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Family Rejection as a Predictor of Suicide Attempts and Substance Misuse Among Transgender and Gender Nonconforming Adults

Augustus Klein, MSW[1] and Sarit A. Golub, PhD, MPH[2,3]

Abstract

Purpose: We examined associations between family rejection and risk of suicide attempts and substance misuse among a national sample of transgender and gender nonconforming adults.
Methods: Data were drawn from the National Transgender Discrimination Survey ($N = 6456$). This secondary analysis was restricted to 3458 individuals who self-identified as transgender or gender nonconforming and provided complete data on study variables. We used multivariable logistic regression to examine health risks by level of reported family rejection (low/moderate/high), controlling for relevant sociodemographic characteristics.
Results: Overall, 42.3% of the sample reported a suicide attempt and 26.3% reported misusing drugs or alcohol to cope with transgender-related discrimination. After controlling for age, race/ethnicity, sex assigned at birth, binary gender identity, income, education, and employment status, family rejection was associated with increased odds of both behaviors. Odds increased significantly with increasing levels of family rejection.
Conclusions: Family rejection related to gender identity is an understudied interpersonal stressor that may negatively affect health outcomes for transgender and gender nonconforming individuals. A better understanding of the role of close relationships in both risk and resilience for transgender individuals is critical in the development of effective public health interventions for this community.

Key words: family rejection, substance use, suicide, transgender.

Introduction

A growing body of evidence points to the multitude of challenges affecting the quality of life of transgender individuals, including poverty, violence, incarceration, and routine discrimination in housing, employment, education, and healthcare settings.[1–6] In addition, data suggest that transgender individuals are at particularly high risk for a host of negative health outcomes, including HIV infection, substance misuse, depression, and suicide.[7–15]

Previous research has focused on the association between these negative health outcomes and structural stigma or discrimination, that is, policies, social norms, and behaviors within institutions and social structures—especially within the healthcare system—that are unjust toward transgender people or reduce their access to critical resources.[2,16–19] Past research has also focused on the role of interpersonal stigma or discrimination, that is, specific instances of transphobia, physical violence, or sexual abuse endured by transgender individuals as a result of their gender nonconforming status.[4,5,12,14,17,20–22] Transgender individuals report high rates of both structural and interpersonal discrimination, and both types of stigma have been significantly associated with increased risk for poor health outcomes.[1,3–5,8,9,12,14,17,23]

Less research has focused on family-based stigma and discrimination, that is, specific acts of exclusion or rejection by family members as a result of a transgender individual's gender identity and/or expression. In contrast to the experiences of individuals from many other stigmatized groups (e.g., those who experience discrimination based on race/ethnicity, socioeconomic status, or religion), transgender individuals and their family members do not typically possess a shared

[1]Department of Social Welfare, The Graduate Center of the City University of New York (CUNY), New York, New York.
[2]Basic and Applied Social Psychology PhD Program, The Graduate Center of the City University of New York (CUNY), New York, New York.
[3]Department of Psychology, Hunter College of the City University of New York (CUNY), New York, New York.

stigmatized identity.[24–26] As such, family members of transgender individuals are unable to provide what has been termed ''primary group member'' support, that is, support provided by a significant other who has experienced—and overcome—similar stigma or stressors.[27] Not only do transgender individuals suffer from this lack of primary group member social support but also data suggest that a significant proportion experiences explicit rejection from family members as a result of their gender identity or expression.[17,21,28,29]

Rejection from family members may be hypothesized to have negative effects on health outcomes for transgender individuals for two reasons. First, familial rejection in itself is a stressor that might have negative impacts on mental health, economic security, and resulting health behavior. Second, family rejection deprives transgender individuals of the protective buffering effects that are usually derived from social support from close others.[27,30–33] Transgender individuals who have been rejected by family members may be less resilient to experiences of both structural and interpersonal discrimination in their larger lives.

Despite the potential importance of understanding the impact of family rejection on health outcomes among transgender individuals, little research has been conducted in this area. Research with sexual minority groups, specifically lesbian, gay, and bisexual youth and young adults,[34] has demonstrated that negative familial response toward a child's sexual orientation may contribute to negative health problems, such as depression, suicide, substance use, homelessness, and sexual risk taking. Conversely, studies have also found that family support may be a protective factor against psychological distress among both gender and sexual minorities.[35–37]

This analysis was designed to explore the importance of family rejection experiences for the health of transgender individuals. Using a national sample, we examined two critical health outcomes that are highly prevalent among transgender individuals and are often linked to difficulties in coping with stigma and discrimination: suicide attempts and substance misuse. We examined the association between experiencing family rejection and the odds of each health outcome, controlling for demographic and social factors known to increase their prevalence.

