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Abstract

Although there is considerable evidence that trans persons are victims of discrimination, social psychologists have rarely explored prejudice against this minority group. We extrapolated from models of heterosexism to test hypotheses about support for and opposition to trans persons' civil rights. Opposition to trans persons' civil rights among 151 participants was correlated with heterosexism, authoritarianism, a belief that there are only two sexes, beliefs that gender is biologically based and several demographic variables. Linear regression showed that heterosexism, authoritarianism, contact with sexual minorities and beliefs in biological gender predicted unique variance in opposition to trans persons' civil rights. Differences and similarities between prejudice towards sexual and gender minorities are discussed.

In the past, social psychologists have taken little account of prejudice against *trans people*. Within the United Kingdom this term is used to refer to people who live in and identify with the opposite gender, regardless of whether or not they seek surgery (e.g., Press for Change, 1999 see also Borstein, 1995; Califia, 1997; Feinberg, 2004; Whittle, 2000). Legal and sociological studies strongly suggest that trans people face discrimination that ranges from media ridicule (Gamson, 1998) to being targets of hate crimes (Moran & Sharpe, 2002; Valentine, 2003). Yet, trans citizens have only recently gained any non-discrimination protection in the UK (The Sex Discrimination (Gender Reassignment) Regulations 1999; Gender Recognition Act 2004) and remain sporadically across the United States (Currah & Minter, 2000). In the 1990s a broad international movement for trans persons' civil rights emerged in such arenas as workplace discrimination law, the medical management of sex reassignment surgery, and consciousness raising about hate crimes (Califia, 1997; Wangh, 2003; Whittle, 2000; Wilchins, 1997).

We consider the shifting terrain of trans persons' rights, and non-trans persons' support for and opposition to those rights in particular to be an interesting social psychological domain. We sought to examine similarities and differences between opposition to trans persons' rights and heterosexism; prejudice against lesbians and gay men (Herek, 2000). We explored heterosexism as a tentative model for prejudice against trans persons for three reasons. Firstly, the medical pathologizing of trans persons and of lesbians and gay men have overlapping histories (Prosser, 1998; Terry, 1999). Secondly, trans persons' gender identities have often been medically managed in ways that privilege heterosexual people (Bolin, 1988). Thirdly, stereotypes describe lesbians and gay men as 'gender inverted' (Kite & Deaux, 1987, but see also Deaux & Lewis, 1984; Simon, 1998; Taylor, 1983); the categories 'gay', 'lesbian', and 'trans people' may be confused for some non-trans heterosexual people.

We assessed the relationship between heterosexism, opposition to trans persons' rights, and several variables. Heterosexism is generally higher among men (Kite & Whitley, 1998), religious persons (Herek, 1987), persons with no personal contact with sexual minorities (Herek & Capitano, 1996; Pettigrew and Tropp, 2000), and non-psychology

students (Ellis, Kitzinger, & Wilkinson, 2002). Sexual prejudice is also strongly correlated with right-wing authoritarianism (RWA, Altemeyer, 1988; Whitley, 1999). We predicted that opposition to trans persons' civil rights would be similarly related to these demographic and attitudinal variables.

Relationships between opposition to trans persons' civil rights and beliefs about gender were also assessed. First, we constructed a *beliefs about gender* scale that operationalized Garfinkel's (1968) claims about the 'natural attitude' or default assumptions about gender that operate in Western culture. These beliefs revolve around the assumptions that membership in a sex category is derived from physical facts about genitals and that there are only two legitimate categories of sex. Garfinkel (1968) argued that such default assumptions were moralizing as well as descriptive (see also Kessler & McKenna, 1978; Parlee, 1996; Speer, in press). We predicted that people who endorsed such beliefs would be less likely to support trans persons' civil rights.

Relationships between opposition to civil rights and ontological beliefs about gender were approached in a more exploratory manner. Heterosexism is strongest among heterosexuals who consider sexual orientation to be changeable, yet also a fundamental basis for categorizing people (Haslam & Levi, in press; Haslam, Rothschild, & Ernst, 2002; Hegarty, 2002; Hegarty & Pratto, 2001). Yet relationships between prejudice and essentialist beliefs vary between domains and cannot be easily generalized between them (Haslam et al., 2002). We constructed a measure of *beliefs about transsexuality* loosely based on Hegarty and Pratto's (2001) measure of beliefs about sexual orientation, and explored the relationship between essentialist beliefs about prejudice toward trans people.

