UvA-DARE (Digital Academic Repository)

Gender nonconformity, discrimination, and mental health among Black South African men who have sex with men: A further exploration of unexpected findings

Sandfort, T.; Bos, H.; Knox, J.; Reddy, V.

DOI

[10.1007/s10508-015-0565-6](https://doi.org/10.1007/s10508-015-0565-6)

Publication date

2016

Document Version

Final published version

Published in

Archives of Sexual Behavior

[Link to publication](#)

Citation for published version (APA):

Sandfort, T., Bos, H., Knox, J., & Reddy, V. (2016). Gender nonconformity, discrimination, and mental health among Black South African men who have sex with men: A further exploration of unexpected findings. *Archives of Sexual Behavior*, 45(3), 661-670. <https://doi.org/10.1007/s10508-015-0565-6>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Gender Nonconformity, Discrimination, and Mental Health Among Black South African Men Who Have Sex with Men: A Further Exploration of Unexpected Findings

Theo Sandfort¹ · Henny Bos² · Justin Knox³ · Vasu Reddy^{4,5}

Received: 19 August 2014 / Revised: 3 February 2015 / Accepted: 28 March 2015 / Published online: 12 June 2015
© Springer Science+Business Media New York 2015

Abstract Using data from a study about HIV risk among Black South African MSM, we aimed to ascertain whether unexpected findings about the relationship between gender nonconformity, discrimination, and mental health in this population, as reported by Cook, Sandfort, Nel, and Rich (2013), could be replicated, and to explore more in-depth how gender nonconformity relates to health. Cook et al. found that feminine men were not more likely to be depressed despite the observation that they were more likely to be discriminated against and that discrimination increased the likelihood of depression. This is in contrast to what studies among gay and bisexual men in Western countries have consistently shown. In the current study, 196 Black South African MSM (ages between 18 and 40; M age, 26.65 years) were surveyed. Assessments included stressors (identity confusion, internalized homophobia, and sexual orientation-based discrimination) and resilience factors (openness about one's sexual orientation, social support, and identification with the gay community). We observed that gender-nonconforming men were not more likely to be depressed despite having experienced more discrimination, which was associated with depression. The same relationships were observed when considering anxiety as

the mental health outcome. We found an indirect negative effect of gender nonconformity on depression through internalized homophobia, suggesting that, in this population, internalized homophobia masks the effect of discrimination on mental distress. Implications for the sexual minority stress model, used to guide our analyses, are discussed. Further research is needed to disentangle the complex relationship between gender nonconformity and mental health among MSM populations.

Keywords Gender nonconformity · Men who have sex with men · Discrimination · Mental health · South Africa · Sexual orientation

Introduction

Studies among gay and bisexual men in Western countries have consistently shown that men who are gender nonconforming or display feminine characteristics experience more mental distress than gender-conforming men (D'Augelli, Grossman, & Starks, 2006; Grossman, D'Augelli, Salter, & Hubbard, 2005; Henning-Stout, James, & Macintosh, 2000; Landolt, Bartholomew, Saf-frey, Oram, & Perlman, 2004; Ploderl & Fartacek, 2009; Sandfort, Melendez, & Diaz, 2007; Skidmore, Linsenmeier, & Bailey, 2006). This elevated mental distress has been attributed to higher levels of discrimination experienced by gender-nonconforming gay and bisexual men, and studies have confirmed that discrimination mediates the relationship between gender expression and mental distress in this population (Baams, Beek, Hille, Zevenbergen, & Bos, 2013; Sandfort et al., 2007; Toomey, Ryan, Diaz, Card, & Russell, 2010).

In a Letter to the Editor of this journal, Cook, Sandfort, Nel, and Rich (2013) reported findings from a study among Black South African men who have sex with men (MSM) that contradicted

✉ Theo Sandfort
Tgs2001@columbia.edu

¹ Division of Gender, Sexuality and Health, Columbia University and New York State Psychiatric Institute, 1051 Riverside Drive, Unit 15, New York, NY 10032, USA

² Department of Education, University of Amsterdam, Amsterdam, The Netherlands

³ Mailman School of Public Health, Columbia University, New York, NY, USA

⁴ Human and Social Development, Human Sciences Research Council, Pretoria, South Africa

⁵ University of Pretoria, Pretoria, South Africa

these observations. Cook et al. found that gender-nonconforming men suffered higher levels of discrimination, both while in school as well as in life more generally, relative to gender-conforming men; furthermore, both forms of discrimination were positively associated with mental distress. Despite these associations, gender-nonconforming men did not have more mental distress than gender-conforming men. The assumption that the effect of discrimination on mental distress was buffered by a greater openness about one's sexuality and stronger identification with the gay community—both positively associated with gender nonconformity—seemed not to be supported by their data. These findings suggest that the relationship between gender nonconformity and mental distress among gay and bisexual men is more complex than often assumed. In this article, we aimed to ascertain whether the findings reported by Cook et al. could be replicated among a different sample of Black South African MSM and explore more in-depth how gender nonconformity and health are related in this population.

Most of the current research about mental health among MSM has been guided by the sexual minority stress model (SMSM) (Meyer, 1995, 2003). Sexual minority stress is the additional stress that gay, lesbian, and bisexual persons experience as a consequence of being a member of a sexual minority. The model posits that this additional stress results from distal and proximal factors. Distal factors include objective sexual orientation-related discrimination or violence. Proximal factors include internalized homophobia (the internalization of negative societal attitudes towards same-sex sexuality) and concealment (hiding one's stigmatized sexual orientation). An additional proximal stressor that has thus far received little attention in scholarly research but might also negatively affect health outcomes is identity confusion (uncertainty about one's sexual orientation) (Mohr & Fassinger, 2006; Willoughby, Doty, & Malik, 2010).

