

KNOWLEDGE AND ATTITUDES TOWARD TRANS PERSONS

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By

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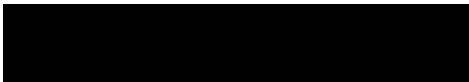
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ABSTRACT

Knowledge and Attitudes Toward Trans Persons

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Beginning in the late 1980s, after Transsexualism was added to the DSM-III, research on issues relating to trans persons (a term that encompasses people who identify as transgendered, transsexual, or as any other significant form of deviation from gender norms) is still relatively new. However, over the past few decades researchers have found that trans persons are at a higher risk for abuse and alienation from the public, including physical and verbal victimization, as well as sexual assault (Clements-Nolle, Marx, & Katz, 2006; Lombardi, 2001; Denny, Green, & Cole, 2007). The current study aimed to measure attitudes towards trans persons and discover possible safeguards against transphobia and discrimination.

Using 126 Humboldt State University students, the current study examined attitudes toward trans persons using the Transphobia Scale and Attitudes Toward Transsexualism National Survey. (Landén & Innala, 2000; Nagoshi, Adams, Terrell, Hill, Brzuzy, & Nagoshi, 2008).

Unlike previous research using the Transphobia Scale, participants in the study were significantly less transphobic, and men and women did not differ in their levels of transphobia. The current study also showed that having met a trans person, having had a relationship with a trans person, and having had previous contact with a wide variety of trans information sources in the media were associated with lower levels of transphobia.

The Attitudes towards Transsexualism National Survey indicated that the majority of participants in the current study and the sample in a national survey in Sweden tended to agree on transsexual issues. Both groups favored giving transsexuals' the right to change their bodies, names, and identities, the right to get married, and the right to work with children. The results of this survey indicate that trans research may generalize across western countries.

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INTRODUCTION

If we are to achieve a richer culture, rich in contrasting values, we must recognize the whole gamut of human potentialities, and so weave a less arbitrary social fabric, one in which each diverse human gift will find a fitting place. (Mead, 1935)

From birth onward, gender is one of the most powerful forces that shapes how an individual is viewed by others (Eliot, 2009). A baby's name, nursery decorations, and even the color of the blanket a baby is wrapped in at the hospital, are all influenced by gender. But what happens when there is a conflict between a child's gender identity and the gender label he or she has been given by society? What would it be like to dream of being captain of the football team, but be forced by friends and family to wear makeup and practice ballet?

Gender non-conformity puts people at a higher risk for abuse and alienation from the public, such as physical and verbal victimization, sexual assault, substance abuse, and depression (Clements-Nolle, Marx, & Katz, 2006; Lombardi, 2001; Denny, Green, & Cole, 2007). Considering the importance of gender, both in terms of establishing identity and shaping social interactions, research on gender deviation as a psychological and social phenomenon is crucial. The current study examines college students' awareness of gender issues, as well as students' tolerance for people who fail to conform to expected gender roles, in the hope of better understanding and decreasing negative biases that may lead to discrimination.

This study investigates attitudes toward trans persons. Transpersons are individuals who identify as transgendered, transsexual, or as any other significant form of deviation from gender norms (Nagoshi et al., 2008). Moreover, many studies involving trans persons use unique terminology to refer to specific subgroups beneath the umbrella of trans person. In these cases, the authors' own vocabulary will be used to describe their findings.

Sex, Gender, and Sexual Identity

Traditional views of sexuality often confuse disparate issues related to sex, gender, and sexual identity because these factors frequently overlap. However, without making distinctions between sex, gender, and sexual orientation, the unique issues facing gays and lesbians, “tom boys/girls” and “sissy boys”, and transgendered persons will inevitably go unnoticed. Therefore, differentiating between sex, gender, and sexual orientation is vital to any discussion of research involving trans persons.

Sex

Sex, or more correctly biological sex, refers to the physical characteristics of males and females, namely sex chromosomes, gonad development, hormonal output, internal reproductive structures, and genitals (Rosenzweig, Breedlove, & Watson, 2005). However, there is more to biological sex than simply developing, dichotomously, into a male or a female. It is estimated that 1 out of 1,500 to 2,000 live births results in an infant that does not have a clearly defined biological sex (MacKenzie, Huntington, & Gilmour,

2009). In other words, many births result in a child whose biological sex cannot be determined as simply male or female.

Individuals who are born with external genitalia, chromosomes, or physiological responses to sex hormones that are not exclusively biologically male or female are referred to as having an intersex condition (MacKenzie et al., 2009). Congenital Adrenal Hyperplasia (CAH) for instance, is a condition where individuals are born with two X chromosomes, but due to an abnormality in the adrenal gland have androgen levels higher than typical females, but lower than typical males. The result is that an individual is chromosomally female with normal abdominal ovaries, but genitalia that are intermediate in size and shape between a penis and scrotum, and a vulva. Androgen Insensitivity Syndrome (AIS) is a similar intersex condition where individuals born with one X and one Y chromosome have complete androgen insensitivity. This condition leads to an individual who is chromosomally a male, lacking ovaries and a uterus, but has the appearance of a typical female, even to the point of developing breasts at puberty (Rosenzweig et al., 2005).

Gender

In contrast to biological sex, gender is primarily a cultural construction because it encompasses behaviors society deems appropriate. Supporting the idea that gender is cultural rather than biological, cross-cultural studies note the only behavior exhibited exclusively by a single biological sex is childbirth and thus, gender is not biologically determined, but rather a grouping of characteristics that societies use to advertise a

person's biological sex (Rosenzweig et al., 2005). In regard to gender, males tend to exhibit qualities society deems masculine, while females tend to exhibit qualities society deems as feminine.

In every society however, there are many people who do not follow normative gender patterns, and have a wide variety of reasons for doing so. For instance, cross-dressing or wearing clothing or accessories intended for the opposite gender, often goes against societal gender norms (Piper & Mannino, 2008). People cross-dress for several reasons, and can be described using a number of different terms. Transvestic Fetishism for example, is a clinical term used to refer specifically to heterosexual or bisexual men who wear women's attire to obtain sexual gratification (American Psychiatric Association [DSM-IV-TR], 2000).

However, many of the individuals who choose not to follow gender norms do so because these norms conflict with their gender identification. These people fit into the category of transgendered, meaning they are born with an identifiable biological sex but feel their biological sex at birth does not accurately reflect who they are internally. Another definition for transgendered is a person who crosses gender boundaries by expressing behaviors associated with the opposite sex to the point of being conspicuous to others (Green, 2004).

Further complicating gender, as well as biological sex, is transsexualism which refers to people who have, or are about to undergo, sex reassignment surgery (commonly called a "sex change"), a procedure which can include changing hormonal output, primary sexual characteristics, and/or secondary sexual characteristics to alter their

biological sex (Piper, & Mannino, 2008). The prevalence of transsexualism is difficult to measure (DSM-IV-TR, 2000). Based on small countries in Europe with total population statistics it is estimated about 1 in 30,000 men and 1 in 110,000 women seek sex reassignment surgeries (DSM-IV-TR, 2000; Meyer-Bahlburg, 1994).

People born with male bodies who transition to a female body through sex reassignment surgeries are usually labeled as male-to-female transsexuals, or MTFs. Likewise, people born with female bodies who transition to a male body through sex reassignment surgeries are usually labeled as female-to-male transsexuals, or FTMs (Green, 2004).