Methods

In 2008, The National Center for Transgender Equality (NCTE) and the National Gay and Lesbian Task Force (now known as the National LGBTQ Task Force) partnered to conduct a cross-sectional survey of transgender discrimination. The National Transgender Discrimination Survey (NTDS)[6] used convenience sampling methods, including community/venue-based and snowball sampling to recruit participants. To ensure broad participation in the survey, ''transgender'' was defined to include individuals who have transitioned or are transitioning from one gender to another, whether medically, socially, and/or legally, as well as individuals who cross-dress, identify as genderqueer or androgynous, or whose gender nonconformity is a part of their identity.

Study participation involved completion of a 20-minute self-administered survey either online (i.e., web-based survey platform) or on paper. No incentives were offered for participation. Recruitment occurred for a period of 6 months (September 2008 through March 2009), and the final sample included 6456 individuals from all 50 states, as well as the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. This secondary analysis of the NTDS was approved by the Institutional Review Board of Hunter College of the City University of New York.

Sample

Of the total NTDS sample ($N=6456$), 5612 respondents (87%) were included in this analysis. Participants were excluded from analysis in this study for two reasons. First, 737 (11% of the NTDS sample) were excluded because they reported that their current primary gender identity was the same as their natal sex, as the present analysis was restricted to individuals currently living either full-time or part-time in a gender different from their sex assigned at birth. Second, 107 individuals (1.6% of the NTDS sample) were removed because they were missing data on either the family rejection variable, or one or both of the health outcome variables.

Participants with missing data on these variables were more likely to be black or Hispanic, have been assigned a male sex at birth, report a high school education or less, and report being unemployed. Given these differences, we analyzed the data with and without using multiple imputation and the results remain unchanged. We report the nonimputed data and address the factors associated with differences in both the Results and Limitations sections.

Measures

Lifetime history of suicide attempts. Participants were asked whether they had ever attempted suicide (yes/no).

Substance misuse. Participants were asked whether they had ever misused drugs and alcohol to cope with transgender-related discrimination (yes/no).

Family rejection. Participants were asked to respond to seven 'yes-or-no' items designed to assess their family's response to their coming out as transgender/gender nonconforming: (1) ''My relationship with spouse or partner ended''; (2) ''My ex limited or stopped my relationship with my children''; (3)''My children chose not to speak with me or spend time with me''; (4) ''My parents or family chose not to speak with me or spend time with me''; (5)''I was a victim of domestic violence by a family member''; (6) ''My family is as strong today as before I came out''; and (7)''My relationships are slowly improving after coming out.'' Items were chosen to reflect past research on specific instances of family rejection among sexual and gender minorities.[28,29,34,37]

For analysis, the last two items were reverse coded and then items were summed to create a family rejection sum score, with higher numbers indicating a greater number of endorsed experiences of family rejection. Due to a nonnormal distribution of the sum scores (skewness = 0.934 [$SE=0.031$]); (kurtosis = 0.240 [$SE=0.061$]), participants were coded into three face-valid categories[38]: ''low rejection'' (scores 0–1, indicated experiencing no rejection or only

one kind of rejection); ''moderate rejection'' (scores 2–3, indicated experiencing two or three types of rejection); and ''high rejection'' (scores 4–7, indicated experiencing four or more kinds of rejection).

Demographics. Demographic characteristics included age, race/ethnicity, income, education, employment status, and sex assigned at birth (male or female). To respect the variety of gender identities held by our current sample, we also coded participants as either gender binary or nonbinary. Individuals were considered nonbinary if they reported (1) living part-time as one gender and part-time as another gender, (2) identifying as gender nonconforming or genderqueer as opposed to male or female; or (3) not identifying as any of the gender categories listed on the survey.

Data analysis

All analyses were conducted using IBM SPSS Statistics, Version 22.0 (IBM Corp. Armonk, NY). First, we conducted bivariate logistic regression to establish associations between each of the health outcomes (suicide attempts and substance misuse) and both demographic variables and family rejection. Because of the significant association between family rejection and both health outcomes at the bivariate level, we also examined demographic differences among participants by level of reported family rejection using chi-square.

We then used multivariable logistic regression to obtain adjusted odds ratios (AORs) in predicting health outcomes. Demographic variables were included in multivariate models if they were significantly associated with either the health outcome or family rejection at $P < 0.05$ in bivariate analyses. The AORs for family rejection in the multivariate models therefore represent the variable's effect on health outcomes after adjusting for other covariates.