Additional to these stressors, there are resilience factors that might either be directly related to mental health outcomes or moderate the effects of stressors on mental health. These factors include social support and identification with the gay and lesbian community. Some stressors, if conceptualized in reverse, can also be considered resilience factors; for instance, openness about one's sexual orientation, the opposite of concealment, can have a positive effect on mental health. There is substantial evidence that these stressors and resilience factors affect the mental health of sexual minority persons (Feinstein, Goldfried, & Davila, 2012; Kosciw, Palmer, & Kull, 2014; Kwon, 2013; Newcomb & Mustanski, 2010). The SMSM has been observed to be valid outside of the Western context (Dunn, Gonzalez, Costa, & Nardi, 2014).

The SMSM has been adapted to understand the impact of gender nonconformity on mental health. Logie, Newman, Chakrapani, and Shunmugam (2012) did so for the comprehensive category of MSM in South India, and Hendricks and Testa (2012) for persons who are transgender and gender nonconforming in the U.S. In these adaptations, gender nonconformity is understood to underlie and exacerbate the negative impact of sexual stigma. In

their study, Logie et al. showed that gender nonconformity stigma—distal and proximal stress experienced for displaying feminine behavior—affected mental health negatively.

Informed by the adapted SMSM and these other findings, we developed the following strategy to test the relationships between gender nonconformity, sexual minority stressors and resilience factors, and mental health among Black South African MSM. We first wanted to test whether, as in most other studies, there was a direct negative effect of gender nonconformity on mental distress. Second, we tested if sexual minority stressors and resilience factors were associated with gender nonconformity as well as with mental distress. As stressors, we included sexual identity confusion, internalized homophobia, and sexual orientation-based discrimination, both current and while growing up. We expected discrimination to be positively associated with gender nonconformity but we had no specific hypotheses about how the other stressors related to gender nonconformity; rather, we expected stressors to negatively affect mental health. As potential resilience factors, we included openness about one's sexual orientation, social support, and identification with the gay community. We had no specific expectations about the direction of the associations of these resilience factors with gender nonconformity, but we did hypothesize that they were positively associated with mental health. Third, we explored whether the effect of gender nonconformity on mental distress was contingent upon the levels of sexual minority stress and resilience; we expected that the negative effect of gender nonconformity would be stronger for men who reported experiences with the sexual minority stressors, and would be less strong for those who reported high scores on the resilience factors. Finally, we explored whether there were indirect effects of gender nonconformity through the sexual minority stressors and resilience factors on mental distress. In particular, we expected that there would be an indirect effect of gender nonconformity through openness and gay community identification on mental health. Cook et al. (2013) found that both resilience factors were positively associated with gender nonconformity.

To test our expectations, we used data from a study about HIV risk among Black South African MSM (Knox, Reddy, Kaigobadi, Nel, & Sandfort, 2012; Knox, Sandfort, Yi, Reddy, & Maimane, 2011; Sandfort, Nel, Rich, Reddy, & Yi, 2008; Sandfort, Yi, Knox, & Reddy, 2013). The data allowed us to replicate Cook et al.'s research question, and explore more comprehensively the relationship between gender nonconformity and mental health in the same population using a different sample.

Although it was not the aim of this article to study its implications, it is important to note that the situation regarding same-sex sexuality in South Africa differs in several ways from that in most Western countries. Until the end of apartheid, same-sex sexuality in South Africa was illegal. However, the new South African Constitution, drafted in 1994, included non-discrimination and protection based on sexual orientation (Cock, 2003; Hoard, Martin, & Reid, 2005). Despite this legal protection, same-sex sexuality remains highly stigmatized. As in other African countries, the social

acceptance of same-sex sexuality in South Africa is among the lowest in the world (Kohut, 2013; Reid, 2010). Another distinguishing factor is the centrality of gender in the expression of same-sex sexuality, which appears to reproduce the binary notion of masculinity and femininity, much more so than in developed countries. Display of feminine behaviors and participation in traditionally feminine occupations are characteristic for a large segment of the Black gay population in South Africa (Murray & Roscoe, 2001; Rabie & Lesch, 2009; Reid, 2005, 2013; Swarr, 2004).

Method

Participants

A total of 199 Black South African MSM were surveyed. The men ranged in age from 18 to 40 years old; the mean age was 26.7 years ($SD = 5.83$). Seventy-nine ($n = 151$) percent of the participants lived in a township. Two-thirds ($n = 122$) of the participants were in an ongoing intimate relationship with a man, and 38.5 % were in this relationship for more than 1 year. Most men (63.8 %, $n = 126$) were employed. Twenty-nine percent of the participants ($n = 58$) had no income and one-third (34.2 %, $n = 68$) had a low income (i.e., 4500 South African Rand or less per month). Sixty-eight percent ($n = 134$) of the participants reported that they were religious. Most participants reported feeling (only) sexually attracted to men, based on an average score of 4.59 ($SD = 0.68$) on an instrument that assessed sexual orientation (absolute range: 1–5).

