

A Comparison between Self-identified Evangelical Christians' and Nonreligious Persons'
Attitudes toward Transgender

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Abstract

The present study provides the first descriptive survey study to date that reports attitudes and beliefs toward transgender persons with a sample of the U.S. evangelical Christian population. Data were collected from 483 participants (nonreligious $n = 253$, evangelical Christian $n = 230$) recruited through Amazon Mechanical Turk (MTurk). The study employed the Transgender Attitudes and Beliefs Scale (TABS)—a psychometrically sound and culturally sensitive, three-factor (interpersonal comfort, sex/gender beliefs, and human value) 29-item scale—to assess attitudes and beliefs toward transgender. Data were analyzed using Two-way ANOVAs, item analyses, independent sample t-tests, and Pearson's correlations. Findings indicated that evangelical Christians showed significantly lower attitude scores and a more dichotomous/fixe view of gender compared to their nonreligious counterparts. At the same time, evangelical Christians displayed greater variability in their attitudes toward transgender persons, had high ratings on the human value factor overall (measuring the extent to which a person affirms transgender persons' intrinsic value as a person), which was, in turn, less correlated with the other factors—interpersonal comfort and sex/gender beliefs—than for their secular reference group. On questions pertaining to civil rights, evangelical Christians, on average, gave significantly lower ratings than nonreligious persons, though the effect size was small on the issue of access to housing.

Keywords: transgender, attitudes, beliefs, TABS, Christianity

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Attitudes toward Transgender

In recent years, views on gender in the United States have been changing rapidly, demanding thoughtful engagement by society at large. The specific issue of transgender is a major driving force in this movement, which, in the last few years, has gained more public attention than ever before. For example, web searches for the word “transgender” rose 500% between July, 2013 and July, 2015 (Google Trends, 2015). Along with the increase in public and media attention in the U.S., public policy is changing rapidly around a multitude of legal issues such as increased protections and medical benefits for transgender individuals (Transgender Law Center, 2015). Nevertheless, evidence suggests that transgender persons continue to experience a high degree of discrimination and stress with resultant social and health problems (Bradford, Reisner, Honnold, & Xavier, 2013; Miller & Grollman, 2015), suggesting that there remains a wide range of attitudes and beliefs toward transgender individuals in this nation. It is therefore critical to better measure and understand the U.S. public’s attitudes and beliefs toward this population, such that discussions around public policy, social action, and education reflect the most accurate and timely information.

In considering the U.S. public’s attitudes and beliefs, the role of Christianity in the United States is difficult to overestimate. Approximately 78% of the population identifies as Christian (Cooperman & Lipka, 2014), and Christianity has held and continues to hold considerable sway on the shaping of social norms, including norms related to gender. Specifically, a majority of Christians hold to a binary view of humanity, in which all individuals are created either male or female (Frame, 2006; Ortlund, 2006). This view can be considered

distinct from a culturally defined dichotomy based on social construction (Fausto-Sterling, 2000). While this dichotomized view has been used to downplay the rights and even “existence” of transgender individuals, another strongly held belief within Christendom is the affirmation of the intrinsic value of the human person. When measuring the attitudes and beliefs of this population toward transgender, it is important, therefore, to allow for the nuance of such beliefs. Furthermore, while these beliefs are held by a majority of Christians, in this paper, the focus is limited to evangelical Christians due to the fact that they constitute a distinct sector of Christianity known for their social and political influence (Jones, 2005).

Given the evolving discussions surrounding gender in the U.S., there has been an effort within evangelical Christianity to self-examine their theology in regard to sex and gender ambiguity, and statements have recently been issued by certain evangelical denominations regarding their view on transsexuality (Cornwall, 2009). To date, the Evangelical Alliance Policy Commission (EAPC) (in 2000) and the Southern Baptist Convention (SBC) (in 2014) have issued statements on their views on transsexuality/transgender (Burk & Walker, 2014; EAPC, 2000). Specifically, the statement issued by the EAPC takes an essentialist view of sex, holding to the view that biological sex is fundamental to being human with each person inevitably being either male or female (EAPC, 2000). Furthermore, the document dismisses the psychological state of transsexuality as having any actuality, endorsing the stance that the mind, not the body, must always be altered in these cases (Cornwall, 2009). Similarly, a resolution passed by the Southern Baptist Convention (SBC) on the issue of transgender affirms a binary view of humanity and claims that “gender identity is determined by biological sex and not by one’s self-perception,” consequently denouncing any effort to alter one’s bodily identity in an attempt to

refashion it to conform to one's perceived gender identity (Burk & Walker, 2014, para. 16).

