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Gender Role Strain and the Precarious Manhood of Sexual Minority Kenyan Men

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Examining the impact of precarious manhood on the mental health of sexual minority men living in Kenya, we hypothesized that (a) men who have sex with men exclusively (MSME) and men who have sex with men and women (MSMW) would display differential patterns of conformity to norms of masculinity; (b) these differences would result in distinct patterns of association between masculine conformity and symptoms of psychological distress for MSME and MSMW; and (c) conformity to norms of masculinity would be bidirectionally associated with symptoms of depression and anxiety. Using data collected from 391 young men who participated in a community-based, cross-sectional study of HIV-related risk and resilience among young sexual minority men in western Kenya, we ran a multivariate analysis of variance (MANOVA) to assess differences in conformity to masculine norms and four hierarchical linear regression models to examine the associations between conformity to masculine norms and symptoms of anxiety and depression for MSME and MSMW. MANOVA results revealed no significant differences between MSME and MSMW in overall conformity to masculinity, although MSMW were significantly more likely to conform to the masculine norm of power over women. Regression results revealed that conformity to norms of masculinity was bidirectionally associated with psychological distress and that these patterns of association were distinct for MSME and MSMW. The discussion explores possible explanations for revealed differences between MSME and MSMW using existing research. Clinical implications, limitations, and opportunities for future research are also discussed.

Ikisiri

Kuchunguza athari za uume hatari juu ya afya ya akili ya wanaume wachache wanaoishi nchini Kenya, tunazo nadhariatete kwamba (1) wanaume wanaojamiiana na wanaume pekee (MSME) na wanaume wanaoshiriki ngono na wanaume na wanawake (MSMW) wataonyesha mifumo tofauti ya kuzingatia kanuni za uume; (2) tofauti hizi zinaweza kusababisha mwelekeo tofauti wa ushirikiano kati ya ufanisi wa wanaume na dalili za dhiki ya kisaikolojia kwa MSME na MSMW; na (3) kuzingatia kanuni za uume kutakuwa na mwelekeo wa kuwili katika kuhusishwa na dalili za unyogovu na wasiwasi. Kutumia data zilizokusanywa kutoka kwa vijana mia tatu tisaini na moja ambao walishiriki katika utafiti uliokitishwa katika jamii, wa kuzingatia sehemu ya hatari ya kuhusiana na Virusi vya UKIMWI na ukakamavu kati ya vijana wa kiume walio wachache huko Magharibi mwa Kenya, Kenya, tuliendesha MANOVA kupima tofauti kulingana na kanuni za uume na mifano minne ya mwelekezo wa mstari mfano kierakia kutathmini mahusiano kati ya utiifu kwa kanuni za uume na ishara za wasiwasi na unyogovu wa MSME na MSMW. Matokeo ya MANOVA haukuonyesha tofauti kubwa kati ya MSME na MSMW kwa kufuata kanuni za uume, ingawa MSMW ilionyesha kaida za uume kudhirisha nguvu dhidi ya wanawake. Matokeo ya ukandamizaji yalibainisha kuwa kufuata kanuni za uume ulikuwa unahusishwa na ule

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mwelekeo wa kuwili katika shida ya kisaikolojia, na kwamba mifumo hii ya chama ilikuwa tofauti kabisa kati ya MSME na MSMW. Mjadala unaangazia maelezo yawezekanayo kuhusu tofauti hizi kati ya MSME na MSMW kwa kutumia tafiti zilizopo. Vikwazo, nafasi kwa tafiti za baadaye, na matokeo ya hatua za kimuundo, ki jamii na katika kiwango cha mtu binafsi pia zinajadiliwa.

Public Significance Statement

The authors examine the impact of sexual behavior on the relationship between masculinity and mental health outcomes for sexual minority men living in Kenya. Results indicate differences in sexual behavior correlate to differences in patterns of association between conformity to norms of masculinity and psychological distress. Study findings have implications for the tailoring of interventions and also suggest a utility in exploring the lived experience of sexual minority men as a function of sexual identity as determined by behavior, as opposed to sexual identity determined by more subjective sexual orientation labels.

Keywords: masculinity, anxiety, depression, sexual behavior, Kenya

While there is a large body of literature establishing psychological distress as a significant public health issue facing sexual minority men in the United States, there is little empirical work exploring this issue in sub-Sharan African countries like Kenya. The majority of the current literature examining sexual minority populations in these regions focuses on these issues in the context of sexual risk behaviors and HIV/AIDS prevention (Graham & Harper, 2017; Secor et al., 2015). In one of the only studies to explore depressive symptoms and related psychosocial factors among sexual minority men in Kenya, Secor et al. (2015) found levels of depression significantly higher than the Kenyan national prevalence, as well as high levels of alcohol and other substance abuse. Addressing this gap in the literature is of particular importance in sub-Saharan African countries due to oftentimes hostile social and political climates marked by the entanglement of homophobic doctrine into law, public policy, and civic life in a way that perpetuates and justifies the subjugation of sexual minority populations in service of a heterosexist social order (Herek, 2009; Kombo et al., 2017; Stahlman et al., 2016).

Research has identified traditional gender roles, specifically norms of masculinity, as one of many threats to the mental health of sexual minority men. In a meta-analysis of 78 studies consisting of 19,453 participants from multiple countries, Wong, Ho, Wang, and Miller (2017) examined the relationship between conformity to masculine norms and mental health–related outcomes and found conformity to masculine norms to be positively associated with psychological distress and negatively associated with positive mental health outcomes and psychological help seeking. When examining the connection between masculinity and mental health, it is essential to consider the socially constructed nature of masculinities—stated in the plural to emphasize that there is no singular "masculinity." Many different conceptions of masculinity can and do exist between and within cultural groups (Connell & Messerschmidt, 2005; Reid & Walker, 2005; Thompson & Pleck, 1995). Therefore, sexual minority Kenyan men likely have somewhat different definitions of masculinity than their U.S. sexual minority or Kenyan heterosexual counterparts, highlighting the importance of contextually specific investigations into masculinity and related phenomenon. We designed this study to examine associations between masculine conformity and mental health outcomes in a sample of sexual minority men in Kenya to see if the patterns of associations identified in previous research hold cross-culturally and to highlight any divergences in these patterns as areas of further inquiry.

Precarious Manhood, Gender Role Strain, and Sexual Minority Men in Kenya

The theory of precarious manhood positions masculinity as a tenuous social accomplishment, as opposed to a developmental milestone or a biological predetermination, that must be repeatedly established and reinforced through public behaviors (Vandello & Bosson, 2013; Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Although the specific norms that must be acted out as public proof of one's manhood are culturally bound, the idea of masculinity as precarious and always in need of an active, public demonstration is evident across cultures (Gilmore, 1990; Vandello & Bosson, 2013). In this context, challenges to a man's manhood or performance of masculinity will result in increased anxiety and a compulsion to engage in an active demonstration of their manliness in the form of public behavior (Vandello & Bosson, 2013; Vandello et al., 2008). While hegemonic masculine ideals serve as a sort of gold standard for the performance of male identity, it does not follow that all men conform to all norms of hegemonic masculinity to the same degree in all spaces, places, or situations. Deviations from the hegemonic masculinity blueprint, and the resulting construction of more contextual masculinities, may be a response to an inability to conform to certain norms, reduced opportunities to enact behaviors in line with certain norms, social position, or the mix of incentives and disincentives that guide everyday behavior (Clarke, Marks, & Lykins, 2015; Lipenga, 2014; Sikweyiya, Jewkes, & Dunkle, 2014).

It is at the intersection of the public performance of masculinity and the context-specific boundaries placed on said performance where Pleck's (1987, 1995) gender role strain paradigm begins to explain the relationship between conformity to masculinity and mental health outcomes for sexual minority men. The theory of gender role strain outlines three pathways by which the behavioral presentation of masculinity adversely impacts mental health: (a) discrepancy strain, psychological distress associated with failing to meet masculine ideals; (b) dysfunction strain, where the perfor-

mance of normative male expectations results in psychological stress; and (c) trauma strain, intensified mental distress experienced by certain groups accountable to more extreme standards of masculinity (e.g., athletes, men of color, and sexual minorities; Pleck, 1987; Richmond & Levant, 2003). Existing research has provided evidence of discrepancy strain, dysfunction strain, and trauma strain in sexual minority populations (Fields et al., 2015; Midoun et al., 2016).

