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The role of gender affirmation in psychological well-being among transgender women

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Abstract

High prevalence of psychological distress, including greater depression, lower self-esteem, and suicidal ideation, has been documented across numerous samples of transgender women and has been attributed to high rates of discrimination and violence. According to the gender affirmation framework (Sevelius, 2013), access to sources of gender-affirmative support can offset such negative psychological effects of social oppression. However, critical questions remain unanswered in regards to how and which aspects of gender affirmation are related to psychological well-being. The aims of this study were to investigate the associations between three discrete areas of gender affirmation (psychological, medical, and social) and participants' reports of psychological well-being. A community sample of 573 transgender women with a history of sex work completed a one-time self-report survey that assessed demographic characteristics, gender affirmation, and mental health outcomes. In multivariate models, we found that social, psychological, and medical gender affirmation were significant predictors of lower depression and higher self-esteem while no domains of affirmation were significantly associated with suicidal ideation. Findings support the need for accessible and affordable transitioning resources for transgender women in order to promote better quality of life among an already vulnerable population. As the gender affirmation framework posits, the personal experience of feeling affirmed as a transgender person results from individuals' subjective perceptions of need along multiple dimensions of gender affirmation. Personalized assessment of gender affirmation may thus be a useful component of counseling and service provision for transgender women.

Keywords

transgender women; gender affirmation; psychological well-being

Transgender women (i.e., individuals assigned a male sex at birth who identify as female, male-to-female, transgender women) are a group at elevated risk of adverse health outcomes (Institute of Medicine, 2011). Numerous studies have reported higher prevalence of psychological distress, including depressive symptoms, low self-esteem, and suicidal ideation in community samples of transgender women (MacCarthy, Reisner, Nunn, Perez-Brumer, & Operario, 2015; Operario & Nemoto, 2010). Due to their gender identity or expression, transgender people experience high levels of gender-based social oppression, or transphobia, including everyday discrimination, family rejection, and hate crimes (Bazargan & Galvan, 2012; Bradford, Reisner, Honnold, & Xavier, 2012; Koken, Bimbi, & Parsons, 2009; Lombardi, Wilchins, Priesing, & Malouf, 2002; Nuttbrock et al., 2010). Scholars have proposed that adverse mental health outcomes in transgender populations are a result of this gender-specific social oppression (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; Goldblum et al., 2012; Haas et al., 2010; Hendricks & Testa, 2012; Nuttbrock et al., 2013; Reisner, Gamarel, Dunham, Hopwood, & Hwahng, 2013). Additionally, the traditional sexism and denigration against women and individuals demonstrating characteristics deemed feminine (i.e. misogyny) has also been shown to be associated with greater risk for violence and psychological distress (Forbes, Adams-Curtis, Pakalka, & White, 2006; Szymanski, Gupta, Carr, & Stewart, 2009). This confluence and intersection of oppressions, i.e., transmisogyny, potentially exacerbates mental health risk for transgender women. Indeed, surveys of diverse community samples of transgender women have documented associations between discrimination, depressive symptoms, self-esteem, and suicidal ideation (Bauer, Scheim, Pyne, Travers, & Hammond, 2015; Bockting et al., 2013; Gamarel, Reisner, Laurenceau, Nemoto, & Operario, 2014; Nemoto, Böderer, & Iwamoto, 2011; Reisner et al., 2015). Some research has suggested that experiences of discrimination among transgender women may lead to greater HIV-risk behaviors (e.g. condomless sex) due to a desire to feeling validated vis-à-vis their sexual partnerships with men (Melendez & Pinto, 2007; Nemoto, Operario, Keatley, Han, & Soma, 2004; Rodríguez-Madera & Toro-Alfonso, 2005).

Research on the health of transgender women generally emphasizes risk outcomes and vulnerabilities, with few studies on resilience among transgender women (MacCarthy et al., 2015). Examining factors that promote resilience and well-being among transgender women is important to contribute a strengths-based discourse to the literature, which currently focuses primarily on deficits in this community. The concept of 'gender affirmation' has been proposed as a way to understand factors that can protect and buffer transgender women from the deleterious psychological consequences of discrimination. According to Sevelius (2013), gender affirmation is the process by which transgender individuals have interactions with their environment that recognize and value their gender expression. The gender affirmation framework (Sevelius, 2013) proposes that social oppression increases psychological distress and decreases access to gender affirmation among transgender populations. Further, psychological distress increases the need for gender affirmation. The gender affirmation model posits that when a transgender woman's need for gender affirmation is high but her access to this type of affirmation is low, she will seek out opportunities to receive this affirmation. Sources of gender affirmation may include support from peers and family or services provided by transgender-sensitive providers and

Rostosky, McCants, & Pascale-Hague, 2011), but also is associated with reduced anxiety and depression, and with greater life satisfaction (Bockting et al., 1998; Kozee et al., 2012). Thus, psychological affirmation may be an important resource to focus on as a protective factor against poor psychosocial outcomes among transgender individuals.