Unique, however, to this document are statements regarding attitudes and behaviors that should govern interactions between Christians and the transgender population. The Resolution expresses a resolve by members of the SBC to extend love and compassion to those who experience conflict between their biological sex and their felt gender identity and a stance to condemn any acts of abuse or violence committed against transgender individuals (Burk & Walker, 2014). These documents represent an effort by evangelical Christian bodies at the institutional level to clarify their theology on gender and to encourage behavior consistent with their theology. What is unknown is the degree to which these positions align with individual evangelical Christians' beliefs and attitudes.

A dozen studies in the western world have used survey research to measure attitudes toward transgender persons within other subpopulations, such as medical professionals, counselors, college students, as well as the general public (Antoszewski, Kasielska, Jedrzczyk, & Kruk-Jeromin, 2007; Franzini & Casinelli, 1986; Green et al., 1966; Harvey, 2002; Hill & Willoughby, 2005; Landen & Innala, 2000; Leitenberg & Slavin, 1983; Nagoshi et al., 2008; Norton & Herek, 2012; Nisley, 2011; Tee & Hegarty, 2006; Walch, Nagamake, Francisco, Stitt, & Shingler, 2012). Of these, only three studies have examined the interaction between religiosity and attitudes and beliefs regarding transgender. Additionally, studies exist on evangelical Christian views on homosexuality, generally showing more negative views than the general population, particularly in the absence of personal relationships between the Christians sampled and a gay or lesbian person (e.g., Wolff, Himes, Miller-Kwon, & Bolinger, 2012). However,

there has been a conflation of sexual orientation and gender identity in the literature and politics, which this study aims to separate for more accurate measurement purposes.

Tee and Hegarty (2006) measured religiosity based on answers to the question, “Do you consider yourself to be a religious person?” (response choices *yes, no, to some extent, not sure, and don’t understand*) (p. 73), finding that more-religious people held stronger opposition to transgender persons’ civil rights. Nagoshi et al. (2008) assessed religiosity using Altemeyer and Hunsberger’s (1992) Religious Fundamentalism scale, which “reflects adherence to a centralized religious belief system that is fundamental for existence, represents a special relationship with God, and must be strictly adhered to in opposition to the forces of evil” (p. 526), and found transphobia to be “significantly and highly correlated with...religious fundamentalism...” (p. 521). In the same study, researchers found that support of traditional gender roles and a restrictive view on gender diversity—typically associated with religiosity—were also correlated with transphobia. A more recent study Norton and Herek (2012) conducted with a large sample in the U.S. found that, for women only, negative attitudes toward transgender persons were associated with religiosity. In their study, religiosity was assessed “by asking respondents how much guidance religion provides in their day-to-day living” (with response choices *none at all, some, quite a bit, and a great deal*) (Norton & Herek, 2012, p. 743). These existing studies generally found more negative attitudes toward transgender persons with greater religiosity.

While some information exists on the relationship between broad religiosity and attitudes toward transgender persons, there is an absence of specific knowledge about evangelical Christians’ beliefs and attitudes toward this particular subpopulation. From a secular standpoint, better understanding the evangelical Christian perspective on this subject is important because of

the influence of Christianity on the shaping of the country's moral terrain as well as of educational, social, corporate, and governmental entities. Understanding attitudes and beliefs of this subpopulation may facilitate constructive dialogue and help inform public policy strategies to decrease discrimination against transgender people while being inclusive of evangelical beliefs. From a Christian standpoint, increasing contact between the Christian and transgender populations along with the existence of individuals who identify as transgender within Christian communities (Kennedy, 2008; Swenson, 2010; Wheeler, 2004) argue for greater clarification of their theology on gender and increased self-reflection on their interaction with the transgender population. Furthermore, evangelical Christians' views on this topic are of concern for educational institutions involved in the training of psychologists as they bear the responsibility of training clinicians with diversity competencies, part of which involves respecting the religious beliefs of Christian trainees as an aspect of religious diversity (Haldeman & Rasby, 2014; Russell & Bohan, 2014). This study was conducted in light of the many ways in which knowledge of U.S. evangelical Christians' attitudes toward transgender persons is important for social, religious, and educational action.

