD, depression, anxiety) than cisgender individuals. Yurksel et al. (2017) found that 29.8% of transgender individuals surveyed had attempted suicide, and 55.3% reported experiencing suicidal ideation over their lifetime. McDuffie and Brown (2010) found that 28.0% of their transgender participants experienced a mood disorder. Difficulty ascertaining adequate care may further exacerbate these concerns. Of the 6,450 TGNC individuals in the U.S who responded, 41% reported they had attempted suicide (Grant et al., 2011). Furthermore, Grant and colleagues (2011) found that visual non-conformers, those who were open regarding their transgender status, and those who had medically or

surgically transitioned reported higher rates of suicide attempts and represented high risk groups within the TGNC populations as a whole. Though elevated levels of stigma and discrimination have been implicated in greater mental health risks, other factors have been found to mitigate these risks.

Gender-affirming behaviors have been found to reduce the risk of mental illness for TGNC individuals. In a sample of 129 TGNC youth, use of the individual's chosen name, when different than name given at birth, was associated with lowered rates of depression, suicidal ideation, and suicidal behavior (Russell et al., 2018). Additionally, rates of suicidal ideation were reduced by 48% when TGNC individuals had access to hormone treatment (Nicolls, 2018). Similar rates have been found in studies examining the mental health of TGNC veterans.

In the Military. Many TGNC individuals serve in the armed forces. A study conducted by McDuffie and Brown (2010) found 61.0% of transgender veterans surveyed had a history of suicidal ideation and 28% reported they were diagnosed with a mood disorder. In their study of 141 male-to-female (MtF) individuals, Shipherd et al. (2012) found TGNC veterans had mental health scores on the Short-Form Health Survey (Ware et al., 1996) significantly lower (i.e., endorsed more mental health concerns) than that of the general population and that of cisgender veterans.

Higher Proportion Serves in the Armed Forces

Individuals identifying as TGNC serve in the armed forces at a higher proportion than individuals identifying as cisgender. An estimated 1,320 transgender individuals served within the active duty division of the military and 830 within the selective reserves in the year 2014 (RAND Corporation, 2016). The proportion of TGNC individuals in the armed forces is higher than in the general population (Yerke & Mitchell, 2010). Shipherd and colleagues (2012) found

three times the rates of TGNC individuals serving in a branch of the military compared to TGNC individuals in the general populations. One explanation for the elevated rates of TGNC individuals serving in the military is the traditional masculine values espoused by the military as an attempt to further explore their gender identity or to suppress their gender identity in some cases (Yerke & Mitchell, 2010).

Attitudes

Attitudes play a role in determining the experiences of individuals. The construct of attitudes has long been the topic of discussion in the field of social psychology (Albarracin & Shavitt, 2018, Greenwald & Banaji, 1995, 2017). Research on attitudes has demonstrated their importance within the helping professions. The following section reviews the relevant literature on what attitudes are, how they are formed and shaped, and how attitudes are measured.

Many definitions have been used to define attitudes. Greenwald and Banaji (1995, p. 7) provided an extensive collection of previously used definitions:

a) Attitude is the affect for or against a psychological object. (Thurstone, 1931, p. 261)
b) An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. (Allport, 1935, p. 810)
c) Attitude is . . . an implicit, drive-producing response considered socially significant in the individual's society. (Doob, 1947, p. 136)
d) An attitude is a predisposition to experience, to be motivated by, and to act toward, a class of objects in a predictable manner. (M. B. Smith, Bruner, & White, 1956, p. 33)

e) [Attitudes] are predispositions to respond, but are distinguished from other such states of readiness in that they predispose toward an evaluative response. (Osgood, Suci, & Tannenbaum, 1957, p. 189)

f) [An attitude is] a disposition to react favorably or unfavorably to a class of objects. (Sarnoff, 1960, p. 261)

g) Attitudes [are] enduring systems of positive or negative evaluations, emotional feelings, and pro or con action tendencies with respect to social objects. (Krech et al., 1962, p. 139)

Though many definitions exist, they do not account for the breadth of what constitutes an attitude and may only allude to the often implicit nature of an attitude. For the purpose of this study, the definition provided in Albarracin and Shavitt's (2018) review of the recent attitude research and developments was adapted to include both implicit attitudes and explicit attitudes. Attitudes are "a person's evaluation of an object on a favorable to unfavorable continuum" (Albarracin & Shavitt, 2018 p. 300) and include both implicit and explicit components.

Attitude Formation

Psychology has a long history of studying attitudes dating back to the early 1900s (Albarracin & Shavitt, 2018; Greenwald & Banaji, 1995). Over the last century, various definitions of attitudes have been used and were primarily focused on one's feelings toward a given construct such as a person, object, or idea (Greenwald & Banaji, 1995). Greenwald and Banaji (1995, 1998, 2017) indicated that attitudes are shaped by social contexts, experiences, and language over the course of a lifetime.

Social Context and Attitudes. Social context shapes attitudes throughout one's lifetime. Support for the impact of social context in attitude formation was found in a longitudinal study

conducted by Fraley and colleagues (2013) regarding the development of political attitudes over time. Children and parents were surveyed when the child was at the age of one and again 18 years later. They found that development of conservative and liberal ideology was associated with the environment in which the children grew up. Authoritarian parenting styles most consistently resulted in children who were ideologically conservative (Fraley et al., 2013).

Experiences and Attitudes. Much like social contexts, one's experiences in life influence their attitudes. Experiences with a given construct help to shape attitudes toward the construct. In fact, repeated exposure to a stimuli has been shown to induce more positive attitudes toward that stimuli (Greenwald & Banaji, 1995). Zajonc (1968) coined this the *mere exposure effect.* However, when an individual has a history of negative experiences with a given construct, they are more likely to hold negative attitudes toward that construct (Watson & Raynor, 1920). Thus, Greenwald and Banji's (1998) research provides an example where individuals held more positive attitudes toward flowers and less positive attitudes toward guns. Because individuals were more likely to have direct or indirect negative experiences with guns, they were more likely to hold more negative attitudes toward them. Similar to the mere exposure effect, the contact hypothesis further exemplifies the role experiences play on attitudes.

Allport's (1954) contact hypothesis is another example of the impact of experiences on attitudes. The contact hypothesis suggests that one holds a greater level of negative attitudes, or prejudice, toward groups one has little contact with. Increased contact with a group reduces negative attitudes; specifically, contact between groups in which groups maintain equal status, share a common goal, must work together to achieve a common goal, and have support from an institution or authority figure have been shown to produce the most positive effects (Allport, 1954). Barbir, Vandevender, and Cohn (2017) demonstrated further support for the contact

hypothesis. In a study of 275 undergraduate participants, attitudes, beliefs, and behavioral intentions toward individuals who are transgender were assessed via a set of self-report items. Additionally, participants were asked to indicate whether they had contact with transgender individuals via questions assessing any transgender friends. Results of this study revealed that individuals who reported having at least one friend who was transgender held significantly fewer negative attitudes toward transgender individuals and reduced prejudice and stigma, demonstrating support for Allport's (1954) contact hypothesis.

Language and Attitudes. In addition to social context and experiences, language also plays a role in the development of attitudes. Language shapes attitudes toward a given construct. Through the research on priming and automatic social cognition, language has been shown to elicit an automatic attitudinal response (Greenwald & Banaji, 1995). Affective priming studies have shown words with congruently held evaluations/connotations (e.g., good and love) will be more strongly associated, evaluated more quickly and accurately by the participant, than words with incongruently held evaluations/connotations (e.g., good and bad; Klauer & Musch, 2008).

Mood and Attitudes. Much like language, mood has been shown to play a role in current attitudinal states. One's current mood also plays a role in current attitudes (Schuldt, et al., 2011). Halperin and colleagues (2013) looked at the effects of emotional regulation on attitudes of Israeli participants toward Palestinians. Participants ($N = 39$) were asked to view a presentation regarding Palestinian aggression due to Israel's disengagement from the Gaza Strip that was designed to induce anger. Half of the participants were instructed to evaluate the presentation from an analytical viewpoint and inhibit emotional responses, while the other half received no such training. Their findings showed a significant reduction in anger directed toward Palestinians from participants in the experimental group when compared to the control group (Halperin et al.,

2013). In another study conducted by Schwarz, Strack, and Mai (1991) looking at the effects of attitudes on life satisfaction, individuals were asked about their satisfaction within their marriages and their lives overall. Half of the participants were asked about their overall satisfaction of life first, while the other half were asked about their satisfaction within their marriage first. When the marriage question preceded the satisfaction with life question, more positive attitudes were endorsed regarding life satisfaction for those reporting happy marriages and less positive attitudes were endorsed regarding life satisfaction for those reporting unhappy marriages when compared to respondents who had been asked the satisfaction with life question first (Schwarz et al., 1991). Further evidence for the impact of mood on attitudes was found in a study conducted by Schwarz and Clore (1983). Participants were asked about quality of life on either rainy or sunny days. The researchers found that participants held more positive attitudes toward their quality of life when asked on sunny days than on rainy days. Attitudes are likely best characterized by a combination of state and trait-based experiences (Albarracin et al., 2015).

Explicit Attitudes. Attitudes can be further divided into explicit and implicit attitudes (Greenwald & Banaji, 1995). Explicit attitudes can be expressed directly by an individual and are consciously known to the individual (Greenwald & Banaji, 1995; 2017). These attitudes are based on both self-reflection and knowledge regarding past experiences (Greenwald & Banaji, 2017). Nesbitt and Wilson (1977) posited that explicit attitudes are often the result of poor introspection. Greenwald and Banaji expanded (2017) on this idea by stating that explicit attitudes are implicit attitudes that flow through a “cultural filter” (p. 868) based upon interpretations of accumulated events in one’s life. Though one may hold a certain set of explicit attitudes, another set of attitudes may also influence behaviors—implicit attitudes.

Implicit Attitudes. Implicit attitudes are attitudes that are outside of an individual's conscious awareness (Greenwald & Banaji 1995; Greenwald et al., 1998). These attitudes are characterized by an individual's immediate evaluation of a novel construct (Greenwald & Banaji 1995). Meta-analyses of implicit attitude research regarding racial discrimination found that explicit attitudes and implicit attitudes did not correlate very strongly when assessed together (Greenwald et al., 2009; Oswald et al., 2013). In their review of 122 research studies, Greenwald and colleagues (2009) found relatively low correlations between implicit and explicit measures (r = .21). This finding was replicated in Oswald and colleagues' meta-analytic review (2013; ρ = .14). It is believed that this is due to social desirability effects, or individuals' innate attempts to respond in a manner that presents themselves favorably to others and themselves (Greenwald & Banaji 2017; Greenwald et al., 2009). In fact, in Greenwald and colleagues' (2009) meta-analysis, the weakest correlations between explicit attitudes and implicit attitudes were found in topics considered to be more socially sensitive (e.g., attitudes toward race and other groups) and thus most likely to be subject to responding in a socially desirable manner, a manner that would be viewed favorably by others. Social desirability has been shown to correlate with explicit measures of attitudes, but not with implicit measures of attitudes, providing further support for the influence of social desirability on explicit attitudes. Oswald and his team (2013) suggested that implicit attitudes and explicit attitudes may be part of the larger construct of attitudes. This seems to align with attitude research as a whole as described by Greenwald and Banaji (1995) and Albarracin and Shavitt (2018), which described attitudinal processes as occurring both at conscious and unconscious levels.

How Attitudes Are Measured

Just as many definitions for attitudes exist, there are also multiple ways to measure attitudes. One way to measure explicit attitudes is through the use of self-report surveys. Self-report surveys can include, but are not limited to, answering questions in the form of a numerical rating scale, graphical rating scales, and semantic differential questions. Each of these types of measurement requires participants to evaluate their attitudes toward a construct. Attitudes are evaluated directly through a series of statements or questions. Direct measures such as these provide a measurement of a participant's explicit attitudes. However, explicit measures have displayed limited ability to predict future behavior (Oswald et al., 2013), particularly with regard to more sensitive topics (e.g., race and intergroup behavior) and instances of lower cognitive control (e.g., tired, taxed, hurried, unmotivated; Greenwald & Banaji, 2017).

Implicit Association Test. The Implicit Association Test (IAT) developed by Greenwald, McGhee, and Schwarz (1998) is the most common measure of implicit attitudes (Oswald et al., 2013). The IAT is able to circumvent one's natural tendencies to appear in a socially acceptable manner and provide insight on an individual's unfiltered attitudes toward a given construct (Greenwald et al., 1998). Similar to the Stroop task, which demonstrates a participant's reduction in response time when dealing with incongruent material (e.g., naming the color printed when the word is denoting a different color; Stroop, 1935), the IAT assesses the degree to which an evaluative dimension is congruent with a specific instance of a given construct such as a race or a gender (Greenwald & Banaji, 2017). In theory, constructs and attributes that are more strongly cognitively associated should be activated quicker, while weaker or competing constructs will require more time in thought in order to override the competing automatic response. The IAT has been shown to be more reliable in predicting behavior with more sensitive topics than explicit

measures; however, explicit measures may be better predictors of behavior when assessing less sensitive topics such as consumer preferences (Greenwald et al., 2009).

The IAT is a computer-based sorting task using a series of word and/or image stimuli to identify an association between a construct and an attribute stimulus. Stimuli usually consist of a construct of interest (e.g., race, gender, or group) and positive or negatively valanced words that are indicative of evaluative dimensions. First, participants are introduced to the task and given instructions to categorize the stimuli appearing in the center of the participant's screen by responding with either their left hand or their right hand as quickly as possible without making mistakes. This is usually through the pressing of the "E" or "I" keys of the keyboard; however, variations exist. Reminders of the categories' assignment appear in the upper left and right corner of the screen respectively. In the first block, participants must sort one group of stimuli (e.g., words) into the categories they belong (e.g., positive or negative). The following block introduces the next stimuli by itself and asks participants to repeat the above procedures. The first and second blocks are considered training blocks meant to familiarize participants to the stimuli and the IAT procedures.

Next, participants are introduced to a combined block in which reminders for both groups of stimuli will appear on their respective sides of the screen (e.g., reminders for Male may be paired with positive on one side of the screen and reminders for Female may be paired with negative at the top of the screen). The following blocks reintroduce the stimuli individually as described above; however, one group of stimuli will switch hands. In order to control for an order effect, block 5 is extended to include 40 trials. The inclusion of a 40-trial block has been shown to eliminate order effects and is the preferred method over counterbalancing (Carpenter et al., 2019; Nosek et al., 2005). Following the re-introductory blocks, participants complete

another combined block with the constructs (e.g., gender) now associated with a different characteristic (e.g., Male will now be paired with negative words and Female will now be paired with positive words). By looking at the reaction time of the participant on the different paired blocks, an association can be inferred. The categorical pairs (e.g., female good) that have the slowest reaction time are interpreted to indicate that the subject is spending more time in thought in order to override their automatic response and that the association between the category and competing evaluative dimension is stronger. A quicker reaction time shows a stronger association between the paired category and evaluative dimension (e.g., quicker reaction time when female and good are paired suggests a positive attitude toward women when compared to men; Greenwald & Banaji, 2017; Greenwald et al., 1998).

An IAT does not require the participants to be aware of their own feelings toward the construct. It also is reasonably difficult to manipulate, particularly for an individual who is unfamiliar with the inner workings of the IAT (Kim, 2003). In a study consisting of 62 undergraduate students, Kim (2003) instructed 32 participants to respond to an IAT assessing attitudes toward weapons and musical instruments in a manner consistent with an individual who holds a positive attitude toward weapons. The results of the "faking" group were then compared to the results of the "non-faking" group. No significant differences between groups were found, demonstrating an inability for participants to artificially manipulate the results of the IAT. Additionally, participants were able to manipulate the results of the test only when given instructions on how to do so (Kim, 2003). Similar results were found in Asendorpf, Banse, and Mücke's (2002) study. Forty-one female university students were assigned to either participate in a job application procedure (n = 23) in which they were instructed to present themselves as not shy in all facets of the proceedings, or in a study on social perception (n = 18). When completing

an IAT assessing shyness, participants in the applicant group were reminded that they should present themselves as not shy, while members of the social perception group were not given this instruction. Scores on the IAT were compared between groups and no significant difference was found when participants were asked to present themselves in a particular fashion (Asendorpf et al., 2002).

Limitations of the IAT. In contrast to the support demonstrated for the IAT, arguments have been made against the IAT as well. Detractors of the IAT have argued that the IAT measurement is flawed as it requires two constructs to be set against each other and thus results are actually indicative of one's relative preference regarding the two constructs (i.e., gun vs. flowers measures preference for guns vs. flowers, not attitudes toward guns or flowers; Blanton & Jaccard, 2006). Thus, the IAT may not provide a reflection of a participants' absolute attitude toward a construct. Similarly, it has been argued that the IAT is measuring the participants' ingroup preference. A large number of White individuals show an implicit preference for White faces on the race IAT; however, a significant proportion of Black individuals have shown this same preference suggesting that ingroup preference cannot be solely responsible for the results of the IAT (Project Implicit, 2011). Additionally, detractors have suggested that the IAT may be measuring salience (Rothermund & Wentura, 2004) or cultural knowledge (Arkes & Tetlock, 2004) as opposed to attitudes regarding the construct of measure.