In Kenya, the dominant masculinity ideology dictates—among other expectations—that men be dominant over women, be promiscuous with women, and serve as the primary breadwinner and patriarch (Mahalik, Lagan, & Morrison, 2006; Spronk, 2014). Further, although rarely enforced, Kenyan laws and policies deeming same-sex sexual behavior a punishable offense nonetheless result in the prosecution and imprisonment of sexual minority Kenyans, directly fostering a culture of sexual stigma by institutionalizing and legitimizing negative attitudes about sexual minorities (Herek, 2009; Kenyan National Commission on Human Rights, 2012). A study by the Kenyan Human Rights Commission (2011) found that this culture of sexual stigma was responsible for a variety of human rights violations against sexual minority Kenyans, including physical assault from mobs and vigilantes, rape and sexual assault by police, denial of care by health workers, and institutional barriers to housing, education, and employment. Research has linked such antigay oppression with increased psychological distress among sexual minorities in the United States (Hatzenbuehler et al., 2014; Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010; Meyer, 2003). The internalization of these heterosexist attitudes may also lead to the development of negative self-schemas and the associated adverse mental health outcomes in sexual minority Kenyans, a connection revealed in U.S. sexual minority men but has yet to be comprehensively examined in Kenya (Feinstein, Goldfried, & Davila, 2012; Hatzenbuehler et al., 2014). As a result, gender role strain may have an even more profound impact on the mental health of sexual minority men living in Kenya due to the compounding stress of being a stigmatized sexual minority in a region where the gender roles are highly polarized, and the persecution of sexual minorities is overt and institutionalized.

Notably, although the majority of research exploring the intersection of masculinities and mental health examines masculinity as a risk factor, conforming to masculine norms has also been shown to reduce psychological distress by allowing individuals to "pass" and avoid the interpersonal, institutional, and societal discrimination experienced by sexual minority men. Passing may be particularly relevant for sexual minority men, allowing them to mitigate the possibility of easily being identified in the public sphere as a result of their gender performance and experiencing discrimination (Fields et al., 2015; Fuller, Chang, & Rubin, 2009; Spendelow, 2015). This coping strategy could be of particular relevance to sexual minority men in Kenya, due to the potentially dire consequences of being identified as a sexual minority. Existing research has also found that conformity to masculine norms such as self-reliance, winning, primacy of work, and emotional control is correlated with positive health outcomes and health-seeking behaviors in various populations, although researchers have yet to examine these connections in Kenyan sexual minority populations (Hammond, 2012; Iwamoto, Liao, & Liu, 2010; Levant & Wimer, 2014).

Hypotheses

While we acknowledge the objections to centering sexual behavior in lieu of self-determined sexual identity labels raised by scholars like Young and Meyer (2005), the contextually performative nature of masculinities informed our decision to explore the relationships between conformity to norms of masculinity and psychological distress in sexual minority Kenyan men by sexual behavior, as opposed to sexual orientation. Further, research has shown that sexual practices and sexual partner selection have implications on gender identity construction—both within and between sexual orientation labels (Dangerfield, Smith, Williams, Unger, & Bluthenthal, 2017; Midoun et al., 2016). Thus, research suggests that it is possible men who have sex with men exclusively (MSME) understand, negotiate, and enact masculinities in ways distinct from men who have sex with men and women (MSMW) due to differences in their lived experiences and access, ability, need, or incentives to conform to certain norms of hegemonic masculinity. These distinctions in the negotiated performances of masculinity between MSME and MSMW should then result in distinct patterns of association between conformity to norms of masculinity and mental health outcomes—as the success or failure of the performance is the site of this relationship. Research exploring this intersection is scarce, and this study is positioned to begin to address that gap in the literature (Dangerfield et al., 2017).

Consistent with this literature, we hypothesized that (a) patterns of conformity to masculine norms would differ between MSME and MSMW, (b) patterns of association between conformity to norms of masculinity and symptoms of anxiety and depression for MSME and MSMW would be distinct, and (c) conformity to masculine norms would be bidirectionally associated with symptoms of psychological distress, exemplifying the potential for masculinity to serve as both a risk factor and a protective factor for sexual minority men with regard to mental health outcomes.

Method

Participants and Procedures

Data were drawn from a cross-sectional study ("Jiamini Study") of HIV-related risk and resilience among young gay and bisexual men who have sex with men (GBMSM) in western Kenya, which was codeveloped by young GBMSM and members of local lesbian, gay, bisexual, and transgender (LGBT) organizations using community-based participatory research principles (Israel et al., 2006; Wallerstein & Duran, 2006). In line with previous research exploring the most effective strategies for recruiting men who have sex with men in Kisumu, the principal city of western Kenya, recruitment tactics utilized included (a) mobilization of key informants, community leaders, and peers; (b) distribution of community-developed materials at LGBT-friendly events and venues; and (c) a "kick-off" event to launch the study (Ogendo et al., 2012). Three members of the authorship team were intimately involved with the conceptualization and execution of the Jiamini Study, with two of those authors living and working in Kenya and the other having 15 years of experience researching and providing services to sexual and gender minority communities in Kenya.

Inclusion criteria for study participants were as follows: (a) between 18 and 29 years of age; (b) assigned male sex at birth and

currently identify as a man; (c) identify as gay, bisexual, another nonheterosexual identity, or report having had anal or oral sex with a man in the past 12 months; and (d) currently reside in western Kenya. Participants completed the survey on a computer in either English or Dholuo, the language of the region. Participants were compensated with money and provided educational materials related to HIV and other sexually transmitted infections. The institutional review boards of the University of Michigan in the United States and Maseno University in Kenya approved study procedures.

Measures

Demographics. We collected data on the following demographic variables: (a) age; (b) employment, through a single item assessing current source of income—with participants indicating a source of income coded as employed and those who did not coded as unemployed; and (c) educational attainment, through a single item asking participants to report the highest level of education they had completed.

Sexual behavior. Sexual behavior was determined using several items inquiring whether the participant had engaged in oral, anal, or vaginal sexual intercourse with at least one man or one woman in the past 12 months. We coded participants only having had sexual intercourse with men as MSME and participants who had sexual intercourse with men and women as MSMW.

Number of sexual partners. We calculated the number of sex partners during the past 12 months by summing the responses to four questions asking participants to indicate how many women and men they have had as regular or nonregular sexual partners in the past 12 months.

Experienced discrimination. We utilized a 19-item measure asking participants how many times in the past 12 months they experienced specific acts of discrimination across multiple domains because someone assumed that they were a man who has sex with other men to assess experienced discrimination (Herek & Berrill, 1992). Items were dichotomously coded—with participants who had experienced a particular act of discrimination coded as 1 and those who had no coded as 0. We calculated a total experienced discrimination score by summing the scores from all items, with higher scores corresponding to higher levels of experienced discrimination.

Social support. We measured social support with the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). Although there are concerns about the quality of research assessing the psychometric properties of international translations of the MSPSS (Dambi et al., 2018), Stewart, Umar, Tomenson, and Creed (2014) validated the MSPSS with a Malawian sample. Malawi is a sub-Saharan African nation akin to Kenya, and we argue that work supports our use of the MSPSS with our sample. The MSPSS contains 12 Likert scale items, with responses ranging from 1 = *very strongly disagree* to 7 = *very strongly agree,* measuring social support across three different domains: family, friends, and significant others. We calculated a global social support score by averaging scores from all items, with higher scores corresponding to higher levels of overall social support. The MSPSS demonstrated strong internal consistency in our sample (α = .937).

Conformity to masculine norms. An adaptation of the Conformity to Masculine Norms Inventory–46 (CMNI-46) was used to assess the degree of compliance to norms of masculinity (Parent & Moradi, 2009). The CMNI-46 contains 46 Likert scale items, with responses ranging from 1 = *strongly disagree* to 4 = *strongly agree,* to measure conformity across nine different dimensions of hegemonic masculinity: Winning (e.g., "It is important for me to win"), Emotional Control (e.g., "I never share my feelings"), Risk-Taking (e.g., "I enjoy taking risks"), Power Over Women (e.g., "Women should be subservient to men"), Playboy (e.g., "I would feel good if I had many sexual partners"), Self-Reliance (e.g., "I hate asking for help"), Primacy of Work (e.g., "Work comes first"), Heterosexual Self-Presentation (e.g., "I try to avoid being perceived as gay"), and Violence (e.g., "Sometimes violent action is necessary"). Although developed to measure masculinity as constructed in the United States, similarities between U.S. and Kenyan men regarding gender roles and gendered developmental milestones suggest that the CMNI-46 would be an acceptable measure for use in this population (Mahalik et al., 2006). We calculated scores for each of the nine subscales by averaging the values of the items corresponding to each scale. Items were reverse coded before calculation to ensure that higher cumulative scores of the subscale items indicated increased levels of conformity to that norm of masculinity.