Sexual identity

Sexual orientation refers to an individual's sexual, romantic, and/or emotional relationships with others (Pettitt, 2009). Traditionally sexual orientation has been split into three major categories: heterosexual, homosexual, and bisexual (LeVay, 2011). Heterosexual indicates a strong preference for sexual, romantic, and/or emotional relationships with the opposite sex, while Homosexual indicates a strong preference for sexual, romantic, and/or emotional relationships with the same sex. Bisexual people are inclined to have sexual, romantic, and/or emotional relationships with both sexes.

To date, much of the research conducted on sexual orientation has revolved around understanding homophobia and preventing violence perpetrated against individuals with sexual orientations that do not following normative gender patterns—namely people who are gay, lesbian, or bisexual (Horn, Kosciw, & Russell, 2009).

However, despite research showing a strong correlation between homophobia and transphobia (Nagoahi et al., 2008), homophobia cannot fully explain discrimination toward trans people (Clements-Nolle, Marx, & Katz, 2006).

Moreover, despite popular opinion and the dictums of society, sexual identity and gender identity are not necessarily linked (Pettitt, 2009). Given the sheer complexity of both biological sex and gender, it should not be surprising that people often report a wide variety of sexual feelings. For example, individuals of any gender or biological sex can be attracted to those with intersex conditions, to those whose biological sex is male but gender is female, to those whose biological sex is female but gender is male, or even experience little to no sexual attraction towards others, a preference termed Asexuality (Hill, 2009).

The term sexual identity is useful when discussing relationships between people who do not identify with the traditional gender binary (Pettitt, 2009). Similar to sexual orientation, sexual identity refers to a person's sexual, romantic, and/or emotional relationships, but focuses solely on sexual attraction rather than biological sex and traditional gender roles. The term sexual identity is inclusive of wider variation of relationships such as: attraction to individuals who are gender nonconforming, MTF, FTM, or have an intersex condition, as well asexuality, or omni/pan sexuality, attraction or sexual preference towards people in varied gender or biological sex spectrums (Samons, 2009). For example, sexual identity could be used to describe a person with a female body who is attracted to women, and at some point decides to undergo sexual reassignment surgery to become a man. In this scenario, the person's sexual identity does

not change because they are consistently attracted to women throughout their life time. However, because sexual orientation involves assumptions of biological sex and gender, the person's sexual orientation changes the moment their body and gender change.

Gender Identity Disorder

Gender Identity Disorder (GID) is a clinical label given to people who do not have an intersex condition, but exhibit strong and persistent Gender Dysphoria, or discomfort with behaving in a manner consistent with the societal gender norms that match one's biological sex, as well as a strong cross-gender identification that causes significant stress or impairment (DSM-IV-TR, 2000). Under this definition, Gender Identity Disorder can include both transgendered and transsexual individuals.

The label of Gender Identity Disorder remains controversial not only within the medical and scientific communities, but also in legal proceedings related to civil rights (Lev, 2005). In 2005, the *Journal of Psychology and Human Sexuality* released an entire volume of articles dedicated to gender and sexual disorders as they are portrayed in the DSM. Advocates of GID as a diagnosis argue that the medical model provides the best possible scientific treatment and support for those individuals who exhibit the characteristics of the disorder and are distressed by them (Rosenfield, 1997). A clinical diagnosis, advocates say, can give credibility to those suffering from Gender Dysphoria and from a legal standpoint this diagnosis allows insurance companies to reimburse GID

patients for treatments such as therapy, hormones, or sex reassignment surgeries when these treatments would otherwise be unavailable to patients (Piper, & Mannino, 2008).

Opponents of GID as a label question the diagnoses' medical validity.

Psychologists have begun asserting that emotional distress is not as easily classifiable as the current medical model assumes (Sroufe, 2007). Developmental psychologists in particular, posit that emotional reactions are not problematic, but rather are useful because they convey information (Chaplin & Cole, 2005). Much like sexual orientation in the past, adversaries of GID strongly question the utility of labeling a minority as having a disorder because they feel distressed by an oppressive and often hostile social environment (Lev, 2005).

The scope of GID has also been challenged (Lev, 2005). For instance, GID specifically targets trans persons seeking sex reassignment surgery. However, more people suffer from a gender identity dilemma than those who identify as transgendered or qualify for a diagnosis of GID. Conversely, not all trans people are psychologically disturbed or impaired, yet many are forced to carry the label of a disorder in order to receive hormonal treatments and surgery that can alleviate their discomfort. In this light, GID contributes to a system where physicians rely on psychologists to screen patients for them by first providing a diagnosis of GID (Green, 2004).

The cause and course of development for Gender Identity Disorder are also hotly contested. However, research on familial patterns has uncovered some interesting results. Many children and adolescents diagnosed with GID are born into families with high rates of parental conflict and poor parenting skills (Hill, Rozanski, Carfagnini, & Willoughby

2005). Paternal alcohol abuse and depression are also more frequent in families with at least one child diagnosed with GID. Mothers of boys diagnosed with GID are more likely to exhibit borderline personality and depression, while 60% of boys diagnosed with GID are diagnosed with Separation Anxiety Disorder. These findings, however, may arise from a tendency for this type of family to more frequently bring children to specialists who diagnosis and counsel GID, rather than reflect an accurate representation of the gender non-conforming community.

Findings for childhood GID should be understood in light of research which shows that children seen as gender deviants are more likely to be viewed as pathological by the public. Hill and Willoughby (2005) illustrate this point in their work on gender discrimination in children. Adults who had at least one child were asked to label children in vignettes as pathological or not. The study found that parents tended to rate gender non-conforming children as more pathological than their gender-conforming counterparts, despite similar levels of impairment across vignettes. The parents' level of education was not correlated with the degree of pathology ascribed to gender non-conforming children. These results illustrate a cultural susceptibility toward unnecessarily labeling gender-bending children as pathological that arises from the general public's discomfort with gender non-conformity.

Risk Factors

The immediate goal of many studies in this area is to describe trans persons as a population, as well as recognize the attitudes society holds regarding this population. The ultimate goal of most trans research, however, is to improve quality of life for trans individuals. The need for intervention is made especially clear by studies demonstrating that trans persons are at severe risk for, among other things, victimization, drug abuse, and depression (Clements-Nolle, Marx, & Katz, 2006).

A recent US study examined risk factors for 392 male-to-female (MTF) and 123 female-to-male (FTM) transgendered participants (Clements-Nolle, Marx, & Katz, 2006). Compared to their non-transgendered counterparts, the authors found that transgendered individuals tended to be: (a) less educated, with nearly a quarter of those surveyed having less than a high school education; (b) more frequently convicted of a crime, with over half of participants having been previously incarcerated; (c) less able to find and maintain employment, with nearly half of participants having been unemployed during the previous six months; (d) at a greater risk for substance abuse, with 28% having been involved in an alcohol or drug treatment program; (e) more likely to experience physical and sexual abuse, with 36% giving at least one account of physical assault due to gender and 59% reporting having been raped or otherwise forced to have sex on at least one occasion; (f) at a greater risk for mental illness, with 60% having been classified as clinically depressed; and (g) more likely to experience discrimination, with 62% reporting having experienced gender discrimination (e.g., being fired or evicted due to

their gender), and 83% reporting having experiencing verbal discrimination or harassment due to their gender.