The effect of salience, or the prominence of stimuli, on the IAT was assessed in a set of experiments conducted by Rothermund and Wentura (2004). Rothermund and Wentura (2004) argued that stimuli that better attracted the attention of participants, such as multi-colored words, would illicit better reaction times, thus influencing the results of the IAT. Thirty-two participants were asked to sort word strings into categories (i.e., old names, multi-colored words, young

names, single-colored words) based on the same pairing procedure as the IAT (e.g., pairing target categories into compatible and incompatible blocks). In this instance, the pairing of old names and multi-colored words were considered the compatible block, while old names and single-colored words were considered the incompatible block, based on findings from previous experiments. The mean response latencies for compatible and incompatible blocks were measured and researchers found that response latencies were significantly faster for the compatible block than for the incompatible block. This study suggests that more salient tasks are easier, and thus are more likely to account for some of the variance found in the associations on an IAT. Multi-colored word strings better attracted participants' attention, creating a more salient task when compared to single-colored word strings. However, these results have been challenged and further support for the construct of the IAT posited (Greenwald et al., 2005).

In response to the study conducted by Rothermund and Wentura (2004), Greenwald and colleagues (2005) completed a pair of experiments to assess the salience hypothesis. Experiment one tasked 30 undergraduate students to complete a flower-insect IAT in which either the flower or insect stimuli would be represented in red text. It was expected, according to the salience hypothesis, that the more salient category (i.e., the one represented by red text) would be performed more quickly; however, this was not observed. There were no significant differences between salient and non-salient groups. Additionally, the direction of the observed differences was counter to the expected direction based on the salient hypothesis. In a second study, 54 (25 men, 29 women) participants were tasked with completing a gender IAT. Based upon the salience hypothesis, it was expected that the less familiar category, in this case the opposite gender of the participant, was considered the more salient category. Results of the study were unable to support the salience hypothesis and were instead trended in the opposite direction. Salience was neither

sufficient nor necessary to produce the IAT effect (Greenwald et al., 2005). Other concerns of the IAT surround the role cultural knowledge may play in producing the IAT effect.

The impact of cultural knowledge is another area of consideration. Arkes and Tetlock (2004) argued that results of the IAT may be due to shared cultural stereotypes held by participants. In their review, they stated that the negative attitudes demonstrated by IAT may not necessarily be indicative of prejudiced beliefs and emotions, but instead due to rational thoughts. Furthermore, Arkes and Tetlock (2004) argued that an individual may demonstrate negative attitudes toward a group on the IAT but does not support or endorse negative explicit attitudes or behaviors toward the same group—the individual may instead be demonstrating the attitudes of the greater culture. However, Greenwald and Banaji (2017) have argued that this is just another aspect of attitudes and prediction of future behaviors.

Attitudes and Care

Measurements of attitudes have allowed researchers to analyze the impact of attitudes on the care individuals receive from their providers. The following section discusses the effects of provider attitudes on patient care. First, the overall impact that attitudes have is covered. Then, the impact of attitudes on the care of those identifying as various cultural backgrounds is discussed. Finally, how the driving theories of professional affiliation may impact attitudes and care is explained.

Impact of Attitudes on Behavior

Attitudes have been found to aid in the prediction of behaviors (Myers, 1990). The attitudes held by individuals have demonstrated an impact on hiring behavior, voting behavior, and judgments in court cases (Greenwald & Banaji, 2017). After blind hiring practices were implemented by various orchestras in the United States, an increase in female hires from less

than 20% in 1975 to approximately 40% in 1990 was demonstrated (Goldin & Rouse 2000). In their 2009 meta-analysis, Greenwald and colleagues looked at the predictive ability of assessing implicit and explicit attitudes. In their review of 122 studies (184 independent samples assessing 14,900 subjects), a moderate positive effect size (r = .27) was found for an implicit measure of attitudes ability to predict behaviors, judgments, and physiological responses, as measured by fMRI scans. Additionally, explicit measures accounted for a moderate positive effect size (r = .36) in its ability to predict behaviors, judgments, and physiological responses, as measured by fMRI scans, however, with a greater level of variability. Due to the relative strengths and weakness of each, it has been recommended that explicit and implicit measures be used in conjunction with each other (Greenwald et al., 2009). Attitudes held by individuals have been implicated in the expression of stigma and discrimination (Greenwald et al., 1995, 2017)

Attitudes and Cultural Background

Attitudes held by providers have been found to impact quality of care and the ability to build rapport with clients from different cultural backgrounds (APA, 2003). Personal beliefs and biases held toward individuals of another race, sexual minorities, gender, and age have all been shown to have a significant impact on behaviors toward these individuals (APA, 2003). TGNC individuals cite negative attitudes as barriers to receiving affirmative treatment. More explicit forms of negative attitudes such as discrimination and harassment have led to disproportionate rates of negative well-being and mental illness for individuals identifying as TGNC (Carmel & Erickson-Schroth, 2016).

Attitudes of Medical Providers vs. Attitudes of Mental Health Providers

Recently studies have looked at the experiences of TGNC individuals and suggest there may be differences in the attitudes espoused by mental health providers and medical providers. Limited research has been conducted to assess attitudes of providers toward TGNC individuals. However, data does exist regarding the experiences of TGNC individuals with their providers. Ascertaining transaffirmative care can be difficult and resources are often limited. Additionally, different training backgrounds may influence providers to hold different attitudes toward TGNC individuals. Medical providers tend to be politically conservative males (Bonica et al., 2014; U.S. Census Bureau, 2017), a combination that has been shown to hold more negative attitudes toward the TGNC community (Gerhardstein & Anderson, 2010; Norton & Herek, 2013). Twenty-eight percent of TGNC individuals reported postponing medical care due to discrimination (Grant et al., 2011). Additionally, 19% reported being refused care due to their gender identity and 28% reported being harassed in the medical setting due to their gender identity (Grant et al., 2011). Fifty percent reported having to educate their providers about transgender care. Additionally, studies have assessed the attitudes of mental healthcare providers toward TGNC individuals and the experiences of TGNC clients in mental health settings.

Although rates differ, negative attitudes have been displayed with mental health providers as well. Eleven percent of TGNC respondents reported denial of services due to their gender identity at mental health clinics (Grant et al., 2011). In a qualitative study of the barriers to seeking treatment, TGNC respondents reported feeling supported when sharing their gender-related concerns with their mental health professionals (Benson, 2013). However, TGNC respondents indicated that they often had to educate their providers on TGNC-related issues regardless of whether the providers were medical or mental health providers (Grant et al., 2011).

The need to educate one's own provider left many TGNC individuals feeling inadequately cared for and fearing stigma and discrimination (Benson, 2013).

Summary

TGNC individuals experience stigma and discrimination in their daily lives. A lack of protection in schools (i.e., primary, secondary, and post-secondary) and harassment based upon gender identity have contributed to many leaving school prior to graduation (Grant et al., 2011). Elevated rates of stigma and discrimination have precluded many TGNC individuals from maintaining their jobs and progressing through their careers (Grant et al., 2011). Additionally, stigma and discrimination have been cited as contributing factors to elevated rates of homelessness and poverty within the TGNC community (APA, 2015; Fredriksen-Goldsen et al., 2014). Individuals identifying as TGNC struggle to obtain affirmative healthcare and are often denied services due to their gender identity (Fredriksen-Goldsen et al., 2014; Lambda Legal, 2012). Within the VA, TGNC individuals report feeling unwelcome and often choose to seek treatment elsewhere, particularly regarding their gender identity (Sherman et al., 2014a; 2014b).

TGNC individuals also experience elevated rates of mental illness, which may be exacerbated by stigma and discrimination felt by TGNC individuals. TGNC individuals report higher rates of suicidal ideation, depression, anxiety, and ADHD when compared to their cisgender counterparts (Dawson et al., 2017). However, when allowed to express themselves in gender affirming ways such as using their chosen name, dressing in a way congruent with their felt gender identity, or when provided access to hormone treatment, elevations seen in mental illness dissipate (Nicolls, 2018; Russell et al., 2018). Similar rates of mental illness and suicidal behavior have been found within the military setting for individuals who identify as TGNC (McDuffie & Brown, 2010; Shipherd et al., 2012; Ware et al., 1996).

A greater proportion of TGNC individuals choose to serve in a branch of the armed forces compared to cisgender individuals (Shipherd et al., 2012). Many explanations have been posited. TGNC individuals are draw to the armed forces for many of the same reasons as their cisgender counterparts. Additionally, it is thought that the military provides an opportunity to either suppress their gender identity or, in other cases, further explore their gender identity (Yerke & Mitchell, 2010).

Stigma stems from the attitudes one feels toward a group of people. Attitudes are formed over the course of one's life. Attitudes toward various constructs are formed through the social contexts, experiences, and language in which an individual is immersed (Greenwald & Banaji, 1995, 1998, 2017). Additionally, one's mood can have a limited influence on attitudes from moment to moment (Schuldt et al., 2011). Attitudes are made up of explicit attitudes, attitudes that are easily accessible to the individual, and implicit attitudes, attitudes that work below one's conscious awareness (Greenwald & Banaji, 1995). Additionally, while explicit attitudes and implicit attitudes may confirm each other, they may also contradict each other. Though one may hold a positive explicit attitude toward a construct, one's experiences through life may cause the individual to hold more negative implicit attitudes toward the same construct (Greenwald & Banaji, 2017). A lack of awareness of contradictory attitudes may have an impact on how an individual behaves (Greenwald & Banaji, 2017). It has become increasingly more important to assess attitudes in order to gauge their impact on behavior.

Measurement of attitudes has developed over the last decade and can be divided into direct measurements, explicit attitudes, and indirect measurements, implicit attitudes. One such measurement of implicit attitudes is the IAT (Greenwald et al., 1998). The IAT has enabled researchers to assess attitudes toward sensitive subject matters more accurately than direct

measures of explicit attitudes (Greenwald & Banaji, 2017; Greenwald et al., 2009). Measurement of attitudes has allowed researchers to predict future behaviors.

Attitudes have been shown to aid in predicting future behaviors (Greenwald & Banaji, 2017; Myers, 1990). However, explicit measurements can have shown a limited ability to predict behavior, particularly when measuring attitudes about more sensitive topics such as race, and when evaluating behaviors in situations where cognitive control is reduced (Greenwald et al., 2009; Oswald et al., 2013). Implicit measures have fared better in respect to sensitive topics but have been unable to surpass explicit measures in regard to less sensitive topics such as consumer preferences (Greenwald et al., 2009). The combination of explicit and implicit measures has been shown to best predict future behaviors.

Additionally, attitudes have been shown to impact treatment toward persons of different backgrounds. Implicit bias against women has resulted in disproportionate hiring rates when compared to men (Goldin & Rouse, 2000). Racial discrimination has perpetuated poor treatment of members of the non-dominant race (APA, 2003). TGNC individuals have experienced the impact of negative attitudes as characterized by the earlier discussion of stigma and discrimination. Furthermore, the impact can be felt when implicit and explicit attitudes differ.

Attitudes have been shown to influence the type of care given to individuals by their health providers. Negative implicit attitudes have been shown to hinder the provider's ability to develop rapport with a client (APA, 2013; Bess & Stabb, 2009; Rachlin, 2002). Additionally, negative attitudes may lead to providers who are unprepared to treat the concerns of specific populations, such as individuals identifying as TGNC (Benson, 2013; Sherman et al, 2014b).

Attitudes held by medical providers and mental health providers may present differently. TGNC individuals have reported greater hesitation to share their concerns with their medical

providers, particularly when related to gender identity. Individuals identifying as TGNC have shared negative attitudes, fear of poor treatment, and refusal of treatment related to their gender identity as barriers to treatment (Johnson & Federman, 2013; Sherman et al., 2014b; Sherman et al., 2014; Shipherd et al., 2012). Less concern has been expressed by TGNC individuals concerning their treatment with mental health professionals (Johnson & Federman, 2013; Sherman et al., 2014a, 2014b); however, TGNC veterans have reported seeking gender identity-related treatment outside of the VA setting (Shipherd et al,. 2012).

Hypotheses

The present study seeks to use a previously constructed IAT designed to assess attitudes toward transgender individuals as well as an explicit measure of attitudes toward transgender individuals to create a holistic picture of the attitudes of providers toward transgender individuals. Based on the review of the literature, this study posits three hypotheses.

Hypothesis One

When assessed concurrently, IAT and explicit measures of attitudes have not been strongly correlated. Meta-analyses of implicit attitude research found weak correlations between the IAT and explicit measures for socially sensitive topics (Greenwald et al., 2009; Oswald et al., 2013). Based on the findings of previously literature assessing the correlation between implicit and explicit measures, it is expected that:

(1) Implicit attitudes of providers toward TGNC individuals will be weakly correlated to explicit attitudes of providers.[4]

H_1: *r* will approach 0

[4] Hypothesis one was changed following data collection as it was realized that the initial hypothesis, H1: $\bar{X}ip \neq \bar{X}ep$, could not be meaningfully assessed.

Hypotheses Two and Three

Previous studies have found the majority of medical providers identify with political conservatism (Bonica, et al., 2014; U.S. Census Bureau, 2017), which is associated with negative attitudes toward TGNC individuals (Norton & Herek, 2013). Additionally, TGNC individuals have reported more difficulty in seeking care from their medical providers than mental health providers (Johnson & Federman, 2013; Sherman et al., 2014a; 2014b). Based on these findings, it was believed that:

(2) The explicit attitudes of medical providers toward TGNC individuals will be less positive than the explicit attitudes of mental health providers toward TGNC individuals.

$$H_2: \bar{X}_{em} < \bar{X}_{eb}$$

(3) The implicit attitudes of medical providers toward TGNC individuals will be less positive than the implicit attitudes of mental health providers toward TGNC individuals.

$$H_3: \bar{X}_{im} < \bar{X}_{ib}$$

Chapter 3: Method

The purpose of this study was to assess attitudes of providers toward TGNC individuals. Furthermore, implicit attitudes and explicit attitudes of providers were analyzed, and implicit and explicit attitudes of medical providers and mental health providers were compared. It was hypothesized that:

(1) Implicit attitudes of providers toward TGNC individuals will be weakly correlated to explicit attitudes of providers.

H_1: *r* will approach 0

(2) The explicit attitudes of medical providers toward TGNC individuals will be less positive than the explicit attitudes of mental health providers toward TGNC individuals.

H_2: $\overline{X}_{em} < \overline{X}_{eb}$

(3) The implicit attitudes of medical providers toward TGNC individuals will be less positive than the implicit attitudes of mental health providers toward TGNC individuals.

H_3: $\overline{X}_{im} < \overline{X}_{ib}$

Discussed in this chapter is a) the participants of the study, b) the measures used, and c) the procedure followed by the researcher and the participants.

Participants

An email was sent to 100 clinicians and seven professional listservs asking them to request the participation of all providers under their supervision. Providers were identified by their status as a clinician at their respective facilities. The initial emails were sent to VA providers from across the country, identified by their service line in the VA or their presence in a

professional listserv specific to VA providers. Recruitment was later expanded to include all medical and mental health providers in order to improve the response rate. Sixty-six providers (48 women 73.7%, 16 men 24.2%, 2 TGNC 2.1%) completed the survey. Participants reported being between 22 and 73 years of age. The majority of participants identified as Caucasian/European American/White (*n* = 49, 74.2%), followed by African American (*n* = 6, 9.1%), and Hispanic, Latino/a, Chicano/a American (*n* = 5, 7.6%). Additionally, 13.6% (*n* = 9) of participants identified as medical providers and 80.3% (*n* = 53) identified as mental health providers. Regarding sexual orientation, 72.7% (*n* = 48) of participants identified as heterosexual, and 27.3% (*n* = 18) identified as a sexual minority. Two participants' data were excluded based on the advanced scoring protocol for the IAT outlined by Greenwald, Nosek, and Banaji (2003) and 16 participants' data were excluded because they did not complete both IATs, they did not complete the ATTI, or they did not identify whether they were a medical provider or a mental health provider. Participants were emailed a survey code that was completed through Qualtrics (Qaultrics Inc., Provo, UT), an online data collection tool.

Measures

All measures were presented to participants via the online survey system Qualtrics. Each participant completed a demographics survey (Appendix A), an explicit measure of attitudes toward TGNC individuals (Attitudes Toward Transgender Individuals scale; Appendix B), the trans women gender identity IAT (Appendix C), and the trans men gender identity IAT (Appendix D).

Demographics

Gender, ethnicity, age, relationship status, sexual orientation, specialty, type of facility they worked at, political conservatism, interaction with TGNC clients, and time since last

training related to TGNC care were assessed via a demographic questionnaire. Demographics were assessed to control for potential confounding variables.

Gender. Participants were asked to provide which gender they most closely identified with (e.g., Male, Female, Other please specify).

Ethnicity. All participants were asked to provide which ethnicity they most closely identified with from a list provided (e.g., Caucasian, African American, Native American). If none matched, they were given the opportunity to provide their own description.

Age. Each participant was asked to provide their current age in years.

Relationship Status. Participants were asked to select from a list which item best described their current relationship status or provide their own description if none fit (e.g., Single, Married).

Sexual Orientation. All participants were asked to select which item from a list best described their current sexual orientation or provide their own description if none were accurate (e.g., Heterosexual, Homosexual, Bi-sexual).

Political Identification. Each participant was asked to rate on 7-point numerical rating scale (i.e., from *extremely conservative* to *extremely liberal*) their general political stance.

Religiosity. Religiosity was assessed by a single item set to a 7-point numerical rating scale (i.e., *extremely important* to *extremely unimportant*) assessing the importance of organized religion.

Specialty. Each participant was asked to provide their specialty (e.g., endocrinology, behavioral medicine). Each specialty was then coded into either medical provider, mental health provider, or general staff based upon the information provided.