In this study, the following research questions were investigated:

1. What are the attitudes of evangelical Christians toward transgender persons and the three interrelated but distinct factors of interpersonal comfort, views on gender, and human value (See Appendix A for items on each factor) in contrast to their secular reference group? What are the corresponding views of secular, nonreligious persons? Are there significant differences between the groups?
2. Are the inter-relationships between the three factors of interpersonal comfort, views

on gender, and human value different between evangelicals and secularists?

Method

Participants

Amazon Mechanical Turk (MTurk), a 10-year-old service increasingly used by social scientists (Buhrmester, Kwang, & Gosling, 2011) was employed as the participant recruitment tool for the survey study. Participation was restricted to individuals residing in the U.S. over the age of 18. Because the purpose of the study was to measure evangelical Christians' beliefs and attitudes toward transgender persons against their secular reference point, stratified sampling procedures were employed, utilizing screening questions on MTurk in combination with the quota function on the survey software Qualtrics to ensure that there was adequate nonreligious and evangelical Christian representation in the sample. Evangelical Christians were chosen as the focus of the study because they constitute a distinct sector of Christianity known for their social and political influence and because they are more likely to share a core set of beliefs as a group (Jones, 2005). Self-report of their religious affiliation (from the following options: *None, Evangelical Christian, Catholic, Jewish, Muslim, Other (please specify)*) was used as the selection criterion for participants for this category.

Survey data were acquired from a total of 731 participants. Given the study's focus on evangelic Christians, participants were excluded who reported other religious affiliation (Catholic: 86; Christian-non-evangelical: 45; Jewish: 7; Muslim: 5; Non-western religion: 13), leaving 282 participants who self-reported as evangelical Christian and 293 participants who reported no religious affiliation. After participants were selected who reported as either evangelical Christian or nonreligious and data screening was conducted, a total of 483

participants were included in the study. The two subgroups (nonreligious $n = 253$, evangelical Christian $n = 230$) were similar in age, education, and race, but differed in marital status in that more evangelical Christian participants identified as married compared to the nonreligious group. Demographic information is reported for this final pool in Table 1.

Procedures

After approval was obtained from the university's Institutional Review Board, participants were recruited through MTurk for the survey study. The informed consent along with a survey consisting of the Transgender Attitudes and Beliefs Scale (TABS) and demographic questions pertaining to gender, age, ethnicity, marital status, education, and contact with transgender persons were included. Based on findings from the work of Meade and Craig (2012), the scale included attention check items in order to safeguard against careless respondents. Clicking on the "next" button at the end of the informed consent indicated subjects' agreement and directed informed participants to the survey available on a secure website. *SPSS* (version 22.0) was used for both data cleaning and analyses.

Measures

For this study, the Transgender Attitudes and Beliefs Scale (TABS) was utilized to measure evangelical Christians' beliefs and attitudes toward transgender persons. This instrument was chosen for two reasons. One, TABS was deemed appropriate for this study because, unlike existing scales, it is a measure specifically designed with cultural sensitivity to the U.S. population with a particular focus on capturing religious nuances of the Christian faith tradition with demonstrated psychometric strength (Kanamori, Pegors, Cornelius-White, & Hulgus, 2016). Additionally, this scale was selected because of its multidimensional

conceptualization of attitudes toward transgender persons, which is a model increasingly supported in the literature (LaMar & Kite, 1998; McNaught, 1997; Mohr, 2002; Worthington, Dillon, & Becker-Schutte, 2005). TABS is a three-factor 29-item scale measuring attitudes toward transgender persons. The factors tap into interpersonal comfort, measuring raters' level of comfort in interacting with transgender persons in increasing social distance; gender belief, evaluating raters' underlying beliefs on gender as a fixed dichotomy or a fluid continuum; and human value, assessing the extent to which raters affirm transgender persons' intrinsic value as a person. Responses are rated on a 7-point Likert scale, ranging from 1 = *strongly disagree* to 7 = *strongly agree*. After reverse-coding of negatively worded items, a higher score indicates a more positive overall attitude toward transgender persons. The scale has demonstrated reliability with Cronbach's alpha values for each factor ranging from .928 to .972 and an overall alpha value of .977 along with evidence of convergent and discriminant validity (Kanamori et al., 2016).