Results

Sociodemographic characteristics of the sample are presented in Table 1, along with their bivariate associations with each of the health outcomes. The sample ranged in age from 18 to 98 ($M = 36.69$, $SD = 13.11$) with more than half having been assigned a male sex at birth (61%). A little more than one-third of the sample (36%) reported a nonbinary gender identity. The sample was largely white, well educated, and employed. A little more than half the sample (54.3%) reported experiencing little or no family rejection; 31.3% reported moderate family rejection (i.e., experiencing two to three types of family rejection) and 14.3% reported high family rejection (i.e., experiencing four or more types of family rejection).

Correlates of family rejection

Table 2 presents sociodemographic correlates of reporting low, moderate, or high levels of family rejection in this sample. Individuals reporting high levels of family rejection were more likely to be older, were born male, and have a binary gender identity. Higher levels of family rejection were also associated with lower income and being unemployed. There was no significant association between reported experiences of family rejection and either race/ethnicity or education.

Factors associated with attempted suicide

A little less than half the participants (42.3%) reported having attempted suicide. In bivariate analyses, higher odds of suicide attempts were associated with a younger age, a binary gender identity, nonwhite race/ethnicity, lower education and income, and being unemployed. Reports of both moderate and high levels of family rejection were also associated with greater odds of attempted suicide.

We then ran an adjusted multivariable model, including all covariates that were significantly associated ($P < 0.05$) with attempted suicide or family rejection in bivariate analyses. All variables remained significant, including family rejection. In the multivariate model, moderate levels of family rejection were associated with almost twice the odds of attempted suicide, and high levels of family rejection were associated with almost three and a half times the odds of attempted suicide.

Factors associated with alcohol or drug misuse

Almost a third of the sample (26.3%) reported misusing alcohol or drugs to cope with transgender discrimination. In bivariate analyses, being 45 years of age or older and male at birth were associated with lower odds of substance misuse. Higher odds of substance misuse were significantly associated with a nonwhite race/ethnicity, a binary gender identity, and lower education and income. Higher odds of substance misuse were also associated with moderate and high levels of family rejection.

We then ran an adjusted multivariable model, including all covariates that were significantly associated ($P < 0.05$) with substance misuse or family rejection in bivariate analyses. Being 45 years of age or older, Hispanic, male at birth, and reporting a lower income remained significant in multivariate models, but binary gender identity and education did not. Moderate (AOR = 1.66; 95% confidence interval [CI] = 1.44, 1.91) and high (AOR = 2.50; 95% CI = 2.08, 2.98) levels of family rejection remained significant predictors of substance misuse.

Discussion

This study is the first, to our knowledge, to examine the association between family rejection and negative health outcomes among a national sample of transgender and gender nonconforming persons. Most studies on transgender health address the negative consequences of discrimination by nonclose others (e.g., strangers, healthcare workers), institutions, or social systems. In contrast, this study explores the associations between family-based stigma and discrimination with health risks for transgender individuals.

After adjusting for sociodemographic factors, having experienced high levels of family rejection was associated with almost three and half times the odds of suicide attempts and two and a half times the odds of substance misuse, compared to those who experienced little or no family rejection. Having experienced only moderate levels of family rejection was associated with almost twice the odds of suicide attempts and over 1.5 times the odds of substance misuse. These findings suggest the importance of investigating and addressing stigmatization experienced by transgender persons by close others, not only by broader society, structures, and systems.

The present study was not designed to test the mechanisms by which familial rejection may be associated with negative

Table 1. Factors Associated with Attempted Suicide and Substance Misuse Among a National Sample of Transgender/Gender Nonconforming Individuals