Cronbach's alpha values for the original CMNI-46 subscales were as follows: Winning (α = .648), Emotional Control (α = .434), Risk-Taking (α = .562), Violence (α = .426), Power Over Women (α = .799), Playboy (α = .580), Self-Reliance (α = .340), Primacy of Work (α = .715), and Heterosexual Self-Presentation (α = .782). To address internal consistency issues indicated by what we believed to be unacceptably low Cronbach's alpha values, we adjusted items in six of the nine CMNI-46 subscales (Winning, Emotional Control, Risk-Taking, Violence, Playboy, and Self-Reliance). This adjustment involved the removal of items to achieve an alpha value closer to .7, which existing literature has identified as an being an acceptable standard (George & Mallery, 2003; Gliem & Gliem, 2003).

Adjustments made were as follows: (a) removed Item 1 from the Winning subscale; (b) removed Items 18, 32, and 45 from the Emotional Control subscale; (c) removed Item 6 from the Risk-Taking subscale; (d) removed Items 19 and 30 from the Violence subscale; (e) removed Item 12 from the Playboy subscale; and (f) removed Items 3, 26, and 43 from the Self-Reliance subscale. Notably, most of the items removed were reverse-coded items relative to the items that remained after adjustment; this is in line with research suggesting that the reverse coding of items can lead to statistically different responses and can create internal consistency issues (Barnette, 2000; Weems & Onwuegbuzie, 2001). We contend that these effects may be of particular concern when dealing with measures that have been translated into different languages, as was done in this study. Cronbach's alpha values for the adjusted CMNI-46 subscales used in these analyses are as follows: Winning (α = .704), Emotional Control (α = .744), Risk-Taking (α = .734), Violence (α = .622), Power Over Women (α = .799), Playboy (α = .722), Self-Reliance (α = .642), Primacy of Work (α = .715), and Heterosexual Self-Presentation (α = .782).

Psychological distress. We measured symptoms of depression and anxiety using the Hopkins Symptom Checklist–25

(HSCL-25; Mollica, 2004). Although developed in the United States, the HSCL-25 has been validated using a sample from Tanzania, a geographically close and culturally similar country, providing evidence to support the use of this measure in our analyses (Kaaya et al., 2002). The HSCL-25 consists of 25 Likert scale items, with responses ranging from 1 = *not at all* to 4 = *extremely*. Of the HSCL-25's 25 items, 10 items assess anxiety symptoms and the remaining 15 assess depression symptoms. We calculated depression and anxiety symptom scores by averaging the scores of the items corresponding to each mental health outcome, with higher scores indicating higher levels of depression and anxiety symptoms. Reliability analyses revealed strong internal consistency in both the depression ($\alpha = .972$) and anxiety ($\alpha = .954$) symptom scales.

Data-Analytic Strategy

Exploratory analyses. Independent samples *t* tests were used to determine if MSME differed from MSMW on demographic variables, number of sexual partners, or mental health outcome variables. We then ran a multivariate analysis of variance test (MANOVA) to determine if MSME and MSMW differed in their overall conformity to masculine norms and specific conformity to each of the nine norms of masculinity measured by the adapted CMNI-46 subscales.

Regression analyses. We estimated two hierarchical linear regression models to examine the association between the nine components of conformity to masculine norms and symptoms of both anxiety and depression for MSME. We also estimated two hierarchical linear regression models to examine the association between the nine components of conformity to masculine norms and those same variables for MSMW. The first step of each regression model included the demographic variables of age, employment status, and educational attainment. Experienced discrimination and social support were also added in the first step of each regression model as control variables given the documented relationships between these variables and mental health outcomes (Hatzenbuehler et al., 2010; Huebner, Rebchook, & Kegeles, 2004; Lindsey, Joe, & Nebbitt, 2010; Shim et al., 2012). The second step of each regression model added the nine CMNI-46 subscales. We chose a two-step hierarchical regression model due to its ability to isolate the amount of variance accounted for by conformity to norms of masculinity over and above what is accounted for by demographics, experienced discrimination, and social support.

Results

Sample

In total, 507 young men participated in the parent study. After removing men who reported not having had sexual intercourse at all in the last 12 months ($N = 95$), those who reported only having had sex with women ($N = 12$) in the last 12 months, and those who failed to complete all items used to calculate the nine masculinity subscales ($N = 9$), we had a final sample size of 391 young men for our analyses. The young men in our sample were between the ages of 18 and 30 ($M = 22.61$). In terms of sexual behavior, the young men reported an average of 5.5 sexual partners in the past 12 months ($SD = .39$), and the majority, 52.9%, were behaviorally MSME ($N = 207$), while the remaining 47.1% of the sample were behaviorally MSMW ($N = 184$). The majority, 60.9%, of the sample reported current employment, and 72.4% of the sample indicated they had at least completed secondary school.

Exploratory Analyses

MSMW reported higher levels of depressive symptoms ($M = 1.56$, $SD = 0.66$) than MSME ($M = 1.37$, $SD = .57$), $t_{(389)} = -3.05$, $p < .01$, although we found no significant differences between MSME and MSMW in anxiety symptoms. MSMW were older ($M = 23.4$, $SD = .3.31$) than MSME ($M = 21.9$, $SD = 2.84$), $t_{(389)} = -4.72$, $p < .001$. MSMW also reported higher levels of employment ($M = 0.69$, $SD = 0.46$) than MSME ($M = 0.54$, $SD = 0.50$), $t_{(389)} = -3.15$, $p < .01$. No significant differences were found between the groups on educational attainment or number of sexual partners. MANOVA testing revealed no significant differences between MSME and MSMW in overall conformity to masculine norms. We performed a Bonferroni correction to account for the number of simultaneous comparisons performed, reducing the alpha required for between-subjects effect significance from .05 to .006. At this adjusted alpha level, MANOVA between-subjects effect testing revealed a significant difference between MSME and MSMW in their conformity power over women, $F_{(1, 389)} = 8.22$, $p = .004$, with MSMW reporting higher levels of conformity ($M = 2.52$, $SD = 0.58$) than MSME ($M = 2.37$, $SD = 0.50$). We found no significant differences between MSME and MSMW on degree of conformity to the remaining eight norms of masculinity measured by the CMNI-46.

Regression Analyses

Depressive symptoms. The first step of the model was significant for MSME, $F_{(5, 201)} = 29.38$, $p < .001$, with an R^2 value of .422. Introducing the CMNI-46 variables in the second step accounted for an additional 8.3% of the variance and this change in R^2 was significant, $F_{(14, 192)} = 14.02$, $p < .001$. Based on standardized beta weights, conformity to the following norms of masculinity emerged as significant correlates of depression symptoms for MSME: Violence, $\beta = -.306$, $t_{(192)} = -3.75$, $p < .001$; Self-Reliance, $\beta = .294$, $t_{(192)} = 3.69$, $p < .001$; and Heterosexual Self-Presentation, $\beta = -.251$, $t_{(192)} = -3.61$, $p < .001$. For other results, see Table 1.

The first step of the model was also significant for MSMW, $F_{(5, 178)} = 6.64$, $p < .001$, with an R^2 value of .157. Introducing the CMNI-46 variables in the second step accounted for an additional 17.1% of the variance, and this change in R^2 was significant, $F_{(14, 169)} = 5.90$, $p < .001$. Based on standardized beta weights, conformity to the following norms of masculinity emerged as significant correlates of depression symptoms for MSMW: Winning, $\beta = -.277$, $t_{(169)} = -2.91$, $p < .01$; Emotional Control, $\beta = -.343$, $t_{(169)} = -3.56$, $p < .001$; Self-Reliance, $\beta = .235$, $t_{(169)} = 2.05$, $p < .05$; and Primacy of Work, $\beta = .330$, $t_{(169)} = 3.06$, $p < .01$. For other results, see Table 1.