In addition to the risk factors presented above, the authors found that transgendered persons were at a substantially higher risk for suicidal behavior than non-transgendered persons, demonstrating a prevalence for attempted suicide of 32% for both MTF and FTM participants (Clements-Nolle, Marx, & Katz, 2006). The authors also reported that gender-based discrimination and victimization were independently correlated with suicidality in trans persons, indicating a link between discrimination and negative risk factors. Sexual orientation and level of education on the other hand, were unrelated to suicidal ideation. Therefore, given the substantial risks faced by members of the trans population, understanding transgenderism and improving the lives of trans persons is of vital importance. Moreover, the link between gender-based discrimination and suicidality in trans persons makes the case that at least some of these risk factors are caused by discrimination from the public, rather than simply arising as a consequence of breaking gender norms.

In another study, suicidal ideation was investigated in relation to childhood gender non-conformity, parental abuse during childhood, and body-esteem (Grossman & D'Augelli, 2007). The authors found that of the 31 MTF and 24 FTM trans persons (aged 15 to 21 years old) surveyed, 45% had thought seriously about taking their own life at some point in time, while 26% reported having attempted suicide at least once—all of whom attributed at least one suicide attempt specifically to being transgendered. In response to these findings, five areas were examined comparing those who had attempted

suicide at least once and those who had not. The authors found no significant difference in childhood gender non-conformity between the two groups, as well as no significant difference in body-esteem due to physical appearance. There was a significant difference, however, between suicide attempters and non-attempters for parental verbal and physical abuse, body weight satisfaction, and perceived evaluation by others of physical appearance, with those who had attempted suicide rating more poorly in all categories. These findings are consistent with studies of suicidality in lesbian, gay, and bisexual (LGB) youth that have shown family relations, peer relations, school performance, and self-perception to be significant factors in differentiating between youth who had attempted suicide and those who had not (Grossman & D'Augelli, 2007).

Transgenderism: A Global Perspective

Due in part to descriptive research, countries around the world are beginning to take notice of the many risk factors facing the trans community. In response, researchers all over the world have begun to examine the belief systems held by the general public regarding trans persons. So far, research on knowledge and attitudes toward trans persons has been conducted primarily in Poland, Sweden, Canada, Hong Kong, and the United States (Landén & Innala, 2000; Hill & Willoughby, 2005; Antoszewski, Kasielska, Jedrzejak, & Kruk-Jeromin, 2007; Winter, Webster & Cheung, 2008; Nagoshi et al., 2008).

Attitudes

Public knowledge and attitudes towards transsexualism were measured using students from three different Polish universities (Antoszewski, Kasielska, Jedrzejczak, & Kruk-Jeromin, 2007). Out of 300 students measured, only 12 reported knowing a transsexual person, and of these only 4 were able to correctly define transsexualism. Nevertheless, a majority of students (54%) were able to define transsexualism correctly, though a significant portion (20%) confused the term with transvestitism or homosexuality. Moreover, only 56% of the Polish medical students could correctly define transsexualism, demonstrating only a marginal improvement over Polish university students (Antoszewski et al., 2007).

As for the causes of transsexualism, the majority of Polish students (54%) believed it to have a genetic basis, while a large minority of students (46%) believed it depended upon upbringing (Antoszewski et al., 2007). The majority of students thought transsexuals should be able to change their name to reflect their gender identity (67%), to undergo hormone therapy (70%), and to receive sex reassignment surgery (65%). Nevertheless, over 60% of students did not believe these services should be covered by socialized medicine.

In terms of demographic difference, the authors reported that women showed significantly more tolerance for transsexual issues than men, answering the questionnaire more positively (Antoszewski et al., 2007). The authors also reported that students from urban areas showed significantly more tolerance toward transsexualism than students from small towns or villages. Despite these differences, the majority of Polish students

reported that they would be comfortable with a transsexual person as a friend (62.3%) or co-worker (75.0%), and many believed transsexual people should have the right to marry (42.7%).

Using a similar design, a Swedish national survey found that 60% of participants would accept a transsexual person as a friend, while 71% would be willing to work with a transsexual person (Landén & Innala, 2000). However, participants reported less positive attitudes toward transsexual people caring for children, with 55% of students asserting that transsexual people should not be able to adopt and 42% believing they should not be able to work with children in schools.

Transphobia

Expanding on the results of studies examining attitudes towards trans persons, several researchers have investigated the characteristics associated with transphobia, a term used to describe feelings of disgust toward, and acts of discrimination directed against, individuals that do not conform to traditional gender norms (Nagoshi et al., 2008). Two scales have been used to measure and understand transphobia in the general population: the Genderism and Transphobia Scale and the Transphobia Scale.

Genderism and transphobia scale. The Genderism and Transphobia Scale (GTS) was developed by Hill and Willoughby (2005) to measure fear, harassment, and assault directed against individuals who deviate from gender norms. The GTS was used by the authors to examine the attitudes of 180 Canadian university students. The authors reported that the GTS was positively correlated with a modified form of the Attitude

Function Index (AFI), designed to measure attitudes towards gender non-conformists, as well as the Homophobia Scale (HS). The relationship between these scales illustrates a possible connection between transphobia and prejudice against gender non-conformists and homosexuals.

Hill and Willoughby (2005) also observed a positive correlation between the GTS and two other scales: the Eysenck Lie Scale (ELS) and the Gender Roles Belief Scale (GRBS). The ELS measures one's tendency to present oneself in a positive light, while the GRBS measures adherence to traditional gender roles. The relationship between these scales demonstrates a possible connection between transphobia and self-promoting deception, as well as between transphobia and a strong belief in the rigidity of gender roles. These findings indicate that people who are more homophobic, adhere more stringently to gender roles, and are more concerned with image management, are at a greater risk for holding prejudicial attitudes towards trans persons.

An independent group of researchers administered the GTS to undergraduate students in Hong Kong (Winter, Webster, & Cheung, 2008). As in previous studies, men from Hong Kong reported more transphobic attitudes than women. However, transphobia for both men and women was higher in Hong Kong than in Poland and Sweden, and both genders viewed deviations from gender norms in men less favorably than they viewed deviations from gender norms in women.

Transphobia scale. In order to examine the relationship between transphobia and homophobia, a nine-item Transphobia Scale was created by Nagoshi et al. (2008). The authors of the scale gave a sample of 310 students from Arizona State University the

Transphobia Scale, along with a host of measures including: the Homophobia Scale, the Right-wing Authoritarianism scale, the Religious Fundamentalism scale, the Personal Attributes Questionnaire, the Ambivalent Sexism Inventory, the Rape Myth Acceptance Scale, and the Sociosexuality Inventory.

A preliminary series of analyses run by the authors uncovered several noteworthy relationships: (a) Transphobia was found to be highly correlated with homophobia; (b) Both transphobia and homophobia were correlated with right-wing authoritarianism, religious fundamentalism, and hostile sexism, a term used to describe prejudice toward women and women's rights; (c) Aggression proneness was correlated with transphobia and homophobia in men, but not women; and (d) Increased scores for benevolent sexism, which refers to maintenance of traditional gender roles, as well as rape myth acceptance, defined as shifting the blame for sexual assault and sexual violence onto victims rather than perpetrators, were related to higher levels of both transphobia and homophobia in women, but not in men.