Training Background. Participants who identified a specialty related to either a medical field or a mental health field were asked to provide their training background (e.g., social work, clinical psychology, Doctor of Medicine, Doctor of Osteopathic Medicine).

Contact with TGNC Clients. All participants were asked to answer whether they had any TGNC friends [e.g., False (I have zero transgender friends), True (I have one transgender friend), True (I have more than one transgender friend)] and whether they had met any TGNC individuals based upon the ranges provided [e.g., False (I know zero transgender people), True (I know one transgender person), True (I know more than one transgender person)].

Time since Last Training Related to TGNC Care. Participants were asked to note how many years it had been since their last training related to providing TGNC care based upon the ranges provided (e.g., 0 – 1 years, 2 – 5 years).

Likelihood to Support for TGNC Policies. A measure of likelihood to support TGNC policies was adapted from Wang-Jones (2017). All participants were asked to what extent they support a set of four transgender-related policies (e.g., Transgender individuals should be able to use the bathroom they feel most comfortable in) on a 7-point numerical ratings scale (from 1 = *Strongly Agree* to 7 = *Strongly Disagree*).

Explicit Attitudes Toward TGNC Individuals

The Attitudes Toward Transgendered Individuals Scale (ATTI; Walch et. al., 2012) is a 20-item self-report measure designed to assess attitudes and stigma toward TGNC individuals. The ATTI is set to a 5-point numerical rating scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree.* Scores on the ATTI range from 20 – 100 with higher scores indicating positive attitudes toward TGNC individuals and lower scores indicating less positive attitudes toward TGNC individuals. The ATTI was used to assess explicit attitudes of both medical providers and

mental health providers toward TGNC individuals in the current study. The ATTI was found to be internally consistent and demonstrated evidence of validity (Walch et. al., 2012).

Evidence for validity was found by Walch and colleagues (2012) in two separate samples. The first sample consisted of 134 college students with ages ranging from 18 – 56 (M = 25.4, SD = 7.6). Seventy-four and two tenths percent identified as female, 70% Caucasian, 90% heterosexual, and 70.8% religious. In an unrotated principal components factor analysis, a single factor was found accounting for 56.7% of the total variance with an eigenvalue of 11.3. Cronbach's alpha for this sample was found to be .96, demonstrating strong internal consistency. The second sample consisted of 234 college students with ages ranging from 18 – 64 (M = 23.3, SD = 6.4), and 28.3% identified as male, 69.2% female, 75.5% Caucasian, 92% heterosexual, and 60.8% religious. Cronbach's alpha for this sample was found to be .95, again demonstrating strong internal consistency. A confirmatory factor analysis with diagonally weighted least squared method of estimations was conducted and supported the original factor analysis, suggesting a one factor solution ($\chi^2(170, N = 237) = 453.92$, $p < .001$; RMSEA = .081; GFI = .99; CFI = .98; and SRMR = .048; Walch et. al., 2012).

Convergent Validity. Construct validity was assessed using the Genderism and Transphobia Scale (GTS) developed by Hill and Willoughby (2005). The ATTI was found to have a strong negative correlation with the GTS (r = -.85 for Sample 1 and r = -.88 for Sample 2) as expected as the GTS was negatively valanced.

Discriminant Validity. Discriminant validity was determined by correlating the ATTI with measures that were theoretically unrelated to the ATTI. The ATTI was found to have a negligible positive correlation (r = .19) with the Marlowe-Crowne Social Desirability Scale, indicating the two measures were assessing unrelated constructs.

Current Internal Consistency. In the current study, Cronbach's alpha was calculated at .91. This was congruent with the alpha found in previous studies using the ATTI, suggesting continued internal consistency.

Implicit Attitudes Toward TGNC Individuals

Implicit attitudes of VA providers toward TGNC individuals were measured using two separate gender identity IATs (GI-IATs; Wang-Jones et al., 2017). The two GI-IATs are designed to assess implicit attitudes toward trans men and trans women, respectively. The two GI-IATs consist of three words that represent either trans men (trans men GI-IAT) or trans women (trans women GI-IAT), three words that represent either cisgender men (trans men GI-IAT) or cisgender women (trans women GI-IAT), five words that are positively valanced, and five words that are negatively valanced. Scores on each IAT range from -2 to 2. In the present study, negative scores were indicative of a preference for cisgender individuals and positive scores indicative of a preference for transgender individuals. Directionality of scores were reversed from the Wang-Jones et al. (2017) study. Scores of zero reflected neutral preference. Score ranges were further defined by break points of .15 (slight preference for transgender), .35 (moderate preference for transgender), and .65 (strong preference for transgender; Greenwald et al., 1998).

In the present study, both GI-IATs were presented using seven total blocks containing 20 trials each for practice blocks, and 40 trials each for experimental blocks. In order to eliminate the order effect, the practice trial immediately following the reversal contained 40 trials, as this method was found to be superior to the counterbalancing method (Carpenter et al., 2019; Nosek et al., 2005). In each trial, a word would appear in the middle of the screen and participants would use the "E" and "I" keys on their keyboard to sort the words to the correct category. Block

1 was a practice block with the transgender category assigned to the “E” key and biological category assigned to the “I” key. Block 2 was a practice block with the good words assigned to the “E” key and the bad words assigned to the “I” key. Block 3 was a practice block with both the transgender category and the good words assigned to the “E” key and both the biological category and the bad words assigned to the “I” key. All practice blocks were designed to introduce participants to the stimuli and the IAT procedures. Block 4 was the first experimental block and was identical to block 3. Block 5 was a practice block with the bad words assigned to the “E” key and the good words assigned to the “I” key, mirroring block 2 and consisted of 40 trials. Block 6 was a practice block with both the transgender category and the bad words assigned to the “E” key and both the biological category and the good words assigned to the “I” key. Block 7 was the second experimental block and was identical to block 6.

Both GI-IATs were scored using the Greenwald, Nosek, and Banaji (2003) improved scoring algorithm. This algorithm improves upon the original scoring procedures by increasing the overall power of the IAT, thus reducing the total number of participants needed for a study, reduced likelihood of contamination by extraneous variables such as extreme scores, and provided a more nuanced score that better illustrates individual differences (Greenwald et al., 2003). All combined blocks (i.e., blocks 3, 4, 6, 7) are used when calculating the final difference score. When scoring the IATs, trials with latencies greater than 10,000 ms were eliminated and participants who had greater than 10% of their trials with a reaction time less than 300 ms were eliminated (Greenwald et al., 2003). The mean latencies of all correctly sorted trials are calculated for each block and a pooled standard deviation is calculated for all trials in blocks 3 and 6 as well as blocks 4 and 7. Each error latency (i.e., how long a participant took to make an incorrect sort) is replaced by the calculated mean latency for the respective block plus 600 ms.

Next, the values of each of the four blocks are averaged. Then, the difference of the averaged scores is computed for blocks 6 and 3 (B6 – B3) and again for blocks 7 and 4 (B7 – B4). The difference scores are then each divided by the pooled standard deviation for its respective set of blocks (e.g., difference score for B6 and B3 will be divided by the pooled *SD* of B6 and B3). The quotients are then averaged creating a final D score that represents the results on the IAT. In the present study, positive scores for an individual are indicative of a faster response time for the incompatible block (i.e., Trans good with biological bad), denoting a preference for transgender individuals, and negative scores for an individual are indicative of a faster response time for the compatible block (i.e., Trans and bad with biological good), denoting a preference for cisgender individuals. The described procedure is repeated for both the trans women and trans men GI-IATs.

Support for the validity of the two GI-IATs was obtained using a sample of 344 Amazon Mechanical Turk workers from the United States. Ages ranged from 18 – 65 (M = 34.31, SD = 10.63) and the average years of education was 14.82 (SD = 2.08). The sample consisted of 50.3% female participants, 37.5% male, and 12.2% transgender individuals. Seventy-seven percent of participants identified as Caucasian, 8.4% African-American/Caribbean, 5.2% Hispanic, 9.4% identified as either Native American, Multi-Racial, or other race, 58.4% heterosexual, 11.9% homosexual, and 10.2% pansexual.

Trans women GI-IAT. The trans women GI-IAT (Wang-Jones et al., 2017) was designed to assess implicit attitudes toward MtF individuals compared to cisgender women. The trans women GI-IAT was found to have strong internal consistency (α = .95). The strength of evidence for test-retest reliability after one week was minimal (r = .48), based on the recommended

criteria posited by Robinson, Wrightsman, and Shaver (1991); however, this was consistent with other IATs (Wang-Jones et al., 2017). In the current study, Cronbach's alpha was .89.

Known-groups Validity. Known-groups validity was used to establish validity for the trans women GI-IAT (Wang-Jones et al., 2017). Means of the attitudes of cisgender individuals (M = .27, SD = 2.09) and TGNC individuals (M = .10, SD = .32) were found to be significantly different on the trans women GI-IAT with cisgender individuals showing less favorable attitudes toward TGNC individuals than TGNC individuals. Means of the attitudes of heterosexual cisgender individuals (M = .34, SD = .69) and non-heterosexual cisgender individuals (M = .14, SD = .79) were found to be significantly different on the trans women GI-IAT. As expected, heterosexual cisgender individuals were found to hold less positive attitudes toward TGNC individuals than non-heterosexual cisgender individuals. Means of the attitudes of individuals who reported contact with TGNC individuals (M = .16, SE = .075) were compared to the means of the attitudes of individuals who reported no contact with TGNC individuals (M = .37, SE = .06) as measured by the trans women GI-IAT. As expected, individuals who reported knowing a TGNC individual had significantly more favorable attitudes toward TGNC individuals than individuals who reported not knowing a TGNC individual.

Trans men GI-IAT. The trans men GI-IAT (Wang-Jones et al., 2017) was designed to assess implicit attitudes toward FtM individuals compared to cisgender men. The trans men GI-IAT was found to have strong internal consistency (α = .95). The strength of evidence for test-retest reliability after one week was minimal (r = .48), based on the recommended criteria posited by Robinson, Wrightsman, and Shaver (1991); however, this was consistent with other IATs (Wang-Jones et al., 2017). In the current study, Cronbach's alpha was .89.

Known-groups Validity. Known-groups validity is used to support construct validity when it is known how a group of individuals will respond to a given construct (Cronbach & Meehl, 1955). Known-groups validity was used to establish validity for the trans men GI-IAT (Wang-Jones et al., 2017). Means of the attitudes of cisgender individuals (M = .23, SD = 1.91) and TGNC individuals (M = .11, SD = .32) were found to be significantly different on the trans men GI-IAT with cisgender individuals showing less favorable attitudes toward TGNC individuals than TGNC individuals. Means of the attitudes of heterosexual cisgender individuals (M = .30, SD = .70) and non-heterosexual cisgender individuals (M = .10, SD = .78) were found to be significantly different on the trans men GI-IAT. As expected, heterosexual cisgender individuals were found to hold less positive attitudes toward TGNC individuals than non-heterosexual cisgender individuals. Means of the attitudes of individuals who reported contact with TGNC individuals (M = .15, SE = .075) were compared to the means of the attitudes of individuals who reported no contact with TGNC individuals (M = .31, SE = .06) as measured by the trans men GI-IAT. As expected, individuals who reported knowing a TGNC individual had significantly more favorable attitudes toward TGNC individuals than individuals who reported not knowing a TGNC individual.

Procedure

Approval for this study was obtained from the University Institutional Review Board. Original approval was focused on assessing the attitudes of VA providers; however, this was later expanded to include all medical and mental health providers due to concerns surrounding who the data would belong to and to increase recruitment numbers. This study garnered participation from medical and mental health providers in order to assess their attitudes toward TGNC

individuals. After providing informed consent, each participant completed a demographic survey, the ATTI, and both GI-IATs.

Recruitment

In order to recruit providers, an email containing the survey link on Qualtrics was sent to clinicians and listservs specifically for medical and mental health providers asking them to distribute the survey to all medical and mental health providers (see Appendix H for participation recruitment email). Providers were identified by their affiliation with professional listservs with their university, the American Psychological Association, the American Medical Association, the Society for the Scientific Study of Sexuality, and the Veterans Health Administration. The identified listservs were used as they provided an initial pool of professionals within the medical and mental health settings. Additionally, the use of listservs allowed the researcher to garner participants from across the country. All responses were recorded electronically through Qualtrics, a program that allows researchers to design studies and collect participants' results through a web-based interface. Qualtrics administration was chosen in order to facilitate ease of access for participants as well to allow for greater level of recruitment for a specialty population.

Informed Consent

Participants were provided with an informed consent form on the first page of the Qualtrics survey. The informed consent provided a description of the study for participants as well as the researcher's contact information in the event they had questions regarding the study (see Appendix F for informed consent form). Consent was demonstrated by participants by pressing the "next" arrow at the bottom of the page. Participants who chose not to participate were asked to click the "x" on their browser to exit the survey. IP addresses were not collected in order to protect the anonymity of all participants.

Process

The survey was completed wholly online through the Qualtrics data collection system. From start to finish the study took approximately 30 minutes to complete. Each participant was provided a survey link via email. After clicking on the provided survey link, participants who were taking the survey on a computer were presented with the informed consent page that delineated the contents of the study; those who were taking the survey from a mobile device were directed to a message informing them that this survey was not compatible with mobile devices. Following the informed consent page, participants began the demographics portion of the study. Next, participants completed the ATTI. Following the ATTI, participants completed the trans women GI-IAT. Next, participants completed the trans men GI-IAT. Finally, upon completion of the study, participants were directed to a brief debriefing form that provided succinct information regarding the goal of the study and contact information for the researcher should they have any further questions or concerns.

Analysis

Data from the survey was cleaned, removing participants that did not complete an attitude measure or provide a provider type, and coded by the researcher. D scores for the GI-IATs were obtained using IATGEN'S data analysis tool (Carpenter et al., 2019). All data were then inputted into SPSS statistical software package version 24. A Cronbach's alpha was used to determine current reliability of the measures used, descriptive analyses of the main variables (attitude types and provider types) were conducted, and correlations were conducted between the ATTI and the averaged score of the GI-IATs. A 2 (implicit attitudes vs. explicit attitudes; within subjects) x 2 (mental health providers vs. medical providers; between subjects) Mixed Model Repeated Measures Factorial ANOVA analysis was conducted to assess differences between explicit and

implicit attitudes, differences between mental health and medical provider types, and the interaction between attitude type and provider type.

Summary

The purpose of this study was to assess the overall attitudes of providers toward TGNC individuals. This chapter provided the methodology used to assess the accuracy of these hypotheses. Sixty-six participants were recruited, and 48 were retained for analysis. Internal Review Board permission was obtained, and informed consent was provided to all participants. Each participant completed the survey through the Qualtrics survey system. All participants completed a demographics questionnaire, the ATTI, the trans women GI-IAT, and the trans men GI-IAT. D scores were obtained using the IATGEN data analysis tool (Carpenter et al., 2019) and data were analyzed using SPSS via a reliability analysis and an ANOVA analysis. The next chapter will discuss the results of the described study.

Chapter 4: Results

This chapter discusses how the data were cleaned and analyzed. Descriptive statistics related to the sample are provided, and the results of the mixed model factorial ANOVA are reviewed. All data were cleaned and analyzed using SPSS statistical software package version 24.

Data Exclusion

In this section, the criteria used to exclude data are provided. Sixty-six providers (48 women 73.7%, 16 men 24.2%, 2 TGNC 2.1%) completed all or a portion of the survey. Two participants' data were excluded based on the advanced scoring protocol for the IAT outlined by Greenwald, Nosek, and Banaji (2003), and 16 participants' data were excluded because they did not complete both IATs, they did not complete the ATTI, or they did not identify whether they were a medical provider or a mental health provider. Forty-eight participants were retained for the final analyses.

Demographics

This section outlines the demographic makeup of the sample collected and retained for final analysis. After removal of data based upon the outlined exclusions above, 48 total providers (34 women [70.8%], 12 men [25%], 2 TGNC [4.2%]) remained, consisting of 40 mental health providers (83.3%) and 8 medical providers (16.7%). Participants reported being between 22 and 73 years of age with an average age of 37 and a standard deviation of 11.54. The majority of participants identified as Caucasian/European American/White (n = 37, 77%), followed by Hispanic, Latino/a, Chicano/a American (n = 5, 10.4%), and African American (n = 2, 4.2%). Regarding sexual orientation, 66.7% (n = 32) of participants identified as heterosexual and 33.3% (n = 16) identified as a sexual minority (see Table 1 for all demographics).