Anxiety symptoms. The first step of the model was significant for MSME, $F_{(5, 201)} = 23.2$, $p < .001$, with an R^2 value of .366. Introducing the CMNI-46 variables in the second step ac-

Table 1
Depression Symptoms Regression Models

	MSME			MSMW		
	Unstandardized coefficients		Standardized coefficients	Unstandardized coefficients		Standardized coefficients
Independent variables	*B*	*SE*	Beta	*B*	*SE*	Beta
Step 1: Controls						
(Constant)	1.343	.307		2.062	.414	
Age	.018	.013	.091	−.007	.017	−.033
Educational Attainment	.102	.030	.199	−.008	.046	−.013
Employment Status	.030	.072	.026	.064	.116	.045
Experienced Discrimination	.052	.007	.450	.041	.009	.335***
Social Support	−.098	.032	−.294	−.102	.046	−.153*
Step 2: CMNI-46						
(Constant)	2.304	.755		3.147	1.001	
Age	.012	.013	.060	−.012	.016	−.063
Educational Attainment	.080	.029	.156	−.039	.043	−.067
Employment Status	.018	.071	.016**	.114	.108	.080
Experienced Discrimination	.050	.007	.433***	.032	.009	.256**
Social Support	−.167	.032	−.308***	−.077	.044	−.116
Winning	.039	.107	.026	−.492	.169	−.277**
Emotional Control	−.031	.087	−.026	−.381	.107	−.343***
Risk-Taking	−.123	.097	−.094	−.127	.117	−.100
Violence	−.421	.112	−.306***	−.103	.133	−.070
Power Over Women	−.081	.069	−.070	−.059	.092	−.052
Playboy	.055	.078	.049	−.061	.099	−.052
Self-Reliance	.369	.100	.294***	.322	.157	.235*
Primacy of Work	.186	.107	.128	.481	.157	.330**
Heterosexual Self-Presentation	−.306	.085	−.251***	.020	.099	.015

Note. MSME = men who have sex with men exclusively; MSMW = men who have sex with men and women; CMNI-46 = Conformity to Masculine Norms Inventory–46.
* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

counted for an additional 7.9% of the variance, and this change in R^2 was significant, $F_{(14,\ 192)} = 12.07$, $p < .001$. Based on standardized beta weights, conformity to the following norms of masculinity emerged as significant correlates of anxiety symptoms for MSME: Risk-Taking, $\beta = -.169$, $t_{(192)} = -2.21$, $p < .05$; Violence, $\beta = -.309$, $t_{(192)} = -3.65$, $p < .001$; Playboy, $\beta = .149$, $t_{(192)} = 2.06$, $p < .05$; Self-Reliance, $\beta = .216$, $t_{(192)} = 2.61$, $p < .05$; Primacy of Work, $\beta = .160$, $t_{(192)} = 2.08$, $p < .05$; and Heterosexual Self-Presentation, $\beta = -.323$, $t_{(192)} = -4.47$, $p < .001$. For other results, see Table 2.

The first step of the model was also significant for MSMW, $F_{(5,\ 178)} = 6.29$, $p < .001$, with an R^2 value of .150. Introducing the CMNI-46 variables in the second step accounted for an additional 15.3% of the variance, and this change in R^2 was significant, $F_{(14,\ 169)} = 5.25$, $p < .001$. Based on standardized beta weights, conformity to the following norms of masculinity emerged as significant correlates of anxiety symptoms for MSMW: Winning, $\beta = -.278$, $t_{(169)} = -2.86$, $p < .01$; Emotional Control, $\beta = -.328$, $t_{(169)} = -3.34$, $p < .01$; and Primacy of Work, $\beta = .297$, $t_{(169)} = 2.70$, $p < .01$. For other results, see Table 2.

Discussion

This study explored whether MSME and MSMW living in western Kenya differed in their conformity to masculine norms and experienced relationships between conformity to masculine norms and mental health outcomes. We found MSMW reported significantly higher levels of depressive symptoms than MSME, consistent with research among U.S.-based samples (Dyer, Regan, Pacek, Acheampong, & Khan, 2015; Dyer et al., 2013; Shearer et al., 2016). However, in contrast with U.S. research indicating MSMW suffer from higher levels of anxiety relative to MSME, we found no significant differences between the groups' self-reported symptoms of anxiety (MacLeod, Bauer, Robinson, Mackay, & Ross, 2015; Wadsworth & Hayes-Skelton, 2015). This discrepancy may be due to the lack of research comparing the mental health of MSME and MSMW in Kenya, meaning that the findings from much of the research on this topic may not be generalizable to Kenyan MSME and MSMW. The difference may also be partially related to cross-cultural differences in predictors of increased psychological distress and the experience and conceptualization of anxiety in Kenya (Aldwin & Greenberger, 1987; Kirmayer, 2001; Moazen-Zadeh & Assari, 2016).

Contrary to our hypothesis, there was no significant difference in overall conformity to masculine norms between MSME and MSMW, underscoring the hegemonic nature of masculinity and masculine ideology in a Kenyan context. However, there was a significant difference found between MSME and MSMW's conformity to the specific norm of power over women. This finding may be evidentiary of the situational and performative nature of masculinities, suggesting the role women play in the lives of MSMW as sexual partners may create an environment and incentive structure to enact/conform to this norm in ways that MSME are unlikely to be able, desire, or be socially incentivized to.

Table 2
Anxiety Symptoms Regression Models

	MSME			MSMW		
	Unstandardized coefficients		Standardized coefficients	Unstandardized coefficients		Standardized coefficients
Independent variables	*B*	*SE*	Beta	*B*	*SE*	Beta
Step 1: Controls						
(Constant)	.832	.334		1.809	.378	
Age	.036	.014	.170*	−.002	.015	−.011
Educational Attainment	.046	.032	.086	−.055	.042	−.103
Employment Status	.030	.079	.025	.077	.106	.059
Experienced Discrimination	.054	.007	.456***	.036	.008	.325***
Social Support	−.098	.032	−.032**	−.055	.042	−.091
Step 2: CMNI-46						
(Constant)	2.339	.812		2.857	.927	
Age	.027	.014	.130	−.007	.015	−.040
Educational Attainment	.018	.031	.035	−.085	.040	−.159*
Employment Status	−.020	.077	−.017	.129	.100	.099
Experienced Discrimination	.050	.007	.415***	.026	.009	.228**
Social Support	−.127	.034	−.226***	−.031	.041	−.052
Winning	.006	.116	.116	−.448	.157	−.278**
Emotional Control	−.022	.093	−.017	−.330	.099	−.328**
Risk-Taking	−.229	.104	−.169*	−.082	.108	−.071
Violence	−.440	.121	−.309***	−.005	.124	−.003
Power Over Women	−.068	.074	−.057	−.070	.085	−.068
Playboy	.172	.084	.149*	−.042	.092	−.039
Self-Reliance	.281	.107	.216*	.241	.146	.193
Primacy of Work	.240	.115	.160*	.393	.146	.297**
Heterosexual Self-Presentation	−.408	.091	−.323***	−.025	.092	−.020

Note. MSME = men who have sex with men exclusively; MSMW = men who have sex with men and women; CMNI-46 = Conformity to Masculine Norms Inventory–46.
* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Conformity to Masculine Norms and Psychological Distress

Consistent with our hypotheses and extant literature, our results revealed associations between conformity to norms of masculinity and symptoms of depression and anxiety in both MSME and MSMW (Carter, Silverman, & Jaccard, 2011; Price, Gregg, Smith, & Fiske, 2018). Also, as hypothesized, these associations were mixed in directionality—with conformity to some norms positively correlated with psychological distress and conformity to others negatively related to psychological distress. These findings exemplify how masculinity can both contribute to and protect against psychological distress (Fischgrund, Halkitis, & Carroll, 2012; Spendelow, 2015). Further, associations between conformity to specific masculine norms and symptoms of depression and anxiety were distinct for MSME and MSMW. While conformity to the norms of self-reliance and primacy of work emerged as common risk factors for MSME and MSMW, patterns of association between conformity to masculine norms and mental health outcomes for MSME and MSMW were otherwise remarkably distinct.

Conformity to masculinity and increased psychological distress. Conformity to the masculine norm of self-reliance was associated with increased symptoms of depression in both MSME and MSMW, as well as increased anxiety symptoms for MSME only. This finding is in line with several studies that have identified masculine self-reliance as a risk factor for psychological distress, including depression, anxiety, irritability, intrusive thoughts, and social discomfort (Burns & Mahalik, 2006; Mahalik, Good, & Englar-Carlson, 2003; Mahalik, Locke, et al., 2003). This association is suggestive of male gender role dysfunction strain, a phenomenon where conformity to a norm of masculinity results in psychological distress as a result of the norm itself being dysfunctional or harmful (Pleck, 1995). Research has linked men's endorsement of masculine self-reliance to counterproductive behaviors such as a decreased ability to manage the adverse psychological effects of microaggressions and a reduced likelihood of seeking mental health services—both of which exacerbate psychological distress (Matthews, Hammond, Nuru-Jeter, Cole-Lewis, & Melvin, 2013).

In contrast to our findings and much of the existing literature, some studies have linked the endorsement of masculine self-reliance to decreased psychological distress (Hammond, 2012; Hammond, Matthews, Mohottige, Agyemang, & Corbie-Smith, 2010). This discrepancy may be indicative of a threshold effect where some degree of masculine self-reliance results in adaptive levels of active coping that improve individuals' sense of control over their situation and lead to positive mental health outcomes, but at higher levels or in response to specific stressors, persistent active coping can be maladaptive and psychologically harmful (Matthews et al., 2013). Existing research showing active coping strategies to be less effective when applied to uncontrollable stressors and maladaptive forms of active coping to be associated with adverse physical and mental health outcomes supports this interpretation (Carothers, Arizaga, Carter, Taylor, & Grant, 2016;

Stevens-Watkins et al., 2016). As discrimination based on sexual minority status is an uncontrollable stressor, it is possible that active coping may not be the best coping strategy for sexual minority men. Additionally, given that conformity to masculine norms is related to men's relative social power, it is possible that sexual minority men are more likely to overadhere to models of masculinity—like self-reliance—to compensate for their stigmatized sexual minority identity (Hammond et al., 2010; Sánchez, Greenberg, Liu, & Vilain, 2009). As a result, sexual minority men may be more likely to adhere to norms of masculine self-reliance at levels above the threshold and experience psychological distress as a result.