A second series of analyses was run by the authors with homophobia partialled out. The results showed that hostile sexism was no longer a significant predictor of transphobia in women. However, right-wing authoritarianism, religious fundamentalism, benevolent sexism, and rape myth acceptance maintained a positive correlation with transphobia. As for men, when homophobia was partialled out, the analyses showed that transphobia was no longer correlated with right-wing authoritarianism, religious fundamentalism, or aggression. This may indicate homophobia, and not traditional gender attitudes, is a large determining factor for transphobia in men, but not in women.

Overall, the results showed that the influence of homophobia on the relationships between transphobia and other factors shows that hostile sexism may be a unique factor in explaining transphobia in men. Moreover, the authors found that in addition to scoring significantly higher on the transphobia scale than women, men also scored significantly higher on homophobia, masculinity, hostile sexism, rape myth acceptance, sexual permissiveness, and proneness to physical aggression (Nagoshi et al., 2008).

Sex and Gender in Education

Clements-Nolle, Marx, and Katz's (2006) study of 392 male-to-female transgendered (MTF) participants and 123 female-to-male (FTM) participants demonstrated that level of education was not a protective factor against suicidality in trans persons. Participants who had a high school, college, or graduate level of education had the same rate of suicidality as participants who had not completed high school. Since prejudice has been shown to lower in students after completing diversity courses (Hogan & Mallott, 2005), the failure of education level to protect against suicidality in trans persons may illustrate the lack of trans friendly environments in education.

Moreover, the lack of emphasis trans issues receive in the educational system both in the United States and abroad may explain why the general population reports such a poor understanding of trans issues (Antoszewski et al., 2007). Numerous public elementary and secondary teacher preparation programs ($n = 142$) participated in a study that examined diversity training priorities in education. Programs from Alabama,

California, Georgia, Illinois, Minnesota, New Jersey, and Pennsylvania were chosen specifically because these states support both rural and suburban populations, and because they offer a single teaching credential for kindergarten through elementary school, and a single credential for high school. In both the elementary and secondary school programs, race and ethnicity were the most widely covered diversity issues in all programs, followed by special needs, language diversity, socio-economic standing, gender, and finally sexual diversity. The states all had a similar ranking of emphases, with the exception of California, which placed greater importance on language diversity over special needs in comparison to other states (Jennings, 2007).

The way in which the priorities of these educational training programs are organized paints a clear picture: gender and sexual orientation diversity training are given the least amount of coverage in teaching preparation programs (Jennings, 2007). Moreover, because the study used forced ranking, it is impossible to tell if programs even included the lowest ranked topics, namely gender and sexual diversity, in their curriculums. Even if these topics are included in diversity training, the paucity of gender and sexuality diversity training is evident inasmuch as high school teachers are given the same emphasis and training as elementary school teachers, despite obvious sexual developmental differences between the age groups.

Contact Theory

One of the most well known theories dealing with prejudice against minority groups is Allport's (1954) Contact theory, which states that contact with a minority group can reduce prejudice if certain conditions are met. Specifically, contact must be sustained, nonsuperficial, supported by an authority, and must occur between individuals of equal status who share common goals. Contact theory has since been supported by a large number of studies.

Contact with a single individual has been shown to have a profound effect on reducing negative attitudes toward entire minority groups. For example, implicit automatic racial prejudice has been shown to decrease in European Americans in studies where the test was administered by an African American experimenter (Lowery & Hardin, 2001).

Numerous studies have investigated contact theory. A recent meta-analysis of contact theory examined the results of more than 700 independent studies, reporting a persistent negative correlation between contact and prejudice ($r = -.21, p > .001$), with increased contact contributing to a reduction in prejudice (Schiappa, Gregg, & Hewes, 2006). A similar meta-analysis of 513 studies found that more rigorous studies tended to yield larger effects, and that reductions in prejudice often generalized to the entire minority group across a variety of experimental contexts (Pettigrew & Tropp, 2006). Moreover, the authors concluded that prejudice reduction often occurred in the absence of Allport's (1954) conditions, though to a much lesser extent.

The results of these meta-analyses demonstrate that intergroup contact has the potential to reduce prejudice against most minority groups in a wide range of settings. These results also indicated that prejudice against trans persons may be effectively addressed through the application of contact theory. Recently, a group of researchers tested contact hypothesis in regard to trans persons by examining the attitudes of Hong Kong residents (King, Winter, & Webster, 2009). A population-based sample of 856 Hong Kong residents between the ages of 15 and 64 were surveyed. Of those sampled, 97.4% were able to correctly define transgenderism, and 34% reported having had contact with a trans person. Participants who had experienced contact with a trans person displayed significantly lower levels of social distancing and social discrimination, higher positive attitudes toward trans persons, more awareness of trans discrimination and its impact, and were more supportive of transgender civil rights, equal opportunity for trans persons, and anti-discrimination legislation for trans persons. Younger and more educated participants also had more positive attitudes toward trans persons, while contrary to the findings of previous studies, gender and religiosity did not impact attitudes for the Hong Kong residents sampled (King, Winter, & Webster).

Increasing public contact with trans persons however—especially contact that satisfies Allport's (1954) conditions—is not as straight forward as it may seem. Like many minority groups, trans persons are the victims of open, sometimes violent oppression. But, unlike racial minority groups, many trans persons are able to hide their minority status to maintain personal safety, which makes prolonged positive contact more difficult to obtain. To overcome this obstacle, researchers in the field of parasociality, or

indirect social interactions, have examined the influence fictional characters in the media can have on reducing prejudice (Schiappa, Gregg, & Hewes, 2006).

A study of 245 university students found that increased viewing of the 1998-2006 television sitcom *Will & Grace*, as well as reporting a parasocial connection with the characters from the show, was correlated with significantly decreased levels of sexual prejudice (Schiappa, Gregg, & Hewes, 2006). This effect was particularly pronounced with students who had little or no contact with homosexuals. One explanation for this result is that students with less prejudicial attitudes may have been more likely to seek out gay-friendly media. However, considering the popularity of this television show in conjunction with research indicating that any degree of contact may reduce prejudice, even in the absence of Allport's (1954) conditions (Pettigrew & Tropp, 2006), it seems reasonable to assume that contact theory can explain at least a portion of the effect.

Goals of the Current Study

In the US, trans issues such as gender and sexual orientation issues are given the least amount of coverage in diversity training during elementary and secondary teachers' preparation programs (Jennings, 2007). Yet, studies have shown trans persons are at a much higher risk for discrimination, substance abuse, depression, and suicide than the general population (Grossman, & D'Augelli, 2007). These unique features of the trans population, in conjunction with the low priority given to gender and sexuality in the diversity training given to teachers, as well as the ramifications and questionable validity

of GID, make an investigation of attitudes and knowledge about trans issues of vital importance to future work on lessening discrimination and refining diagnoses. The current study aims to understand attitudes toward trans persons as well as examine effects of contact and knowledge in safeguarding against transphobia and discrimination.

Research questions and hypotheses

Considering previous research, the present study made the following hypotheses:

Research question A. Participants' scores will be similar to previous research using the Transphobia Scale, which yielded a mean score of 4.25 in women and 5.05 in men using a likert scale ranging from 1 (completely disagree with transphobic statements) to 7 (completely agree with transphobic statements).

Hypothesis A. Men will score significantly higher on the Transphobia Scale than women, a trend indicated by previous research (Claman, 2007).

Hypothesis B. People who have had personal contact with trans persons will have lower Transphobia Scale scores than those with no contact. This hypothesis was made because contact with a minority group has been shown to reduce prejudice (Pettigrew & Tropp, 2006).