Participant recruitment and data collection were conducted from October to December 2008. The study's aim was to recruit a heterogeneous sample of Black South African MSM based on age (MSM above and below 25 years of age) and residential status (MSM living in townships and those not living in townships). Townships in South Africa are areas that are relatively under-resourced with high levels of unemployment, poverty, stigma, and low levels of education. As a result, there is hardly any MSM community organization in these townships and there is no MSM commercial subculture. In order to ensure diversity, multiple recruitment strategies were deployed. For Black men living in townships, social functions were held in locations throughout the township. Black men living outside of townships were invited to attend social events at an LGBT community center. Men were eligible to participate in the study if they (1) lived in the greater Pretoria metropolitan area; (2) were between 18 and 40 years old; (3) identified as Black or African; (4) reported having had oral, anal, or masturbatory sex with at least one man in the preceding year, regardless of involvement with women and including men who self-identify as gay; and (5) were conversant in English.

Procedure

Informed consent was obtained verbally by the interviewers. Once confirmed, all participants were asked to fill out a questionnaire on

the spot. Privacy was maintained by having participants complete the survey in quiet, usually adjacent rooms. Questionnaires were administered using Computer-Assisted Self-Interviewing (CASI) in order to minimize social desirability bias. Four research assistants were trained to obtain consent and to help participants begin the CASI. Participants were compensated equal to approximately \$8 USD for their time.

The research protocol was approved by the Institutional Review Boards at the New York State Psychiatric Institute and the Human Sciences Research Council (Pretoria, South Africa).

Measures

The survey collected information on sociodemographic characteristics, sexual orientation, gender expression, mental health, sexual minority stressors, and resilience factors. The sociodemographic characteristics measured included age, residential status (living in a township or in the city), educational attainment, income, and employment status.

Sexual Orientation

Three items were used to assess sexual orientation: (1) Do you feel more sexually attracted to men or to women? (2) In your current sexual fantasies, are you more aroused by men or by women? (3) Are your recent sexual experiences more with men or with women? Answer categories for these 3 items were: 1 = *only to women*, 2 = *mostly to women*, 3 = *to women and men equally*, 4 = *mostly to men*, 5 = *only to men*. In the present study Cronbach's alpha for this scale was .88.

Gender Nonconformity

Gender nonconformity was assessed by asking how participants perceived themselves in terms of masculinity and femininity. The masculinity/femininity (M/F) scale consisted of two items ("Do you see yourself as more masculine or more feminine than most other men?" and "Do you think other people see you as more masculine or more feminine than most other men?"; 1 = *much more masculine* – 5 = *much more feminine*; (Cronbach's alpha = .85). We established construct validity for this M/F scale by testing whether there were differences on this scale for participants who presented themselves to others as feminine, masculine or those who did not have a preference in their gender expression using a one-way analysis of variance. The analysis was significant, $F(2, 193) = 414.29, p < .001$. A post hoc comparison (Least Significant Difference) showed that men who preferred to present themselves to others in a feminine way had the highest M/F score ($M = 4.51, SD = 0.42$), and differed significantly from men who preferred to present themselves in a masculine way ($M = 1.98, SD = 0.58$) ($p < .0001$) and men who reported no specific preference for gender expression (neutral gender expression) ($M = 3.21, SD = 0.49$) ($p < .0001$). Men with a masculine gender expression also differed

significantly from men who reported a neutral gender expression ($p < .0001$).

Sexual Minority Stressors

In addition to discrimination while growing up and current discrimination, sexual minority stressors included sexual identity confusion and internalized homophobia. Discrimination while growing up was measured using four items that questioned: “As you were growing up, how often were you (1) made fun of or called names for being effeminate?; (2) hit or beaten up for being effeminate?; (3) made fun of or called names for being attracted to other men?; and (4) hit or beaten up for being attracted to other men?” (adapted from Diaz, Ayala, Bein, Henne, & Marin, 2001). Response options ranged from 1 = *never* to 4 = *many times*, and Cronbach’s alpha was .79.

Discrimination in the past year was measured using a previously validated scale adapted for this study (Herek & Berrill, 1992). Participants were requested to indicate the number of times in the past year that they were verbally insulted, physically threatened, had property damaged, objects thrown at them, been chased, spat upon, punched, hit, kicked or beaten, assaulted, and sexually harassed because someone thought they were homosexual.

Sexual identity confusion was measured using four items that included: “I’m not totally sure what my sexual orientation is,” “I keep changing my mind about my sexual orientation,” “I can’t decide whether I am bisexual or homosexual,” and “I get very confused when I try to figure out my sexual orientation” (Cronbach’s alpha = .89) (adapted from Mohr & Fassinger, 2000). Response options ranged from 1 = *disagree strongly* to 6 = *agree strongly*.

Internalized homophobia was measured using a previously validated 10-item scale (adapted from Mohr & Fassinger, 2006). Sample items include: “Sometimes I dislike myself for being a man who has sex with other men”, “I have tried to become more sexually attracted to women”, and “I wish I were only sexually attracted to women” (Cronbach’s alpha = .72). Response options ranged from 1 = *disagree strongly* to 6 = *agree strongly*.

Resilience Factors

Openness about one’s sexual orientation, gay community identification, and social support were assessed as potential resilience factors. Openness was measured using two items that asked how many of the following people knew that one was sexually attracted to men: current heterosexual friends and casual acquaintances who are heterosexual (Cronbach’s alpha = .91). Response options ranged from 1 = *none of them* to 5 = *all of them*.

Gay community identification was measured with a scale developed by Vanable, McKirnan, and Stokes (1998). The scale includes three statements (e.g., “It is very important to me that at least some of my friends are bisexual or gay”); participants were asked to indicate the extent to which they agreed or disagreed with

each statement. Response options ranged from 1 = *disagree strongly* to 5 = *agree strongly*. Cronbach’s alpha was .72.