Endorsement of masculine primacy of work was associated with increased symptoms of anxiety for both MSME and MSMW, as well as increased symptoms of depression for MSMW only. As prior literature has not demonstrated such a relationship, our findings may reflect a discrepancy strain unique to the current socioeconomic realities facing Kenya men. For these men, conformity to masculine primacy of work is a reflection of the culturally dominant expectation that men be the breadwinners and heads of households (Mahalik et al., 2006; Spronk, 2014). Unfortunately, the following demographic and economic trends have obstructed this pathway to manhood for many men in Kenya: (a) Sharp decreases in infant mortality have expanded the working-age population far beyond what the economies of African nations like Kenya can accommodate, (b) expansion of educational opportunities leading to a youth population that is overeducated and debt-burdened relative to the jobs available in the transitioning economy, and (c) increased participation of women in the labor force—resulting in more competition for already scarce jobs and a higher standard that men must meet to fulfill the traditional breadwinner role (Mojola, 2014). These dynamics have made it impossible for many men to meet the breadwinner and head of household gender role expectations, resulting in gender role discrepancy strain and psychological distress (Izugbara, 2015; Silberschmidt, 2001). Notably, sexual minority Kenyan men are more likely to experience this gender role discrepancy strain and resulting psychological distress due to also having to contend with homophobic employment discrimination.

For MSME only, conformity to the norm of desiring multiple sexual partners was associated with increased symptoms of anxiety. When discussing the norm of wanting numerous sexual partners, it is important to note that traditional notions of sub-Saharan masculinity conceptualize having multiple sexual partners as a means of attaining status and boosting a man's social position. Previously described economic shifts resulting in higher rates of unemployment, lower wages, and the inability of sub-Saharan African men to attain other markers of traditional masculinity—such as marriage and owning a home—have further incentivized the acquisition of multiple sexual partners as a means of enacting masculinity and boosting self-esteem (Hunter, 2005). In this context, and contrary to our findings, one would expect conformity to a masculine desire for multiple sexual partners would be associated with decreased psychological distress—not an increase. One explanation for this conflict is that, although the questions in the CMNI-46 refer to a desire to have multiple sex partners of any gender, traditional Kenyan masculine ideologies are constructed such that the incentives driving men to have multiple sexual partners, and the increased social status bestowed upon them, are specifically oriented toward the accumulation for women as sexual partners (Hunter, 2005). In this context, the increase in anxiety for MSME may be attributable to gender role discrepancy strain, a phenomenon where men experience psychological distress as a result of being unable to meet the expectations of masculinity (Fields et al., 2015; Pleck, 1995). This understanding would also explain why this relationship exists only for MSME and not MSMW.

Conformity to masculinity and decreased psychological distress. For MSME, conformity to masculine norms of violence, heterosexual self-presentation, and risk-taking correlated with reduced psychological distress. Conformity to masculine violence was associated with fewer symptoms of depression and anxiety for MSME. If we can reasonably assume that conformity to masculine violence results in an increased likelihood of engaging in violent behavior, this finding is in line with existing literature showing men who conform more rigidly to norms of masculinity are more likely to exhibit externalizing symptoms—such as anger, violence, and aggression—than they are to experience internalizing symptoms—such as depressed mood and rumination (Price et al., 2018). Given that we found no significant difference in overall conformity to masculinity between MSME and MSMW, which would suggest an equal likelihood of exhibiting externalizing symptoms, we are unsure why violence would be associated with reductions in psychological distress for MSME but not MSMW. It is possible that this is related to an increased need to publicly perform violence to assert masculinity being more salient for MSME than MSMW due to increased risk of identification and persecution. It is also possible that this finding is linked to an increase in an unmeasured factor related to violence, such as alcohol or substance abuse (Basterfield, Reardon, & Govender, 2014).

Endorsement of masculine heterosexual self-presentation was associated with decreased anxiety and depression symptoms for MSME, a finding that is consistent with the literature on passing as a strategy for sexual minorities to limit or avoid the stigmatization that can result in decreased psychological distress (Fields et al., 2015; Fuller et al., 2009). Risk-taking was also associated with decreased symptoms of anxiety for MSME, consistent with the literature showing anxiety to be associated with avoidance of risk-taking behaviors and more conservative appraisals of risk—therefore, you would expect decreases in symptoms of anxiety to be associated with increased conformity to the masculine norm of risk-taking among men (Giorgetta et al., 2012; Maner et al., 2007; Maner & Schmidt, 2006).

For MSMW, conformity to masculine emotional control was associated with reduced symptoms of both anxiety and depression. Importantly, the questions assessing emotional control in the CMNI-46 address issues of emotion concealment and disclosure, as opposed to emotion regulation. In this context and understanding that stoicism and aversion to weakness are tenets of traditional masculinity, firm adherence to the norm of emotional control may boost external masculine presentation and work to reduce instances of discrimination based on a perceived weakness, femininity, or sexual minority identity—creating a protective effect akin to passing (Mahalik et al., 2006). Viewed alongside the relationship between conformity to heterosexual self-presentation and decreased psychological distress for MSME, these findings highlight the contextual nature of masculinities. While passing is the

mechanism mediating both of these relationships, the levers pulled by these men (conformity to emotional control for MSMW and heterosexual self-presentation for MMSE) are subtly distinct and dictated by the close relationship between their sexual behavior and gender identity. As MSMW engage in sexual relationships with women, they are arguably under less pressure to specifically defend themselves against accusations of homosexuality than MSME, shifting the battleground on which their masculinity is challenged to prioritize the projection of stoicism and hardness over a heterosexual self-presentation.

Conformity to the masculine norm of winning was also correlated with reduced symptoms of both anxiety and depression for MSMW. This finding echoes a similar result from Iwamoto et al. (2010) showing that, in a sample of Asian American men, endorsement of the masculine norm of winning was associated with reduced symptoms of depression. Importantly, sub-Saharan African conceptions of masculinity similarly value success, status, and achievement. In a historical, ethnographic exploration of sub-Saharan African masculinity, Hunter (2005) found that men frequently emphasized the time and effort that they put into becoming *umnumzanas* (a homestead head) in their oral accounts. Wrapped up in this idea of the homestead head are the establishment of an independent household and the accumulation of women and wealth in the pursuit of status and esteem (Hunter, 2005; Odimegwu, Pallikadavath, & Adedini, 2013). Given how central work can be to conceptualizations of wealth, status, and success, it may seem as though this finding conflicts with the correlation we found between conformity to masculine primacy of work and increased psychological distress. Importantly, the CMNI-46 questions used to assess "winning" do not confine winning to employment or any specific arena—so any potential conflict is a matter of interpretation. Thus, it is possible that the poor economic conditions prohibiting Kenyan men from meeting the expectations placed on them to be the breadwinner and head of household have also incentivized them to boost their self-esteem by exercising their dominance, and "winning," in other areas (Izugbara, 2015; Silberschmidt, 2001). Silberschmidt (2001) argues that one area in which Kenyan men may exercise this dominance is through engaging in violence against women. This argument is particularly interesting in the context of our finding that MSMW endorsed the norm of power over women significantly more than MSME, which could explain why this particular relationship is unique to MSMW. On the other hand, Silberschmidt (2001) also suggests men may also enact "winning" through the accumulation of women as sexual partners. While this could be interpreted to suggest a link between increased conformity to the masculine playboy norm of desiring multiple sexual partners and decreased psychological distress for MSMW, no such association was revealed in our results.

Implications

Several clinical implications can be drawn from the patterns of association between conformity to masculine norms and mental health outcomes for MSME and MSMW revealed in this study. Conformity to masculine primacy of work was associated with increased psychological distress for both MSME and MSMW. As previously referenced, the socioeconomic climate in Kenya has made it difficult for sexual minority men to find financially rewarding work that makes use of their increasingly nonagrarian education and provides them with the status necessary to fulfill the breadwinner role—leading to discrepancy strain (Izugbara, 2015; Mojola, 2014; Silberschmidt, 2001). These results suggest the importance of working with men to reduce this discrepancy strain through efforts like gender-transformative interventions decentralizing work in men's conceptualization of masculinity or psychoeducational interventions to help men develop adaptive coping strategies and better manage stressors of performing head of household gender role expectations under these conditions. As the economy rebounds (World Bank, 2018), workforce participation programs should also be explored as psychosocial interventions to improve the mental health of men through the reduction of gender role discrepancy strain—with work needing to be done to ensure the inclusion of sexual minority men in such efforts.