Table 1
Frequency Table for Demographics

Variable		*n*	Percentage
	Total Sample	48	
Gender			
	Female	34	70.8%
	Male	12	25.0%
	TGNC	2	4.2%
Ethnicity			
	Caucasian/European American/White	37	77.0%
	Hispanic, Latino/a, Chicano/a American	5	10.4%
	African American	2	4.2%
	Multi-Ethnic	2	4.2%
	Pacific-Islander American	1	2.1%
	Middle-Eastern/North-African American	1	2.1%
Relationship Status			
	Married	30	62.4%
	Single	7	14.6%
	Exclusive Relationship	5	10.4%
	Engaged	3	6.3%
	Casual Relationship	3	6.3%
Sexual Orientation			
	Heterosexual	32	66.7%
	Bisexual	10	20.8%
	Queer	4	8.3%
	Gay/Lesbian	2	4.2%
Specialty			
	Mental Health	40	83.3%
	Medical	8	16.7%
TGNC Friends			
	None	31	64.6%
	More Than One	11	22.9%
	One	6	12.5%
TGNC Acquaintances			
	More Than One	35	72.9%
	One	7	14.6%
	None	6	12.5%
Care of Transgender Individuals Training			
	Yes	32	66.7%
	No	16	33.3%
Time since Last Training			
	2 – 5 years	16	50.0%
	0 – 1 years	14	43.8%
	6 – 10 years	2	6.3%

Political Identification and Religiosity

Additionally, the overall sample's identified political stance was "somewhat liberal" and the sample indicated religion was "somewhat unimportant." A one-way ANOVA test was used to compare the political stance and religiosity of mental health and medical providers. The average score was 5.54 with a standard deviation of .15 and scores ranged from 3 to 7. There was a significant difference in the political stance of mental health and medical providers, $F(1, 46) = 27.14$, $p < .001$, $\eta^2 = .37$. Mental health providers were significantly more liberal ($M = 5.83$, $SD = .13$) than medical providers ($M = 4.13$, $SD = .30$). Additionally, political stance was significantly positively correlated with both explicit attitudes, $r(46) = .37$, $p < .01$, and implicit attitudes, $r(46) = .41$, $p < .01$. A more liberal political stance was associated with more positive attitudes toward TGNC individuals. For religiosity, the average score was 5.21 with a standard deviation of 1.89 and scores ranged from 1 to 7. There was no significant difference in religiosity between mental health ($M = 5.25$, $SD = 1.93$) and medical providers ($M = 5.00$, $SD = 1.77$), $F(1, 46) = 0.11$, $p = .737$, $\eta^2 = .002$. Religiosity was significantly correlated with both explicit attitudes, $r(46) = .31$, $p < .05$, and implicit attitudes, $r(46) = .32$, $p < .05$. Less religiosity was associated with more positive attitudes toward TGNC individuals.

Likelihood of Supporting TGNC Policies

The overall sample was supportive of transgender positive policies. Cronbach's alpha was .71 and the average score was 1.53 with a standard deviation of .15. Scores ranged from 1 to 4. A one-way ANOVA compared the likelihood of supporting TGNC policies for mental health and medical providers. There was no significant difference in the likelihood of supporting TGNC policies between mental health ($M = 1.46$, $SD = .77$) and medical providers ($M = 1.91$, $SD = 1.03$), $F(1, 46) = 2.05$, $p = .159$, $\eta^2 = .04$. Likelihood of supporting TGNC polices was

significantly correlated with both explicit attitudes, $r(46) = -.78$, $p < .01$, and implicit attitudes, $r(46) = -.53$, $p < .01$. Increased likelihood of supporting TGNC policies (a low score overall) was associated with more positive attitudes toward TGNC individuals

Main Analyses

This section presents the findings with regard to each of the proposed hypotheses. The purpose of this study is to assess the overall attitudes of providers toward TGNC individuals, the implicit attitudes and explicit attitudes of providers toward TGNC individuals, and the implicit and explicit attitudes of each provider group toward TGNC individuals.

Explicit Attitudes

Scores on the ATTI were summed with the necessary items recoded in order to create an explicit attitudes score. An analysis of internal consistency was conducted, and an alpha of .91 was found. The average score was 91.63 with a standard deviation of 9.35 and scores ranged from 64 to 100. The total sample's overall average was indicative of positive explicit attitudes toward TGNC individuals. A one-way ANOVA compared the ATTI scores for mental health and medical providers. There was no significant difference in the ATTI scores between mental health ($M = 91.70$, $SD = 9.99$) and medical providers ($M = 91.25$, $SD = 5.55$), $F(1, 46) = .02$, $p = .903$, $\eta^2 = .00$. Scores were then transformed to Z-scores in order to create a standard score for later comparisons. The mean score on the ATTI for medical providers was -.04 with a standard deviation of .59, which was indicative of positive attitudes toward TGNC individuals. The mean score on the ATTI for mental health providers was .01 with a standard deviation of 1.07, which was indicative of positive attitudes toward TGNC individuals.

Implicit Attitudes

D scores for the IATs were obtained using IATGen's data analysis tool (Carpenter et al., 2019) and following Greenwald, Nosek, and Banaji's (2003) advanced scoring procedure. An analysis of internal consistency was conducted, and an alpha of .89 was found for both the Trans women GI-IAT and the Trans men GI-IAT. The mean score on the Trans women GI-IAT was -.008 with a standard deviation of .479, which was indicative of no relative preference for trans women or cisgender women, by all providers. The mean score on the Trans men GI-IAT was -.023 with a standard deviation of .465, which was indicative of no relative preference for trans men or cisgender men, by all providers. Implicit attitudes toward trans women and trans men were significantly correlated, $r(46) = .55$, $p < .01$. Next, a composite score was created to assess overall implicit attitudes.

The D scores for each GI-IAT were averaged together for each participant to create a total implicit attitude toward TGNC individuals score ($M = -.01$, $SD = .42$) ranging from -1.21 to .95. The mean combined implicit attitude score for medical providers was -.29 with a standard deviation of .42, which was indicative of a slight to moderate preference for cisgender individuals. The mean combined implicit attitude score for mental health providers was .05 with a standard deviation of .4, which was indicative of no relative preference for TGNC individuals or cisgender individuals; however, preferences trended toward TGNC individuals.

Next, scores were converted into Z-scores in order to create a standard score for later comparison. The mean combined implicit attitude score for medical providers was -.68 with a standard deviation of 1, which was indicative of a slight to moderate preference for cisgender individuals. The mean combined implicit attitude score for mental health providers was .14 with a standard deviation of .96, which was indicative of no relative preference for TGNC individuals

or cisgender individuals; however, preferences trended toward TGNC individuals. Z-scores for both the implicit and explicit attitudes were then used for the analysis of variance.

Analysis

Next, a correlation analysis was performed in order to determine whether implicit attitudes of providers were correlated with their explicit attitudes. Implicit and explicit attitudes displayed a significant strong, positive correlation, $r(46) = .53$, $p < .01$, thus suggesting that implicit attitudes and explicit attitudes were related and may confirm each other. Then, a 2 (implicit attitudes vs. explicit attitudes; within subjects) x 2 (mental health provider vs. medical provider; between subjects) Mixed Model Repeated Measures Factorial ANOVA analysis was conducted (see Table 2). The main effect for type of attitude (implicit vs. explicit attitudes) was not significant, $F(1, 46) = 1.99$, $p = .165$, $\eta^2_{partial} = .04$. This indicated that there was no significant difference between implicit ($M = 0$, $SD = 1.00$; Estimated Marginal Mean = -.27, $SE = .19$, when controlling for the effects of provider type) and explicit attitudes ($M = 0$, $SD = 1.00$; Estimated Marginal Mean = -.02, $SE = .20$, when controlling for the effects of provider type) collectively; however, 4% of the variance was accounted for in spite of the small sample size. The main effect for provider type (medical vs. mental health) was not significant, $F(1, 46) = 1.64$, $p = .207$,$\eta^2_{partial} = .03$. This indicated that the attitudes toward TGNC individuals, implicit or explicit, of medical providers (Estimated Marginal Mean = -.36, $SE = .31$) and mental health providers (Estimated Marginal Mean = .07, $SE = .14$) were not significantly different. The interaction effect for implicit vs. explicit attitudes within subjects was significant, $F(1, 46) = 4.48$, $p = .04$,$\eta^2_{partial} = .09$. Simple effects tests were conducted to probe the interaction (see Table 3).

Table 2
The Effects of Attitude Type (Implicit vs. Explicit) and Provider Type (Medical vs. Mental Health) on Attitudes toward TGNC Individuals

Effect	*SS*	*df*	*F*	*p*	η^2_{partial}
Attitude Type	0.87	1	1.99	.165	.04
Provider Type	2.48	1	1.64	.207	.03
Interaction	1.96	1	4.48	.04	.09
Error Within Subjects	20.1	46			
Error Between Subjects	69.46	46			

A repeated measures ANOVA was conducted comparing implicit attitudes and explicit attitudes of medical providers. There was a marginally significant difference between implicit attitudes and explicit attitudes (see Table 3). Nearly 40% of the variance was accounted for. Next, a repeated measures ANOVA was conducted comparing implicit attitudes and explicit attitudes of mental health providers. There was no significant difference between implicit attitudes and explicit attitudes. A one-way ANOVA was conducted comparing the explicit attitudes of medical providers and mental health providers. There was no significant difference for explicit attitudes between medical providers and mental health providers (see Table 3). Another one-way ANOVA was conducted comparing the implicit attitudes of medical providers and mental health providers. There was a significant difference for implicit attitudes between medical providers and mental health providers with a moderately large effect size (see Table 3).

Table 3
Implicit Attitudes and Explicit Attitudes by Provider Type

	Provider Type		
	Medical Provider (n = 8)	Mental Health Provider (n = 40)	$F_{\text{simple effect}}$ (η_p^2)
Implicit Attitudes	-.68 (1.00)	.14 (.96)	4.77* (.09)
Explicit Attitudes	-.04 (.59)	.01 (1.07)	0.02 (.00)
$F_{\text{simple effect}}$ (η_p^2)	4.49† (.39)	0.72 (.02)	

Note. †= $p \leq .10$, * = $p \leq .05$. *df* for Provider Type simple effects = 7, 39. *df* for Attitudes Type simple effects = 1, 46.

Hypotheses

The above results were applied to each of the proposed hypotheses.

(1) Implicit attitudes of providers toward TGNC individuals will be weakly correlated to explicit attitudes of providers.

H_1: r will approach 0

(2) The explicit attitudes of medical providers toward TGNC individuals will be less positive than the explicit attitudes of mental health providers toward TGNC individuals.

H_2: $\bar{X}_{em} < \bar{X}_{eb}$

(3) The implicit attitudes of medical providers toward TGNC individuals will be less positive than the implicit attitudes of mental health providers toward TGNC individuals.

H_3: $\bar{X}_{im} < \bar{X}_{ib}$

Hypothesis one was partially supported. Although a perfect correlation was not found, implicit attitudes of providers toward TGNC individuals displayed a strong positive correlation

with explicit attitudes of providers. This finding indicated that the two constructs were strongly related to each other. Additionally, although the results of the tests comparing implicit attitudes and explicit attitudes of providers were not significant when controlling for the effect of provider types, a moderate effect size was found accounting for 4% of the total variance in spite of the small sample size. Furthermore, the difference between implicit attitudes and explicit attitudes for medical providers approached significance and accounted for 40% of the variance. Hypothesis two was not supported; there was no significant difference between the explicit attitudes of the two provider groups. Support was found for hypothesis three, as medical providers displayed a preference for cisgender individuals over TGNC individuals, which was significantly different from the implicit preferences of mental health providers. Additionally, a moderately large effect size was evidenced.

Summary

No significant difference was found between the explicit attitudes of the two provider groups based on an ANOVA. The hypothesis predicting a difference between implicit attitudes of providers and explicit attitudes of providers was not supported as the two attitude types were strongly correlated. Additionally, data for medical providers approached significance and a moderate effect size was observed. Furthermore, medical providers displayed a preference for cisgender individuals over TGNC individuals, which was significantly different from the implicit preferences of mental health providers, lending support to hypothesis three. Implications for the results and the limitations of the current study will be discussed in the next chapter.

Chapter 5: Discussion

The treatment of individuals identifying as TGNC continues to be an important topic of discussion in society. Recently, the Supreme Court of the United States was tasked with determining if the Civil Rights Act of 1964 provides protections to the LGBTQ population, ruling in favor of the LGBTQ community (Liptak, 2020); however, members of the TGNC community continue to face violence and discrimination (Human Rights Campaign, 2020). Due to the continued discrimination in today's society toward TGNC individuals (e.g., job loss, homelessness, or refusal of care due to gender expression; Grant et al., 2011), evaluating the attitudes of those tasked with providing care for this population becomes increasingly more important. To date, there has been limited research evaluating the attitudes of providers toward the TGNC community.

The present study sought to fill a gap in the current literature by assessing both the explicit and implicit attitudes of providers toward TGNC individuals. Several important conclusions can be drawn from the data that can impact future studies and current practices. In the current chapter, the findings of the present study, implications for practice, limiting factors of the study, and potential avenues for future research are discussed.

Discussion of the Results

Based on a thorough review of the literature it was hypothesized:

(1) Implicit attitudes of providers toward TGNC individuals will be weakly correlated to explicit attitudes of providers.

H_1: *r* will approach 0

(2) The explicit attitudes of medical providers toward TGNC individuals will be less positive than the explicit attitudes of mental health providers toward TGNC individuals.

H_2: $\bar{X}_{em} < \bar{X}_{eb}$

(3) The implicit attitudes of medical providers toward TGNC individuals will be less positive than the implicit attitudes of mental health providers toward TGNC individuals.

H_3: $\bar{X}_{im} < \bar{X}_{ib}$

Each hypothesis exhibited varying levels of support. Hypothesis one was partially supported as correlations between the implicit and explicit attitude scores were strong but not a perfect correlation. Hypothesis two was not supported as no significant difference was found between explicit attitudes of the two provider types. Finally, hypothesis three was supported as medical providers displayed a preference for cisgender individuals, as compared to TGNC individuals, that was significantly different than the observed preferences of mental health providers. Based upon the results, several conclusions can be drawn.

Implicit vs. Explicit Attitudes. It was hypothesized that the implicit attitudes would be weakly correlated with explicit attitudes. The results did not provide support for this hypothesis as a strong, positive correlation was found. This finding is not consistent with other IAT literature demonstrating implicit attitudes to be weakly correlated with explicit measures, specifically with regard to socially sensitive topics (e.g., Greenwald et al., 2009; Oswald et al., 2013). One possible explanation for this finding may be that providers in this sample were more comfortable discussing their attitudes toward TGNC individuals, making it less influenced by social

desirability. Strong correlations between implicit and explicit measures are typically only observed in topics with low sensitivity (Greenwald et al., 2009). Upon further evaluation, the difference between implicit and explicit attitudes for medical providers approached significance.

One potential explanation for the observed difference in implicit and explicit attitudes for medical providers may lie with the IAT design itself. The IAT requires that two categories be set in opposition in order to determine a preference for one group. It is possible to view both groups in the same light (i.e., negatively, positively, or neutral). While the IAT may theoretically give a measure of implicit attitudes, it is only based on the relativity of the group compared to another group. If medical providers hold both cisgender and TGNC individuals in positive regard, then the IAT would demonstrate a lack of difference in preference despite a positive (or negative) explicit attitude toward both groups. The explicit attitudes measure may be a reflection of absolute attitudes toward TGNC individuals, while the GI-IATs provide a relative attitudinal preference between TGNC individuals and cisgender individuals. The difference between absolute and relative measurement may explain the difference observed in the current study. It is possible that a larger sample could provide further elucidation on this phenomenon.

In contrast, mental health providers showed no such difference with regard to implicit and explicit attitudes. Mental health providers endorsed very positive explicit attitudes toward TGNC individuals and little to no preference on the IAT. It is likely that mental health providers hold positive implicit attitudes toward both TGNC individuals and cisgender individuals, suggesting mental health providers generally have a good awareness of their implicit attitudes. One reason for this finding may be an additional focus on multicultural training by mental health workers. Greater awareness of one's own biases increases one's ability to counter biases and may result in fewer actions of micro- and macro-aggressions (APA, 2003) and congruency between

implicit and explicit attitudes have found to be better predictors of future behaviors (Greenwald et al., 2009).

Implicit Attitudes of Providers. Overall, providers displayed no relative preference for TGNC individuals or cisgender individuals, suggesting providers likely held congruent implicit attitudes toward TGNC individuals and cisgender. However, upon further analysis, medical providers displayed a slight to moderate preference for cisgender individuals. Mental health providers did not display the same relative preference and accounted for the lack of preference in the overall sample.

With regard to the final hypothesis, it was hypothesized that the implicit attitudes of medical providers would be significantly less positive than the implicit attitudes of mental health providers. This hypothesis was supported as medical providers displayed a relative preference for cisgender individuals as compared to TGNC individuals, which was significantly different from the observed preferences of mental health providers. One explanation for this observed pattern may be that medical providers have less awareness of any potential biases toward TGNC individuals that they do possess and, therefore, may be more likely to exhibit micro- or macro-aggressions (APA, 2003; Greenwald et al., 2009). By their nature, implicit attitudes are outside of the conscious awareness of the individual, making it more likely for individuals to lack awareness of their implicit biases (Greenwald & Banaji 1995; Greenwald et al., 1998). As previously mentioned, the IAT design itself may account for the observed differences. Medical providers may view TGNC individuals positively, while displaying a slight preference for cisgender individuals compared to mental health providers. However, it is important to note that this preference was not considered significant based upon the breakpoints described by Greenwald and colleagues (1998).

Explicit Attitudes of Providers. With regard to explicit attitudes, it was determined that providers as a whole held positive attitudes toward TGNC individuals. The results regarding explicit attitudes means that providers expressed positive views toward this population and were aware of these views. Positively held attitudes are more likely to translate into positive behaviors during interactions (Greenwald et al., 2017). These findings were further supported by providers expressing intent to support TGNC positive policies. The majority of participants in the current study reported multiple contacts within the TGNC community and trainings related to transaffirmative care. Contact with members of the TGNC community has been shown to positively impact attitudes toward members of the TGNC community (Barbir et al., 2017). Additionally, Majumdar, Browne, Roberts, and Carpio (2004) found that cultural sensitivity training improved healthcare providers' cultural awareness increased open mindedness and improved communication with patients from a minority group. Combined these two factors should increase the likelihood that participants will view TGNC individuals more positively and may explain the very positive explicit attitudes observed.