Hypothesis C. Increased contact with trans issues in media will correlate with decreased transphobia. Much like personal contact, this hypothesis was made because exposure to characters in the media has been shown to help decrease stigma (Schiappa, Gregg, & Hewes, 2006).

Hypothesis D. The majority of participants (65 % or higher) will not have knowingly come into contact with trans persons (Claman, 2007). Furthermore, the majority of participants (91 % or higher) will not have knowingly come into contact with people who identify as transsexual (Landén, & Innala, 2000). This hypothesis was made because research shows that trans persons are openly oppressed (Nagoshi et al., 2008), which may lead trans persons to hide their minority status for personal safety, and therefore make contact with members of the trans population limited.

Research question B. US attitudes toward transsexuals will be comparable to attitudes in Sweden, in that the majority of both samples will be in agreement on transsexual rights and opinions. Research on knowledge and attitudes toward trans persons has been conducted around the globe including countries like Sweden, Canada, Poland, the People's Republic of China, and the United States (Landén & Innala, 2000; Hill & Willoughby, 2005; Antoszewski, Kasielska, Jedrzejezak, & Kruk-Jeromin, 2007; Winter, Webster & Cheung, 2008; Nagoshi et al., 2008). With research on trans issues just recently developing, it would be useful to utilize information gathered from other countries to extrapolate possible directions for research and interventions. However, before this can be done, it is important to examine the similarity of public opinions and reactions in relation to trans persons.

METHODS

Participants

The current study recruited 126 students from Humboldt State University who were enrolled in at least one psychology course, as well as HSU's online psychology research participation pool. The study included 97 female and 29 male participants. The ages of participants ranged from 18 to 49 years old, with a mean age of 20.

Measures

Transphobia was measured using the Transphobia Scale created by Nagoshi et al. (2008). The Transphobia Scale has been shown to have high internal consistency, $\alpha = .82$, and a test-retest correlation of .88.

In regard to content validity, the nine items of the Transphobia Scale were designed around Darryl Hill's conceptualization of genderism as well as Kate Bornstein's book *My Gender Workbook* (as cited in Nagoshi et al., 2008). Specifically, Bornstein's Flexibility of Gender Aptitude items were used to assess discomfort with proximity to those who do not conform to conventional gender roles. A factor analysis of the Transphobia Scale showed that question 6 was a separate factor from the other questions. The authors of the scale chose to leave this question in the scale however, because it correlated positively with all other questions and was part of Hill and Bornstein's

conceptualization of genderism and because it caused only a small decline in overall reliability ($\alpha = .85$ with the item removed, compared to .82 with the item included).

Personal contact with trans persons was measured using two self-report questions. The first question was, “How many people do you know who identify as transgendered or transsexual?” This was followed by the question “What are their relations to you?”

Exposure to trans persons was measured with seven self-report questions designed to assess whether the participants had heard friends or family discuss trans issues, and whether participants had experienced a television program, movie, website, article, book, class, or seminar that involved trans issues.

Attitudes toward transsexuals was measured using Landén and Innala’s (2000) Attitudes Toward Transsexualism National Survey which allows data to be compared with previous research conducted in Sweden and Poland. The survey is a questionnaire consisting of 13 questions, each having three or more answers to choose from (e.g., yes, no, or have no opinion/have not thought about it).

Procedure

Participants were administered a questionnaire online. Informed consent was presented and the participant had the option of either declining participation or agreeing to continue. The Transphobia Scale was administered first. After the scale was completed, definitions for the terms transsexual, and transgendered, were provided to ensure accuracy on the personal contact measures. Participants were then asked, “Do you

know someone who identifies as transgendered?” If the participant answered “yes”, they were then asked “How many transgendered people do you know?”, and “What is their relation(s) to you (for example self, coworker, friend, sibling, or romantic partner)?”

Following this, participants were questioned on possible sources of exposure to trans persons, such as a discussion with friends or family, a television program, movie, article, book, or class. Finally, Landén and Innala’s (2000) Attitudes Toward Transsexualism National Survey was given to participants, completing the study.

Data Analysis

Research question A. Participants’ scores will be similar to previous research using the Transphobia Scale. This was measured using an independent t-test comparing mean scores in the current study with mean scores of 4.25 for women and 5.05 for men obtained from previous research.

Hypothesis A. Men will score higher on the Transphobia Scale than women. This was measured using an independent t-test comparing men and women in the current study.

Hypothesis B. People who have had personal contact with trans persons will have lower Transphobia Scale scores than those with no contact. This was measured using a t-test comparing students who had had contact with trans persons to those who had not.

Hypothesis C. Increased contact with trans issues in the media will correlate with decreased transphobia. To test this hypothesis, a correlation was used to measure the relationship between number of information and transphobia scores.

Hypothesis D. The majority of participants (65 % or higher) will not have knowingly come into contact with trans persons and (91 % or higher) will not have knowingly come into contact with people who identify as transsexual (Landén, & Innala, 2000). This was measured with a chi-squared comparing the percentage of students who have and have not had trans contact, with the level of trans contact in previous studies.

Research question B. US attitudes toward transsexuals will be comparable to attitudes in Sweden. This was measured using a chi-squared comparing the frequency of responses between this study and those obtained for questions on the Landén and Innala's (2000) Attitudes Toward Transsexualism National Survey.

RESULTS

In the present study, the Transphobia Scale demonstrated good internal consistency ($\alpha = .82$). This result is consistent with previous research (Nagoshi et al., 2008). Each participant received a single transphobia score, which was computed by taking the average of all nine of the scale's items. Larger numbers indicated more transphobic attitudes.

Research Question A

In the current study, participants' transphobia scores were expected to be similar to previous research using the Transphobia Scale, meaning a mean score of 4.25 or higher for women and a score of 5.05 or higher for men. However, the data showed that women in the current study ($M = 3.03$, $SD = 1.12$) and women in previous research ($M = 4.25$, $SD = 1.20$) scored differently on the Transphobia Scale, with women in the current study scoring lower, $t(248) = 8.03$, $p < .001$, $d = 1.05$. Similarly, men in the current study ($M = 3.24$, $SD = 1.31$) and men in previous research ($M = 5.05$, $SD = 1.01$) scored differently on the Transphobia Scale, with men in the current study scoring lower, $t(184) = 8.44$, $p < .001$, $d = 1.55$. Contrary to what had been predicted, both women and men in the current study were less transphobic than indicated by previous research.

Hypothesis A

In the current study, it was expected that men would score higher on the Transphobia Scale than women. However, the data showed that there was no evidence to support a significant difference between men ($M = 3.24$, $SD = 1.31$) and women ($M = 3.02$, $SD = 1.12$) for Transphobia Scale scores, $t(124) = 0.89$, $p = .37$, $d = 0.16$. Contrary to what had been predicted, men and women did not appear to differ in their levels of transphobia.

Hypothesis B

In the present study, it was predicted that participants' who had personal contact with trans persons would have lower Transphobia Scale scores than those with no contact. And indeed, Transphobia Scale scores for participants who had one or more friendships with trans persons ($M = 2.59$, $SD = .90$) were significantly lower than scores for participants who did not have any friendships with trans persons ($M = 3.33$, $SD = 1.21$), $t(122) = 3.46$, $p = .001$, $d = 0.63$. Having one or more friendships with trans persons was also associated with lower levels of transphobia.