Method

Participants. 87 women, 58 men and 6 participants who did not identify their gender participated (mean age 22.0, age range = 19 to 54 years). Participants were students of psychology (n = 90) and engineering (n = 61). Engineers received raffle tickets in return for participation. Participants were nationals of Britain (n = 98), other European countries (n = 19), Asian countries (n = 22), Australasian countries (n = 1), African countries (n = 1), South American countries (n = 1), and North American countries (n = 1) or undisclosed countries (n = 8). Participants described their ethnicity as White (n = 83), Chinese (n = 20), Greek (n = 8), Asian Indian (n = 8), Tamil (n = 4), Black (n = 4), European (n = 3), Mixed race (n = 20) and Middle Eastern (n = 1). Many more of the psychologists than engineers were British (91%, 33% respectively), White (85%, 24% respectively) and female (82%, 25% respectively). A participant who identified as transsexual was excluded from the analysis.

Materials. Questionnaire booklets including seven multi-item questionnaire measures and additional demographic items were constructed. All questionnaire measures consisted of 7-point Likert items. The *beliefs about gender* scale was presented first (see Table 1 for items). The *beliefs about transsexuality* measure, was presented second (see Table 2 for items). Third, participants rated the similarity of sexual and gender minority groups to each other, using 7-point scales ranging from 1 (strongly dissimilar) to 7 (strongly similar). For example, one item read as follows; *How similar are gay men and male to female transsexuals?* (see Table 3 for items). Fourth, the key measure of *opposition to trans persons rights* was presented. All items described rights that had historically been statutorily denied to trans persons in the UK (See Table 4 for items). The final three measures were standardized prejudice scales; the short form of Herek's (1984, 1993) Attitudes to Lesbians and Gay men scale (ATLG), Swim, Aikin, Hall and Hunter's (1995) Modern Sexism scale (MS) and Altemeyer's (1996) Right-Wing Authoritarianism scale (RWA). ATLG included five items about gay men and five items about lesbians, MS included eight items, and RWA included thirty. High scores for all three measures

indicated higher levels of prejudice. The order of presentation of these three scales was randomized between participants.

Demographic information and contact experiences were assessed next. Participants reported their sexual orientation as *heterosexual, homosexual, bisexual, or none of these* and used forced-choice items to report if they were transsexual, transgendered, or a transvestite. Contact with members of sexual and gender minorities was assessed with five separate items relating to lesbians and gay men, transsexuals, bisexuals, transvestites, and transgendered persons. Each item asked if the participant knew a person with that identity and presented the following forced choice responses; *yes, no, not sure* and *do not understand*. Participants reported their religion with an open-ended measure and answered the item *Do you consider yourself to be a religious person?* using the options *yes, no, to some extent, not sure, and don't understand*. Finally, participants reported their gender, age, nationality, and ethnicity with open-ended items.

Procedure. Participants completed the materials during regular class sessions and were randomly assigned to questionnaire order conditions. Both the psychology and the engineering students were supervised as they completed the questionnaires and subsequently debriefed. Psychology students received an oral presentation on the results one month after they participated.

Results

Below we report the reliability of the published prejudice measures (ATLG, MS, and RWA), principal component analyses of the new measures (beliefs about gender, beliefs about transsexuality, similarity and opposition to trans people's rights), and tests of the hypothesis that opposition to trans persons' rights and heterosexism have similar correlates. Finally, we report a regression model that predicts support for trans persons' rights from both demographic and attitudinal variables. All factor analyses reported below involved examination of unrotated matrices and oblimin rotation with Kaiser normalization where there was more than one significant component. Only measures with Cronbach's $\alpha > .70$ were analyzed (Nunnally, 1978).

Reliability of Published Scales. The relevant ATLQ, MS and RWA items were reverse coded. The ten ATLQ items and thirty RWA items were averaged to form reliable measures of sexual prejudice and authoritarianism (Cronbach's $\alpha = .92, .83$ respectively). The MS scale was unreliable (Cronbach's $\alpha = .68$) and was not analyzed further.

Reliability of New Measures: Beliefs About Gender. A factor analysis of the ten items revealed three components with Eigenvalues 3.47, 1.12, and 1.02 which explained 34.7%, 11.2%, and 10.2% of the variance. Oblimin rotation was performed as described above. Only Item 10 effectively loaded on the third component which was uncorrelated with the first and second components ($r = -.06, -.07$ respectively). When the scale was reanalyzed using only the first nine items, two components emerged with Eigenvalues of 3.39 and 1.08 explained 37.7% and 12.0% of the variance respectively. Oblimin rotation revealed the two components to be correlated, $r = .42$. Since the complete scale was reliable ($\alpha = 0.78$) we retained all nine items as a single measure.