The current study is a secondary analysis of a larger study that aimed to investigate the determinants of drug and hormone use and HIV risk and protective behaviors among transgender women with a history of sex work, and to examine disparities among racial/ethnic subgroups. Research suggests that a large proportion of transgender women engage in sex work due to systematic (e.g. employment) discrimination and social stigma, and that transgender identity and sex work may have synergistic effects on health risk outcomes including HIV and substance use (Operario, Soma, & Underhill, 2008). Although the literature has shown the broader transgender community to be at risk for poor mental health, psychological problems may be even further exacerbated among transgender women who engage in sex work.

Given the potential importance of increasing access to gender affirmative services in order to promote the health of transgender people in general, critical questions remain unanswered in regards to the relative contribution of different types of gender affirmation to support psychological well-being among transgender women. The purpose of this study was to investigate the associations between discrete types of gender affirmation - medical affirmation, familial social affirmation, and psychological affirmation - and psychological well-being among a sample of transgender women.

Methods

Participants and Procedures

Participants were 573 transgender women with a history of sex work recruited from the San Francisco bay area to participate in a one-time survey study of HIV, substance use, and health risk factors among transgender women who engage in sex work. Inclusion criteria were as follows: 1) self-reported gender identity as transgender or transsexual woman; 2) 18 years of age or older; 3) self-identified as African American, Asian/Pacific Islander (API), Latina, or White; and 4) self-reported exchange of sex for money or drugs at some time in the past month. The study consisted of two cohorts recruited independently: 1) 332 transgender women (112 African Americans, 110 APIs, and 110 Latinas) who were recruited in San Francisco, California between November 2000 and July 2001; and 2) 241 transgender women (118 White transgender women recruited in San Francisco and 123 African American transgender women recruited in Oakland, California) who were recruited between August 2004 and July 2006. The latter cohort was recruited to increase the size and diversity of the analytic sample. Participants were recruited through purposive sampling by identifying community spaces and venues where transgender women congregate (e.g., community-based organizations, bars, and nightclubs) and posting flyers. After obtaining informed consent, participants completed a one-time structured questionnaire, which lasted approximately one hour. Participants received financial compensation for their time, a safe-sex kit, and a resource guide for transgender persons that listed community resources and

services. All study procedures received Institutional Review Board approval (for details see: REMOVED FOR BLINDING)

Measures

Psychological Well-being—We included three measures of psychological well-being. First, depressive symptoms was assessed with the 20-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977; study $\alpha = .95$), which measures the frequency of past week depressive symptoms. Second, self-esteem was assessed with the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965; study $\alpha = .87$), which is a 10-item assessment measuring global self-worth on a 5-point Likert scale. For this sample, the scale ranged from 0–50 with greater scores suggesting higher self-esteem. Finally, lifetime suicidal ideation was assessed with a single dichotomous (yes/no) item (“*Have you ever thought about committing suicide?*”).

Psychological gender affirmation: Gender comfort—Comfort with one’s gender was assessed using a single-item (“*How comfortable do you feel about your gender at this time?*”) measured on 7-point Likert scale ranging from 1 (*Very uncomfortable*) to 7 (*Very comfortable*). Responses ranged from 1 to 7 with higher scores indicated greater comfort with one’s gender.

Medical gender affirmation: gender affirming surgery/hormone use—Although not desired or needed by all transgender individuals, for this study we used two constructs as indicators of medical affirmation. These constructs were assessed with two single dichotomous (yes/no) items indicating if an individual had: 1) undergone any type of gender affirmative surgery (“*Have you had any sexual reassignment procedures?*” e.g. breast augmentation, vaginoplasty, Adam’s apple reduction, hip enlargement, facial plastic surgery) and 2) currently using any hormones (“*Are you currently using hormones?*”).

