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An Application of the Minority Stress Model in a Non-Western Context: Discrimination and Mental Health Among Sexual and Gender Minorities in Macedonia

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Abstract We examined an application of the minority stress model to the experiences of sexual and gender minorities in Macedonia. We conducted a cross-sectional online national survey among 18–30-year-old participants in Macedonia. We facilitated two focus groups with a subset of sexual and gender minority participants to gain an additional context about their everyday lives and experiences of discrimination. We performed unadjusted and adjusted linear regression models between sexual and gender identity and discrimination scales, as well as rumination and social anxiety. We calculated indirect effects using the Judd and Kenny difference of coefficients approach and used framework analysis to analyze the focus groups. Overall, 396 persons completed the survey, 178 identified as cisgender male and 200 identified as cisgender female. Sexual and gender minorities had higher scores on the rumination scale, 48.6 vs. 45.6 (p = 0.039), as compared to non-sexual and gender minorities. Sexual and gender minority persons had scores on the social anxiety that were higher than those of non-sexual and gender minority persons, 17.7 vs. 12.9 (p = 0.000). Experiences of discrimination due to one's sexual orientation and gender identity accounted for a substantial portion of the increased anxiety and rumination. Focus groups confirmed the quantitative findings. Sexual and gender minority persons in Macedonia have poorer mental health outcomes as compared to non-sexual and gender minority persons, with discrimination being a major factor. Policies are needed to safeguard their rights, and interventions are also needed to provide mental health support and services to the population in an identity-friendly and affirming manner.

Keywords Sexual and gender minorities · Mental health · Discrimination · Human rights · Policy

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Introduction

Since the early 1990s, political instability and social inequality have dominated post-Yugoslavia (Bojan, 2016; Sajo, 1998). During the transitional period in these post-socialist societies, distrust in state institutions cultivated an increased attachment to the Orthodox Church (Inglehart & Baker, 2000; Tomka, 2011). The Church became an omnipresent social and political force that produced ideologies and norms defining social expectations in many countries, including Macedonia. Consequently, the Church's role as a transcendent moral authority strengthened conservative viewpoints and policies that reinforced a patriarchal binary gender regime, delegitimizing any sexual and gender diversity (Stulhofer & Sandfort, 2005).

This climate is further exploited by nationalism in the region, specifically Macedonia, in which sexual minorities are regarded as a threat to ideals of virility, fecundity, respectability, and national identity (Pryke, 1998; Stojanovski, Kotevska, Milevska, Mancheva, & Bauermeister, 2015; Trost & Slootmaeckers, 2015).

In Macedonia, the political and social contexts are homophobic, which have resulted in widespread discrimination of sexual and gender minorities (SGMs) (Kajevska, 2016; Stojanovski et al., 2015; Štulhofer, Baćak, Božičević, & Begovac, 2008). Structural violence in the form of state-endorsed homophobia has been evident through the promulgation of antidiscrimination legislation that purposefully excluded recognizing sexual orientation as a basis for unlawful discrimination. The state also attempted to pass legislation that would constitutionally define marriage as a union solely between a cisgendered woman and a cisgendered man (Kajevska, 2016). Furthermore, hegemonic masculine understandings of gender identity and sexuality have penetrated into the SGM community, particularly among gay men (Dimitrov & Kostovski, 2013). Internalized discrimination within the community is also a serious issue leading to shame and mental health concerns and limiting social cohesion within the SGM community (Dimitrov & Kostovski, 2013). This political and social climate portrays the extent to which sexual and gender minorities in Macedonia are discriminated by institutional and societal practices. Through prejudice and discrimination, SGM groups in the country become relegated to a lower social order. Institutional, societal, and everyday discrimination and harassment continue against SGM populations in Macedonia (Kajevska, 2016; der Veur, 2001). While media and human rights organizations have reported instances of hate speech and violence against SGM persons, government institutions have been unwilling to prosecute these, let alone prevent them (Kajevska, 2016; Watch, 2013). Unfortunately, no attempts have been made to neither enumerate the population at a governmental level nor address the many issues they face.