The second hypothesis posited that medical providers would report significantly lower explicit attitudes toward TGNC individuals than mental health providers. It was believed that medical providers would endorse more negative thoughts, behaviors, and beliefs with regard to TGNC individuals. Previous studies have found an increased likelihood for medical providers to identify with political conservatism (Bonica, et al., 2014; U.S. Census Bureau, 2017), which is associated with negative attitudes toward TGNC individuals (Norton & Herek, 2013). Additionally, TGNC individuals have reported more difficulty in seeking care from their medical providers than mental health providers. Based on these findings, it was believed that medical

providers would display lower levels of explicit attitudes toward TGNC individuals when compared to mental health providers.

Although the present study found medical providers were more politically conservative than mental health providers, they did not display any significantly higher levels of religiosity. Additionally, there was no significant difference in the observed explicit attitudes of medical providers and mental health providers. These results may be partially due to the primarily liberal and less religious makeup of the sample. It is of note that individuals identifying as politically liberal and with lower religiosity tend to display more positive attitudes toward TGNC individuals (Norton & Herek, 2013). Furthermore, explicit attitudes have been found to be better predictors of behaviors when they are more closely aligned with implicit attitudes and in instances of high cognitive control (e.g., intent, time to think, well rested; Greenwald et al., 2009 2017).

Greenwald and his colleagues (2009) indicated that, in the case with socially sensitive topics, individuals display a tendency to respond in a socially desirable manner. Attitudes toward TGNC individuals would fall into this category in most cases. Medical providers are tasked with caring for a diverse population in an empathic manner (Lasagna, 1964), and as such, may be under more pressure to present themselves in a manner consistent with professional expectations, thus, feeling a greater pressure to express more positive explicit attitudes. This explanation may be further supported by the observed difference in implicit and explicit attitudes for medical providers. Medical providers' marginally significantly less positive implicit attitudes as compared to explicit attitudes may demonstrate a disconnect that may be explained by a lack of awareness of implicit bias, or an attempt to present in a favorable light. The next section will discuss the implications for practice based on the findings of the present study.

Implications for Practice

Based on the results of the study, implications for real world practice can be made. First, based upon Alport's (1938) contact hypothesis and the results of Barbir and colleagues' (2017) study, it is recommended that efforts be made to engage in positive interactions with members of TGNC communities. Participants in the present study held positive attitudes toward TGNC individuals and may have been predisposed to do so based on the high rate of contact with TGNC individuals. While it cannot be determined that positive attitudes were due to increased contact, it does provide further support for the previously established literature.

It is recommended that multicultural awareness trainings continue to be offered. The majority of the providers in the present study indicated participation in trainings specific to transgender care. Majumdar and colleagues (2004) found that cultural sensitivity training improved healthcare providers' cultural awareness, increased open mindedness, and improved communication with patients from a minority group; thus, it is expected that a similar effect would be observed in relation to TGNC individuals. Participation in transaffirmative trainings may partially explain the positive attitudes toward the TGNC population observed in the present study.

While the majority of providers indicated they had participated in TGNC specific trainings, providing more opportunities for trainings related to TGNC care is an area of need. Thirty-three percent of respondents reported they had never had a training related to TGNC care. Of those who had completed a population specific training, over half reported their training was two or more years ago with 6.3% indicating it had been at least six years since their last training. It is important to note that significant change in standards of care and appropriate language is likely to occur in a six or more year period. Providing more opportunities for training and

exposure to population specific information can allow for a greater level of care and knowledge, which is particularly important as many TGNC individuals have shared feeling a need to educate their providers (Grant et al., 2011). While the majority of providers indicated participation in TGNC specific trainings, the fluidity of knowledge may make it necessary to continue to participate in such trainings. In the next section, the strengths of this study are discussed.

Strengths of Study

The present study attempted to provide a unique addition to the literature with regard to the care of TGNC individuals. Several facets of the present study can be considered strengths. Particularly, the unique contribution made, the use of both implicit and explicit attitudinal measures, and taking the perspective of the providers are all unique strengths of the present study.

This study is the first known study to assess the implicit attitudes of providers toward the TGNC population. While it is more common to assess the explicit views of providers, explicit attitudes may be subject to distortion and social desirability (Greenwald et al., 2009). Implicit attitudes have been shown to be less influenced by social desirability and, in certain instances, better predictors of future behavior (Greenwald et al., 2009). The added dimension of implicit attitudes provides a previously unknown aspect of the patient provider relationship and sheds light on the experience of TGNC individuals in the healthcare arena. Although an implicit measure was added, the present study also chose to include an explicit measure of attitudes toward TGNC individuals.

The use of both implicit and explicit measures to assess provider attitudes toward TGNC individuals provides a holistic view of attitudes. The inclusion of both implicit and explicit measures affords the current study a unique strength in assessing the overall attitudes of

providers. At the time the study was conducted, no other study had attempted to assess both aspects of attitudes toward TGNC individuals with regard to providers. Furthermore, limited data exists assessing the role providers play in creating a welcoming environment for TGNC individuals.

The majority of studies assessing attitudes and care in relation to TGNC individuals focus on the perceptions and experiences of TGNC individuals. While this dimension is certainly important, the other half of the picture has remained unexplored. Since attitudes can influence the experience of others, it is therefore important to also understand the attitudes of the providers toward TGNC individuals. The current study assessed the attitudes of providers toward TGNC individuals in order to provide an explanation for the stigma and discrimination experienced by TGNC individuals when seeking care. Additionally, this shift in focus provides new avenues for intervention.

Limitations of Study

As with all studies, the present study experienced some limiting factors. These limitations should be considered when viewing and applying the results of the present study. The following section discusses the impact of the sample size, representativeness of the sample, the design used for the implicit measures, and the availability of measurement tools.

Change in Population of Study

Originally this study sought to determine the attitudes of Veterans Affairs (VA) providers toward TGNC individuals specifically; however, due to recruitment difficulties and the protective nature of VA surrounding data relating to its system, it was deemed necessary to amend the population of study. The Department of Veterans Affairs views all data collected specifically looking at their system to belong to the VA, and as such, protected and under their

control. As a result, it was not possible to distribute within the VA healthcare system and use the data freely. Some concern was expressed by one hospital that the data may reflect negatively on the system, while others were more willing to aid in the research. Prior to expanding the scope of the participant pool, only 12 respondents were garnered. Due to the restrictions placed on the use of data and the limited response, recruitment was expanded to include all providers without making the distinction of VA or non-VA. Providers were reached through professional organizations and listservs. This improved recruitment efforts and feasibility; however, the results may not wholly represent providers in specific settings such as the VA.

Small Sample Size

One limiting factor of this study was the relatively small sample size. Despite best efforts at recruiting and widening the subject pool, the total recruitment contained only 66 providers with only 48 of the respondents being retained for final analysis. Sixteen participants were excluded because they did not complete both GI-IATs and the ATTI, and 2 were excluded because they did not provide valid IAT data (e.g., responded too fast, too slow, made too many errors). Additionally, only 8 of the total sample represented medical providers, which greatly limits the overall interpretability and generalizability of the data. Furthermore, the two groups of analysis (i.e., mental health and medical providers) were not balanced. The unbalanced nature of the groups and small size of the medical group population limited the overall power of the study and increased the possibility of accepting a false premise (Faber & Fonseca, 2014). Recruiting medical providers to the study was a challenge, and steps to increase recruitment of medical providers may be beneficial in future studies as less is known regarding this population.

Representativeness of the Sample

An additional issue was the representativeness of the sample. The diversity of the sample was limited, particularly with respect to ethnicity and gender. The sample predominately identified as Caucasian and female. Due to the relative uniformity of the sample, the results may not represent other diverse groups, thus limiting the generalizability of the results. Underrepresentation in research may lead to the drawing of false conclusions, ineffective interventions, and misrepresentation (APA, 2003). Furthermore, the makeup of the current sample is unlikely to be representative of the population of medical providers in the country who are predominantly male and Caucasian, with Asian being the next highest represented group (U.S. Census Bureau, 2017).

IAT Design

The design of the current IAT is in itself a limitation. The GI-IATs separate trans men and trans women into separate IATs, thus allowing researchers to determine attitudes toward a specific subset of the transgender community. However, this required that a participant's score on each IAT be averaged in order to determine a global implicit attitude toward TGNC individuals. The GI-IATs were chosen in spite of this as they were the only available IAT assessing attitudes toward TGNC individuals available. The averaging of the two scores may skew the scores, particularly if a provider had significantly strong attitudes toward one group but not another. Some evidence in the present study was found as the correlations for the Trans women GI-IAT with explicit attitudes was weaker than the correlations of the Trans men GI-IAT with explicit scores. Additionally, the stimuli used in the IAT was limited and primarily used outdated language (e.g., transsexual). Finally, the GI-IATs only focused specifically on the transgender population, and therefore it was assumed to apply to gender non-conforming individuals as well,

as they are subsumed under the transgender umbrella; however, further studies may benefit from assessing these groups separately. The availability of measures was a concern as well.

A further limitation of the IAT design is the requirement to set two categories in opposition. The traditional IAT design requires two categories for a construct to be set in opposition and therefore results would reflect a relative preference that may not be indicative of an absolute attitude. While the results may display implicit bias for one group over another, it does not necessitate that the participant have a negative attitude toward that group. Implicit preference may still result in inequities between groups.

Finally, while the IAT theoretically measures implicit attitudes, other potential explanations for the IAT effect exist. While data has been posited to support the IAT's utility as a tool assessing implicit attitudes, it relies on an indirect method in order to do so (Greenwald & Banaji, 2017; Greenwald et al., 1998). The indirect method allows for space for alternative explanations stemming from the observed cognitive associations measured.

Availability of Measures

The availability of validated measures assessing attitudes toward TGNC individuals was limited. The implicit measure used was the only one that existed at the time this study began, and few explicit measures were available. The ATTI was chosen over other explicit measures as it provided strong psychometrics and was more frequently used. Additionally, the available measures often had outdated language (e.g., transsexual, transgendered). Due to the limited availability of measures, concessions were made regarding the language of the measures, such as using a measure with outdated language (e.g., transgendered). The data and limitations of this study suggest several potential avenues for future study.

Recommendations for Future Research

Based upon the results of this study, multiple recommendations for future research can be made. Improved availability and diversity of assessment materials, outcome data on interventions designed to target biases toward TGNC individuals, and studies focused on providing further insight on the attitudes of specific populations toward TGNC individuals would benefit the scientific community as well as the TGNC community.

During development of this study, it was discovered that limited measures assessing attitudes toward TGNC individuals were available. Additionally, significant limitations existed in the available measures. Measures often used outdated language and frequent changes in the sociopolitical environment limit the degree to which statements on each measure apply to current populations. Furthermore, no measures exist to assess attitudes for specific populations toward TGNC individuals, such as medical and mental health providers. Thus, future research focused on developing modern and targeted measures would be a major boon to the scientific community.

Due to the findings suggesting that implicit bias may exist, one potential study could focus on developing norms for the GI-IATs to use with providers. Currently, no norms exist, making it impossible to estimate the size and degree of the observed bias. The development of specific norms for the GI-IATs could help provide more information, making the tools more useful in the future.

A study specifically targeting the attitudes of medical providers may provide further insight regarding this observed separation between implicit and explicit attitudes. While the present study was able to identify a significant difference between the implicit and explicit attitudes of medical providers, determining the reason behind this gap was beyond the scope of the present study. Possible explanations were posited based upon the observed pattern of results

and the available literature on implicit attitudes; however, future studies may be able to further elucidate the reasons behind the observed separation. Determining the cause of the observed separation may serve to better design and target future interventions.

Another area of interest may be comparing the attitudes of providers in various settings, such as private practice, hospitals, VAs, and rural providers versus urban providers. It is possible that different types of providers may gravitate to different types of settings, influencing their experiences and attitudes toward TGNC individuals. Previous studies have shown factors such as political affiliation and religiosity to be correlated with attitudes toward the TGNC communities. This correlation was further corroborated by the findings of the current study. Furthermore, these factors may influence where providers decide to practice. Further research may help target where interventions may be of the greatest impact.

Finally, future research endeavors would benefit from larger samples with a greater level of representation from diverse groups. The current study was primarily composed of Caucasian females and as such may not generalize to other diverse groups. Cultural differences may impact a provider's attitudes toward TGNC individuals. Evidence for cultural and gender-based attitudinal differences exists (e.g., Norton & Herek, 2013). Further examination could better explain previously observed differences and may generate new information regarding the development of implicit and explicit attitudes toward TGNC individuals. The information generated from this type of research may improve targeted interventions toward improving care of TGNC individuals.

Summary

The present study sought to determine the current explicit and implicit attitudes of providers toward TGNC individuals. Providers displayed predominately positive attitudes toward TGNC individuals. Factors predisposing the sample to be more positively valanced toward TGNC individuals (i.e., high degree of contact with TGNC community, high participation in transaffirmative trainings, primarily liberal political views, and lower rates of religiosity) may contribute to positively held attitudes displayed. Medical providers displayed a preference for cisgender individuals that was significantly different than the preferences of mental health providers and may be due to lower levels of awareness of potential biases surrounding TGNC individuals or an increased pressure to present in a positive light. These findings suggest that efforts should be made to help providers continue to interact with the TGNC community in positive ways, continue to engage in trainings related to transgender care, and even expand availability and frequency of trainings related to transgender care. The present study is the only known study to assess the attitudes of providers toward TGNC individuals in depth. Furthermore, the current study assessed both implicit and explicit attitudes of providers. While there were many strengths of the current study, it also experienced limitations related to sample size, generalizability, the design of the IAT, and availability of measures. Several avenues for future research stemming from the present study exist and can serve to expand on the results in order to better care for TGNC individuals.

References

Albarracin, D., & Shavitt, S., (2018). Attitudes and attitude change. *Annual Review of Psychology, 69*(4), 1–29. https://doi.org/10.1146/annurev-psych-122216-011911

American Medical Association. (2016). AMA principles of medical ethics. https://www.ama-assn.org/delivering-care/ama-principles-medical-ethics

American Psychiatric Association. (1968). *Diagnostic and statistical manual of mental disorders, (DSM-II).* American Psychiatric Association, Washington, DC.

American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist*, *58*(5), 377–402. https://doi.org/10.1037/0003-066X.58.5.377

American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist, 70*(9), 832–864. http://dx.doi.org/10.1037/a0039906

American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. http://www.apa.org/ethics/code/index.html

Arkes, H. R., & Tetlock, P. E. (2004). Attributions of Implicit Prejudice, or "Would Jesse Jackson 'Fail' the Implicit Association Test*?" Psychological Inquiry*, *15*(4), 257–278. https://doi.org/10.1207/s15327965pli1504_01

Banse, R., Seise, J., & Zerbes, N. (2001). Implicit attitudes towards homosexuality: Reliability, validity, and controllability of the IAT. *Experimental Psychology*, *48*(2), 145–160. https://doi.org/10.1026//0949-3946.48.2.145

Barbir, L. A., Vandevender, A. W., & Cohn, T. J. (2017). Friendship, attitudes, and behavioral intentions of cisgender heterosexuals toward transgender individuals. *Journal of Gay and Lesbian Mental Health*, *21*(2), 154–170. https://doi.org/10.1080/19359705.2016.1273157

Barnes, S. M., Bahraini, N. H., Forster, J. E., Stearns-Yoder, K. A., Hostetter, T. A., Smith, G., Nagamoto, H. T., & Nock, M. K. (2017). Moving beyond self-report: Implicit associations about death/life prospectively predict suicidal behavior among veterans. *Suicide and Life-Threatening Behavior*, *47*(1), 67–77. https://doi.org/10.1111/sltb.12265

Bender-Baird, K. (2011). *Transgender employment experiences: Gendered exceptions and the law.* SUNY Press.

Benson, K. (2013). Seeking support: Transgender client experiences with mental health services. *Journal of Feminist Family Therapy, 25*(1), 17–40. https://doi.org/10.1080/08952833.2013.755081

Bess, J. A., & Stabb, S. D. (2009). The experiences of transgendered persons in psychotherapy: Voices and recommendations. *Journal of Mental Health Counseling*, *31*(3), 264–282. https://doi.org/10.17744/mehc.31.3.f624154681133w50

Blanton, H., & Jaccard, J. (2006). Arbitrary metrics in psychology. *American Psychologist*, *61*(1), 27–41. https://doi.org/10.1037/0003-066X.61.1.27

Blavin, F., Shartzer, A., Long, S. K., & Holahan, J. (2016). Employer-sponsored insurance stays strong, with no signs of decay under the ACA: Findings through March 2016. *Urban Institute*. http://hrms.urban.org/briefs/employer-sponsored-insurance-stays-strong.pdf

Bonica, A., Rosenthal, H., & Rothman, D. J. (2014). The political polarization of physicians in the United States: An analysis of campaign contributions to federal elections, 1991

through 2012. *JAMA Internal Medicine*, *174*(8), 1308–1317. https://doi.org/10.1001/jamainternmed.2014.2105

Carpenter, T. P., Pogacar, R., Pullig, C., Kouril, M., Aguilar, S., LaBouff, J., Isenberg, N., & Chakroff, A. (2019). Survey-software implicit association tests: A methodological and empirical analysis. *Behavior Research Methods, 51*, 2194–2208. https://doi.org/10.3758/s13428-019-01293-3

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*(4), 281–302. https://doi.org/10.1037/h0040957

Cunningham, W. A., Preacher, K. J., & Banaji, M. R. (2001). Implicit attitude measures: Consistency, stability, and convergent validity. *Psychological Science*, *12*(2), 163–170. https://doi.org/10.1111/1467-9280.00328

Currah, R., & Minter, S. P. (2000). *Transgender equality: A handbook for activists and policymakers*. National LGBTQ Task Force. https://www.thetaskforce.org/

Dawson, A. E., Wymbs, B. T., Gidycz, C. A., Pride, M., & Figueroa, W. (2017). Exploring rates of transgender individuals and mental health concerns in an online sample. *International Journal of Transgenderism, 18*(3), 295–304. http://dx.doi.org/10.1080/15532739.2017.1314797

Department of Defense. (2011). DoD Instruction 4715.15, December 11, 2006; Incorporating change 1, May 10, 2011. *Executive Services Directorate* http://www.dtic.mil/whs/directives/corres/pdf/471515p.pdf

Department of Defense. (2018). Department of Defense report and recommendations on military service by transgender persons. *Executive Services Directorate.*

https://media.defense.gov/2018/Mar/23/2001894037/-1/-1/0/MILITARY-SERVICE-BY-TRANSGENDER-INDIVIDUALS.PDF

dickey, l. m., Reisner, S. L., & Juntunen, C. L. (2015). Non-suicidal self-injury in a large online sample of transgender adults. *Professional Psychology: Research and Practice*, *46*(1), 3–11. https://doi.org/10.1037/a0038803

Doob, L. (1947). The behavior of attitudes. *Psychological Review, 54*(3), 135–156. https://psycnet.apa.org/doi/10.1037/h0058371

Executive Memorandum No. 83 FR 13367 (2017).