Similarly, Transphobia Scale scores for participants who had met trans persons ($M = 2.80$, $SD = 1.00$) were significantly lower than scores for participants who had never met a trans person ($M = 3.65$, $SD = 1.30$), $t(124) = 4.05$, $p < .001$, $d = 0.73$. Furthermore, with voluntary relationships (i.e., friendships and romantic partners) partialled out, Transphobia Scale scores were significantly lower for participants who had

come into involuntary contact with a trans person ($M = 2.97$, $SD = 1.01$), than they were for those who had never knowingly come into contact with a trans person ($M = 3.65$, $SD = 1.30$), $t(94) = 2.89$, $p = .005$, $d = 0.58$. As predicted, having met one or more trans persons, regardless of whether the relationship was voluntary or involuntary, was associated with lower levels of transphobia.

Hypothesis C

In the current study, it was expected that increased contact with trans issues in the media would correlate with decreased transphobia. And indeed, the number of trans information sources was negatively correlated with Transphobia Scale scores. The larger the number of trans information sources a participant had come in contact with ($M = 4.20$, $SD = 1.55$), the lower their Transphobia scores ($M = 3.08$, $SD = 1.16$) tended to be, $r = -0.45$, $p < .001$. As predicted, exposure to a wider variety of trans information sources in the media was associated with decreased levels of transphobia.

All participants reported having been exposed to at least one source of trans information ($M = 4.20$, $SD = 1.55$; see Table 1). Allowed to choose up to seven sources of information, the most common source of information cited by participants was a Television show (86 %), followed by a Movie (78 %). The least common source of information was from a Book (28 %; see Table 2).

Table 1

Number of trans information sources reported per participant

Number of Information Sources	Frequency	Percent
0	0	0%
1	8	6%
2	5	4%
3	30	24%
4	30	24%
5	23	18%
6	21	17%
7	8	6%
Did Not Respond	1	1%

Table 2

Reported types of trans information sources experienced

Sources of Trans Information	Frequency	Percent
Television Show	108	86%
Movie	96	78%
Class, Seminar, or Community Event	81	64%
Friends or Family	75	60%
Website	67	53%
Newspaper or magazine	63	50%
Book	35	28%
Did Not Respond	1	1%

Hypothesis D

In the present study, it was that expected that the majority of participants (65 % or higher) would not have knowingly come into contact with trans persons and (92 % or higher) would not have knowingly come into contact with people who identify as transsexual. Compared to previous research, significantly more participants in this study had met at least one trans person, $\chi^2(1, n = 126) = 61.25, p < .001, \phi = .70$, as well as at least one transsexual $\chi^2(1, n = 126) = 413.44, p < .001, \phi = 1.00$.

Contrary to what had been predicted, only 35 % of participants had never met at least one trans person, and 43 % had never met a person who identified as transsexual. The majority, meaning 72 participants (57 %), had met at least one person who identified as transsexual, 86 participants (68 %), had met at least one trans person, with 41 participants (33 %) reporting a relationship with a trans person. The most commonly cited relationship with a transperson was Acquaintance (28 %), followed by Friendship (22 %). The least common relationship with a trans person was Romantic Partner (1 %; see Table 3).

Table 3

Reported types of relationships with trans persons

Relationship	Frequency	Percent
None	44	35%
Acquaintance	35	28%
Friend	27	22%
Coworker/Peer	10	8%
Teacher	3	2%
Family	4	3%
Romantic Partner	1	1%
Did Not Respond	2	2%

Research Question B

In the current study, it was expected that attitudes toward transsexuals in the United States would be similar to attitudes in Sweden. Percentages were compared between two studies for answers to questions on Landén and Innala's (2000) Attitudes Toward Transsexualism National Survey.

Participants in the present study followed the general trends set by Landén and Innala's (2000) Swedish national survey. However, the most common response in both studies differed in four main areas. First, even though the majority of both samples favored transsexual rights, the percentage in favor of transsexual rights in the present study was higher (see Table 4, 5, and 6). For example, the majority of participants in the current study (93 %), and in the Swedish national survey (64 %), answered that they thought transsexual persons should have the opportunity to change their name to better reflect their personal identification (see Table 4), with significantly more participants favoring name changes in the current study than in the Swedish study, $\chi^2(2, n = 126) = 45.56, p < .001, \phi_c = 0.43$

The second difference found was in the amount of contact with transsexuals. The majority of participants in the current study (57 %) reported that they knew at least one transsexual person, whereas a small minority in Swedish national survey (8 %) reported knowing a transsexual person.

Table 4

Transsexualism National Survey: Responses to questions 1, 2, 4–9, 11, and 12

Questions	Current Study (<i>n</i> = 126)			Landen and Innala (2000) (<i>n</i> = 668)		
	Yes	No	No Opinion	Yes	No	No Opinion
Transsexualism is a disease that can be treated	6 %	73 %	21 %	22 %	52 %	26 %
Transsexual persons should have the opportunity to change their name	93 %	2 %	5 %	64 %	14 %	22 %
Transsexual persons should have the opportunity to change their identity	85 %	5 %	10 %	52 %	22 %	26 %
Transsexual persons should have the opportunity to be administered the sex hormones of the opposite sex	84 %	5 %	11 %	53 %	19 %	27 %
Transsexual persons should have the opportunity to undergo surgical operation to alter their genitals	87 %	4 %	9 %	56 %	18 %	25 %
People who have undergone a sex change should have the right to get married in their new sex	80 %	6 %	14 %	56 %	23 %	21 %
People who have undergone a sex change and are single should have the right to adopt and raise children on equal terms with other single people	80 %	7 %	13 %	29 %	52 %	19 %

Table 4 (continued)

Transsexualism National Survey: Responses to questions 1, 2, 4–9, 11, and 12

Questions	Current Study (<i>n</i> = 126)			Landen and Innala (2000) (<i>n</i> = 668)		
	Yes	No	No Opinion	Yes	No	No Opinion
People who have undergone a sex change and live together with a partner as a husband or wife should have the right to adopt and raise children on equal terms with other married people	86 %	3 %	11 %	43 %	41 %	16 %
People who have undergone a sex change from male to female should be allowed to work with children	88 %	8 %	9 %	61 %	20 %	19 %
I would be comfortable having an openly transsexual person as a fellow worker	93 %	2 %	6 %	71 %	11 %	18 %
I would be comfortable having an openly transsexual person as a friend	87 %	5 %	8 %	60 %	18 %	22 %
I would be comfortable having an openly transsexual person as a partner	14 %	70 %	15 %	2 %	84 %	14 %
Do you know anyone who is transsexual	57 %	43 %	N/A	8 %	92 %	N/A
Transsexualism has increased in the last 20 years	40 %	7 %	52 %	38 %	23 %	39 %

Table 5

Transsexualism National Survey: Responses to the question, “Who should bear the expenses for a sex change?”

	Current study	Landen and Innala (2000)
	Percent	Percent
Public funds	6 %	15 %
The individual	84 %	63 %
No opinion	10 %	21 %

Table 6

Transsexualism National Survey: Responses to the question, “What makes a person transsexual?”