Social gender affirmation: Family support—The satisfaction with familial social support scale (study $\alpha = .84$) consisted of 5 items (example item: “*During the last 30 days, how much more help would you have liked from family members to help you do things?*”) with response options including 1 (*A lot more*), 2 (*A little more*), and 3 (*It was about right*). Responses were averaged with higher scores indicating more satisfaction with social support (for measure details see: REMOVED FOR BLINDING).

Data Analysis Plan

All analyses were executed in SAS 9.4 (SAS Institute Inc, 2013). Descriptive statistics were obtained for all variables included in the analyses, including the distribution of scale scores, with appropriate tests for normality which indicated all variables were normally distributed. Next, we examined bivariate associations between aspects of gender affirmation and indicators of psychological well-being (Chi-Squares, t-tests, Pearson correlations, and ANOVAs). Finally, we fit a series of multiple linear regression models to examine: 1) psychological, medical, and familial social gender affirmation as predictors of continuous psychological well-being outcomes (depressive symptoms and self-esteem). A logistic regression model was fit to examine the same predictors and the binary psychological well-

being outcome of lifetime suicidal ideation. Age, ethnicity, and HIV status were included as covariates in all regression models. Results of regression models are reported as Adjusted Odds Ratios (aORs) with 95% Confidence Intervals (CIs) for lifetime suicidal ideation, and the unstandardized coefficients (b) for depressive symptoms and self-esteem. The alpha level for significance was set to .05 (two-tailed) for each analysis.

Results

Sample Description and Bivariate Analyses

Table 1 presents the study sample characteristics. Table 2 presents bivariate associations between demographic factors, each indicator of gender affirmation, and aspects of psychological well-being. There were significant group differences in race/ethnicity on self-esteem and depressive symptoms. Follow-up pairwise comparisons using Tukey's HSD test ($p < .05$) indicated that API women reported significantly higher self-esteem than all racial/ethnic groups, and Black women reported significantly higher self-esteem than Latinas. Additional follow-up pairwise comparisons using Tukey's HSD test ($p < .05$) indicated that API women had significantly lower depressive symptoms than all other racial/ethnic groups and Black women had significantly lower depressive symptoms compared to their White and Latina counterparts. There was also a significant race/ethnicity difference in suicidal ideation. In addition, transgender women who reported lifetime suicidal ideation were significantly older compared to those who reported never experiencing suicidal ideation.

There was a significant difference in depressive symptoms and self-esteem between HIV-negative/unknown and HIV-positive participants, such that the HIV-negative/unknown individuals had lower depressive symptoms and higher self-esteem. Similarly, there was a significant difference between those that had any gender affirming surgery and those that had not, such that those reporting any surgery had lower depressive symptoms and higher self-esteem. Further, transgender women endorsing current hormone use had significantly higher self-esteem than their non-using counterparts but had no difference in depressive symptoms. There were significant positive correlations between both psychological and familial social affirmation and self-esteem, as well as significant negative correlations between both psychological and familial social affirmation and depressive symptoms. Those who reported lifetime suicidal ideation had significantly lower levels of psychological and familial social affirmation than those who did not report lifetime suicidal ideation. There were no significant group differences among HIV-status, surgery status, or hormone use regarding endorsing suicidal ideation or not.

Multivariate Models Examining Gender Affirmation and Psychological Well-being

Table 3 presents multivariate regression models predicting each of the three indicators of psychological well-being. In regards to depressive symptoms, greater satisfaction with family support, greater gender comfort, and API race/ethnicity (compared to White) were each independently associated with lower levels of depressive symptoms, adjusting for covariates. In regards to self-esteem, higher levels of familial social support, greater gender comfort, having had any affirmative surgeries, and API race/ethnicity (compared to White) were each independently associated with greater levels of self-esteem, adjusting for co-

variates. No gender affirmation predictors were significantly associated with endorsing lifetime suicidal ideation; however, greater levels of family support was marginally associated with a reduced adjusted odds of reporting lifetime suicidal ideation. Self-identifying as Latina and API were both significantly associated with a reduced adjusted odds of reporting lifetime suicidal ideation compared to white transgender women; older age was associated with an increased adjusted odds of endorsing lifetime suicidal ideation.