Masculine self-reliance was also associated with increased symptoms of psychological stress for both MSME and MSMW. Operating under the previously outlined theory, whereby masculine self-reliance results in adaptive active coping when applied to controllable stressors in moderation but is psychologically damaging in response to uncontrollable stressors or when persistently relied upon, these findings suggest sexual minority men are experiencing a kind of gender role dysfunction strain. Clinicians looking to mitigate this discrepancy strain should consider helping sexual minority men develop coping strategies better suited to deal with the uncontrollable stressors of homophobia or working with them to build and extend their social support networks, thereby reducing the need to engage in persistent active coping. Aforementioned workforce participation programs may also help reduce this dysfunction strain insofar as employment works to deepen ties to the community, affirm masculine status, and provide necessary financial resources.

In terms of group-specific implications, clinicians working with MSME clients experiencing psychological distress from discrepancy strain associated with conformity to a masculine desire for multiple sexual partners should focus on helping these men redefine their masculinity rather than be conflicted by externally defined masculinities that devalue their same-sex attractions and behaviors. This work might involve helping these men expand their conceptualization of masculinity to value the accumulation of multiple male partners similarly to female partners or unpacking the motivation behind this desire (e.g., is the desire linked to an inability to "win" in other areas of masculine life?) and channeling that energy into more adaptive practices (Silberschmidt, 2001).

The intuitive association between conformity to heterosexual self-presentation and reduced psychological distress for MSME may be due to conformity helping these men camouflage their same-sex attractions, behaviors, or identities, mitigating the ill effects of heterosexist and homophobic stigma and discrimination. Clinicians should work with clients engaging in these practices to ensure that such concealment is adaptive and in line with their values and, to the extent that it is not, facilitate the development of alternative coping strategies to manage the stressors of heterosexist oppression without undercutting their sense of self-worth. A similar calibration approach should be taken concerning the found associations between conformity to emotional control and winning and reduced psychological distress for MSMW; the common concern is that conformity to these norms could lead to gender role dysfunction strain and become maladaptive at certain levels and in specific contexts. For example, while the performance of emo-

tional stoicism may be protective insofar as it projects a traditionally masculine image, reducing the likelihood of being targeted for homophobic discrimination, it can become dysfunctional to the extent that it impedes help seeking or leads to internalizing behaviors. Likewise, conformity to the masculine norm of winning may become maladaptive as it starts to look less like healthy competition and striving for success and more like a desire to dominate others.

Strengths, Limitations, and Future Research

A core strength of this study lies in its community-based participatory research approach, which allowed for the collection of a large sample of young sexual minority men from nine different regions in western Kenya and the active involvement of these men in the research process. This study is the only study to explore the relationship between mental health outcomes and masculinity both at the trait level utilizing individual subscales and as a global construct in our population of interest—allowing for a level of granularity and nuance in our analysis that can advance the conversation around men and masculinities. Additionally, while how we define, shape, and enact masculinities through behavior has been well documented, this is one of few studies to explore differences in masculine presentation and mental health outcomes as a function of sexual behavior, as opposed to sexual identity. Future research should build on this study by exploring these differences qualitatively to allow us to develop a better understanding of how men subjectively process their social context and actively make decisions about their gendered performance. Answering questions such as "what cues men look for to make decisions about masculine presentation" and "what social incentives/disincentives men see around them exerting pressure on this decision-making process" would be best done qualitatively and are essential for understanding these relationships and also identifying points at which we can intervene to produce desired outcomes.

This sociopolitical climate in Kenya, which makes sexual minority men a particularly hard-to-reach population, presents a limitation to our findings. While convenience sampling strategies, like those used in this study, are useful when studying hard-to-read populations, they inherently introduce sampling bias and reduce the generalizability of study findings. The cross-sectional nature of the study is a limitation in that it prevents us from drawing causal conclusions from our analyses. Given that this limitation applies to much of the research exploring the relationship between conformity to masculine norms and mental health, future research should emphasize longitudinal examinations of these relationships. More specifically, studies should examine these relationships in the context of broader socioeconomic indicators, such as unemployment rate and gender inequality indices, as these larger realities constitute the social incentive structure men respond to in performing their masculinities and are vital to understanding the process of gender identity negotiation.

The culturally relative nature of masculinities also presents a limitation to our findings. Although versions of the CMNI-46 have been tested and validated with samples from various populations, the scale was developed in the United States and, as a result, measures a conceptualization of masculinity that reflects American gender norms and expectations. While many of these elements of masculinity overlap with those of other masculinities, as is the case in the sub-Saharan African context, there are elements unique to these different masculinities that the CMNI-46 fails to measure or account for (Mahalik et al., 2006). Notably, this critique also applies to our measurements of depression and anxiety symptoms, as we know psychological distress and disorder manifest differently across cultures (Kirmayer, 2001). This presents an opportunity for future research to focus on the development of region/population-specific measures of masculinity and mental health outcomes that will sharpen our ability to examine, understand, and aid these diverse populations.

References

Aldwin, C., & Greenberger, E. (1987). Cultural differences in the predictors of depression. *American Journal of Community Psychology, 15,* 789–813. http://dx.doi.org/10.1007/BF00919803

Barnette, J. J. (2000). Effects of stem and Likert response option reversals on survey internal consistency: If you feel the need, there is a better alternative to using those negatively worded stems. *Educational and Psychological Measurement, 60,* 361–370. http://dx.doi.org/10.1177/00131640021970592

Basterfield, C., Reardon, C., & Govender, K. (2014). Relationship between constructions of masculinity, health risk behaviors and mental health among adolescent high school boys in Durban, South Africa. *International Journal of Men's Health, 13,* 101–120.

Burns, S. M., & Mahalik, J. R. (2006). Physical health, self-reliance, and emotional control as moderators of the relationship between locus of control and mental health among men treated for prostate cancer. *Journal of Behavioral Medicine, 29,* 561–572. http://dx.doi.org/10.1007/s10865-006-9076-1

Carothers, K. J., Arizaga, J. A., Carter, J. S., Taylor, J., & Grant, K. E. (2016). The costs and benefits of active coping for adolescents residing in urban poverty. *Journal of Youth and Adolescence, 45,* 1323–1337. http://dx.doi.org/10.1007/s10964-016-0487-1

Carter, R., Silverman, W. K., & Jaccard, J. (2011). Sex variations in youth anxiety symptoms: Effects of pubertal development and gender role orientation. *Journal of Clinical Child and Adolescent Psychology, 40,* 730–741. http://dx.doi.org/10.1080/15374416.2011.597082

Clarke, M. J., Marks, A. D., & Lykins, A. D. (2015). Effect of normative masculinity on males' dysfunctional sexual beliefs, sexual attitudes, and perceptions of sexual functioning. *Journal of Sex Research, 52,* 327–337. http://dx.doi.org/10.1080/00224499.2013.860072

Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & Society, 19,* 829–859. http://dx.doi.org/10.1177/0891243205278639

Dambi, J. M., Corten, L., Chiwaridzo, M., Jack, H., Mlambo, T., & Jelsma, J. (2018). A systematic review of the psychometric properties of the cross-cultural translations and adaptations of the Multidimensional Perceived Social Support Scale (MSPSS). *Health and Quality of Life Outcomes, 16,* 80. http://dx.doi.org/10.1186/s12955-018-0912-0

Dangerfield, D. T., II, Smith, L. R., Williams, J., Unger, J., & Bluthenthal, R. (2017). Sexual positioning among men who have sex with men: A narrative review. *Archives of Sexual Behavior, 46,* 869–884. http://dx.doi.org/10.1007/s10508-016-0738-y

Dyer, T. P., Regan, R., Pacek, L. R., Acheampong, A., & Khan, M. R. (2015). Psychosocial vulnerability and HIV-related sexual risk among men who have sex with men and women in the United States. *Archives of Sexual Behavior, 44,* 429–441. http://dx.doi.org/10.1007/s10508-014-0346-7

Dyer, T. P., Regan, R., Wilton, L., Harawa, N. T., Ou, S. S., Wang, L., & Shoptaw, S. (2013). Differences in substance use, psychosocial characteristics and HIV-related sexual risk behavior between Black men who have sex with men only (BMSMO) and Black men who have sex with

men and women (BMSMW) in six U.S. cities. *Journal of Urban Health, 90,* 1181–1193. http://dx.doi.org/10.1007/s11524-013-9811-1

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. http://dx.doi.org/10.1037/a0029425

Fields, E. L., Bogart, L. M., Smith, K. C., Malebranche, D. J., Ellen, J., & Schuster, M. A. (2015). "I always felt I had to prove my manhood": Homosexuality, masculinity, gender role strain, and HIV risk among young Black men who have sex with men. *American Journal of Public Health, 105,* 122–131. http://dx.doi.org/10.2105/AJPH.2013.301866

Fischgrund, B. N., Halkitis, P. N., & Carroll, R. A. (2012). Conceptions of hypermasculinity and mental health states in gay and bisexual men. *Psychology of Men & Masculinity, 13,* 123–135. http://dx.doi.org/10.1037/a0024836

Fuller, C. B., Chang, D. F., & Rubin, L. R. (2009). Sliding under the radar: Passing and power among sexual minorities. *Journal of LGBT Issues in Counseling, 3,* 128–151. http://dx.doi.org/10.1080/15538600903005334

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference 11.0 update* (4th ed.). Boston, MA: Allyn & Bacon.