The experiences of prejudice and discrimination faced by SGMs has adverse consequences for physical and mental health (Bränström, Hatzenbuehler, & Pachankis, 2016; Eldahan et al., 2016; Lee, Gamarel, Bryant, Zaller, & Operario, 2016; Rendina et al., 2016). One study revealed that 42% of sexual minority men who had ever experienced discrimination had any lifetime drug disorder, as compared to 16% in sexual minority men experiencing no discrimination (Lee et al., 2016). In addition, sexual minority men who experienced discrimination also demonstrated higher rates of panic disorder (Lee et al., 2016). Furthermore, sexual minority women who experienced discrimination had poorer mental health (Lee et al., 2016). Another study found that SGM individuals who reported discrimination were two to three times more likely to meet criteria for mood, anxiety, and substance disorders (McLaughlin, Hatzenbuehler, & Keyes, 2010). Other studies also showed that sexual minority men and women, as compared to heterosexual counterparts, had higher levels of anxiety, depression, panic, and post-traumatic stress disorders (Cohen, Blasey, Barr Taylor, Weiss, & Newman, 2016). A 2013 study in 38 European countries, including Macedonia and other Southeastern European countries (i.e., Bosnia and Herzegovina, Bulgaria, and Serbia), showed that structural- and community-level factors contribute to internalized negative perceptions about the gay community (i.e., homonegativity) among men who have sex with men (MSM) (Berg, Ross, Weatherburn, & Schmidt, 2013). In the study, countries that did not include legal rights and protections for SGMs saw increased homonegativity (Berg et al., 2013). Negative community perceptions of SGM by the general population also increased homonegativity within the MSM community (Berg et al., 2013). The highest levels of homonegativity existed in Southeastern Europe, including Macedonia (Berg et al., 2013).

The findings above highlight the processes posited in the Minority Stress Model, which has shown that disproportionate stress related to marginalized identities is linked to psychological distress. Specific to SGMs, this model outlines experiences of discrimination, expectations of stigma, internalized heterosexism and homonegativity, and concealment of sexual minority identity as five minority stressors that can promote psychological distress (Meyer, 2003). Although the Minority Stress Model has been extensively studied in the USA and Western Europe, there has been no explicit application of the model in non-Western contexts and no examination of mental health outcomes in Macedonia or the Southeast European region.

Limited health data exists on SGM populations that reside in societies where social regulation of sexuality and gender identity is pervasively anchored in religious and political institutions. Additionally, it remains unclear how experiences of discrimination among SGMs in such spaces impact mental health and wellbeing. According to the European Centre for Disease Control and Prevention, Macedonia has some of the highest rates of MSM persons who do not disclose their sexual orientation to others. However, there has not been any research on the implications of social and political regulation on their health (ECDC, 2013; Stojanovski et al., 2015). The following study explored whether differences in experiences of discrimination on the basis of sexual or gender identity impact social anxiety and rumination, a possible indicator of depressive symptomatology. This study is novel because it provides insight on a population that has been difficult to access, due to the high levels of structural violence and institutionalized discrimination pervasive in the lives of SGMs. To further add to the literature, we applied the Minority Stress Model in the context of Macedonia to assess whether processes in Western contexts may be comparable to those identified in Macedonia. Finally, we aimed to contextualize the cultural,

political, and social circumstances that discriminate SGM, in an effort to provide a more comprehensive picture on the experience of SGM in the country and region.

Methods

Subversive Front, a NGO focused on addressing discourses about SGM in the country, and the Youth Educational Forum (YEF), a NGO focused on supporting youth and providing non-formal education, which includes issues of sexuality and gender identity, collaboratively carried out the study. They created the study to measure discrimination, bullying, and mental health among SGM youth and non-SGM youth and young adults living in Macedonia. They employed a cross-sectional national online survey in Macedonia among 18–30-year-old participants who were identified as SGM and non-SGM. In addition, Subversive Front and YEF conducted two focus groups with SGM youth in Skopje to gain an additional understanding about the social and cultural context, creating the minority-specific stress experiences. Skopje is the capital city and where majority of SGM-related NGOs operate. The city is deemed as more progressive, including improved anonymity due to the population size, and has a few bars deemed friendly to the SGM community.

Procedures and Recruitment

Prior to implementation, researchers uploaded the survey into SurveyMonkey and pilot tested it to ensure accuracy of skip patterns and logic. Due to the sensitive nature of the research and the fact that sexual and gender identity minorities are hard-to-reach populations, the research utilized a snowball sampling procedure. Snowball sampling has been proven particularly pertinent and useful in sampling hard-to-reach populations (Biernacki & Waldorf, 1981; Platt et al., 2006). The YEF utilized their contacts and emailed a list of youth that are members and participate in their programs to recruit participants. YEF sent an email explaining the survey, a survey link, and a request that youth and young adults complete it. YEF also asked participants to send the link to others who might be eligible and interested. In total, 672 persons started the survey of which 396 completed the survey in its entirety (60% completion rate) and 296 had partial responses (excluded from analysis). Due to the snowball sampling procedure, we are unable to provide further information on the number of approached and completed, particularly as no identifiers were collected. The online survey took approximately 40 min to complete, and no personal identifiers were collected. Informed consent was obtained from all individuals included in the study. For the online survey, a consent form appeared at the start of the survey that participants agreed to before being allowed to continue to the survey. During the focus groups, consent was obtained in-person before the focus group began.