Social support was measured using five items that asked how true it was that there is someone that the person can rely on for money, food, a place to stay, to talk to if he has problems, to accompany him to the doctor, or help him if he gets hurt (Cronbach’s alpha = .86) (Dandona et al., 2005). Response options ranged from 1 = *always* to 5 = *never* (total mean scores were reversed).

Mental Health Outcomes

These included depression and anxiety, measured with two subscales of the Depression Anxiety Stress Scales (Lovibond & Lovibond, 1995). The Depression and Anxiety subscales each included seven items. Men were asked questions about how they felt over the past week, such as: “I felt that life was meaningless” (depression) and “I was worried about situations in which I might panic and make a fool of myself” (anxiety). Response options ranged from 1 = *not at all* to 3 = *very much or most of the time*. Cronbach’s alpha for the subscales was .88 (depression) and .83 (anxiety).

Analyses

Pearson r correlations were conducted to investigate the bivariate associations between the independent (gender nonconformity) and dependent variables (depression and anxiety), risk factors (sexual identity confusion, internalized homophobia, discrimination when growing up and during past year), and resilience factors (openness, social support and gay community identification).

A set of hierarchical analyses were conducted to examine whether there was an effect of an interaction between gender nonconformity and the studied risk and resilience factors on depression and anxiety. Analyses were conducted separately for depression and anxiety. Gender nonconformity was included as Step 1 of both regression analyses and the risk and resilience factors in Step 2. In Step 3, we added the interaction between gender nonconformity and each stress and resilience factor to the equation.

To investigate whether there was an indirect effect of gender nonconformity and depression and anxiety through the studied stress and resilience factors bootstrapped mediation analyses were conducted through the Process macro developed by Hayes (2013). This analysis was done separately for depression and anxiety as dependent variables. In bootstrapping, random samples are generated based on the original data. In the current analysis, the bootstrapping was done with 10,000 resamples. For each random sample, the indirect effects were computed. The distribution of these effects was then used to obtain 95 % confidence intervals (CI) for the size of indirect effects of the studied stress and resilience factors on the relation between gender nonconformity and depression

and anxiety. The indirect effect for a stress and/or resilience factor is significant when the obtained CI does not contain the value 0. Using bootstrapping CI reduces power problems that might occur by asymmetric distribution of an indirect effect (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002).

Results

Bivariate Associations Between Gender Nonconformity and Mental Health, Sexual Minority Stressors, and Resilience Factors

There was no significant association between gender nonconformity and the mental health outcomes of depression and anxiety (Table 1). Gender nonconformity, however, was associated with higher levels of experiences of discrimination during childhood and in the preceding year, but also with lower levels of sexual identity confusion and internalized homophobia (sexual minority stressors). Gender nonconformity was also related to openness and gay community identification (resilience factors), with gender-nonconforming men being more open and identifying more strongly with the gay community. Gender nonconformity was not associated with social support.

Most stressors were significantly correlated with depression (with the exception of discrimination while growing up) and anxiety (with the exception of sexual identity confusion). Men who experienced sexual identity confusion were more likely to have feelings of depression. Men who reported more discrimination in the preceding years and had higher levels of internalized homophobia had more feelings of depression and anxiety.

Some stressors were significantly associated with one another: men with stronger identity confusion also had higher levels of internalized homophobia; men who had experienced more discrimination while growing up also reported more discrimination in the preceding year. Discrimination in the preceding year was, however, not significantly related with sexual identity confusion and internalized homophobia, while men who had experienced more discrimination while growing up experienced less identity confusion and internalized homophobia.

None of the resilience factors were associated with the mental health outcomes nor were they associated with one another. There was, however, a marginally significant trend for the negative association between openness and depression; men who reported to be less open had higher levels of depression.

Stressors and Resilience Factors as Moderators

Table 2 shows the results of the hierarchical regression analyses with the gender nonconformity (Step 1), stressors and resilience factors (Step 2), and the interaction of gender nonconformity with the stressors and resilience factors (Step 3) regressed on both men-

tal health outcomes (depression and anxiety). R-square's for depression and anxiety were not significant in Step 1 and inclusion of the stressors and resilience factors in Step 2 produced a significant change (ΔR^2) in the coefficient of determination for depression and anxiety. The interaction terms in Step 3 did not produce significant changes (ΔR^2 s) for the mental health variables, indicating that minority stressors or resilience factors did not moderate the association between gender nonconformity and mental health.

As shown in Table 2, sexual identity confusion and internalized homophobia were both significantly related to depression in Model 2. Fisher's z test showed that the beta's for sexual identity confusion and internalized homophobia on depression did not differ significantly (Fisher $z = 0.81$). For anxiety, we only found three marginally significant trends. Men with more internalized homophobia, stronger gay community identification, and discrimination in the preceding year reported more anxiety ($.10 < p > .05$), while men with had less anxiety. The beta's for internalized homophobia, discrimination in the preceding year, and gay community identification did not differ significantly (Fisher $z = -0.34 < \text{Fisher } z = 0.34$).

Indirect Effect of Gender Nonconformity on Mental Health through Stressors and Resilience Factors

The indirect effects of the stressors and resilience factors on depression and anxiety were tested using Hayes' bootstrapped analyses by PROCESS for assessing indirect pathways for multiple variables. In the bootstrapped analyses, we found an indirect effect of gender nonconformity on depression for the stressor internalized homophobia (95 % CI $-.08$; $-.02$). The bootstrapping CIs included a zero for the other stressors and resilience factors (see Table 3), indicating that there was no support for an indirect effect of gender nonconformity through openness and gay community identification on depression as we had predicted and also not through sexual identity confusion, discrimination while growing up, discrimination in the preceding year, and social support. There was no indirect effect of gender nonconformity through the stressors and resilience factors on anxiety (see Table 3). The total indirect effects for depression and anxiety were not significant in the bootstrapping analyses.