Results

Differences between Evangelical and Nonreligious and Male and Female Persons

The primary interest of this study was to determine differences between evangelical Christians and their secular counterparts in attitudes and beliefs toward transgender persons. Because the literature suggests gender differences in attitudes toward transgender individuals (Antoszewski et al., 2007; Harvey, 2002; Hill & Willoughby, 2005; Landen & Innala, 2000; Leitenberg & Slavin, 1983; Nagoshi et al., 2008; Norton & Herek, 2012; Nisley, 2011; Tee & Hegarty, 2006), three two-way ANOVAs were conducted to evaluate the effects of religious affiliation and gender on transgender attitudes along the three factors of TABS. Religion (nonreligious and evangelical Christian) and gender (male and female) were the independent

variables in this study. The dependent variables were each of the three factors—interpersonal comfort, sex/gender beliefs, and human value—on TRANS, which were tested separately.

Interpersonal comfort had a possible raw range of 84 points (from 14 to 98), sex/gender beliefs had a possible raw range of 60 (from 10 to 70), and human value had a possible raw range of 30 points (from 5 to 35). The means and standard deviations for the three measures as a function of the two independent variables are presented in Table 2.

The test for homogeneity of variance, employing Levene's test, indicated that the data did not meet this assumption. However, given that the two-way ANOVA is robust to violations of assumptions, particularly when the sample size is large, it was determined that a two-way ANOVA was appropriate for this study ($n = 483$).

The outputs of the two-way ANOVA indicated a highly significant main effect for religion and gender for all three attitude factors of TABS. For religion, evangelical Christians scored lower than nonreligious persons on all three factors (interpersonal comfort: $F(1, 479) = 99.71, p < .001, d = 0.91$; sex/gender beliefs: $F(1, 479) = 164.38, p < .001, d = 1.17$; human value: $F(1, 479) = 21.21, p < .001, d = 0.42$). For gender, females scored higher than males on all three factors (interpersonal comfort: $F(1, 479) = 20.27, p < .001, d = 0.41$; sex/gender beliefs: $F(1, 479) = 33.53, p < .001, d = 0.53$; human value: $F(1, 479) = 16.29, p < .001, d = 0.37$). These differences for both religion and gender were statistically large, with religion being larger than gender. Additionally, there was no significant interaction between religion and gender for any of the three factors (interpersonal comfort: $F(1, 479) = .24, p = .622, d = 0.06$; sex/gender beliefs: $F(1, 479) = .63, p = .429, d = 0.06$; human value: $F(1, 479) = 2.03, p = .115, d = 0.13$), indicating that differences in factor scores between evangelical Christians and nonreligious

persons were not due to gender (see Figure 1).

Figure 1, plotting factor item means by group, reveals some other noticeable trends. Both groups rated human value quite highly, their averages being well above the average for interpersonal comfort. Furthermore, all averages for both groups were above the midline. For the sex/gender beliefs factor, this means subjects tended to conceptualize gender as more toward a continuum than a dichotomy. For the attitudes factors, these scores suggest that, on average, subjects from both groups did not show attitudes in the “negative” range of the scale, thus indicating generally favorable attitudes toward transgender persons for both groups.

To gain further insight into differences in attitudes toward transgender persons between evangelical and nonreligious Americans, items on each of the factors were examined. For the interpersonal comfort factor, the largest mean difference was found on Q1.10 (reverse coded), “If a transgender person asked to be my housemate, I would want to decline,” with evangelical Christians scoring 4.18 ($SD = 2.01$) on average while nonreligious persons scored 5.75 ($SD = 1.53$), suggesting that, overall, evangelical Christians are far less open to living with transgender persons ($d = .878$). An examination of the standard deviation for items on this factor also showed that evangelical Christians displayed greater variability in ratings on all items, suggesting that there is more of a range in how evangelical Christians feel toward transgender persons compared to their nonreligious counterparts (see Table 3).