		Attempted suicide (n=*2376, 42.3%)*		*Alcohol or drug misuse* (n=*1488, 26.3%)*	
	Total sample, n *(%)*	*OR (95% CI)*	*AOR*[a] *(95% CI)*	*OR*	*AOR*[a] *(95% CI)*
Age, years					
18–24	940 (17.6)	1.02 (0.88, 1.18)	0.99 (0.84, 1.16)	1.06 (0.90, 1.24)	1.00 (0.85, 1.19)
25–44	2768 (51.9)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
≥45	1627 (30.5)	0.65 (0.57, 0.73)***	0.68 (0.59, 0.79)***	0.66 (0.58, 0.76)***	0.69 (0.58, 0.80)***
Race/ethnicity					
Non-Hispanic white	4328 (77.5)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
Non-Hispanic black	324 (5.8)	1.49 (1.19, 1.87)**	1.15 (0.89, 1.48)	1.56 (1.22, 1.98)***	1.27 (0.98, 1.65)
Hispanic	289 (5.2)	1.57 (1.23, 1.99)***	1.36 (1.05, 1.77)*	1.79 (1.40, 2.29)***	1.58 (1.20, 2.07)**
Multiracial/other	646 (11.6)	1.56 (1.32, 1.84)***	1.34 (1.12, 1.61)**	1.34 (1.13, 1.62)**	1.14 (0.94, 1.39)
Sex assigned at birth					
Female	2197 (39.2)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
Male	3406 (60.8)	0.79 (0.71, 0.88)***	0.76 (0.67, 0.86)***	0.84 (0.74, 0.95)**	0.85 (0.74, 0.98)*
Binary gender identity					
Yes	3582 (64.1)	1.47 (1.31, 1.64)***	1.27 (1.12, 1.44)***	1.16 (1.02, 1.31)*	0.99 (0.86, 1.13)
No	2003 (35.9)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
Education					
High school or less	689 (12.3)	1.45 (1.23, 1.70)***	1.34 (1.11, 1.61)**	1.27 (1.07, 1.52)**	1.14 (0.94, 1.39)
Some college or more	4915 (87.7)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
Annual income					
0–$19,999	1525 (27.8)	2.00 (1.77, 2.25)***	1.56 (1.36, 1.80)***	1.63 (1.43, 1.86)***	1.38 (1.20, 1.59)***
≥$20,000+	3954 (72.2)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
Employment					
Unemployed	1690 (30.2)	1.53 (1.36, 1.72)***	1.29 (1.13, 1.48)***	1.10 (0.97, 1.26)	
In the workforce	3907 (69.8)	1.00 (ref)	1.00 (ref)	1.00 (ref)	
Family rejection:					
Low	3050 (54.3)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
Moderate	1758 (31.3)	2.03 (1.80, 2.29)***	1.96 (1.72, 2.22)***	1.70 (1.49, 1.94)***	1.66 (1.44, 1.91)***
High	804 (14.3)	3.20 (2.72, 3.76)***	3.34 (2.80, 3.99)***	2.37 (2.00, 2.80)***	2.50 (2.08, 2.98)***

[a]The model controlled for factors significantly associated with either the health outcome or family rejection at the bivariate level.
*$P < 0.05$.
**$P < 0.01$.
***$P < 0.001$.
AOR, adjusted odds ratio; CI, confidence interval; OR, odds ratio.

Table 2. Demographic Differences Among Transgender/Gender Nonconforming Individuals by Level of Reported Family Rejection

	Low rejection, n *(%)*	*Moderate rejection,* n *(%)*	*High rejection,* n *(%)*	χ^2
Total	3050 (54.3)	1758 (31.3)	804 (14.3)	
Age, years				110.75***
18–24	557 (59.3)	302 (32.1)	81 (8.6)	
25–44	1517 (54.8)	910 (32.9)	341 (12.3)	
≥45	778 (47.8)	493 (30.3)	356 (21.9)	
Race/ethnicity				6.30
Non-Hispanic white	2370 (54.8)	1343 (31.0)	615 (14.2)	
Non-Hispanic black	164 (50.6)	104 (32.1)	56 (17.3)	
Hispanic	166 (57.4)	85 (29.4)	38 (13.1)	
Multiracial/other	337 (52.2)	219 (33.9)	90 (13.9)	
Sex assigned at birth				131.12***
Female	1329 (60.5)	696 (31.7)	172 (7.8)	
Male	1715 (50.4)	1061 (31.2)	630 (18.5)	
Binary gender identity				177.38***
Yes	1724 (48.1)	1221 (34.1)	637 (17.8)	
No	1309 (65.4)	531 (26.5)	163 (8.1)	
Education				0.40
High school or less	379 (55.0)	209 (30.3)	101 (14.7)	
Some college or more	2665 (54.2)	1549 (31.5)	701 (14.3)	
Annual income				23.62***
0–$19,999	747 (49.0)	516 (33.8)	262 (17.2)	
≥$20,000+	2206 (55.8)	1219 (30.8)	529 (13.4)	
Employment				8.34*
Unemployed	889 (52.6)	525 (31.1)	276 (16.3)	
In the workforce	2154 (55.1)	1228 (31.4)	525 (13.4)	

*$P < 0.05$.
***$P < 0.001$.

health outcomes for transgender individuals. As noted in the introduction to this article, familial rejection may be a stressor in and of itself, leading to negative health outcomes.[34] Alternatively (or synergistically), family rejection may deprive transgender individuals of the emotional or logistical social support that provides other stigmatized individuals with a buffer in the face of stressful circumstances.[27,30,32]

Data from this project suggest the potential for both mechanisms. In the largest study of transgender individuals, ~41% reported attempting suicide.[6] Among individuals reporting moderate or high levels of family rejection in our sample, this percentage was significantly higher (50% and 61%, respectively); however, among those who reported low or no family rejection experiences, this percentage was significantly lower (33%).