Discussion

Our study among Black South African MSM replicated the main findings from Cook et al. (2013): while discrimination in the preceding year was associated with depression, and gender-nonconforming men had experienced more discrimination, gender nonconformity was not directly associated with depression, a relationship that would logically follow. The same applies if anxiety is considered as the mental health outcome. This confirms Cook et al.'s findings that discrimination does not seem to mediate the

Table 1 Pearson *r* correlations between gender nonconformity, stressors and resilience factors, and mental health outcomes (means and SDs)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	<i>M</i>	<i>SD</i>
Independent variable											
1. Gender nonconformity ^a	–									3.11	1.15
Stress factors											
2. Sexual identity confusion ^b	–.15*	–								1.87	1.30
3. Internalized homophobia ^b	–.33***	.40***	–							2.48	1.12
4. Discrimination growing up ^c	.33***	–.14 [†]	–.17*	–						2.01	0.81
5. Discrimination past year ^d	.22***	.00	–.01	.41***	–					2.15	2.26
Resilience factors											
6. Openness ^e	.39***	–.21**	–.40***	.33***	.19**	–				3.45	1.41
7. Social support ^e	–.02	–.24**	–.16*	.00	–.16*	.01	–			4.03	0.95
8. Gay community identification ^e	.14*	–.17*	–.31***	.14*	.18**	.06	.03	–		3.64	1.07
Dependent variables											
9. Depression ^f	.00	.24**	.31***	.11	.19**	–.14 [†]	–.05	–.05	–	1.52	0.57
10. Anxiety ^f	.01	.11	.18*	.12 [†]	.22**	–.10	–.11	.10	.78***	1.52	0.54

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$ Absolute range: ^a 1–5, ^b 1–6, ^c 1–4, ^d 0–9, ^e 1–5, ^f 1–3

relationship between gender nonconformity and mental distress among Black South African MSM. We also found that the association between gender nonconformity and mental health did not vary in relation to levels of minority stressors or resilience factors.

Overall, these findings suggest that the association between gender nonconformity and mental distress among gay and bisexual men is more complex than generally assumed. This conclusion is strengthened by the fact that many variables utilized in our study, including gender nonconformity, were operationalized differently than in the study by Cook et al. (2013). Furthermore, we included more variables in this study and tested the relationships more widely. We also did not find support for our expectation that the negative association of gender nonconformity with mental distress would be stronger for men who reported experiences with the sexual minority stressors, and would be less strong for those who reported higher scores on the resilience factors.

Our study presents some additional findings that help to elucidate the relationship between gender nonconformity and mental health among Black South African MSM. We found an indirect effect of gender nonconformity on depression through the stressor internalized homophobia. This finding suggests that gender nonconformity leads to less internalized homophobia, which, in turn, leads to less depression. In this sample, internalized homophobia appeared to mask the effect of discrimination on mental distress. We did not find support for our expectation that there was an indirect effect of gender nonconformity through openness and gay community identification—the factors that Cook et al. (2013) had found to be positively associated with gender nonconformity—on mental health. Also contrary to our findings, resilience factors were not associated with mental health; mental health seemed to be exclusively determined by sexual minority stressors, in par-

ticular internalized homophobia and current sexual orientation-based discrimination.

The positive association between internalized homophobia and depression has been found in several studies (Newcomb & Mustanski, 2010). But how do we understand that gender nonconformity leads to less internalized homophobia? A possible explanation is that the disproportionate discrimination that gender-nonconforming men experience while they are growing up forces them to come to terms with their homosexuality, while sexual identity development for men who do not stand out in terms of their gender is more uneven and discordant. Another possible explanation is related to the gendered-way that homosexuality is understood among Black persons in South Africa: a dominant conception of male homosexuality is that it is strongly associated with femininity (Reid, 2005). Rabie and Lesch (2009), for instance, discussed how it was normal for gay Black men in a South African township to visit with the females in the community and participate in traditionally female activities. It is almost as if, in the South African system of hegemonic masculinity, identification with femininity facilitates the expression of a gay identity. If femininity is indeed experienced as the only legitimate way in which homosexuality can be expressed, gender-nonconforming men may find it easier to accept their homosexual desires than men who by being masculine deviate from what their environment expects from them. Discrimination might strengthen this effect as well: the discrimination that gender nonconforming men undergo while growing up could be experienced as a group-based rejection, resulting in a nurturing and embracing of the identity that is responsible for their exclusion, which subsequently bolsters well-being (Branscombe, Schmitt, & Harvey, 1999; Jetten, Branscombe, Schmitt, & Spears, 2001). Men who are gender-conforming might be less inclined to see themselves as part of a group.