	Current study	Landen and Innala (2000)
	Percent	Percent
Choose to be that way	20 %	9 %
Learn to be that way	0 %	1 %
Born that way	52 %	53 %
Childhood experiences	5 %	19 %
It is a disease that may affect you	1 %	4 %
Other	22 %	11 %

The third difference between the current study and that conducted by Landen and Innala (2000) was in perceptions of transsexualism in the media. Participants in the current study believed that there was too little attention given to trans issues in the media (38 %), whereas the most common response for participants in the Swedish national survey (30 %) believed there was just enough (see Table 7). Compared to the Swedish study, significantly more participants in the current study thought too little attention was given to trans issues in the media, $\chi^2(3, n = 126) = 84.24, p < .001, \phi_c = 0.47$.

The fourth and final difference found was in transsexuals' adoption rights. The majority in the current study believed transsexuals should be able to adopt children when single (80 %), as well as when in a committed relationship (86 %). The Swedish study, however, found only a minority (28 %) of participants believed single transsexuals should be able to adopt children, though the percentage was somewhat higher (43 %) for transsexuals in committed relationship (see Table 4). Compared to the Swedish study, significantly more participants in the current study supported both adoption when in a committed relationship, $\chi^2(2, n = 126) = 99.31, p < .001, \phi_c = 0.63$, as well as when single, $\chi^2(2, n = 126) = 165.10, p < .001, \phi_c = .81$.

Table 7

Transsexualism National Survey: Responses to the question, “Do you think society and the media pay too much attention to transsexualism?”

	Current study	Landen and Innala (2000)
	Percent	Percent
Too Much	14 %	17 %
Just Enough	14 %	30 %
Too Little	38 %	12 %
No opinion	34 %	41 %

DISCUSSION

The goal of current study was to better understand attitudes toward trans persons, as well as look for possible protective factors against transphobia. This study can be broken into two major sections: findings for the Transphobia Scale, which examined discomfort with gender ambiguity in others, and findings for the Attitudes towards Transsexualism National Survey, which measured beliefs regarding the rights and freedoms transsexuals' should be given.

Transphobia Scale

Findings

The Transphobia Scale showed that participants in this study: (a) were less transphobic than in previous studies, (b) men and women did not differ in their level of transphobia, (c) the more trans information sources that a persons had in their life the less transphobic they were, (d) people who had a friendship with a trans person were less transphobic than those who did not, and (e) people who had involuntarily met a trans person were less transphobic than those who had not.

The level of transphobia differed between US universities. Thus, level of transphobia may vary by location. This shows that attitudes toward trans persons are not stagnant, and can be influenced. It also shows that interventions could target specific locations or institutions that run a higher risk for transphobia.

Because men and women displayed similar levels of transphobia in the current study, differences in level of transphobia are likely not inherent between the sexes. This may be due to the composition of the current study's sample; perhaps men interested in taking a psychology course are more open to diversity or know more about trans issues. Regardless, this finding again shows that attitudes toward trans persons are not set and can be influenced. It may also show future efforts to decrease transphobia may not need to target men to be effective.

Both contact with trans persons and exposure to trans issues were related to lower levels of transphobia. This may indicate that transphobia exists primarily due to a lack of information or an abundance of misinformation. Thus, personal contact and knowledge of trans issues may be the most effective intervention tools in reducing transphobia.

Applications

The results of the current study can be applied in several ways. First, the demographics and opinions gathered in this study can contribute to a more complete understanding of trans issues by adding to current research in the field. Second, the results of the current study can be used to create intervention efforts to reduce transphobia and trans discrimination. Specifically, findings from this study indicate that reducing transphobia may be accomplished through increased contact with trans persons as well as through increased trans visibility in the media—namely in television, movies, books, seminars, websites, and articles. Because transphobia is not homogenous across

the US, intervention efforts should target locations most at risk for transphobia and trans discrimination.

Limitations

The results of the current study to are limited by the sample, which was relatively small and examined only a narrow range of people. All 126 participants were students taking at least one psychology course in the same northern Californian state university. Thus, it is difficult to generalize these findings to the US population until more diverse groups and locations are measured.

Another limitation in the current study is the inability to show causation. People who had met a trans person tended to be less transphobia than people who had not. However, it does not necessarily follow that meeting a trans person caused a reduction in transphobia. Likewise, the more trans information sources that a person had encountered the less transphobia they tended to display, which does not necessarily indicate that greater exposure to trans information sources reduced transphobia. It could be that less transphobic people seek out trans persons and trans information, or a third variable could affect both level of transphobia and exposure to trans persons and information sources.

Future research

Future studies using the Transphobia Scale could use the measure in a wider variety of settings with larger, more varied samples. This would add to the scale's reliability and better represent transphobia in the US. Another possible use for the Transphobia Scale would be to measure the effectiveness of transphobia interventions,

which could in turn establish causal relationships. Future research could also examine why men and women did not differ on levels of transphobia at this particular university in California. Research demonstrates that men traditionally score higher in transphobia and trans discrimination than women, so it would be informative to see which, if any, protective factors influenced the level of transphobia displayed by men in the current study's sample.

Attitudes Towards Transsexualism National Survey

Findings

The Attitudes towards Transsexualism National Survey showed: (a) the majority of Humboldt State University students and the population in Sweden tended to agreed on transsexual issues, (b) a majority of Humboldt State University students sampled, and the population in Sweden, favored giving transsexuals' the right to change their bodies, names, and identities, the right to get married, and the right to work with children, (c) Humboldt State University students had more contact with transsexuals than people in Sweden, (d) a majority of Humboldt State University students would like more coverage of transsexual issues in the media, and (e) a majority of Humboldt State students support transsexuals adopting children both when single and in a committed relationship, whereas a majority of people in Sweden only support transsexuals in a committed relationship adopting.

While a larger percentage of the sample in the current study favored transsexual rights when compared to the sample in Sweden, the composition of both samples' responses was similar. This similarity supports sharing research across borders, at least until a larger body of research can be established for each country. The ability to generalize the results of these studies is especially important considering the relative lack of information available regarding trans issues. For instance, the DSM-IV-TR, a current clinical standard in the US, uses European research to estimate the prevalence of transsexualism in the US (American Psychiatric Association [DSM-IV-TR], 2000).

A large majority of participants in the current study were in favor of transsexual rights. Additionally, 57 % of participants reported having met one or more transsexuals, compared to 8% in the Swedish national survey. One explanation for this discrepancy may be the differences of the populations both in size, location, and sampling strategy.

Apart from the number of transsexuals met, responses in the present study and in the Swedish national survey were only substantially different for two questions. A majority of participants in the current study were in favor of increasing coverage of trans issues in the media, and also supported the right to adopt for single transsexuals, where as the Swedish majority did not support either of these positions. It is difficult to ascertain whether these differences reflect Sweden's beliefs regarding the rights of transsexuals, or if other cultural influences came into play. Since the majority (56 %) of Swedish participants believed transsexuals in a committed relationship should be able to adopt, the low support for single transsexuals to adopt (29 %) may have resulted either from trans discrimination or simply a preference for couples to adopt. Likewise, the Swedish

national survey did not measure trans knowledge or contact with trans information sources. Thus the lack of interest in increasing the amount of coverage of trans issues in the media may have occurred either because trans issues were in fact well covered by the media, or people may have simply been uninterested in increasing coverage of trans issues.

Applications

The results of the current study can build on current research, help narrow intervention strategies to specific areas of discrimination, and may support using trans research from European countries in the US. Participants from both groups seemed the least comfortable with the idea of having a transsexual partner. Exploring issues attached to this aversion may lead to a better understanding of transphobia and trans discrimination.