Survey Instrument and Measures

The survey measured demographics such as gender identity and sexual orientation, as well as ethnicity, age, education, and sources of income. The survey also included two validated discrimination scales. Subversive Front and YEF implemented the two scales below to capture a more holistic understanding of discrimination and their operationalization in Macedonia. The implemented scales are described below:

- Experiences of Discrimination Scale (EODS) is an eight-question, 4-point Likert scale ranging from zero to three. It is used to measure discrimination within locational/situational contexts (e.g., "have you experienced discrimination at school, at work, etc.," and frequency). It requires the participant to think back to their experiences and define them as discriminatory and then assess their frequency. This validated tool is widely used in measuring discrimination across various populations including African-Americans, Romani women, and sexual and gender minorities (Janevic et al., 2015; Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005; Lee et al., 2016). Cronbach's alpha statistic was high at 0.82.
- Experiences of Everyday Discrimination Scale (EDS) is an 11-question, 4-point Likert scale ranging from zero to three. It is used to measure discrimination persons face by asking about specific experiences in their everyday living (e.g., "people have treated you with less respect, people have called you names or insulted you, etc.," and frequency). This scale defines discrimination within the question (e.g., treated you with less respect), while the EODS above does not. The scale is also validated and widely used in the literature including African-Americans, Romani women, and sexual and gender minorities (Janevic et al., 2015; Lee et al., 2016; Williams, Yu, Jackson, & Anderson, 1997). Cronbach's alpha statistic for EDS was also high at 0.91.

Subversive Front and YEF also used two validated psychosocial scales to measure social anxiety and rumination, described below:

- Social Interaction Anxiety Scale (SIAS) is a 20-question, 5-point Likert scale measured from zero to four. It is used to measure anxiety one may experience in social situations (e.g., "I have difficulty talking to other people," etc.). Our study utilized an updated and validated non-heteronormative version of the scale to ensure accommodation of the same and opposite gender-loving participants

(Lindner, Martell, Bergström, Andersson, & Carlbring, 2013). Cronbach's alpha statistic was high at 0.94.

- Ruminative Response Scale (RRS) is a 22-question, 4-point Likert scale measured from one to four that measures the compulsive focus and attention of symptoms of distress, which may be related to depressive symptomatology. The scale asks questions related to feelings and attention paid to negative feelings (e.g., "Think why can't I get going," etc.) (Treynor, Gonzalez, & Nolen-Hoeksema, 2003). Cronbach's alpha statistic for the Ruminative Response Scale was 0.91.

The survey was translated from English to the official language, Macedonian (used by 70% of the population), and the regional language, Albanian (used by 25% of the population) (CIA, 2017).

For the two focus groups, we used a focus group guide that included questions about everyday living as a SGM in Macedonia and experiences of discrimination (e.g., how do you feel living as a SGM in Macedonia? How safe do you feel? What kinds of experiences have you had with discrimination?). The focus group guide focused on elucidating information about the lived experience of SGMs in the capital city. The guide included questions about experiences of discrimination, sentiments about the political and legal system in reference to SGM, and feelings about participants' ability to live open and authentic lives. Twenty persons who participated in the online survey participated in the focus groups. Subversive Front and YEF used purposeful random sampling to select participants based on diversity of sexual orientation (e.g., lesbian, gay, bisexual women and men) and gender identity (i.e., cis- and transgender-identifying persons). Participants in the focus group were required to speak Macedonian.

Predictors

The main predictor was identification as a sexual or gender minority. The gender identity measurement included a two-question approach. The first question asked about sex assignment at birth (i.e., male, female), and the second question about the current gender the participants identified with (i.e., female, male, transgender man, transgender woman, genderqueer, and genderfluid). Prior research shows this two-question approach allows for improved accuracy of measurement (Westbrook & Saperstein, 2015). The survey included two questions to assess sexual orientation. The first was a question about their identified sexual orientation (e.g., straight, gay, lesbian, bisexual, queer, pansexual) and the second being a question about gender of the participant's sex partners.