Table 2 Hierarchical regression for depression and anxiety

	Step 1				Step 2				Step 3			
	B	SE	β	<i>p</i>	B	SE	β	<i>p</i>	B	SE	β	<i>p</i>
Depression												
Gender nonconformity (GNC)	−.01	.04	−.03	ns	.02	.04	.05	ns	.02	.04	.04	ns
Sexual identity confusion					.08	.03	.18	.021	.08	.04	.18	.033
Internalized homophobia					.14	.04	.27	.002	.14	.05	.28	.003
Discrimination growing up					.09	.06	.12	.ns	.07	.06	.09	ns
Discrimination past year					.03	.02	.12	ns	.03	.02	.10	ns
Openness					−.04	.03	−.09	ns	−.03	.03	−.08	ns
Social support					.06	.04	.10	ns	.07	.05	.12	ns
Gay community identification					.03	.04	.06	ns	.05	.04	.09	ns
GNC × Sexual identity confusion									.02	.03	.06	ns
GNC × Internalized homophobia									.01	.04	.02	ns
GNC × Discrimination growing up									.04	.05	.06	ns
GNC × Discrimination past year									−.01	.02	−.03	ns
GNC × Openness									−.03	.03	−.08	ns
GNC × Social support									−.01	.04	−.02	ns
GNC × Gay community identification									−.02	.03	−.07	ns
R ²	0.00				0.17***				0.19**			
<i>F</i>	0.12				4.62***				2.68**			
ΔR^2	0.00				0.17***				0.02**			
ΔF	0.12				5.26***				0.56**			
Anxiety												
Gender nonconformity (GNC)	−.01	.04	−.01	ns	.00	.04	−.00	ns	.00	.04	.00	ns
Sexual identity confusion					.03	.03	.07	ns	.03	.04	.07	ns
Internalized homophobia					.09	.04	.18	ns	.08	.05	.17	ns
Discrimination growing up					.07	.06	.11	ns	.08	.06	.12	ns
Discrimination past year					.03	.02	.14	ns	.03	.02	.14	ns
Openness					−.04	.03	−.09	ns	−.04	.03	−.11	ns
Social support					−.01	.04	−.02	ns	.01	.05	.01	ns
Gay community identification					.08	.04	.15	ns	.07	.04	.15	ns
GNC × Sexual identity confusion									.02	.03	.07	ns
GNC × Internalized homophobia									−.05	.04	−.11	ns
GNC × Discrimination growing up									−.01	.05	−.01	ns
GNC × Discrimination past year									−.01	.02	−.06	ns
GNC × Openness									−.04	.03	−.12	ns
GNC × Social support									−.04	.04	−.07	ns
GNC × Gay community identification									.00	.03	−.01	ns
R ²	.00				0.11**				.14			
<i>F</i>	0.04				2.81**				1.86*			
ΔR^2	.00				0.11**				.03			
ΔF	.04				3.20**				.81			

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

We also found gender conformity to be associated with less openness. Gender conforming men might be less open because, as masculine men, it is easier for them to pass as straight since their gender conformity does not raise any doubt and suspicion about their sexual orientation. In a social climate where rejection of

same-sex sexuality is strong, passing might also be a safer option than coming out. It is possible, however, that not coming out precludes men from processing negative feelings that stem from engaging in stigmatized behavior—being attracted to members of the same sex—and this results in them processing stronger feelings

Table 3 Parallel multiple mediation analyses examining indirect effects of gender nonconformity on depression and anxiety via stress and resilience factors

			95 % confidence interval	
	B	SE	Lower	Upper
Depression				
Direct effect	.02	.04	−.05	.10
Indirect effect via				
Sexual identity confusion	−.01	.01	−.04	.00
Internalized homophobia	−.04**	.02*	−.08*	−.02*
Discrimination growing up	.02	.02	−.01	.06
Discrimination past year	.01	.01	.00	.04
Openness	−.02	.02	−.05	.01
Social support	.00	.01	−.01	.01
Gay community identification	.01	.01	.00	.03
Total	−.05	.03	−.11	.00
Anxiety				
Direct effect	.00	.04	−.08	.08
Indirect effect via				
Sexual identity confusion	.00	.01	−.02	.00
Internalized homophobia	−.03	.02	−.07	.00
Discrimination growing up	.02	.02	−.01	.05
Discrimination past year	.01	.01	−.01	.04
Openness	−.02	.02	−.05	.02
Social support	.00	.00	−.01	.01
Gay community identification	.01	.01	.00	.04
Total	−.01	.02	−.05	.04

Sexual identity confusion, internalized homophobia, discrimination while growing up, and number of experiences with discrimination in the preceding year. Openness about sexual orientation, social support, and gay community identification

** $p < .01$; * $p < .05$

of internalized homophobia. An alternative explanation could be that internalized homophobia prevents men from coming out (Weber-Gilmore, Rose, & Rubinstein, 2011).

Do MSM with varying gender expression have different coming out processes and trajectories? It is important to indicate that gender nonconformity during childhood was not assessed in this study. However, the finding that gender-nonconforming men had experienced more discrimination while growing up suggests that they have a qualitatively different trajectory of sexual identity development. If men with varying gender expressions already differ while growing up, it is likely that their process of coming out is different, eliciting distinct social responses and enabling different coping strategies. Childhood gender nonconformity should be taken into account in future research that attempts to further disentangle the complex relationship between gender nonconformity and mental health in this population.

Our findings have implications for the SMSM. First of all, they suggest that this model might operate differently depending upon the social context. They also indicate the importance of including

gender nonconformity as a critical factor in the model. Our findings suggest that there are important differences in terms of sexual minority stressors and resilience factors in relation to gender nonconformity; for instance, while discrimination was more frequent for gender-nonconforming MSM, identify confusion was less strong compared to gender-conforming MSM. Factors that one would assume induce stress—gender nonconformity—might through developmental processes turn out to have positive consequences as well in the long-term. Finally, our findings suggest the importance of differentiating between health outcomes. Despite the strong correlation between depression and anxiety, depression was associated with more stress factors than anxiety. It could be that due to the comparatively high levels of interpersonal violence in South Africa (Mayosi et al., 2012), anxiety is more affected by social factors than individual factors, while depression is more strongly shaped by individual factors than social factors.