Discussion

The concept of gender affirmation (Sevelius, 2013) offers a compelling framework to understand processes that can reinforce the identities and promote the health of transgender individuals. The current study contributes to the empirical evidence to this framework. Although this framework and past studies have examined social, legal, and medical gender affirmation, we proposed and found that another facet, psychological gender affirmation, is also critical to the well-being of transgender populations. Furthermore, this is among the first known studies attempting to disaggregate and quantify these unique components of gender affirmation among transgender women.

Findings in this study provided support for the importance of attending to multiple aspects of gender affirmation in order to promote the psychological well-being of transgender women, including medical, psychological, and social processes that acknowledge transgender identities. As hypothesized, we found that different types of gender affirmation served independently as protective factors for maintaining higher levels of psychological well-being. Specifically, we found that psychological and familial social types of affirmation each had independent associations with both lower depression and higher self-esteem, whereas medical affirmation was moderately associated with only self-esteem, adjusting for co-variables. After including the affirmation variables in the model, the previously significant bivariate associations between mental health and HIV status, Black race/ethnicity, and Latina race/ethnicity were no longer significant, suggesting that gender affirmation plays an important role in reducing mental health problems for transgender women of color and HIV-positive transgender women. Race/ethnicity has been shown in multiple studies to be associated with suicide attempts among transgender individuals (Haas, Rodgers, & Herman, 2014). However, the literature has shown mixed findings, with some studies reporting that White transwomen have higher prevalence of suicide attempts (Clements-Nolle, Marx, & Katz, 2006; Kenagy & Bostwick, 2005) and others reporting that transwomen of color have a higher prevalence of suicide attempts (Goldblum et al., 2012). Reasons for these differences across studies are unclear, and may be due to sample-specific variability. Examining differences by specific race and ethnicity groups is an area for further research.

Recognizing and addressing the importance of the internal psychological gender affirmative domain may help to build a strong foundation for coping with the social oppression many transgender women experience. Pachankis (2014) recently developed an intervention for gay and bisexual men to address minority stress regarding discrimination, mental health, and other health risks. This intervention addresses the propensity for some gay and bisexual men to internalize a deviant or inferior identity leading to negative self-views, and helps these men to restructure negative self-views and use self-affirming exercises. Preliminary results

have shown a reduction in depressive symptoms, anxiety, and condomless sex (Pachankis, Hatzenbuehler, Rendina, Safren, & Parsons, 2015). In light of our current finding that psychological affirmation is important, similar intervention development research is needed to help transgender women establish positive self-views and comfort with oneself as a protective factor against internalized transphobia. Most recently, pilot work for an intervention aiming to reduce internalized stigma among transgender men revealed high feasibility and acceptability (Reisner et al., 2016). Hendricks and Testa (2012) proposed a conceptual framework for clinical work with transgender individuals promoting acknowledging and targeting internalized transphobia within clinical work. Additionally, Puckett and Levitt (2015) reviewed the experience of internalized stigma among transgender individuals in the context of therapeutic guidelines for clinical implications. Although frameworks, clinical implications, and studies examining risk and protective factors are most significant and needed in this area, developing interventions and programs similar to the above mentioned are important immediate next steps.

Findings reported here extend previous research on the mental health implications of gender-affirming social support and medical services for transgender women. Notably, prior research by Nuttbrock et al. (2009) found that gender-identity affirmation was more likely to happen in achieved relationships (i.e. friends) than in ascribed relationships (i.e. parents). Our findings suggest that supportive family members can contribute to higher mental health. Moreover, we found that medical affirmation was only marginally significant with mental health, such that gender-related surgery was associated with lower self-esteem whereas hormone use was not associated with any mental health indicators. This pattern of findings corresponds with mixed findings in the literature related to the association of medical affirmation with negative mental health outcomes (Barrett, 1998; Dhejne et al., 2011) as well as positive outcomes (de Vries et al., 2014; Wilson et al., 2015).