Faber, J. & Fonseca, L. M. (2014). How sample size influences research outcomes. *Dental Press Journal of Orthodontics*. https://dx.doi.org/10.1590%2F2176-9451.19.4.027-029.ebo

Fazio, R. H. (1990). Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 75-109). Academic Press.

Fraley, R. C., Griffin, B. N., Belsky, J., & Roisman, G. I. (2012). Developmental antecedents of political ideology: A longitudinal investigation from birth to age 18 years. *Psychological Science, 23*(11), 1425–1431. https://doi.org/10.1177/0956797612440102

Fredriksen-Goldsen, K. I., Cook-Daniels, L., Kim, H. J., Erosheva, E. A., Emlet, C. A., Hoy-Ellis, C. P., Goldsen, J., & Muraco, A. (2014). Physical and mental health of transgender older adults: An at-risk and underserved population. *Gerontologist*, *54*(3), 488–500. https://doi.org/10.1093/geront/gnt021

Geer, J. H., & Robertson, G. G. (2005). Implicit attitudes in sexuality: Gender differences. *Archives of Sexual Behavior*, *34*(6), 671–677. https://doi.org/10.1007/s10508-005-7923-8

Gerhardstein, K. R., & Anderson, V. N. (2010). There's more than meets the eye: Facial appearance and evaluations of transsexual people. *Sex Roles*, *62*, 361–373. https://doi.org/10.1007/s11199-010-9746-x

Goldblum, P., Testa, R. J., & Pflum, S. (2012). The relationship between gender-based victimization and suicide attempts in transgender people. *Professional Psychology: Research and Practice, 43*(5), 468–475. https://doi.org/10.1037/a0029605

Goldin, C., & Rouse, C. (2000). Orchestrating impartiality: The impact of "blind" auditions on female musicians. *American Economic Review, 90*, 715–741. http://dx.doi.org/10.1257/aer.90.4.715

Grant, J. M., Mottet, L. A., Tanis, J. D., Harrison, J., Herman, J. L., & Keisling, M. (2011). *Injustice at every turn: A report of the national transgender discrimination survey.* National Center for Transgender Equality and National Gay and Lesbian Task Force.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*(1), 4–27. https://doi.org/10.1037/0033-295X.102.1.4

Greenwald, A. G., & Banaji, M. R. (2017). The implicit revolution: Reconceiving the relation between conscious and unconscious. *American Psychologist*, *72*(9), 861–871. https://doi.org/10.1037/amp0000238

Greenwald, A. G., Banaji, M. R., Rudman, L. A., Farnham, S. D., Nosek, B. A., & Mellott, D. S. (2002). A unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept. *Psychological Review*, *109*(1), 3–25. https://doi.org/10.1037//0033-295X.109.1.3

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, *74*(6), 1464–1480. https://doi.org/10.1037/0022-3514.74.6.1464

Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, *85*(2), 197–216. https://doi.org/10.1037/0022-3514.85.2.197

Greenwald, A. G., Nosek, B. A., Banaji, M. R., & Klauer, K. C. (2005). Validity of the salience asymmetry interpretation of the implicit association test: Comment on Rothermund and Wentura (2004). *Journal of Experimental Psychology: General, 134*(3), 420–425. http://dx.doi.org/10 .1037/0096-3445.134.3.420

Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the implicit association test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, *97*(1), 17–41. https://doi.org/10.1037/a0015575

Hill, D. B., & Willoughby, B. L. B. (2005). The development and validation of the genderism and transphobia scale. *Sex Roles*, *53*, 531–544. https://doi.org/10.1007/s11199-005-7140-x

Human Rights Campaign. (2020). Violence against transgender and gender-nonconforming community in 2020. *Human Rights Campaign.* https://www.hrc.org/resources/violence-against-the-trans-and-gender-non-conforming-community-in-2020

Israel, T., Gorcheva, R., Burnes, T. R., & Walther, W. A. (2008). Helpful and unhelpful therapy experiences of LGBT clients. *Psychotherapy Research*, *18*(3), 294–305. https://doi.org/10.1080/10503300701506920

Johnson, L., & Federman, E. J. (2013). Pathways and barriers to care for LGBT veterans in the U.S. Department of Veterans Affairs (VA). *Journal of LGBT Issues in Counseling*, *7*(3), 218–235. https://doi.org/10.1080/15538605.2013.812928

Klauer, K. C., & Musch, J. (2008). Affective priming: Findings and theories. In J. Musch & K. C. Klauer (Eds.), *The psychology of evaluation: Affective processes in cognition and emotion* (pp. 9–50). Lawrence Erlbaum Associates, Publishers.

Koh, J. (2012). The history of the concept of gender identity disorder. *The Japanese Society of Psychiatry & Neurology, 114*(6), 673–680. https://www.jspn.or.jp/modules/english/index.php?content_id=1

Korell, S. C., & Lorah, P. (2007). An overview of affirmative psychotherapy and counseling with transgender clients. In K. J. Bieschke, R. M. Perez, & K. A. Debord (Eds.), *Handbook of counseling and psychotherapy with lesbian, gay, bisexual, and transgender clients* (2nd ed., pp. 271–288). American Psychological Association. https://doi.org/10.1037/11482-011

Kosciw, J. G., Greytak, E. A., Palmer, N. A., & Boesen, M. J. (2014). *The 2013 national school climate survey*. GLESN. https://www.glsen.org/sites/default/files/2020-03/GLSEN-2013-National-School-Climate-Survey-Full-Report.pdf

Krech, D., Crutchfield, R. S., & Ballachedy, E. L. (1962). *Individual in society*. McGraw-Hill.

Lambda Legal. (2012). Professional organization statements supporting transgender people in health care. http://www.lambdalegal.org/sites/default/files/publications/downloads/fs_professional-org-statements-supporting-trans-health_1.pdf

Lasagna, L. (1964) Hippocratic oath. *WGBH Educational Foundation.*

Lipka, M. (2016, October 3). Americans are divided over which public bathrooms transgender people should use. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2016/10/03/americans-are-divided-over-which-public-bathrooms-transgender-people-should-use/

Liptak, A. (2020) Civil rights law protects gay and transgender workers, Supreme Court rules. *New York Times*. https://www.nytimes.com/2020/06/15/us/gay-transgender-workers-supreme-court.html

Majumdar, B., Browne, G., Roberts, J., & Carpio, B. (2004) Effects of cultural sensitivity training on health care provider attitudes and patient outcomes. *Journal of Nursing Scholarship, 36*(2), 161–166. https://doi.org/10.1111/j.1547-5069.2004.04029.x

McDuffie, E., & Brown, G. R. (2010). 70 U.S. veterans with gender identity disturbances: A descriptive study. *International Journal of Transgenderism*, *12*(1), 21–30. https://doi.org/10.1080/15532731003688962

Meerwijk, E. L., & Sevelius, J. M. (2017). Transgender population size in the United States: A meta-regression of population based probability samples. *American Journal of Public Health, 107*, e1–e8. https://doi.org/10.2105/AJPH.2016.303578

Moe, J. L., Finnerty, P., Sparkman, N., & Yates, C. (2015). Initial assessment and screening with LGBTQ clients: A critical perspective. *Journal of LGBT Issues in Counseling*, *9*(1), 36–56. https://doi.org/10.1080/15538605.2014.997332

Myers, D. G. (1990). *Social psychology* (3rd ed.). McGraw-Hill.

Nadal, K. L., Rivera, D., & Corpus, M. (2010). Sexual orientation and transgender microaggressions in everyday life: Experiences of lesbians, gays, bisexuals, and

transgender individuals. In D. W. Sue (Ed.), *Experiences of lesbians, gays, bisexuals, and transgender individuals* (pp. 217–240). Wiley.

Nadal, K. L., Skolnik, A., & Wong, Y. (2012). Interpersonal and systemic microaggressions toward transgender people: Implications for counseling. *Journal of LGBT Issues in Counseling*, *6*(1), 55–82. https://doi.org/10.1080/15538605.2012.648583

National LGBTQ Task Force. (2013). *Hate crimes laws in the U.S.* https://www.thetaskforce.org/

Nicolls, D. (2018). Transgender & gender non-conforming (TGNC) clients: Clinical issues and treatment strategies. *PESI.*

Norton, A. T., & Herek, G. M. (2013). Heterosexuals' attitudes toward transgender people: Findings from a national probability sample of U.S. adults. *Sex Roles*, *68*, 738–753. https://doi.org/10.1007/s11199-011-0110-6

Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the implicit association test: II. Method variables and construct validity. *Personality and Social Psychology Bulletin*, *31*(2), 166–180. https://doi.org/10.1177/0146167204271418

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). *The measurement of meaning*. University of Illinois Press.

Oswald, F. L., Mitchell, G., Blanton, H., Jaccard, J., & Tetlock, P. E. (2013). Predicting ethnic and racial discrimination: A meta-analysis of IAT criterion studies. *Personality and Social Psychology*, *105*(2), 171–192. Retrieved from http://dx.doi.org/10.1037/a0032734

Project Implicit. (2011). About the IAT. Retrieved December 19, 2018, from https://implicit.harvard.edu/implicit/iatdetails.html

Rachlin, K. (2002). Transgender individuals' experiences of psychotherapy. *International Journal of Transgenderism*, *6*(1). Retrieved from http://www.symposion.com/ijt/ijtvo06no01_03.htm

RAND Corporation. (2016). *Assessing the implications of allowing transgender personnel to serve openly.* RAND Corporation. https://www.rand.org/pubs/research_reports/RR1530.html

Reason, R. D., & Rankin, S. R. (2006). College students' experiences and perceptions of harassment on campus: An exploration of gender differences. *College Student Affairs Journal*, *26*(1), 7–29. Retrieved from https://www.sacsa.org/page/CSAJ

Riggs, D. W., Webber, K., & Fell, G. R. (2012). Australian undergraduate psychology students' attitudes towards trans people. *Gay and Lesbian Issues and Psychology Review*, *8*(1), 52–62.

Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). Criteria for scale selection and evaluation. *Measures of personality and social psychological attitudes* (pp. 1–16). Academic Press.

Rothermund, K., & Wentura, D. (2004). Underlying processes in the implicit association test: Dissociating salience from associations. *Journal of Experimental Psychology: General, 133*(2), 139–165. https://doi.org/10.1037/0096-3445.133.2.139

Russell, S. T., Pollitt, A. M., Li, G., & Grossman, A. H. (2018). Chosen name use is linked to reduced depressive symptoms, suicidal ideation, and suicidal behavior among transgender youth. *Journal of Adolescent Health, 63*(4), 503–505. https://doi.org/10.1016/j.jadohealth.2018.02.003

Sarnoff, I. (1960). Psychoanalytic theory and social attitudes. *Public Opinion Quarterly, 24*(2), 251–279. https://doi.org/10.1086/266948

Schreger, C., & Kimble, M. (2017). Assessing civilian perceptions of combat veterans: An IAT study. *Psychological Trauma: Theory, Research, Practice, and Policy*, *9*(Suppl. 1), 12–18. https://doi.org/10.1037/tra0000191

Schuldt, J. P., Konrath, S. H., & Schwarz, N. (2011). "Global warming" or "climate change"?: Whether the planet is warming depends on questioning wording. *Public Opinion Quarterly, 75*(1), 115–124. https://doi.org/10.2307/41288371

Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology, 45*(3), 513–523. https://doi.org/10.1037/0022-3514.45.3.513

Schwarz, N., Strack, F., & Mai, H. P. (1991). Assimilation and contrast effects in part-whole question sequences: A conversational logic analysis. *Public Opinion Quarterly*, *55*(1), 3–23. https://doi.org/10.1086/269239

Sherman, M. D., Kauth, M. R., Ridener, L., Shipherd, J. C., Bratkovich, K., & Beaulieu, G. (2014). An empirical investigation of challenges and recommendations for welcoming sexual and gender minority veterans into VA care. *Professional Psychology: Research and Practice*, *45*(6), 433–442. https://doi.org/10.1037/a0034826

Sherman, M. D., Kauth, M. R., Shipherd, J. C., & Street, R. L. (2014a). Communication between VA providers and sexual and gender minority veterans: A pilot study. *Psychological Services*, *11*(2), 235–242. https://doi.org/10.1037/a0035840

Sherman, M. D., Kauth, M. R., Shipherd, J. C., & Street, R. L. (2014b). Provider beliefs and practices about assessing sexual orientation in two veterans health affairs hospitals. *LGBT Health*, *1*(3), 185–191. https://doi.org/10.1089/lgbt.2014.0008

Shipherd, J. C., Kauth, M. R., & Matza, A. (2016). Nationwide interdisciplinary e-consultation on transgender care in the Veterans Health Administration. *Telemedicine and E-Health*, *22*(12), 1008–1012. https://doi.org/10.1089/tmj.2016.0013

Shipherd, J. C., Mizock, L., Maguen, S., & Green, K. E. (2012). Male-to-Female transgender veterans and VA health care utilization. *International Journal of Sexual Health*, *24*(1), 78–87. https://doi.org/10.1080/19317611.2011.639440

Singh, A. A., & Jackson, K. (2012). Queer and transgender youth education and liberation in our schools. In E. R. Meiners & T. Quinn (Eds.), *Sexualities in Education: A Reader* (pp. 175–186). Peter Lang.

Smith, M. B., Bruner, J. S., & White, R. W. (1956). *Opinions and personality*. Wiley.

Spade, D. (2011). *Normal life: Administrative violence, critical trans politics, and the limits of the law.* South End.

Stroop, J. R. (1935). Studies of interference in serial verbal reactions. *Journal of Experimental Psychology, 18*(6), 643–662. https://doi.org/10.1037/h0054651

Tatum, S. (2018, March 24). White house announces policy to ban most transgender people from serving in military. *CNN*. https://www.cnn.com/2018/03/23/politics/transgender-white-house/index.html

Taylor, J. K. (2007). Transgender identities and public policy in the United States: The relevance for public administration. *Administration & Society, 39*, 833–856. http://dx.doi.org/10.1177/0095399707305548k

Testa, R. J., Sciacca, L. M., Wang, F., Hendricks, M. L., Goldblum, P., & Bradford, J. (2012). Effects of violence on transgender people. *Professional Psychology: Research and Practice, 43*(5), 452–459. https://doi.org/10.1037/a0029604

Thurstone, L. L. (1931). The measurement of social attitudes. *Journal of Abnormal and Social Psychology, 26(3)*, 249-269. https://doi.org/10.1037/h0070363

Transgender Law Center. (N. D.). Ideas of change. https://transgenderlawcenter.org/

U.S. Census Bureau. (2017). American Community Survey. *U.S. Census.* https://data.census.gov/cedsci/

Vasquez, M. J. T. (2007). Cultural difference and the therapeutic alliance: An evidence-based analysis. *American Psychologist*, *62*(8), 878–885. https://doi.org/10.1037/0003-066X.62.8.878

VHA Directive No. 2011-024 (2011).

Walch, S. E., Ngamake, S. T., Francisco, J., Stitt, R. L., & Shingler, K. A. (2012). The attitudes toward transgendered individuals scale: Psychometric properties. *Archives of Sexual Behavior*, *41*(5), 1283–1291. https://doi.org/10.1007/s10508-012-9995-6

Wang-Jones, T. S., Alhassoon, O. M., Hattrup, K., Ferdman, B. M., & Lowman, R. L. (2017). Development of gender identity implicit association tests to detect attitudes toward transmen and transwomen. *Psychology of Sexual Orientation and Gender Diversity*, *4*(2), 169–183. http://dx.doi.org/10.1037/sgd0000218

Ware, J. E., Kosinski, M., & Keller, S. D. (1996). A 12- item short-form health survey: Construction of scales and preliminary tests of reliability and validity. *Medical Care*, *34*, 220–233. http://dx.doi.org/10.2307/3766749

Welsh, T. (2016). Military lifts transgender ban. Retrieved May 15, 2018, from http://www.mcclatchydc.com/news/nation-world/national/article86902072.html

White Hughto, J. M., Reisner, S. L., & Pachankis, J. E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine, 147*, 222–231. https://doi.org/10.1016/j.socscimed.2015.11.010

Yerke, A. F., & Mitchell, V. (2013). Transgender people in the military: Don't ask? Don't tell? Don't enlist! *Journal of Homosexuality*, *60*(2–3), 436–457. https://doi.org/10.1080/00918369.2013.744933

Appendix A

Demographics

Gender Which gender do you most closely identify with?