Gilmore, D. D. (1990). *Manhood in the making: Cultural concepts of masculinity*. New Haven, CT: Yale University Press.

Giorgetta, C., Grecucci, A., Zuanon, S., Perini, L., Balestrieri, M., Bonini, N., . . . Brambilla, P. (2012). Reduced risk-taking behavior as a trait feature of anxiety. *Emotion, 12,* 1373–1383. http://dx.doi.org/10.1037/a0029119

Gliem, J. A., & Gliem, R. R. (2003, October). *Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales*. Paper presented at Midwest Research to Practice Conference in Adult, Continuing, and Community Education, Columbus, OH.

Graham, S. M., & Harper, G. W. (2017). Improving HIV prevention and care for African GBMSM. *The Lancet HIV, 4,* e234–e236. http://dx.doi.org/10.1016/S2352-3018(17)30020-6

Hammond, W. P. (2012). Taking it like a man: Masculine role norms as moderators of the racial discrimination-depressive symptoms association among African American men. *American Journal of Public Health, 102*(Suppl. 2), S232–S241. http://dx.doi.org/10.2105/AJPH.2011.300485

Hammond, W. P., Matthews, D., Mohottige, D., Agyemang, A., & Corbie-Smith, G. (2010). Masculinity, medical mistrust, and preventive health services delays among community-dwelling African-American men. *Journal of General Internal Medicine, 25,* 1300–1308. http://dx.doi.org/10.1007/s11606-010-1481-z

Hatzenbuehler, M. L., Bellatorre, A., Lee, Y., Finch, B. K., Muennig, P., & Fiscella, K. (2014). Structural stigma and all-cause mortality in sexual minority populations. *Social Science & Medicine, 103,* 33–41. http://dx.doi.org/10.1016/j.socscimed.2013.06.005

Hatzenbuehler, M. L., McLaughlin, K. A., Keyes, K. M., & Hasin, D. S. (2010). The impact of institutional discrimination on psychiatric disorders in lesbian, gay, and bisexual populations: A prospective study. *American Journal of Public Health, 100,* 452–459. http://dx.doi.org/10.2105/AJPH.2009.168815

Herek, G. M. (2009). Sexual stigma and sexual prejudice in the United States: A conceptual framework. In D. A. Hope (Ed.), *Contemporary perspectives on lesbian, gay, and bisexual identities* (pp. 65–111). New York, NY: Springer Science+Business Media.

Herek, G. M., & Berrill, K. T. (1992). *Hate crimes: Confronting violence against lesbians and gay men*. Newbury Park, CA: Sage.

Huebner, D. M., Rebchook, G. M., & Kegeles, S. M. (2004). Experiences of harassment, discrimination, and physical violence among young gay and bisexual men. *American Journal of Public Health, 94,* 1200–1203. http://dx.doi.org/10.2105/AJPH.94.7.1200

Hunter, M. (2005). Cultural politics and masculinities: Multiple-partners in historical perspective in KwaZulu-Natal. *Culture, Health & Sexuality, 7,* 209–223. http://dx.doi.org/10.1080/13691050412331293458

Israel, B. A., Krieger, J., Vlahov, D., Ciske, S., Foley, M., Fortin, P., . . . Tang, G. (2006). Challenges and facilitating factors in sustaining community-based participatory research partnerships: Lessons learned from the Detroit, New York City and Seattle Urban Research Centers. *Journal of Urban Health, 83,* 1022–1040. http://dx.doi.org/10.1007/s11524-006-9110-1

Iwamoto, D. K., Liao, L., & Liu, W. M. (2010). Masculine norms, avoidant coping, Asian values and depression among Asian American men. *Psychology of Men & Masculinity, 11,* 15–24. http://dx.doi.org/10.1037/a0017874

Izugbara, C. O. (2015). 'Life is not designed to be easy for men': Masculinity and poverty among urban marginalized Kenyan men. *Gender Issues, 32,* 121–137. http://dx.doi.org/10.1007/s12147-015-9135-4

Kaaya, S. F., Fawzi, M. C., Mbwambo, J. K., Lee, B., Msamanga, G. I., & Fawzi, W. (2002). Validity of the Hopkins Symptom Checklist-25 amongst HIV-positive pregnant women in Tanzania. *Acta Psychiatrica Scandinavica, 106,* 9–19. http://dx.doi.org/10.1034/j.1600-0447.2002.01205.x

Kenya Human Rights Commission. (2011). *The outlawed among us: A study of the LGBTI Community's search for equality and non-discrimination in Kenya*. Nairobi, Kenya: Author.

Kenya National Commission on Human Rights. (2012). *Realizing sexual and reproductive health rights in Kenya: A myth or reality?* Nairobi, Kenya: Author.

Kirmayer, L. J. (2001). Cultural variations in the clinical presentation of depression and anxiety: Implications for diagnosis and treatment. *Journal of Clinical Psychiatry, 62*(Suppl. 13), 22–28.

Kombo, B., Sariola, S., Gichuru, E., Molyneux, S., Sanders, E. J., & van der Elst, E. (2017). "*Facing our fears*": Using facilitated film viewings to engage communities in HIV research involving MSM in Kenya. *Cogent Medicine, 4,* 1330728. http://dx.doi.org/10.1080/2331205X.2017.1330728

Levant, R. F., & Wimer, D. J. (2014). Masculinity constructs as protective buffers and risk factors for men's health. *American Journal of Men's Health, 8,* 110–120. http://dx.doi.org/10.1177/1557988313494408

Lindsey, M. A., Joe, S., & Nebbitt, V. (2010). Family matters: The role of mental health stigma and social support on depressive symptoms and subsequent help seeking among African American boys. *Journal of Black Psychology, 36,* 458–482. http://dx.doi.org/10.1177/0095798409355796

Lipenga, K. J. (2014). Disability and masculinity in South African autosomatography. *African Journal of Disability, 3,* 85. http://dx.doi.org/10.4102/ajod.v3i1.85

MacLeod, M. A., Bauer, G. R., Robinson, M., Mackay, J., & Ross, L. E. (2015). Biphobia and anxiety among bisexuals in Ontario, Canada. *Journal of Gay & Lesbian Mental Health, 19,* 217–243. http://dx.doi.org/10.1080/19359705.2014.1003121

Mahalik, J. R., Good, G., & Englar-Carlson, M. (2003). Masculinity scripts, presenting concerns, and help seeking: Implications for practice and training. *Professional Psychology: Research and Practice, 34,* 123–131. http://dx.doi.org/10.1037/0735-7028.34.2.123

Mahalik, J. R., Lagan, H. D., & Morrison, J. A. (2006). Health behaviors and masculinity in Kenyan and U.S. male college students. *Psychology of Men & Masculinity, 7,* 191–202. http://dx.doi.org/10.1037/1524-9220.7.4.191

Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003). Development of the Conformity to Masculine Norms Inventory. *Psychology of Men & Masculinity, 4,* 3–25. http://dx.doi.org/10.1037/1524-9220.4.1.3

Maner, J. K., Richey, J. A., Cromer, K., Mallott, M., Lejuez, C. W., Joiner, T. E., & Schmidt, N. B. (2007). Dispositional anxiety and risk-avoidant

decision-making. *Personality and Individual Differences, 42,* 665–675. http://dx.doi.org/10.1016/j.paid.2006.08.016

Maner, J. K., & Schmidt, N. B. (2006). The role of risk avoidance in anxiety. *Behavior Therapy, 37,* 181–189. http://dx.doi.org/10.1016/j.beth.2005.11.003

Matthews, D. D., Hammond, W. P., Nuru-Jeter, A., Cole-Lewis, Y., & Melvin, T. (2013). Racial discrimination and depressive symptoms among African-American men: The mediating and moderating roles of masculine self-reliance and John Henryism. *Psychology of Men & Masculinity, 14,* 35–46. http://dx.doi.org/10.1037/a0028436

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. http://dx.doi.org/10.1037/0033-2909.129.5.674

Midoun, M., Shangani, S., Mbete, B., Babu, S., Hackman, M., van der Elst, E. M., . . . Operario, D. (2016). How intersectional constructions of sexuality, culture, and masculinity shape identities and sexual decision-making among men who have sex with men in coastal Kenya. *Culture, Health & Sexuality, 18,* 625–638. http://dx.doi.org/10.1080/13691058.2015.1102326

Moazen-Zadeh, E., & Assari, S. (2016). Depressive Symptoms Predict Major Depressive Disorder after 15 Years among Whites but Not Blacks. *Frontiers Public Health*. Advance online publication. http://dx.doi.org/10.3389/fpubh.2016.00013

Mojola, S. A. (2014). Providing women, kept men: Doing masculinity in the wake of the African HIV/AIDS epidemic. *Signs, 39,* 341–363. http://dx.doi.org/10.1086/673086

Mollica, R. F. (2004). *Measuring trauma, measuring torture: Instructions and guidance on the utilization of the Harvard Program in Refugee Traumas versions of the Hopkins Symptom Checklist-25 (HSCL-25) & the Harvard Trauma Questionnaire (HTQ)*. Cambridge, MA: Harvard Program in Refugee Trauma.