Findings highlight a need for multilevel interventions to address mental health inequities and other health problems that disadvantage transgender women (Operario & Nemoto, 2010; Yang, Manning, van den Berg, & Operario, 2015). Promoting only one type of gender affirmation these may have limited impact. For instance, programs for transgender women that provide guidance about medical affirmation but that do address difficult social contexts or family issues may overlook the everyday life experiences that shape the mental health of transgender women (Levitt & Ippolito, 2014). Furthermore, prioritizing medical affirmation over other affirmation needs may unintentionally increase pressure for some transgender women to engage in risky behaviors such as self-surgery or use of non-prescribed cross-sex hormones purchased from unauthorized sources, especially in the context of limited finances and access to medical resources (Mepham, Bouman, Arcelus, Hayter, & Wylie, 2014; Rotondi et al., 2013). Notably, in a comparison of pre- versus post-operative transgender individuals, Barrett (1998) found higher levels of depression among the post-operative group, which was attributed to having unrealistic expectations regarding surgery outcomes. Thus, gender affirmation is better conceived of as a holistic process that addresses not only medical transitioning but psychological and social facets of gender identity and expression.

Although this is among the first known studies attempting to disaggregate and quantify unique components of gender affirmation among transgender women, there are important

limitations to this study. First, our assessments might not capture other domains by which transgender women experience gender affirmation. For example, we only examined familial support as one specific facet of social affirmation; other facets of social affirmation such as “passing”, transgender peer networks and community support, and legal affirmation should be examined in order to discern how different types of affirmation contribute to psychological well-being for transgender individuals. Another limitation is in our measurement of medical affirmation. It should be noted that having any gender affirmative surgeries or using hormones is an individual decision; these interventions might not be needed or desired by all transgender individuals. Further, given the cross-sectional nature of the study, we cannot infer temporal order or causal pathways among variables; it may be that individuals who have higher psychological well-being report being more affirmed, perhaps because they are more likely to be active in causing their environment to be more affirming. Due to the geographic context and inclusion criteria guiding study recruitment, this sample may not be representative of other transgender communities; findings might not generalize to communities in less liberal or inclusive environments, or the broader transgender community who do not have any history of sex work due to socioeconomic and racial/ethnic differences. Also, it is important to note the historical changes that have occurred since data collection, which include strides in transgender visibility and legal protections, which might influence patterns of associations between gender affirmation and mental health. However, even with added legal protections, transgender individuals still experience discrimination in various settings (e.g. retail, restaurants, transportation) including health care (Reisner et al., 2015) thus perpetuating barriers to receiving affirmative supports.

Due to the multiple components of gender affirmation and the individual variability in perceived importance of the different components, it is important to avoid a one-size-fits-all approach to designing gender affirming interventions for alleviating psychological distress among transgender individuals. As the gender affirmation framework posits, the personal experience of feeling affirmed as a transgender person results from individuals’ subjective perceptions of need along multiple dimensions of gender affirmation (Sevelius, 2013). Personalized assessment of gender affirmation may thus be a useful component of counseling and service provision for transgender women. In addition to investigating risks for transgender women, continued research to identify opportunities for resilience is needed. Transgender individuals should not be portrayed simplistically as objects of vulnerability, and research identifying mechanisms to promote wellness and thriving is necessary for future intervention development. In this specific analysis we examined gender affirmation as a factor to facilitate resilience. Our findings correspond with previous studies reporting peer networks and community belongingness as factors that promote resilience among transgender individuals (Bariola et al., 2015; Barr, Budge, & Adelson, 2016; Singh, Hays, & Watson, 2011; Testa, Jimenez, & Rankin, 2014). Expanding the scientific discourse beyond deficit-focused models of transgender health is crucial in advancing wellness within the broader transgender community, discovering and targeting amenable protective factors, and identifying opportunities for health promotion interventions.

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Table 1*Sample Characteristics (N = 573)*

	<i>n</i> (%) or <i>M</i> (<i>SD</i>)	95% CI
Age at time of survey (years)	35.10 (9.38)	34.36, 35.90
Race/ethnicity		
Black	235 (41%)	
White	118 (21%)	
Asian/Pacific Islander	110 (19%)	
Latina	110 (19%)	
HIV-positive	161 (30%)	
Gender affirmation- psychological ^a	5.91 (1.54)	5.78, 6.04
Gender affirmation- familial social ^b	2.39 (0.61)	2.34, 2.44
Gender affirmation- medical		
Any gender affirmative surgery	144 (26%)	
Currently using hormones	393 (76%)	
Psychological well-being		
Depressive symptoms ^c	17.10 (13.50)	15.96, 18.19
Self-esteem ^d	39 (7.10)	38.39, 39.60
Any suicidal ideation	315 (56%)	

^a response scale ranging 1–7, higher scores indicating greater comfort with gender.

^b response scale ranging from 1–3, higher scores indicating more satisfaction with family support.