Beliefs about Transsexuality A factor analysis of the twelve items revealed four components with Eigenvalues of 3.17, 1.71, 1.13, and 1.07 which explained 26.4%, 14.2%, 9.4% and 8.9% of the variance respectively. Examination of the scree plot revealed an obvious 'elbow' after the second factor. Only the first two components were analyzed. An oblimin rotation revealed that most items loaded on one of the two components, which were uncorrelated, $r = .07$. Composite scales were formed using items that loaded more heavily than .40 on each scale (see Table 2). The first factor was

labeled *biological gender* and the items that loaded on this factor referred overwhelmingly to beliefs that gender identity always matched biological sex. The second factor was labeled *social gender*; the relevant items referred to the acculturation of gender identity and the possibility of effective sex reassignment. The biological gender scale was internally reliable but the social gender scale was not (Cronbach's $\alpha = .77, .50$ respectively). Consequently, only the former scale was analyzed.

Similarities between Sexual and Gender Minorities. A factor analysis of the similarities items revealed two clear components with Eigenvalues of 4.50 and 2.17 that explained 49.9% and 24.1% of the variance respectively. All items loaded clearly on one of these two unrelated components, $r = .21$ (see Table 3). Items loading on the first factor referred to similarities between homosexuals, cross-dressers, and transsexuals, and items loading on the second factor referred to gender similarities within those groups (see Table 3). Two reliable composite measures of *between group similarity* and *between genders similarity* were constructed from the items that loaded on these two components (Cronbach's $\alpha = .92, .87$ respectively).

Opposition to Trans Persons' Rights. Finally, a factor analysis of the seven items pertaining to trans persons' rights revealed a single component with an Eigenvalue of 4.26 that explained 60.9% of the variance. All items loaded on this component (see Table 4). Items were reverse coded and averaged to form a reliable measure (Cronbach's $\alpha = .89$).

Contact with Sexual and Gender Minorities. For each of the five contact items, 'yes' responses were dummy coded as '1' and all other responses were coded as '0'. Participants who knew either lesbians and gay men (70.7%) or bisexual men and women (46.0%) had lower levels of ATLG than participants who reported no familiarity with sexual minorities, $t(142) = 1.96, p < .05$ ($M_s = 2.74, 3.30$ respectively). Opposition to trans persons' rights were equivalent among these two participant groups, $t < 1$, ($M_s = 3.24, 3.38$ respectively). Far fewer participants knew transsexual (14.0%), transvestite (10.7%) or transgender persons (6.7%). Participants who reported familiarity with at least one gender minority group had lower opposition to trans persons' rights than participants who did not, $t(143) = 2.12, p < .05$ ($M_s = 2.69, 3.38$ respectively). However, the two participant groups did not differ in their levels of heterosexism, $t < 1$, ($M_s = 2.87, 2.84$ respectively).

Religiosity. Responses to the religiosity measure were coded on a three point scale including the responses 'yes' (3) 'to some extent' (2) and 'not sure' 'no' and 'don't understand' (1). More religious persons opposed trans persons' rights more, $r(144) = .39, p < .001$, and were more heterosexist, $r(142) = .40, p < .001$, and more authoritarian, $r(132) = .45, p < .001$.

Predicting Opposition to Trans Persons' Rights. The effects of demographic variables on opposition to trans persons' civil rights were examined using t-tests. Engineers showed greater opposition to civil rights than psychologists, $t(149) = 4.78, p < .001$ ($M_s = 3.93, 2.93$ respectively). Men showed greater opposition than women, $t(144) = 2.82, p < .01$ ($M_s = 3.65, 3.03$ respectively). Non-British participants showed more opposition than British participants, $t(142) = 2.25, p < .05$ ($M_s = 3.67, 3.15$ respectively). Non-White participants showed more opposition than White participants, $t(133) = 1.74, p < .01$ ($M_s = 3.55, 3.12$ respectively).

Similar relationships were observed for heterosexism. Psychologists were less heterosexist than engineers, $t(144) = 6.94, p < .001$ ($M_s = 2.31, 3.87$ respectively). Women showed less heterosexism than men, $t(140) = 2.74, p < .01$ ($M_s = 2.61, 3.28$ respectively). British participants showed less heterosexism than non-British participants, $t(138) = 4.88, p < .0001$ ($M_s = 2.54, 3.77$ respectively). White participants showed less

heterosexism than non-White participants, $t(130) = 4.89, p < .001$ ($M_s = 2.49, 3.77$ respectively).

Opposition to trans persons' rights, ATLG, RWA and natural attitudes to gender were all highly correlated with each other (see Table 5). However, neither measure of similarity was correlated with any of these measures.