Odimegwu, C., Pallikadavath, S., & Adedini, S. (2013). The cost of being a man: Social and health consequences of Igbo masculinity. *Culture, Health & Sexuality, 15,* 219–234. http://dx.doi.org/10.1080/13691058.2012.747700

Ogendo, A., Otieno, F., Nyikuri, M., Shinde, S., Nyambura, M., Pals, S., . . . Gust, D. A. (2012). Persons at high risk for HIV infection in Kisumu, Kenya: Identifying recruitment strategies for enrolment in HIV-prevention studies. *International Journal of STD & AIDS, 23,* 177–181. http://dx.doi.org/10.1258/ijsa.2011.011173

Parent, M. C., & Moradi, B. (2009). Confirmatory factor analysis of the Conformity to Masculine Norms Inventory and development of the Conformity to Masculine Norms Inventory–46. *Psychology of Men & Masculinity, 10,* 175–189. http://dx.doi.org/10.1037/a0015481

Pleck, J. H. (1987). *The myth of masculinity*. Cambridge, MA: MIT Press.

Pleck, J. H. (1995). The gender role strain paradigm: An update. In R. F. Levant & W. S. Pollack (Eds.), *A new psychology of men* (pp. 11–32). New York, NY: Basic Books.

Price, E. C., Gregg, J. J., Smith, M. D., & Fiske, A. (2018). Masculine traits and depressive symptoms in older and younger men and women. *American Journal of Men's Health, 12,* 19–29. http://dx.doi.org/10.1177/1557988315619676

Reid, G., & Walker, L. (2005). Sex and secrecy: A focus on African sexualities. *Culture, Health & Sexuality, 7,* 185–194. http://dx.doi.org/10.1080/13691050412331334353

Richmond, K., & Levant, R. (2003). Clinical application of the gender role strain paradigm: Group treatment for adolescent boys. *Journal of Clinical Psychology, 59,* 1237–1245. http://dx.doi.org/10.1002/jclp.10214

Sánchez, F. J., Greenberg, S. T., Liu, W. M., & Vilain, E. (2009). Reported effects of masculine ideals on gay men. *Psychology of Men & Masculinity, 10,* 73–87. http://dx.doi.org/10.1037/a0013513

Secor, A., Wahome, E., Micheni, M., Rao, D., Simoni, J., Sanders, E., & Graham, S. (2015). Prevalence of depression, substance abuse, and stigma among men who have sex with men in coastal Kenya. *Annals of Global Health, 81,* 101. http://dx.doi.org/10.1016/j.aogh.2015.02.735

Shearer, A., Herres, J., Kodish, T., Squitieri, H., James, K., Russon, J., . . . Diamond, G. S. (2016). Differences in mental health symptoms across lesbian, gay, bisexual, and questioning youth in primary care settings. *Journal of Adolescent Health, 59,* 38–43. http://dx.doi.org/10.1016/j.jadohealth.2016.02.005

Shim, R. S., Ye, J., Baltrus, P., Fry-Johnson, Y., Daniels, E., & Rust, G. (2012). Racial/ethnic disparities, social support, and depression: Examining a social determinant of mental health. *Ethnicity & Disease, 22,* 15–20.

Sikweyiya, Y. M., Jewkes, R., & Dunkle, K. (2014). Impact of HIV on and the constructions of masculinities among HIV-positive men in South Africa: Implications for secondary prevention programs. *Global Health Action, 7,* 24631. http://dx.doi.org/10.3402/gha.v7.24631

Silberschmidt, M. (2001). Disempowerment of men in rural and urban East Africa: Implications for male identity and sexual behavior. *World Development, 29,* 657–671. http://dx.doi.org/10.1016/S0305-750X(00)00122-4

Spendelow, J. S. (2015). Men's self-reported coping strategies for depression: A systematic review of qualitative studies. *Psychology of Men & Masculinity, 16,* 439–447. http://dx.doi.org/10.1037/a0038626

Spronk, R. (2014). The idea of African men: Dealing with the cultural contradictions of sex in academia and in Kenya. *Culture, Health & Sexuality, 16,* 504–517. http://dx.doi.org/10.1080/13691058.2014.889755

Stahlman, S., Sanchez, T. H., Sullivan, P. S., Ketende, S., Lyons, C., Charurat, M. E., . . . Baral, S. D. (2016). The prevalence of sexual behavior stigma affecting gay men and other men who have sex with men across sub-Saharan Africa and in the United States. *JMIR Public Health and Surveillance, 2,* e35. http://dx.doi.org/10.2196/publichealth.5824

Stevens-Watkins, D., Knighton, J. S., Allen, K., Fisher, S., Crowell, C., Mahaffey, C., . . . Oser, C. (2016). John Henryism active coping as a cultural correlate of substance abuse treatment participation among African American Women. *Journal of Substance Abuse Treatment, 63,* 54–60. http://dx.doi.org/10.1016/j.jsat.2016.01.004

Stewart, R. C., Umar, E., Tomenson, B., & Creed, F. (2014). Validation of the Multi-Dimensional Scale of Perceived Social Support (MSPSS) and the relationship between social support, intimate partner violence and antenatal depression in Malawi. *BMC Psychiatry, 14,* 180. http://dx.doi.org/10.1186/1471-244X-14-180

Thompson, E. H., Jr., & Pleck, J. H. (1995). Masculinity ideologies: A review of research instrumentation on men and masculinities. In R. F. Levant & W. S. Pollack (Eds.), *A new psychology of men* (pp. 129–163). New York, NY: Basic Books.

Vandello, J. A., & Bosson, J. K. (2013). Hard won and easily lost: A review and synthesis of theory and research on precarious manhood. *Psychology of Men & Masculinity, 14,* 101–113. http://dx.doi.org/10.1037/a0029826

Vandello, J. A., Bosson, J. K., Cohen, D., Burnaford, R. M., & Weaver, J. R. (2008). Precarious manhood. *Journal of Personality and Social Psychology, 95,* 1325–1339. http://dx.doi.org/10.1037/a0012453

Wadsworth, L. P., & Hayes-Skelton, S. A. (2015). Differences among lesbian, gay, bisexual, heterosexual individuals and those who reported an other identity on an open-ended response on levels of social anxiety. *Psychology of Sexual Orientation and Gender Diversity, 2,* 181–187. http://dx.doi.org/10.1037/sgd0000092

Wallerstein, N. B., & Duran, B. (2006). Using community-based participatory research to address health disparities. *Health Promotion Practice, 7,* 312–323. http://dx.doi.org/10.1177/1524839906289376

Weems, G. H., & Onwuegbuzie, A. J. (2001). The impact of midpoint responses and reverse coding on survey data. *Measurement and Evaluation in Counseling and Development, 34,* 166–176.

Wong, Y. J., Ho, M. R., Wang, S. Y., & Miller, I. S. (2017). Meta-analyses of the relationship between conformity to masculine norms and mental health-related outcomes. *Journal of Counseling Psychology, 64,* 80–93. http://dx.doi.org/10.1037/cou0000176

World Bank. (2018, October 11). *Kenya's economy poised to rebound in 2018 and remain robust through 2020.* Retrieved from https://www.worldbank.org/en/news/press-release/2018/10/10/kenyas-economy-poised-to-rebound-in-2018-and-remain-robust-through-2020

Young, R. M., & Meyer, I. H. (2005). The trouble with "MSM" and "WSW": Erasure of the sexual-minority person in public health discourse. *American Journal of Public Health, 95,* 1144–1149. http://dx.doi.org/10.2105/AJPH.2004.046714

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 52,* 30–41. http://dx.doi.org/10.1207/s15327752jpa5201_2

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