To create the SGM vs. non-SGM groups, we dichotomized persons as follows. If a person responded as gay, lesbian, or bisexual for the sexual orientation question, they were categorized into the sexual minority group, while those who stated straight or heterosexual were categorized as a non-sexual minority. For those who stated their sex assigned at birth was opposite of their current gender identity, we categorized them into the gender minority group. Persons who identified as transgender were also categorized into this group. In addition, those who identified as genderfluid (gender identity is viewed within a spectrum between male and female) or genderqueer (gender identity is not defined with the binary understanding of gender) were also included into the gender minority category. Persons who stated they were straight but then listed having sexual partners of the same sex were also grouped into the sexual minority group. Genderfluid, transgender, or genderqueer persons were all defined as a gender minority. The SGM group was made up of those categorized as a sexual minority or gender minority according to above.

In addition, two discrimination scales were tested for mediation in our models. We summed the Experiences of Discrimination Scale and Everyday Discrimination Scale responses separately to a composite continuous score of discrimination for each scale. The ranges were zero to 24 for EODS and zero to 33 for EDS.

Outcomes

The two main outcomes were rumination, measured by the Ruminative Response Scale and social anxiety as measured by the Social Interaction Anxiety Scale. We scored the psychosocial scales described earlier using pre-established scoring criteria for each of the scales (Krieger et al., 2005; Mattick & Clarke, 1998; Treynor et al., 2003; Williams et al., 1997). Depending on the scale and the wording of questions, we scored the scales from the lowest to the highest or recoded in reverse. For example, three of the questions in the Social Interaction Anxiety Scale (i.e., questions 5, 9, and 11) are scored in reverse to assess for response validity (Treynor et al., 2003). Similarly, we summed the responses for each scale by participant to come to an aggregate score. The range was zero to 100 for the Social Interaction Anxiety Scale and zero to 88 for the rumination scale.

Analysis

We examined background and sociodemographic variable frequencies and means and standard deviations for continuous variables. For duplicate records, we utilized the first instance of the record and removed subsequent instances.

We measured the level of internal scale consistency using Cronbach's alpha. After confirmation, we assessed differences between SGM and non-SGM participants for each of the scales using independent sample t tests. Means, standard deviations, and their respective p values are presented.

We created five separate models as part of the analysis. First, we conducted unadjusted linear regression models including SGM identity and discrimination scales. We then performed unadjusted linear regression models of SGM identity and psychosocial outcomes (i.e., Ruminative Response Scale and Social Interaction Anxiety Scale). Next, we executed linear regressions including the discrimination scales and psychosocial outcomes alone. Subsequently, we ran adjusted regressions that included SGM identity and the discrimination scales against the psychosocial outcomes. As no other variables were significant, we excluded them from final models. Finally, we calculated the indirect effects to assess for mediation of discrimination's effect on psychosocial outcomes. We used the Judd and Kenny difference of coefficients approach to calculate indirect effects (Judd & Kenny, 1981). We utilized the Sobel test to examine the significance of the mediation effects of the discrimination scales on the outcomes. We analyzed data using Stata 13 (StataCorp, 2013).

We transcribed the 1-h digitally recorded focus groups and translated them from Macedonian to English. The primary investigator utilized framework analysis to analyze the transcripts to assess how the findings were aligned with quantitative findings (Gale, Heath, Cameron, Rashid, & Redwood, 2013). Framework analysis originated in the context of applied social policy research and included five transparent stages of analysis: (1) researchers familiarize themselves with the qualitative data, noting key context areas (familiarization); (2) analysts meet to identify salient coding categories to be applied across interviews (identifying a thematic framework); (3) analysts apply codes and convene analysis meetings to read and collaboratively summarize the data (indexing); (4) analysts create tables of the data associated with the codes deemed most relevant (charting); and (5) comparing and contrasting cases within a particular code to better understand the similarities and differences within and across each thematic category (interpretation). The primary investigator concentrated the focus group analysis on gaining additional information about living in Macedonia as a SGM, experiences of discrimination, and sentiments about their mental health. The University of Michigan Institutional Review Board approved the secondary analysis of the data.