- ○ Male (1)
- ○ Female (2)
- ○ Transgender Male (3)
- ○ Transgender Female (4)
- ○ Other (Please specify) (5) _____

Ethnicity Which ethnicity do you most closely identify with?

- ○ Caucasian/European American/White (1)
- ○ African American (2)
- ○ American Indian/Native American (3)
- ○ East-/Southeast-Asian American (4)
- ○ Pacific-Islander American (5)
- ○ Pacific Islander American (6)
- ○ Hispanic, Latino/a, Chicano/a American (7)
- ○ Carribean American (9)
- ○ Middle-Eastern/North-African American (10)
- ○ Multi-Ethnic (please specify) (11)

_____

- ○ Other (please specify) (8) _____

Age What is your age in years (e.g., 23)

_____

Relationship Which best describes your current relationship status?

- ○ Single (1)
- ○ Married (2)
- ○ Casual (in a relationship but still able to see other people) (3)
- ○ Exclusive (in a relationship but not seeing other people) (4)
- ○ Engaged (5)
- ○ Other (please specify) (6) _____

Sex_Orient What best describes your sexual orientation?

- ○ Heterosexual (1)
- ○ Gay/Lesbian (2)
- ○ Bi-sexual (3)
- ○ Other (please specify) (4) _____

Vet Are you a veteran?

- ○ Yes (23)
- ○ No (24)

Q107 What type of facility are you currently working in (i.e., Hospital, Community Mental Health, Private Practice, VA Medical Center)?

_____

Specialty What is your specialty within your field (e.g., Endocrinology, Behavioral Medicine)?

_____

Training What is your training background (e.g., Doctor of Medicine, Doctor of Osteopathic Medicine, Social Work, Clinical Psychology)?

_____

Politic Please choose the answer you most closely identify with.

	Extremely Conservative (1)	Conservative (2)	Somewhat Conservative (3)	Balanced between Liberal and Conservative (4)	Somewhat Liberal (5)	Liberal (6)	Extremely Liberal (7)
How would you rate your general political stance? (1)	○	○	○	○	○	○	○

Relig Please choose the answer you most closely identify with.

	Extremely Important (1)	Important (2)	Somewhat Important (3)	Neutral (4)	Somewhat Unimportant (5)	Unimportant (6)	Extremely Unimportant (7)
How important is organized religion in your life? (1)	○	○	○	○	○	○	○

Q105 For the following sections, **Cisgender** is defined as an individual whose assigned gender aligns with their identified gender.

Transgender is defined as an individual whose assigned gender does not align with their identified gender.

Please be aware that some language used may be outdated. However, this language must be used as it was present when the measure was validated.

Policy Please rate your level of support for the following transgender related policies.

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Transgender individuals should not be discriminated against (1)	○	○	○	○	○	○	○
Hormone therapy and transition services should be covered by health care (2)	○	○	○	○	○	○	○
Transgender individuals should be able to use the bathroom they feel most comfortable in (3)	○	○	○	○	○	○	○
Transgender individuals should be allowed to dress in the clothing of their preferred gender (4)	○	○	○	○	○	○	○

TFriend I know I have a friend who is transgender

- False (I have zero transgender friends) (1)
- True (I have one transgender friend) (2)
- True (I have more than one transgender friends) (3)

TKnow I know I know people who are transgender

- False (I know zero transgender people) (1)
- True (I know one transgender person) (2)
- True (I know more than one transgender person) (3)

TTraining Have you ever had a training specific to transgender care?

- Yes (28)
- No (29)

Display This Question:

If Have you ever had a training specific to transgender care? = Yes

Time Since TTraining How long has it been since your last training specific to transgender care?

- ○ 0 - 1 years (1)
- ○ 2 - 5 years (2)
- ○ 6 - 10 years (3)
- ○ More than 10 years (4)

Appendix B

ATTI

ATTI This questionnaire is designed to measure the way you feel about working or associating with transgendered individuals. It is not a test, so there are no right or wrong answers. Answer each item as carefully and accurately as you can.

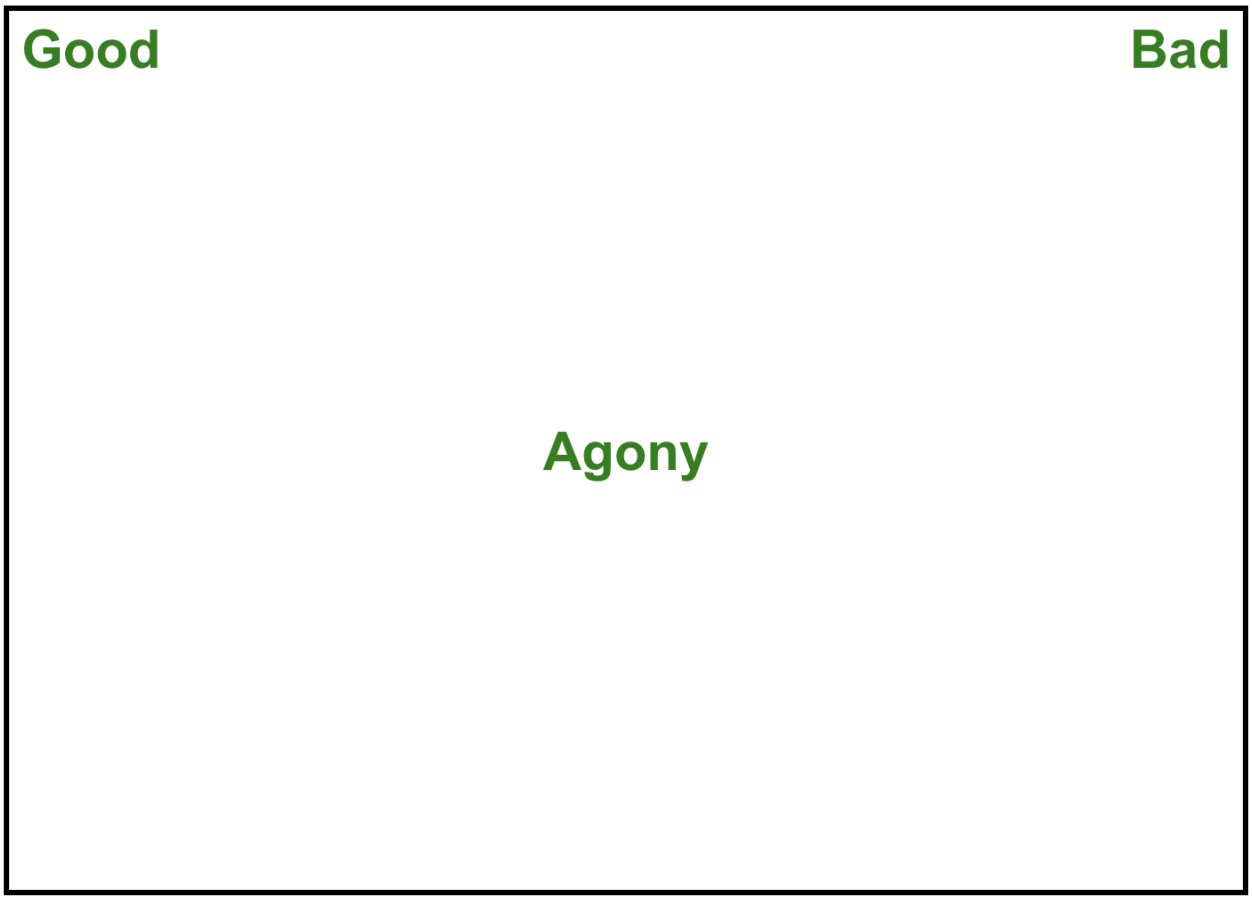
	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
It would be beneficial to society to recognize transgenderism as normal (1)	○	○	○	○	○
Transgendered individuals should not be allowed to work with children (2)	○	○	○	○	○
Transgenderism is immoral (3)	○	○	○	○	○
All transgendered bars should be closed down (4)	○	○	○	○	○
Transgendered individuals are a viable part of our society (5)	○	○	○	○	○
Transgenderism is a sin (6)	○	○	○	○	○
Transgenderism endangers the institution of the family (7)	○	○	○	○	○
Transgendered individuals should be accepted completely into our society (8)	○	○	○	○	○
Transgendered individuals should be barred from the teaching profession (9)	○	○	○	○	○
There should be no restrictions on transgenderism (10)	○	○	○	○	○

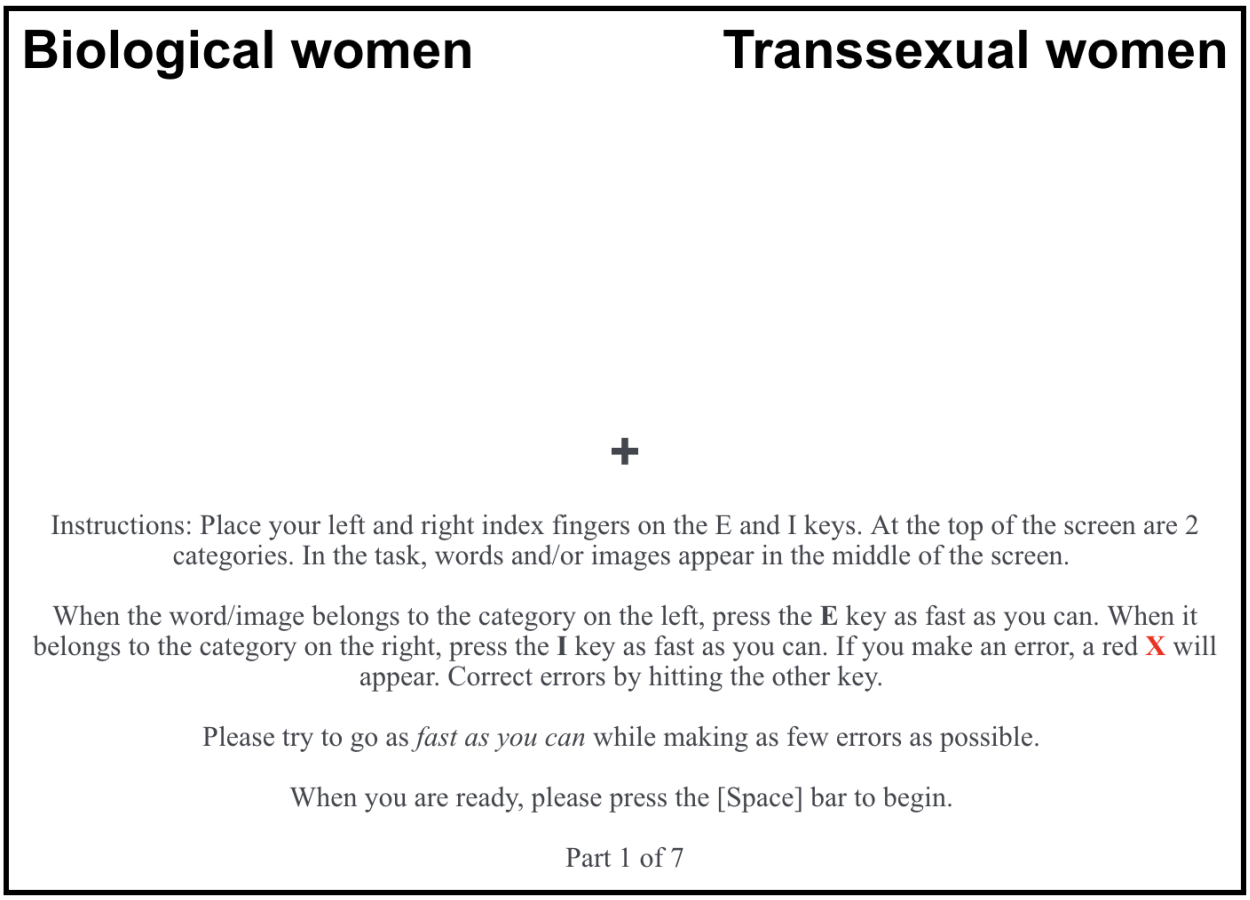
I avoid transgendered individuals whenever possible (11)	○	○	○	○	○
I would feel comfortable working closely with a transgendered individual (12)	○	○	○	○	○
I would enjoy attending social functions at which transgendered individuals were present (13)	○	○	○	○	○
I would feel comfortable if I learned that my neighbor was a transgendered individual (14)	○	○	○	○	○
Transgendered individuals should not be allowed to cross dress in public (15)	○	○	○	○	○
I would like to have friends who are transgendered individuals (16)	○	○	○	○	○
I would feel comfortable if I learned that my best friend was a transgendered individual (17)	○	○	○	○	○
I would feel uncomfortable if a close family member became romantically involved with a transgendered individual (18)	○	○	○	○	○

Transgendered individuals are really just closeted gays (19)	○	○	○	○	○
Romantic partners of transgendered individuals should seek psychological treatment (20)	○	○	○	○	○

Appendix C

Trans women G-IAT




Biological women
Transsexual women
+
Instructions: Place your left and right index fingers on the E and I keys. At the top of the screen are 2 categories. In the task, words and/or images appear in the middle of the screen.
When the word/image belongs to the category on the left, press the E key as fast as you can. When it belongs to the category on the right, press the I key as fast as you can. If you make an error, a red X will appear. Correct errors by hitting the other key.
Please try to go as fast as you can while making as few errors as possible.
When you are ready, please press the [Space] bar to begin.
Part 1 of 7

Biological women
or
Good

Transsexual women
or
Bad

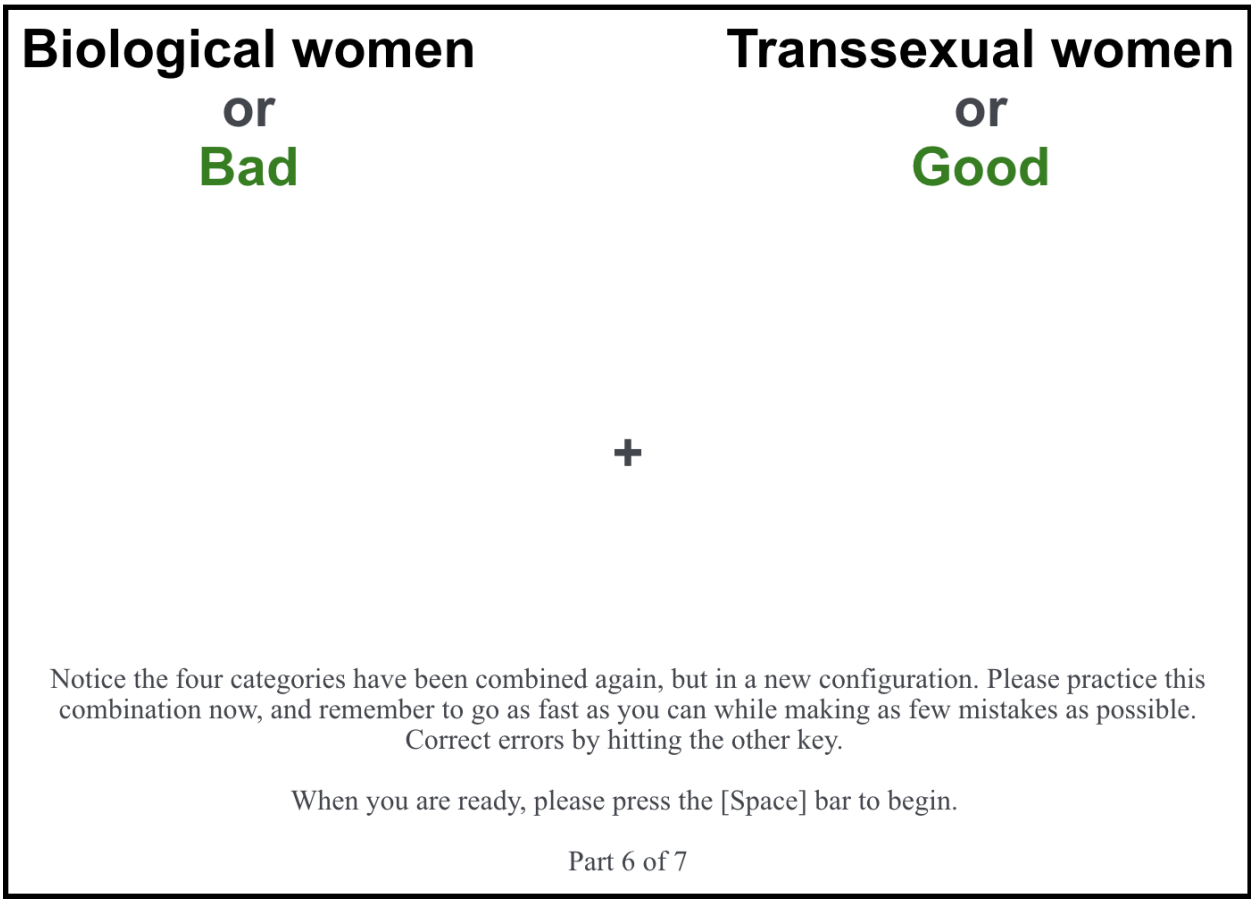
+

Now the four categories you saw separately will appear together. Remember, each word/image fits in only one of the four categories. The label/item colors may help you identify the appropriate category.

Use the **E** key for the two categories on the left and the **I** key for the two categories on the right. Again, try to go as fast as possible without making mistakes. Correct errors by hitting the other key. Practice this combination now.