Limitations

The limitations of the current study were sample size, nonrandomized sampling, and the inability to generalize results. In the US, 13 states & Washington D.C. prohibit discrimination due to gender identity or expression. California, as one of these states, incorporated gender identity/expression antidiscrimination laws in 2003, four years before the U.S. House of Representatives did in 2007. Humboldt State University, where the present study was conducted, included gender identity or expression antidiscrimination on campus in 2008 (Transgender Law and Policy Institute, 2010). Given this trend in the law, it follows that a sample of psychology students attending a

college aware of trans discrimination, in a state also aware of trans discrimination, would most likely differ from a national survey both in terms of experience and attitudes.

Future research

Future studies using the measure Transsexualism National Survey could use the measure in a wider variety of settings with larger, more varied samples. It would further research to measure institutions such as universities before and after implementing trans antidiscrimination policies. Swedish researchers could measure whether the low support for the right of single transsexuals to adopt occurred because of trans discrimination or because of a preference for couples to adopt. Another question future research could address is whether Swedish contentment with the amount of coverage of trans issues in the media occurred because trans issues were in fact well covered by the media, or if people were simply not interested in increasing coverage of trans issues.

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APPENDIX A

Gender attitudes questionnaire

Throughout the course of this survey please be aware of the following:

In order to participate you must be **18 years or older**. Furthermore, **participation is not required** and you may elect to withdraw from the study at anytime. Participation—or lack thereof—will not alter or affect your grade in anyway. The purpose of this survey is to measure the attitudes HSU students hold regarding gender. The survey will take approximately 20 minutes to complete and all information collected will be **completely anonymous**. Make sure to **read all instructions and questions carefully** and choose the best answer for each (usually your first instinct is the best). **Do not leave any questions blank**. If you have any questions or concerns feel free to contact the principal investigator, Rachel Kooy, at rek10@humboldt.edu, the major professor Dr. Emily Sommerman at es47@humboldt.edu, the Psychology Department at (707) 826-5264, or the Office for Research & Graduate Studies at (707) 826-3949.

Age: _____

The Gender You Identify With Most: _____

Measure Transphobia: Rate from 1 (*completely disagree*) to 7 (*completely agree*)

1. ____ I don't like it when someone is flirting with me, and I can't tell if they are a man or woman.
2. ____ I think there is something wrong with a person who says they are neither a man nor a woman.
3. ____ I would be upset, is someone I'd known a long time revealed to me that they used to be another gender.
4. ____ I avoid people on the street whose gender is unclear to me.
5. ____ When I meet someone, it is important for me to be able to identify them as a man or a woman.
6. ____ I believe the male/female dichotomy is natural.
7. ____ I am uncomfortable around people who don't conform to traditional gender roles, e.g., aggressive women or emotional men.
8. ____ I believe that a person can never change their gender.
9. ____ A person's genitals define what gender they are, e.g., a penis defines a person as being a man, a vagina defines a person as being a woman.

Definitions given to ensure participants understand the terms used in this questionnaire:

A *transsexual* person is someone who wants, is about to, or has already undergone a sex change through surgery, hormone therapy, or a combination of both. For example a person born as a man who acts like a woman, takes female hormones, and gets breast implants

A *transgendered* person is someone who does not necessarily want a sex change, but who identifies with the gender that is opposite from their biological sex at birth. For example a person born as a woman who dresses and acts like a man.

Measure of Trans Proximity:

1. ____ How many people have you met who identify as transgendered or transsexual?
2. ____ How many friends do you have who identify as transgendered or transsexual?
3. _____ What is the closest relationship between to you and a transgendered or transsexual person (for example: self, sibling, romantic partner, friend, teacher, coworker, acquaintance, or I do not know a trans person)

Exposure Sources:

Mark all the categories where you have heard or seen transgendered or transsexual information

1. ____ Friends or family
2. ____ Television show, such as the news, Opera, or the Logo channel
3. ____ Movie, such as a documentary, Transamerica, Boy's Don't Cry, Hedwig and the Angry Inch.
4. ____ Website
5. ____ Newspaper or magazine, such as Newsweek
6. ____ Book, such as Becoming a Visible Man, or Transgender History
7. ____ Class, seminar, or community event

Transsexual survey:

All questions are answered in this survey with *Yes, No, Have no opinion/Have not thought about it* except questions 3, 10, 11, and 13.

1. Transsexualism is a disease that can be treated? *Yes, No, Have no opinion*
2. Transsexual persons should have the opportunity to...
 - ...change their name? *Yes, No, Have no opinion*
 - ...change their identity? *Yes, No, Have no opinion*
 - ...be administered the sex hormones of the opposite sex? *Yes, No, Have no opinion*
 - ...undergo surgical operation to alter their genitals? *Yes, No, Have no opinion*
3. Who should bear the expenses for a sex change?
Public funds, The individual, Have no opinion
4. People who have undergone a sex change should have the right to get married in their new sex?
Yes, No, Have no opinion
- 5a. People who have undergone a sex change and are single should have the right to adopt and raise children on equal terms with other single people?
Yes, No, Have no opinion
- 5b. People who have undergone a sex change and live together with a partner as a husband or wife should have the right to adopt and raise children on equal terms with other married people?
Yes, No, Have no opinion
- 6a. People who have undergone a sex change from female to male should be allowed to work with children, e.g., be a teacher or youth worker?
Yes, No, Have no opinion
- 6b. People who have undergone a sex change from male to female should be allowed to work with children, e.g., be a teacher, or youth worker?
Yes, No, Have no opinion
7. I would be comfortable having an openly transsexual person as a fellow worker?
Yes, No, Have no opinion
8. I would be comfortable having an openly transsexual person as a friend?
Yes, No, Have no opinion

9. I would be comfortable having an openly transsexual person as a partner?
Yes, No, Have no opinion
10. Media pay too much attention to transsexualism?
Too much attention, Just enough attention, Too little attention, Have no opinion/Have not thought about it
11. Do you know anyone who is transsexual?
Yes, No
12. Transsexualism has increased in the US in the last 20 years?
Yes, No, Have no opinion
13. What makes a person transsexual? (Choose one alternative)
You choose to be that way, You learn to be that way, You are born that way, It is due to different experiences during childhood, It is a disease that may affect you, Other

APPENDIX B

Informed consent

Throughout the course of this survey please be aware of the following:

In order to participate you must be 18 years or older. Furthermore, participation is not required and you may elect to withdraw from the study at anytime. Participation—or lack thereof—will not alter or affect your grade in anyway. There are no benefits for participation besides possible course credit and good karma. The purpose of this survey is to measure the attitudes HSU students hold regarding gender. A possible risk of participation is coming into contact with uncomfortable material about sex and gender. All data will be kept anonymous, stored on a password protected computer, and destroyed in five years. The survey will take approximately 20 minutes to complete and all information collected will be completely anonymous. Make sure to read all instructions and questions carefully and choose the best answer for each (usually your first instinct is the best). Do not leave any questions blank. If you have any questions or concerns feel free to contact the principal investigator, Rachel Kooy, at rek10@humboldt.edu or (707) 441-1721, the major professor Dr. Emily Sommerman at es47@humboldt.edu or (707) 826-3270, Diane Hunt the graduate secretary the Psychology Department at dlh7004@axe.humboldt.edu or (707) 826-5264, or Chris A. Hopper the Institutional Research Board Director at cah3@humboldt.edu or (707) 826-3949.