For items on the sex/gender beliefs factor, the largest mean difference was found on Q2.5 (reverse coded), “Humanity is only male or female; there is nothing in between,” with evangelical Christians scoring 3.80 ($SD = 1.92$) on average while nonreligious persons scored 5.59 ($SD = 1.61$), suggesting that evangelical Christians clearly hold a more dichotomous view

of humanity while nonreligious persons view gender categories more along a continuum ($d = 1.01$). Of interest also is the fact that on Q2.3 (reverse coded), “If you are born male, nothing you do will change that,” the most frequently selected response was “1” (which denotes *strongly agree*) for evangelical Christians, while for the secular group, it was “7” (*strongly disagree*). This finding suggests that more evangelical Christians hold to a fixed view of gender (rather than fluid) when compared to nonreligious persons. As was the case for items on the interpersonal comfort factor, evangelical Christians displayed greater variability in their responses. Of note also is the fact that the most frequently selected response across all items on this factor was “4,” designating *neither agree nor disagree*, for evangelical Christians (5 out of 10 items), while for nonreligious individuals, it was “7,” denoting *strongly agree* (8 out of 10 items). This finding seems to demonstrate that, in general, the evangelical Christian group is less decided on their views regarding gender compared to their nonreligious counterparts.

For the human value factor, the average rating on all items in both groups were in the 6–point range (6.20 - 6.88) and the standard deviation ranged between .64 and .94, suggesting that the between-group difference on items on the human value factor was small relative to the other two factors. Furthermore, the most frequently chosen response across all items for both groups was “7,” indicating an overwhelming affirmation of transgender persons’ value regardless of the group.

Of interest also is the contrast between secularists and evangelicals on attitudes toward transgender civil rights. For example, the average rating of a civil rights item found on the gender beliefs factor, “If a transgender person identifies as female, she should have the right to marry a man,” was 6.38 ($SD = .97$) for nonreligious Americans, with 62.1% of the respondents

strongly agreeing (selecting “7”) with the statement. In contrast, the mean value for the same item for evangelical Christians was 4.82 ($SD = 1.88$) with only 22.6% of the subjects strongly agreeing (selecting “7”) with the statement ($d = 1.04$). On the other hand, the average ratings of the statement found on the human value factor, “Transgender individuals should have the same access to housing as any other person,” were high for both groups (evangelical Christian: $M = 6.42$, $SD = .79$; secular: $M = 6.68$, $SD = .65$; $d = .36$).

Group Differences in the Relationships between Interpersonal Comfort, Sex/Gender Beliefs, and Human Value

In the scale development and validation study, a moderate to high positive correlation between all three factors of TABS (interpersonal comfort, human value, and sex/gender beliefs) were found (Kanamori et al., 2016). In the analyses for the present study, we set out to determine whether the relationships between these three factors differed between evangelical Christians and nonreligious persons. Given findings from the two-way ANOVAs in which differences in scores on these three factors were found for both gender and religion, the comparisons were run within gender (see Table 4).

First, the relationship between the factor of human value and interpersonal comfort for each religious group was tested by calculating the Pearson’s correlation of these two factors for males and females separately. For all groups, significant positive correlations were found between the two factors (See Table 4 for r and p values and Figure 2 for plot). To test whether this relationship differed between evangelical Christians and nonreligious persons, a comparison was made between correlation scores of these groups after applying Fisher’s r -to- z transformation. Here, evangelical Christians showed a significantly lower correlation than

nonreligious persons between interpersonal comfort and human value, but this was only true for males ($z = 3.08, p < .01$) and not females ($z = 1.38, p = 0.168$). In other words, for evangelical males, there is a smaller relationship between interpersonal comfort with transgender persons and the affirmation of transgender persons' value.

Second, group differences in the relationship between the human value and sex/gender beliefs factors were tested. For all groups, divided by religion and gender, significant positive correlations were found between the two factors (see Table 4 for r and p values and Figure 3 for plot). Results from the comparison of these correlation scores after applying Fisher's r -to- z transformation revealed that the evangelical Christian group showed significantly lower correlations than the nonreligious group across both males ($z = 2.56, p < 0.05$) and females ($z = 1.95, p = 0.05$), though for females this effect was barely significant, indicating that, being evangelical Christian is associated with a weaker relationship between one's views on gender and an endorsement of transgender persons' human value.