Finally, we conducted a regression analysis to determine which demographic and psychological variables predicted unique variance in opposition to civil rights. The analysis included two prejudice measures (i.e., ATLG and RWA), two belief measures (biological gender and attitudes to gender), contact with members of sexual minorities and gender minorities and five demographic variables (participant's academic subject, gender, nationality, ethnicity, and religiosity). The resulting model was highly significant $F(11, 114) = 7.93, p < .001$ and explained much of the variance in the dependent variable (adjusted $R^2 = .38$, see Table 6). Heterosexism, authoritarianism, contact with sexual minorities, and biological gender beliefs all predicted unique variance in opposition to trans persons' civil rights.

Discussion

The present study more found opposition to trans persons' civil rights among men, engineering students, non-White, non-British, religious, authoritarian, and heterosexist participants and those with little previous contact with gender minorities. As these factors also predicted heterosexism both here and in other studies, these point to similarities between prejudice against trans persons and heterosexism. Several of these predictors were substantively correlated, but right-wing authoritarianism, heterosexism, biological gender beliefs and contact with *sexual* minorities all predicted unique variance in opposition to trans persons' civil rights.¹

However, differences in prejudice toward sexual and gender minorities were also evident. Neither prejudice was correlated with perceived similarities between gender and sexual minorities; similarities in prejudice towards sexual and gender minorities does not rest on conceptual confusion between them. There are also important differences between the relationships between prejudice and biological essentialist beliefs in the two domains. Here, more prejudiced participants endorsed items about the biological basis of gender identity. However heterosexist people are more likely to reject than to accept that sexual orientation has a biological basis (Haslam & Levi, in press; Haslam et al., 2002; Hegarty, 2002; Hegarty & Pratto, 2001b). The different might depend upon the practical implications of biological determinism for different minorities. Lesbians and gay men sometimes argue for a biological basis of sexual orientation to show the futility of attempts to change sexual orientations (Whisman, 1994). However, many trans persons rely on sex reassignment, and the belief that gender identity is tied to biological markers of sex or that trans people can be talked out of sex reassignment may undermine the legitimacy of sex reassignment in the minds of some. Thus, both prejudices might be rooted in right wing authoritarian acceptance of, and reliance on, authority to punish those who transgress social norms. However, ill-treatment may look like medical management for some and medical neglect for others. In other words biological determinist beliefs might be correlated with prejudice because they are fitted to the goal of defending and justifying prejudice within particular contexts (Hegarty, 2002; Crandall & Eshleman, 2003) rather than because they are attributional precursors to prejudice (Weiner, Perry, & Magnusson, 1988).

Clearly, this study has limitations which caution the interpretation and generalization of its findings. Like others, we found Swim et al.'s (1994) scale to be unreliable (see e.g., Haslam et al., 2002). Our student sample was of modest size. Attitudes and beliefs were measured, but behaviors and behavioral intentions were not. Our items referred largely to

transsexuals, but we have presumed that they speak to prejudice against a larger category of trans persons. Further studies, particularly vignette and behavioral studies, are required to examine prejudicial actions toward trans persons. We hope our work will be only the first step towards a social psychological analysis of prejudice against trans persons.

Notes.

1. The finding that contact with sexual minorities but not contact with gender minorities emerged as a significant predictor is likely due to the correlation between the two. Participants who had contact with one minority group were disproportionately likely to have contact with the other group, $\chi^2(1, N = 144) = 4.31, p < .05$.

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Table 1: Factor Loadings on the Beliefs about Gender Scale

Item	Component	1	2	3
1. There are only two genders, male or female		.77	-.10	.12
2. Only these two genders are morally acceptable and legitimate in our society		.65	-.18	.39
3. All adults identify as either male or female		.74	-.01	.43
4. If you are either male or female, then you are that gender for all time		.65	-.34	-.52
5. All males have a penis and females all have a vagina		.37	-.22	.63
6. It's just a social norm to assign babies to a gender based on what their bodies are like.		.28	.35	.65
7. Anyone who is not naturally male or female is a 'freak of nature'		.25	-.32	.76
8. If someone says they are changing their gender, they are most likely just making a joke or play acting.		.28	.03	.65
9. Even a person with ambiguous genetalia is still either male or female		.63	.40	.29
10. Possession of a vagina, even one that is man-made through surgery, entitles a person to consider themselves female		-.18	.76	-.16

Note: Highest loading for each component shown in bold. Kaiser-Meyer-Olkin Measure of Sampling Adequacy – 0.79, Significance – $p < .001$