Results

Sociodemographics

Overall, 396 participants completed the online survey. The sample included 208 SGM and 188 non-SGM persons. Examining gender, 183 stated they were assigned male sex at birth, and of those, 178 were identified with the male gender, while 212 stated they were assigned female sex at birth, and 200 responded identifying with the female gender. The sexual orientation breakdown was as follows: 185 identified themselves as straight (two identifying as a gender minority), 87 as gay (three identifying as a gender minority), 29 as lesbian (four identifying as a gender minority), 70 as bisexual (one identifying as a gender minority), and seven as pansexual (four identifying as a gender minority). No differences existed in the average age, education, source of income, or ethnicity between SGM and non-SGM (Table 1). SGM persons experienced higher levels of physical violence (40% had been assaulted), as compared to 15% in the non-SGM sample (Table 1).

Experiences of Discrimination

We found no difference in the Experiences of Discrimination Scale, the more situational based discrimination scale (Table 2). Both SGM and non-SGM had a mean score of 3.5. However, on the Everyday Discrimination Scale, SGM persons had a higher mean score, 9.1 out of 33, as compared to 3.7 in non-SGM ($p < 0.001$) (Table 2). Major themes from the focus groups noted that discrimination exists in everyday life and, when asked about why they feel they experience discrimination, focus group participants stated that a lack of understanding about the SGM community exists because people "fear what they don't know" (Table 3). Another major theme was that participants feared for their safety and felt inadequately protected and even felt victimized by government-run institutions (Table 3). Participants felt that protection against discrimination is not possible, as one participant stated, "It won't make any difference if we first change the law, because the political climate in the State is specific and the government through its institutions will find a way to impose

Table 1 Sample characteristics among SGM and non-SGM youth and young adults in Macedonia, 2016

	SGM (n = 208) N (%)	Non-SGM (n = 188) N (%)
Education[a]		
Secondary or less	36 (17.3)	31 (16.5)
University degree or higher	172 (82.3)	157 (83.5)
Income source		
Salary	64 (30.8)	68 (36.7)
Contract	32 (15.4)	31 (16.7)
Social assistance	–	1 (0.54)
Remittance	1 (0.5)	5 (2.7)
Parents/family	111 (53.4)	79 (42.9)
Ethnicity		
Macedonian	195 (95.3)	179 (93.8)
Non-Macedonian	9 (4.8)	13 (6.3)
Age, mean (Stdev)	23.0 (3.7)	23.5 (3.7)

[a] $p = 0.047$

Table 2 Differences in median scores of discrimination, rumination, and social interaction anxiety scales between SGM and non-SGM youth and young adults in Macedonia, 2016

Scales	SGM Mean (Stdev)	Non-SGM Mean (Stdev)
Experiences of Discrimination Scale (EODS)	3.5 (4.4)	3.4 (4.4)
Everyday Discrimination Scale (EDS)	9.1[a] (7.5)	3.7 (5.2)
Ruminative Response Scale (RRS) score	48.6[b] (14.6)	45.6 (13.9)
Social Interaction Anxiety Scale (SIAS) score	17.7[c] (10.3)	12.9 (6.8)

[a] $p = 0.000$; [b] $p = 0.035$; [c] $p = 0.000$

their own beliefs"—gay, male, 24 years old. Another participant stated, "There is no legal framework, the State won't guarantee safety, not only that, it encourages violence. And given all these circumstances, how can we [SGM] exist?"—28-year-old, lesbian, female. One more youth noted that even in school, they experienced discrimination and prejudice by the teachers including homophobia, transphobia, and sexism, as one 18-year-old lesbian youth noted when discussing her school, "On top of that when I was in another class, visiting a friend, the class director asked, 'where is that boy?'" and the class replied she is a girl. She responded, "I pity those parents, they gave birth to a hermaphrodite, she should kill herself." As seen above, SGM youth feel assaulted in numerous contexts as part of their daily lives, including the government, society, and even their educational institutions, adding to the pervasive discrimination they experience.

Rumination and Anxiety

The survey results showed that SGM persons had a higher mean rumination scale score, 48.6 of 88, as compared to 45.6 in non-SGM persons ($p = 0.035$) (Table 2). In addition, SGM persons' median score on the Social Interaction Anxiety Scale was 17.7 out of 100, as compared to 12.9 out of 100 among non-SGMs ($p = 0.000$).