Third, the correlation between the factors interpersonal comfort and sex/gender beliefs was tested for the evangelical Christian and nonreligious groups and significant positive correlations were found between the two (see Table 4 for r and p values and Figure 4 for plot). Results from the comparison of these correlation scores after applying Fisher's r -to- z transformation indicated that there were no significant differences between the groups in either males ($z = -0.04, p = 0.97$) or females ($z = -0.29, p = 0.77$). In other words, being evangelical or nonreligious made no difference in how gender belief related to interpersonal comfort.

Discussion

The present work is the first study that reports attitudes and beliefs toward transgender

persons with a sample of the U.S. evangelical Christian population. TABS (Kanamori et al., 2016) was used to measure two attitude subscales (interpersonal comfort, human value) and one belief subscale (sex/gender beliefs). Relative to a sample who identified as nonreligious, the evangelical Christian group showed significantly lower attitude scores and a more dichotomous/fixed view of gender. At the same time, the evangelical Christian group displayed greater variability in their attitudes toward transgender persons, had high ratings on human value overall, and this score was less correlated with the other factors than for the nonreligious group, suggesting that human value for evangelical Christians is somewhat less dependent on these factors. On questions pertaining to civil rights, evangelical Christians, on average, gave lower ratings (less support) than nonreligious persons, though the effect size for the question on access to housing was small.

Although acknowledged differences exist between evangelical Christian and secular perspectives on transgender and related issues, the current findings suggest that a focus on shared values—namely the affirmation of the intrinsic value of transgender persons—would provide a constructive approach toward effecting social, political, and educational reform to reduce discrimination against transgender persons. Likewise, within training settings, these findings provide insight into a possible entry point to build concern toward transgender persons among evangelical psychologists-in-training.

Group Differences in TABS Factors

The results of the two-way ANOVA showed that the main effects of both religion and gender were significant when comparing scores on all three factors of TABS: overall, the nonreligious group scored higher than the evangelical Christian group as did females compared

to males across all factors. Significantly, there was no interaction between these effects.

With regard to the main effects of religion, on the sex/gender beliefs factor, the nonreligious group held more fluid and continuous view of gender while evangelical Christians held to a more fixed and dichotomous view of gender (See Table 3). This finding aligns with the theology of gender taught at the institutional level in the broadly evangelical Christian tradition, specifically, a belief system that upholds a dualistic paradigm of humanity grounded in the fabric of creation (Frame, 2006; Ortlund, 2006). That said, an evaluation of the most frequently selected response across all items on this scale (“4” designating *neither agree nor disagree* for evangelical Christians and “7” designating *strongly agree* for the nonreligious group) seems to suggest that, on the whole, evangelical Christians are less decided than nonreligious persons when it comes to their beliefs pertaining to gender.

On the factor measuring interpersonal comfort, nonreligious Americans displayed a strong degree of comfort in associating with transgender individuals in contrast to evangelical Christians who demonstrated lesser levels of comfort (See Table 3). This between-group difference in comfort level may be attributed, at least in part, to the fact that a slightly larger percentage of the nonreligious group (38.3%) reported having contact with those who identify as transgender as compared to the evangelical Christian group (31.7%), which fits with prior studies reporting that less familiarity with transgender persons corresponds to higher levels of anti-transgender attitudes (Hill & Willoughby, 2005; Nisley, 2010; Tee & Hegarty, 2006). While the difference in contact is not dramatic, encouraging personal and professional contact between evangelicals and transgender people within and outside the church may improve evangelical Christians’ comfort level in interacting with the transgender population. At the same time, it is

noteworthy that even while the evangelical Christian group scored lower relative to the nonreligious group, the mean score of items on the interpersonal comfort factor for evangelical Christians was still 5.01 on a 1-7 scale with 5 designating *somewhat agree*, suggesting that, overall, evangelical Christians do feel somewhat comfortable in associating with transgender persons. This finding is meaningful in that while there may be opposition to civil rights from church organizations, evangelicals report themselves to feel moderately comfortable when relating to transgender persons. This finding also challenges the popular notion that evangelical Christians hold strong phobias toward those who do not conform to a gender binary.