Our findings should be interpreted taking some limitations into account. First, this was a cross-sectional study, which limits the ability to draw causal inferences with respect to time. Second,

all data were self-reported. In terms of our gender nonconformity assessment, this implies for instance that it is not known whether gender nonconforming men are actually perceived as such by other persons, which might be crucial in terms of the consequences of gender nonconformity.

In conclusion, our study confirms findings reported by Cook et al. (2013) that, among Black South African MSM, gender nonconformity appears to affect mental health differently than it does among gender nonconforming men in Western countries. Our findings also elicit several further questions. One is whether sexual identity development varies based on gender nonconformity; answering this question would require studying a cohort beginning at a younger age and to follow them over time. Another question is whether White South African gender nonconforming MSM are more similar to Black South African gender nonconforming MSM or to MSM in Western countries, in which case ethnic culture and not national culture would be a determining factor. From a historical perspective, one might question whether gender as a critical element of same-sex sexual expression in South African MSM is an enduring factor or a local remnant that as a consequence of globalization will diminish in importance (Altman, 1996; Sutton, 2007).

Acknowledgments The study was supported by a grant from amfAR (106973; Principal Investigator: Theo Sandfort, Ph.D.) with additional support from a grant from the National Institute of Mental Health (R01-MH083557; Principal Investigator: Theo Sandfort, Ph.D.). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Mental Health or the National Institutes of Health. The HIV Center for Clinical and Behavioral Studies is supported by a center grant from the National Institute of Mental Health, P30 MH43520 (Principal Investigator: Robert Remien, Ph.D.). We wish to thank OUT Well-being, the communities that partnered with us in conducting this research, and the study participants for their contributions. We also thank study staff at all participating institutions for their work and dedication.

References

- Altman, D. (1996). Rupture or continuity? The internationalization of gay identities. *Social Text*, 48, 77–94.
- Baams, L., Beek, T., Hille, H., Zevenbergen, F. C., & Bos, H. M. (2013). Gender nonconformity, perceived stigmatization, and psychological well-being in Dutch sexual minority youth and young adults: A mediation analysis. *Archives of Sexual Behavior*, 42, 765–773.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, 77, 135–149.
- Cock, J. (2003). Engendering gay and lesbian rights: The equality clause in the South African constitution. *Womens Studies International Forum*, 26, 35–45.
- Cook, S. H., Sandfort, T. G. M., Nel, J. A., & Rich, E. P. (2013). Exploring the relationship between gender nonconformity and mental health among Black South African gay and bisexual men [Letter to the Editor]. *Archives of Sexual Behavior*, 42, 327–330.
- Dandona, L., Dandona, R., Gutierrez, J. P., Kumar, G. A., McPherson, S., Bertozzi, S., & ASCIFPP Study Team. (2005). Sex behaviour of men who have sex with men and risk of HIV in Andhra Pradesh, India. *AIDS*, 19, 611–619.
- D'Augelli, A. R., Grossman, A. H., & Starks, M. T. (2006). Childhood gender atypicality, victimization, and PTSD among lesbian, gay, and bisexual youth. *Journal of Interpersonal Violence*, 21, 1462–1482.
- Diaz, R. M., Ayala, G., Bein, E., Henne, J., & Marin, B. V. (2001). The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 US cities. *American Journal of Public Health*, 91, 927–932.
- Dunn, T. L., Gonzalez, C. A., Costa, A. B., & Nardi, H. C. (2014). Does the minority stress model generalize to a non-U.S. sample? An examination of minority stress and resilience on depressive symptomatology among sexual minority men in two urban areas of Brazil. *Psychology of Sexual Orientation and Gender Diversity*, 1, 117–131.
- Feinstein, B. A., Goldfried, M. R., & Davila, J. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *Journal of Consulting and Clinical Psychology*, 80, 917–927.
- Grossman, A. H., D'Augelli, A. R., Salter, N. P., & Hubbard, S. M. (2005). Comparing gender expression, gender nonconformity, and parents' responses of female-to-male and male-to-female transgender youth: Implications for counseling. *Journal of LGBT Issues in Counseling*, 1, 41–59.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York: Guilford Press.
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the minority stress model. *Professional Psychology-Research and Practice*, 43, 460–467.
- Henning-Stout, M., James, S., & Macintosh, S. (2000). Reducing harassment of lesbian, gay, bisexual, transgender, and questioning youth in schools. *School Psychology Review*, 29, 180–191.
- Herek, G. M., & Berrill, K. T. (1992). Documenting the victimization of lesbians and gay men: Methodological issues. In G. M. Herek & K. T. Berrill (Eds.), *Hate crimes: Confronting violence against lesbians and gay men* (pp. 270–286). Newbury Park, CA: Sage.
- Hoad, N. W., Martin, K., & Reid, G. (2005). *Sex and politics in South Africa*. Cape Town: Double Storey.
- Jetten, J., Branscombe, N. R., Schmitt, M. T., & Spears, R. (2001). Rebels with a cause: Group identification as a response to perceived discrimination from the mainstream. *Personality and Social Psychology Bulletin*, 27, 1204–1213.
- Knox, J., Reddy, V., Kaighobadi, F., Nel, D., & Sandfort, T. G. M. (2012). *Communicating HIV status in sexual interactions: Assessing individual and situational predictors among South African MSM*. Paper presented at the International AIDS Conference, Washington, DC.
- Knox, J., Sandfort, T. G. M., Yi, H., Reddy, V., & Maimane, S. (2011). Social vulnerability and HIV testing among South African men who have sex with men. *International Journal of STD and AIDS*, 22, 709–713.
- Kohut, A. (2013). *The global divide on homosexuality: Greater acceptance in more secular and affluent countries*. Washington, DC: Pew Research Center.
- Kosciw, J. G., Palmer, N. A., & Kull, R. M. (2014). Reflecting resiliency: openness about sexual orientation and/or gender identity and its relationship to well-being and educational outcomes for LGBT students. *American Journal of Community Psychology*, 55, 167–178.
- Kwon, P. (2013). Resilience in lesbian, gay, and bisexual individuals. *Personality and Social Psychology Review*, 17, 371–383.
- Landolt, M. A., Bartholomew, K., Saffrey, C., Oram, D., & Perlman, D. (2004). Gender nonconformity, childhood rejection, and adult attachment: A study of gay men. *Archives of Sexual Behavior*, 33, 117–128.
- Logie, C. H., Newman, P. A., Chakrapani, V., & Shunmugam, M. (2012). Adapting the minority stress model: Associations between gender