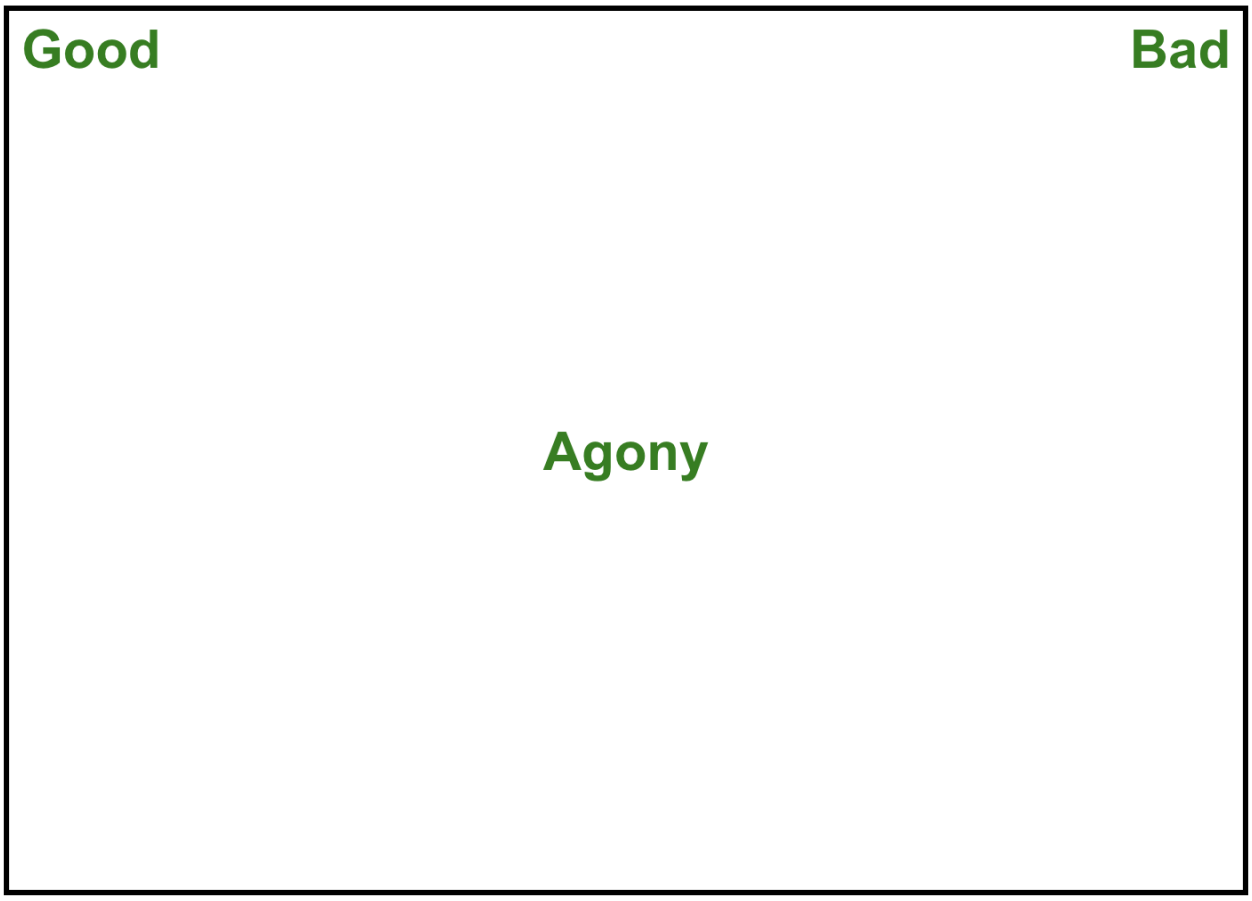
When you are ready, please press the [Space] bar to begin.

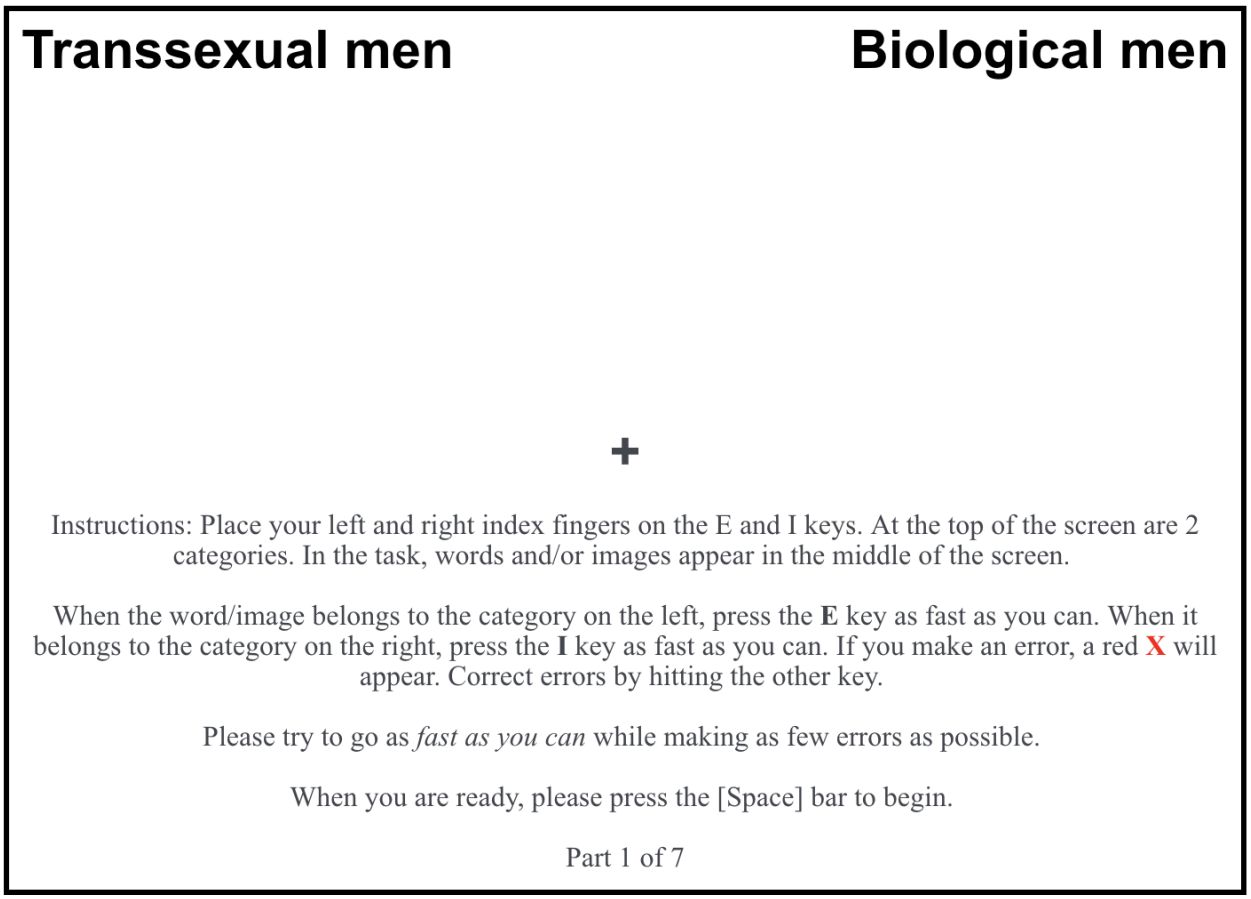
Part 3 of 7


Biological women
or
Bad
Transsexual women
or
Good
+
Notice the four categories have been combined again, but in a new configuration. Please practice this combination now, and remember to go as fast as you can while making as few mistakes as possible. Correct errors by hitting the other key.
When you are ready, please press the [Space] bar to begin.
Part 6 of 7

Appendix D

Trans men G-IAT




Transsexual men
Biological men
+
Instructions: Place your left and right index fingers on the E and I keys. At the top of the screen are 2 categories. In the task, words and/or images appear in the middle of the screen.
When the word/image belongs to the category on the left, press the E key as fast as you can. When it belongs to the category on the right, press the I key as fast as you can. If you make an error, a red X will appear. Correct errors by hitting the other key.
Please try to go as fast as you can while making as few errors as possible.
When you are ready, please press the [Space] bar to begin.
Part 1 of 7

Transsexual men
or
Bad

Biological men
or
Good

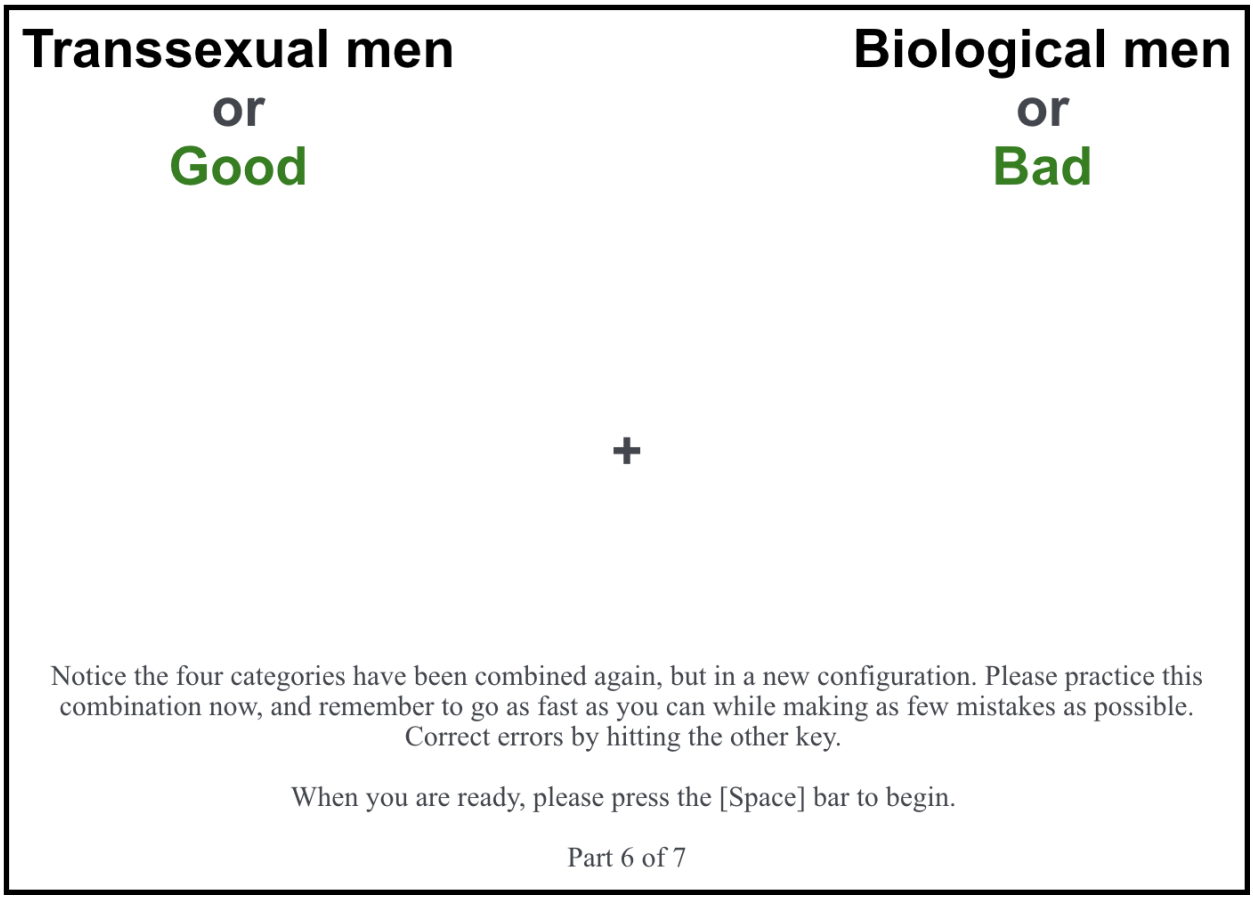
+

Now the four categories you saw separately will appear together. Remember, each word/image fits in only one of the four categories. The label/item colors may help you identify the appropriate category.

Use the **E** key for the two categories on the left and the **I** key for the two categories on the right. Again, try to go as fast as possible without making mistakes. Correct errors by hitting the other key. Practice this combination now.

When you are ready, please press the [Space] bar to begin.

Part 3 of 7


Transsexual men
or
Good
Biological men
or
Bad
+
Notice the four categories have been combined again, but in a new configuration. Please practice this combination now, and remember to go as fast as you can while making as few mistakes as possible. Correct errors by hitting the other key.
When you are ready, please press the [Space] bar to begin.
Part 6 of 7

Appendix E

IAT Stimuli

GI-IAT	Construct Categories	Construct Stimuli	Attribute Category	Attribute Stimuli
Trans men IAT	**Transsexual men**	**Transsexual men, transsexual males, male transsexuals**	**Good**	**Marvelous, superb, pleasure, beautiful, joyful, glorious, lovely, wonderful**
	Biological men	**Biological men, biological males, biological guys**	**Bad**	**Tragic, horrible, agony, painful, terrible, awful, humiliate, nasty**
Trans women IAT	**Transsexual women**	**Transsexual women, transsexual females, female transsexuals**	**Good**	**Marvelous, superb, pleasure, beautiful, joyful, glorious, lovely, wonderful**
	Biological women	**Biological women, Biological females, Biological gals**	**Bad**	**Tragic, horrible, agony, painful, terrible, awful, humiliate, nasty (Wang-Jones et al., 2017)**

Appendix F

Informed Consent

Q85

RADFORD UNIVERSITY

Q87 You are invited to participate in a research survey investigating attitudes toward transgender individuals. The study is being conducted by Alex Latham, M.S., under the supervision of Valerie S. Leake, Ph.D., of Radford University 5107 CHBS Building, 540-831-5153 vleake@radford.edu.

The purpose of this study is to examine attitudes toward transgender individuals. Your participation in the survey will contribute to a better understanding of how transgender individuals are perceived and help us develop more accurate measurement techniques for future use. We estimate that it will take about 15 to 20 minutes of your time to complete the questionnaire. You are free to contact the investigator at the above address and phone number to discuss the survey.

Risks to participants are considered minimal. There will be no costs for participating in the study. IP addresses will not be collected during data collection.

Your participation in this survey is voluntary. You may decline to answer any question and you have the right to withdraw from participation at any time without penalty. If you wish to withdraw from the study or have any questions, contact the investigator listed above.

If you have any questions or concerns, please contact Alex Latham at alatham@radford.edu or Valerie S. Leake, Ph.D., at vleake@radford.edu or by phone at 540-831-5153. You may also request a hard copy of the survey from the contact information above.

If you have questions about your rights as a study participant or are dissatisfied at any time with any aspect of this study, you may contact Dr. Orion Rogers, Interim Dean, College of Graduate and Professional Studies, Radford University, jorogers@radford.edu, 1-540-831-5470.

If you agree to participate, please press the arrow button at the bottom right of the screen and continue until the survey informs you that it is completed. By clicking this arrow you are indicating consent to participate in this study. Otherwise, use the X at the upper right corner to close this window and disconnect.

Thank you.

Appendix G

Debriefing Form

Thank you for participating in this study.

PURPOSE OF THE STUDY

The purpose of this study is to assess attitudes toward transgender individuals. Since this is typically a more private matter a measure that will assess one's implicit or gut feelings towards the topic was included. This is done through the use of the Implicit Association Test (IAT) that was completed halfway through the survey. Our goal is to assess the current attitudes of providers toward individuals who are transgender within the VA system. We hope that this information can bring awareness to the potential impact of implicit attitudes and lead to future efforts to improve the care of veterans who are transgender.

If you have any comments or concerns, are feeling any distress due to the contents of this study, or would like more information on the study or one of its components please contact one of the researchers below.

Researcher Contact Information

Alex Latham, M.S.
Principal Investigator
Psychology Dept.
5108 CHBS Building
P.O. Box 6946
Radford University
Radford, VA 24142

Valerie S. Leake, Ph.D.
Faculty Supervisor
Psychology Dept.
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Radford, VA 24142

Appendix H

Sample Participation Request Email

Hello,

My name is Alex Latham and I am a doctoral candidate at Radford University in the Counseling Psychology program. My advisor is Dr. Valerie S. Leake and I would like to request your help with data collection for my dissertation entitled *Assessing Attitudes of Providers toward Transgender and Gender Nonconforming Individuals.* My project requires the participation of both medical and mental health providers. This study has been approved by the Institutional Review Board (IRB) of Radford University (IRB# FY19-066).

Would you be willing to share the statement and survey link (found below) with all medical and mental health providers under your charge? Participation should take 15 – 20 minutes and will be completely anonymous. If you have any questions please feel free to contact me at alatham@radford.edu.

Thank you in advance for your time and consideration!

Sincerely,

Alex

Alex Latham, MS
Counseling Psychology
Doctoral Candidate
CHBS 5600

****

Dear Colleagues,

I would like to invite you to participate in a study for my doctoral dissertation. This study is designed to assess the current attitude of mental health and medical providers toward Transgender and Gender Non-Conforming individuals. This study should take approximately 15 – 20 minutes, is completely online, and is anonymous. To participate in this study you must be either a mental health or medical provider. Participants who choose to will be entered for a chance to win 1 of 10 $20 Amazon gift cards.

To participate please follow the link below. Note this study cannot be completed on tablets or phones.

http://radford.qualtrics.com/jfe/form/SV_a5x3AfHJ4hmioS1

Thank you in advance for your time and consideration!

Sincerely,

Alex Latham

Alex Latham, MS
Counseling Psychology
Doctoral Candidate
CHBS 5600