On the human value factor, it is noteworthy that both evangelical Christians and nonreligious persons displayed overwhelming endorsement of the fundamental value of transgender persons (See Table 3 for item means and *SD* by religion and Appendix A for items on this factor). This finding suggests that there is a degree of universal affirmation of transgender persons' value regardless of religious affiliation. For evangelical Christians, this finding seems to reflect the person-behavior distinction central to their belief system, which attests to the intrinsic value of all persons regardless of behavior. At the same time, evangelical Christians scored significantly lower than nonreligious persons on this factor, which may suggest the need to emphasize the intrinsic value of transgender persons in church statements, as was done in the 2014 SBC resolution (Burk & Walker, 2014). Additionally, the finding that, overall, both groups gave high rating on the human value factor while evangelical Christians scored lower relative to their secular counterparts, suggests that human value is not a binary concept, but rather one that is assessed along a continuum.

The fact that evangelical Christians scored lower on the two attitude subscales is

consonant with previous work that has shown a positive relationship between religiosity in general and negative attitudes toward transgender persons (Nagoshi et al., 2008; Tee & Hegarty, 2006). Interestingly, while a more recent study (Norton & Herek, 2012) found such a relationship only in females, the current study found a difference in attitudes between the evangelical Christian and nonreligious groups for both genders. The divergent findings are not necessarily contradictory, given that it may be the case that this gender-qualified relationship between attitudes and religiosity is most prevalent *within* those who identify as “religious.” Since the present study was focused on evangelicals as a group and did not quantify individual religiosity (the extent to which religion provides guidance in a person’s daily life), it might very well be the case that evangelical females show a relationship between religiosity and attitudes similar to that which was found by Norton & Herek (2012). Future studies should seek to reconcile these divergent findings.

With regard to the main effects of gender, the current findings showing females to have more accepting attitudes toward transgender individuals are in agreement with previous studies (Antoszewski et al., 2007; Harvey, 2002; Hill & Willoughby, 2005; Landen & Innala, 2000; Leitenberg & Slavin, 1983; Nagoshi et al., 2008; Norton & Herek, 2012; Nisley, 2011; Tee & Hegarty, 2006). Additionally, it is important to note that results of the two-way ANOVA revealed that there was no significant interaction between religion and gender, indicating that differences in attitudes/beliefs toward transgender persons between nonreligious and evangelical Americans are not based on gender.

Group Differences in Relationships between TABS Factors

The second set of analyses measured the degree to which the correlation between factors

differed between the nonreligious and evangelical Christian groups. While not consistent for females, evangelical Christian males showed lower correlations between human value and both interpersonal comfort and sex/gender beliefs. Even still, correlates were moderate to high between all three factors for all groups.

The fact that the interpersonal comfort subscale was positively correlated with both sex/gender beliefs (higher scores indicating a more “continuous/fluid” view) and human value suggests that, for both groups, greater levels of comfort in relating to transgender persons may be expected for those who hold to a gender non-binary and affirm the intrinsic value of transgender persons. These results support Norton and Herek (2012) who found that negative attitudes were associated with a binary view of gender. However, results from the current study provides more nuance by showing a weaker relationship between gender belief and human value for evangelical Christians relative to their secular counterparts. In other words, for evangelical Christians, there is a greater likelihood that human value may still be rated high, even given a more dichotomous view of gender. While nothing definitive may be said about a causal relationship between human value and sex/gender beliefs, what seems to be the case is that, for evangelical Christians, holding to a gender binary does not directly translate into a devaluing of transgender persons, nor does a high regard of transgender persons necessarily stem from a more fluid view of gender. The results, in fact, may reflect evangelical Christians holding the tension between two of their faith’s core beliefs regarding humanity—the divinely appointed dual nature of humanity imbued with meaning and moral implications in the present world and the value of human beings as image bearers of God (Frame, 2006; Ortlund, 2006)—as specifically applied to transgender persons.

Additionally, it is noteworthy that, in the present study, the correlation between interpersonal comfort and human value for evangelical Christian males was significantly lower than nonreligious males, suggesting that for evangelical Christian males, their ratings of transgender persons' value is less dependent upon how comfortable they feel interacting with transgender persons as compared to nonreligious males. Alternatively, this finding may suggest that, for evangelical Christian males, their level of comfort in associating with transgender persons is less related to their ratings of transgender persons' value. Stated another way, evangelical Christian males (compared to nonreligious males) may experience more discomfort in relating to transgender persons even while affirming their intrinsic value as human beings.