^c scale ranges from 0–60 with greater scores suggesting greater depressive symptoms (standard cut-off for clinical depression = 16).

^d scale ranges from 0–50 with greater scores suggesting higher self-esteem.

Table 2
Bivariate analyses between all predictors and outcomes of psychological well-being

	Self-Esteem		Depressive Symptoms		Suicidal Ideation		χ^2
	<i>M</i> (SD)	<i>F</i>	<i>M</i> (SD)	<i>F</i>	yes <i>n</i> (%)	no <i>n</i> (%)	
Race/ethnicity		24.42**		18.86**			60.93**
White	37.46 (7.81)		20.66 (13.43)		86 (74.14)	30 (25.86)	
Black	38.85 (7.01)		16.2 (12.89)		148 (35.93)	83 (64.07)	
Asian/Pacific Islander	43.7 (5.72)		10.1 (10.81)		31 (28.18)	79 (71.82)	
Latina	36.23 (4.99)		21.88 (13.98)		50 (45.45)	60 (54.55)	
	<i>M</i> (SD)	<i>t</i>	<i>M</i> (SD)	<i>t</i>			
HIV status		2.36*		-2.00*			2.04
Negative/unknown	39.59 (7.08)		16 (12.25)		194 (52.29)	177 (47.71)	
Positive	37.97 (7.02)		18.51 (13.23)		95 (59.01)	66 (40.99)	
Medical affirmation							
Surgery status		-4.45**		3.56**			3.17
Pre-Op	38.17 (6.91)		18.3 (13.38)		241 (57.52)	178 (42.48)	
Post-Op	41.27 (7.07)		13.69 (13.32)		70 (48.95)	73 (51.05)	
Current hormone use		-2.19*		1.22			0.00
No	37.93 (6.60)		17.93 (14.18)		69 (56.56)	53 (43.44)	
Yes	39.57 (7.21)		16.22 (13.32)		221 (56.52)	170 (43.48)	
	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>M</i> (SD)	<i>M</i> (SD)	<i>t</i>
Psychological affirmation gender comfort	0.27**		-0.21**		5.7 (1.62)	6.2 (1.36)	3.87**
Familial social affirmation satisfaction w/family support	0.24**		-0.33**		2.34 (0.63)	2.45 (0.59)	2.10*
Age	0.03		0.03		36.39 (9.56)	33.5 (8.83)	-3.70**

Notes. *F* = ANOVA. *t* = independent samples t-test. *r* = Pearson product-moment correlation. χ^2 = Chi-square.

* *p* < .05.

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Table 3

Multiple linear and logistic regression predicting psychological well-being

	Depressive symptoms <i>n</i> = 427		Self-esteem <i>n</i> = 427		Any suicidal ideation <i>n</i> = 457	
	<i>b</i> (SE)	<i>p</i> -value	<i>b</i> (SE)	<i>p</i> -value	aOR	95% CI
Age	0.03 (0.06)	0.61	0.03 (0.03)	0.35	1.03*	1.01, 1.05
HIV-positive	-0.32 (1.32)	0.81	-0.05 (0.71)	0.95	0.80	0.50, 1.28
Black	-1.95 (1.63)	0.23	0.45 (0.87)	0.60	0.75	0.40, 1.37
Latina	1.15 (1.89)	0.55	-1.91 (1.01)	0.06	0.31**	0.15, 0.59
Asian/Pacific Islander	-7.60 (1.92)**	<0.01	4.78 (1.03)**	<0.01	0.19**	0.09, 0.38
Familial Social Affirmation	-6.07 (0.99)**	<0.01	2.46 (0.53)**	<0.01	0.71	0.49, 0.99
Psychological Affirmation	-0.99 (0.38)**	<0.01	0.90 (0.20)**	<0.01	0.88	0.76, 1.01
Medical Affirmation						
Any gender affirmative surgeries	-2.38 (1.33)	0.07	1.53 (0.71)*	0.03	0.90	0.57, 1.44
Current hormone use	-0.95 (1.35)	0.48	0.91 (0.72)	0.21	0.96	0.60, 1.55
						0.89

Notes. aOR = Adjusted Odds Ratio. Referents: HIV-negative/unknown, White race, no gender related surgeries, no current hormone use. Age, familial social affirmation, & psychological affirmation were centered.

* *p* .05.

** *p* .01.