These data suggest that family acceptance (or the absence of family rejection) may have a protective effect for transgender individuals. Considerable research has documented that meaningful relationships with family, friends, and others are associated with increased psychological well-being, health promoting behaviors, and better physical health, whereas social isolation is a risk factor for morbidity and mortality.[31,33,35,39–42] More research is needed into both risk and resilience among transgender populations as well as research on the potential role of increasing family acceptance in promoting health and well-being in this vulnerable population.

Our findings are consistent with past literature on the importance of socioeconomic factors (income, education, and employment) in terms of risk for negative health outcomes.[1,5,17,22,23] These data underscore the importance of structural and societal interventions that reduce discrimination and increase educational and economic opportunities for transgender individuals. It is important to note that having a binary gender identity was significantly associated with greater odds of suicide attempts, but not substance misuse. A binary gender identity was also associated with greater likelihood of experiencing moderate or high levels of family rejection. Most studies of the transgender community compare transgender women (male to female) to transgender men (female to male) without accounting for a binary or nonbinary gender identity.[13,14] As such, there is little existing research examining the psychological, social, and behavioral risk factors for nonbinary identified transgender and gender nonconforming individuals.

Although it is possible that some nonbinary individuals are consciously choosing a more ambiguous gender presentation to lessen the stigma or maintain some degree of tolerance or acceptance from family, it is important not to discount the experiences of individuals for whom a nonbinary gender presentation is an authentic representation of their identity. Future research is needed to better understand within-group differences for individuals along both the transmasculine and transfeminine spectrum (i.e., binary vs. nonbinary), rather than solely focusing on health outcomes that distinguish transgender women from transgender men.

Limitations

Several limitations are important to consider when interpreting these findings. First, the NTDS used sampling techniques

that were not random and included a homogenous study population that was largely white, educated, and employed, thus limiting the generalizability of our findings. Second, the cross-sectional nature of the data did not allow us to determine any causal relationship between family rejection and the negative health-related outcomes. Third, and relatedly, we do not have any information about the time frame within which family rejection occurred, including what precipitated the event(s), the severity of the rejection, or whether this changed over time. Therefore, we do not know how these factors might have influenced our results. Future research must include the collection of more specific, longitudinal data on this population to better understand the relationship between family rejection and health-related outcomes.

Fourth, ~1.6% (107 of 6456) of NTDS participants were not included in the analysis because they did not respond to the predictor and/or outcome variables used in our model. Participants with missing data were more likely to endorse demographic characteristics that were associated with family rejection and negative health outcomes in bivariate analyses. To address the issue of missingness, research strategies are needed to ensure that survey questions accurately reflect the experiences of vulnerable communities and are acceptable enough to ensure full participation.

Fifth, all measures in the NTDS were developed specifically for this survey. Lack of validated measures could have resulted in misclassification of information and noncomparability of data to other studies that have standardized instruments. Last, given the high risk for negative social, emotional, and physical health outcomes among transgender people of color and the homogeneity of the NTDS, extra attention needs to be paid to increase participation and involvement in research among this community. It is critical to design research projects and data collection strategies that increase the potential for proportionate participation among potentially vulnerable populations.

Conclusions

Despite these limitations, this is the largest sample of transgender individuals enrolled to date and provides vital information to guide the efforts of public health officials, mental health and social service providers, researchers, and policymakers. The implications of these results are important for developing interventions and services for transgender and gender nonconforming individuals and their families. If family rejection is found to be a contributing factor toward the negative health-related consequences faced by this population, service providers could help to identify potential avenues for intervention.

These findings suggest that providers serving the transgender community consider the role of families when assessing a transgender person's social, emotional, and physical health.[35] Providing emotional and informational support to families may help make a critical difference in decreasing the risk and increasing well-being for transgender individuals. Future research is needed to examine for the protective factors associated with both social and familial support that may assist in mitigating the negative effects of the structural and institutional discrimination and violence experienced by transgender people.

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Author Disclosure Statement

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Address correspondence to:
Augustus Klein, MSW
Department of Social Welfare
The Graduate Center of the City
University of New York (CUNY)
365 5th Avenue
New York, NY 10016

E-mail: gklein@gradcenter.cuny.edu