Table 2: Factor Loadings of Items on Trans Persons Beliefs Scale

Item	Biological Gender	Social Gender
Gender is determined by biological factors, such as genes and hormones, before birth.	.63	-.28
Whether a person sees himself/herself as male or female is largely a matter of upbringing.	-.03	.52
Transvestites are people who gain pleasure from cross-dressing.	.40	.14
Transsexuals are basically transvestites who wear the clothes of the opposite sex all of the time.	.35	.54
All mammals have a physical sex, but only humans have a gender identity.	-.07	.73
If someone wants a sex reassignment, their doctor or psychologist can talk them out of it.	.71	-.07
Male to female transsexuals are practically all attracted to men and not to women	.58	.21
Transsexual people are fooling themselves in believing that they, and not their bodies, determine what their gender identity should be.	.82	-.07
There are only three factors that determine gender: internal gonads (e.g. testes), external genetalia (e.g. penis) and chromosomes (i.e. xx – female and xy – male).	.73	-.15
If someone has a sex change operation they have genuinely changed their gender.	-.27	.44
Transsexuals should be tolerated but it is difficult to accept them as 'normal' people.	.24	.52

In countries where sex reassignment surgery is not readily available, nobody worries about their gender identity..51 .09

Note: Loadings for items included in scales are in bold. Kaiser-Meyer-Olkin Measure of Sampling Adequacy – 0.72 Significance – $p < 0.001$

Table 3: Factor Loadings of Items on Similarities Subscale.

Contrasted Groups	Component 1	Component 2
Gay men and Male-to-Female Transsexuals	.85	-.01
Lesbians and Female-to-Male Transsexuals	.85	.03
Drag Queens and Gay Men	.81	.07
Drag Kings and Lesbians	.83	-.06
Drag Kings and Female-to-Male Transsexuals	.84	.06
Drag Queens and Male-to-Female Transsexuals	.87	-.263
Drag Queens and Drag Kings	.02	.87
Lesbians and Gay Men	.00	.90
Male-to-Female and Female-to Male Transsexuals	-.01	.90

Note: Highest loading for each component shown in bold. Kaiser-Meyer-Olkin Measure of Sampling Adequacy – 0.74. Significance – $p < .001$.

Table 4: Factor Loadings on the Support for Trans Persons' Civil Rights Scale

Item	Component
Transsexual people should have the right to...	
have a new passport issued ¹	.90
have a new birth certificate issued ¹	.55
have a new driving license issued ¹	.85
marry someone of the opposite gender from their "new" gender (i.e. the same as their birth gender) ¹	.83
have an existing marriage to a person of the same gender as their "new" gender still recognized after transition ²	.79
be treated in a hospital appropriate to their "new" gender ¹	.81
be detained in a prison appropriate to their "new" gender ¹	.67

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy – 0.83. Significance – 0.00.

¹ Rights which became statutory under the 2004 Gender Recognition Act in the UK.

² Right currently denied to trans persons seeking statutory recognition under the GRA.

Table 5: Correlations of Attitudes, Beliefs and Religiosity by Subject.

	Rights	ATLG	RWA	Belief	Biology	Sim(1)	Sim(2)
ATLG	.60***						
RWA	.54***	.64***					
Belief	.41**	.52***	.44***				
Biology	.51***	.57***	.41***	.63***			
Sim (1)	-.02	.20**	-.09	.12	.22**		
Sim (2)	-.12	-.01	-.01	.20*	.07	.22**	
Rel	.39***	.41***	.45***	.15	.30***	.07	-.12

* $p < .05$, ** $p < .01$, *** $p < .001$,

Note: Rights = Opposition to Transpersons' Rights, Belief = Beliefs about Gender, Biology = Biological Gender, Sim (1) = Between Group Similarity, Sim (2) = Between Gender Similarity, Rel = Religiosity.

Table 6: Regression Model Predicting Opposition to Trans Persons' Civil Rights.

	Standardized β	t
<i>Prejudice Measures</i>		
Right Wing Authoritarianism	.26	2.72**
Attitudes to Lesbians and Gay Men	.20	1.84*
<i>Belief Measures</i>		
Beliefs About Gender	-.02	<1
Biological Gender	.21	2.1*
<i>Demographics</i>		
Academic Subject	.02	<1
Contact with Gender Minorities	-.08	-1.08
Contact with Sexual Minorities	.20	2.63*
Participant Ethnicity	.12	1.62
Participant Nationality	.12	1.67
Participant Gender	.06	<1
Participant Religiosity	.135	1.66

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

Note: Variables were dummy coded as follows; Academic Subject [1 = psychology, 2 = engineering], Participant Ethnicity [1 = White, 2 = non-White], Participant Nationality [1 = British, 2 = Non-British], Participant Gender [1 = Female, 2 = Male].