- non-conformity stigma, HIV-related stigma and depression among men who have sex with men in South India. *Social Science and Medicine*, 74, 1261–1268.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33, 335–343.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83–104.
- Mayosi, B. M., Lawn, J. E., van Niekerk, A., Bradshaw, D., Abdool Karim, S. S., & Coovadia, H. M. (2012). Health in South Africa: Changes and challenges since 2009. *Lancet*, 380, 2029–2043.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36, 38–56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674–697.
- Mohr, J. J., & Fassinger, R. E. (2000). Measuring dimensions of lesbian and gay male experience. *Measurement and Evaluation in Counseling and Development*, 33, 66–90.
- Mohr, J. J., & Fassinger, R. E. (2006). Sexual orientation identity and romantic relationship quality in same-sex couples. *Personality and Social Psychology Bulletin*, 32, 1085–1099.
- Murray, S. O., & Roscoe, W. (2001). *Boy-wives and female husbands: Studies of African homosexualities*. Basingstoke, UK: Palgrave Macmillan.
- Newcomb, M. E., & Mustanski, B. (2010). Internalized homophobia and internalizing mental health problems: A meta-analytic review. *Clinical Psychology Review*, 30, 1019–1029.
- Ploderl, M., & Fartacek, R. (2009). Childhood gender nonconformity and harassment as predictors of suicidality among gay, lesbian, bisexual, and heterosexual Austrians. *Archives of Sexual Behavior*, 38, 400–410.
- Rabie, F., & Lesch, E. (2009). 'I am like a woman': Constructions of sexuality among gay men in a low-income South African community. *Culture Health & Sexuality*, 11, 717–729.
- Reid, G. (2005). 'A man is a man completely and a wife is a wife completely': Gender classification and performance amongst 'ladies' and 'gents' in Ermelo, Mpumalanga. In G. Reid & L. Walker (Eds.), *Men behaving differently: South African men since 1994* (pp. 205–227). Cape Town: Double Storey.
- Reid, G. (2010). The canary of the Constitution: Same-sex equality in the public sphere. *Social Dynamics*, 36, 38–51.
- Reid, G. (2013). *How to be a real gay: Gay identities in small-town South Africa*. Scottsville: University of KwaZulu-Natal Press.
- Sandfort, T. G. M., Melendez, R. M., & Diaz, R. M. (2007). Gender nonconformity, homophobia, and mental distress in Latino gay and bisexual men. *Journal of Sex Research*, 44, 181–189.
- Sandfort, T. G. M., Nel, J., Rich, E., Reddy, V., & Yi, H. (2008). HIV testing and self-reported HIV status in South African men who have sex with men: results from a community-based survey. *Sexually Transmitted Infections*, 84, 425–429.
- Sandfort, T. G. M., Yi, H. S., Knox, J., & Reddy, V. (2013). Sexual partnership types as determinant of HIV risk in South African MSM: An event-level cluster analysis. *AIDS and Behavior*, 17, S23–S32.
- Skidmore, W. C., Linsenmeier, J. A. W., & Bailey, J. M. (2006). Gender nonconformity and psychological distress in lesbians and gay men. *Archives of Sexual Behavior*, 35, 685–697.
- Sutton, T. H. (2007). The emergence of a male global gay identity: A contentious and contemporary movement. *Totem: The University of Western Ontario Journal of Anthropology*, 15, Article 7. Available at <http://ir.lib.uwo.ca/totem/vol15/iss1/7>.
- Swarr, A. L. (2004). Moffies, artists, and queens: Race and the production of South African gay male drag. *Journal of Homosexuality*, 46, 73–89.
- Toomey, R. B., Ryan, C., Diaz, R. M., Card, N. A., & Russell, S. T. (2010). Gender-nonconforming lesbian, gay, bisexual, and transgender youth: School victimization and young adult psychosocial adjustment. *Developmental Psychology*, 46, 1580.
- Vanable, P. A., McKirnan, D. J., & Stokes, J. P. (1998). Identification and involvement with the gay community scale. In C. M. Davis, W. L. Yarber, R. Bauserman, G. E. Schreer, & S. L. Davis (Eds.), *Handbook of sexuality-related measures* (pp. 407–409). Thousand Oaks, CA: Sage.
- Weber-Gilmore, G., Rose, S., & Rubinstein, R. (2011). The impact of internalized homophobia on outness for lesbian, gay, and bisexual individuals. *The Professional Counselor*, 1, 163–175.
- Willoughby, B. L. B., Doty, N. D., & Malik, N. M. (2010). Victimization, family rejection, and outcomes of gay, lesbian, and bisexual young people: The role of negative GLB identity. *Journal of GLBT Family Studies*, 6, 403–424.