Potential Discrepancies between Attitudes and Behavior

To what extent do the self-reported attitude measures reflect real-world behavior? While attitudes are worthy of study in their own right, particularly concerning religious beliefs, political rhetoric, and civil rights (Ajzen & Fishbein, 2005), there is a well-established critique of attitude research, especially pertaining to attitudes toward minority groups, dating back to 1934 (Wicker, 1969). Decades of research have shown that attitudes and behavior are related but are not equivalent (Ajzen & Fishbein, 2005). Specifically, a classic meta-analysis of 88 studies found that "attitudes significantly predict future behavior," but the mean correlation was only $r = .38$ (Krauss, 1995, p. 63). In other words, a person who reports that they would maintain a positive degree of comfort in having a transgender person into their home for a meal, may not actually enact such actions and attitudes in a similar real-life situation. This correlation between intention and action is especially small when people do not think about the issue under question regularly (they do not have easy access to recall) or regularly face the actual situation itself (they do not

have regular or significant engagement with the issue) (Glasman & Albarracin, 2006). This moderate relationship between attitude and behavior is increased, on the other hand, in cases where attitudes are held with confidence (for instance, a 1 or 7 on an item of TABS) (Glasman & Albarracin, 2006). In the current data, attitude scores for human value may be more likely to translate into consistent action because they were quite high overall, whereas interpersonal comfort scores, which averaged closer to center may lead to more variable action. Additional studies have found that attitudes are better predictors of behavior when they involve nonstudents, self-report measures, and when self-report measures have been normed to show no relationship with social desirability (Krauss, 1995), as was the case with the current study. This body of literature—suggesting personal, methodological, and situational moderating factors in the attitude-behavior relationship—provides an incentive and a rich host of questions for further studies to address.

Conclusions and Further Questions

As the first data-driven study of U.S. evangelical Christians' beliefs and attitudes toward transgender persons, the present study produced a number of informative findings. First, the study found that evangelical Christians hold more negative views toward transgender persons on all three dimensions examined. However, the findings also showed that those views are still more positive than negative, especially the affirmation of the intrinsic value of transgender persons. In other words, there may be substantial support within evangelical Christian memberships to reduce discrimination toward transgender persons.

Next, findings from the current study related to within- and between-group factor relationship differences reveal a need for examining possible causal relationships between

factors of TABS. Given the associations between factors, understanding how, specifically, gender views, interpersonal comfort with transgender persons, and the valuing of transgender individuals are related may be useful toward informing social, religious, and educational action. For example, given the relationship between contact and reduced phobia (Hill & Willoughby, 2005; Nisley, 2010; Tee & Hegarty, 2006), might the shared value in human dignity coupled with increased contact lead to greater interpersonal comfort?

Additionally, the present study was designed to provide a general sense of evangelical Christians' beliefs and attitudes toward the transgender population, but future studies should work to expand knowledge of how factors within the evangelical Christian community play into beliefs and attitudes toward transgender persons. Specifically, exploring possible correlates to attitudes toward transgender—such as certain religious behaviors and doctrinal beliefs along with other demographic factors—is of interest. Similarly, given differences in the level of support displayed by evangelical Christians for varying civil rights issues, further examination, again, of possible correlates to the group's attitudes toward matters concerning transgender civil rights would be informative. Furthermore, based on the ample body of social psychological research on moderating factors influencing the relationship between stated attitudes/values and corresponding behavior (see for example, Azjen & Fishbein, 2005; Glasman & Albarracin, 2006; Kraus, 1995; Wicker, 1969), an exploration of attitude-behavior relationship in evangelical Christians toward the transgender population is needed.

There are additional limitations. Because the current study was conducted exclusively with an MTurk sample, future work with a non-web-based sample of evangelical Christians would be appropriate as there are, at present, no data available as to whether the religious

representation in MTurk is comparable to that of the general population. Likewise, given the limitations of self-report measures and quantitative methods, data gathered from observation and qualitative interviews could add to current findings. Finally, even though Christianity is the predominant religion in the U.S., there is a diversity of religious beliefs in the country (Pew Research Center, 2015); thus it would be beneficial to explore other religious affiliates' attitudes toward transgender persons.

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