In unadjusted regression models, SGM persons' score on the Ruminative Response Scale was 3.1 [CI (0.2, 5.9)] points higher as compared to that of non-SGM persons (Table 4). SGM persons scored 4.8 [CI (3.1, 6.5)] points higher on the Social Interaction Anxiety Scale, as compared to non-SGM persons. In unadjusted models of experiences of discrimination, both scales were associated with higher scores on rumination and anxiety scales (Table 4). For every point increase in the Experiences of Discrimination Scale, rumination increased by half a point [CI (0.1, 0.80] and social anxiety increased by 0.3 points [CI (0.1, 0.5)] (Table 4). In regard to the Everyday Discrimination Scale, every point increase on the scale equated to half a point [CI (0.3, 0.7)] increase in rumination and 0.4 point [CI (0.3, 0.6)] increase in social anxiety.

In adjusted analyses of rumination and anxiety by SGM identity and discrimination (non-mediator model), the findings showed increased scores of rumination and social anxiety. In the model that included SGM identity and the Experiences of Discrimination Scale, SGM persons scored 3.1 points higher on the rumination scale [CI (0.3, 5.9)] and 4.7 points higher in regard to social anxiety [CI (3.0, 6.4)]. In the model including SGM identity and Everyday Discrimination Scale, SGM persons had scores that were 0.1 point higher for the Ruminative Response Scale [CI (−2.8, 3.1)] and 2.8 points higher for social anxiety [CI (1.0, 4.7)]. Mental health issues were of particular concern in the focus groups.

When discussing their mental health, a major theme that arose from focus groups was that participants overwhelming expressed sentiments of despair, fear, and distress, as depicted by an 18-year-old, lesbian, female participant, "The

Table 3 Themes and codes from focus groups with sexual and gender minorities in Skopje, Macedonia, 2016

Qualitative theme	Codes
Reasons for pervasive discrimination	• Lack of knowledge about the topic of sexual and gender minorities • Limited legal protection against discrimination • Government institutions victimize sexual and gender minorities
Concerns about mental health	• Sexual and gender minorities experience depression and anxiety • Psychological violence seen as more pervasive than physical violence • Sexual and gender minorities experience poor access to high quality, acceptable, and identity-friendly mental health professionals
Poorer mental health processes	• Experiences of discrimination influence poorer mental health • Anxiety is related to feeling unsafe and uncomfortable among others • Social anxiety exists when among other SGM community members ○ Attempts to limit interaction with other SGM community members • Daily experiences of discrimination influence feeling down and sad

Table 4 Differences in anxiety and depression among SGM and non-SGM youth and young adults in Macedonia with effects of discrimination, 2016

Variable	RRS *B* (95% CI)	SIAS *B* (95% CI)
Model 1[a]		
SGM identity		
SGM	3.05 (0.22, 5.88)	4.79 (3.05, 6.53)[b]
Non-SGM	Reference	Reference
Model 2[a]		
EODS	0.46 (0.14, 0.79)[b]	0.33 (0.13, 0.53)[b]
Model 3[a]		
EDS	0.54 (0.34, 0.73)[b]	0.44 (0.32, 0.56)[b]
Model 4[c]		
SGM identity		
SGM	3.08 (0.25, 5.91)	4.70 (3.01, 6.38)[b]
Non-SGM	Reference	Reference
Discrimination scale		
EODS	0.47 (0.15, 0.79)[b]	0.34 (0.15, 0.53)[b]
Model 5[d]		
SGM identity		
SGM	0.14 (− 2.84, 3.12)	2.83 (1.01, 4.65)[a]
Non-SGM	Reference	Reference
Discrimination scale		
EDS	0.53 (0.32, 0.75)[b]	0.36 (0.23, 0.49)[b]

[a] Models unadjusted

[b] Denotes significance

[c] Model adjusted for Experiences of Discrimination Scale in order to calculate the indirect effect using the Judd and Kenny difference of coefficients approach

[d] Model adjusted for Experiences of Discrimination Scale in order to calculate indirect effects using the Judd and Kenny difference of coefficients approach

psychological violence is much worse than the physical violence. The physical violence, the traces will pass after a while, but the psychological will stay for the rest of the life, especially during the critical stages of development where the personality is being formed. The violence doesn't have to be physical in order to be scary." (Table 3).

Although SGM persons experience higher levels of anxiety and rumination, another theme that arose was that over half of the youth encountered homophobic psychologists and psychology professors when attempting to address their concerns. As a 19-year-old gay student said, "It shouldn't be allowed for an Academic citizen [professor] to educate young people how homosexuality is a disease…especially not to be put in the official educational program and books for future psychologist, who will face this population later on and work with them, psychotherapy or otherwise." The focus groups showed that finding identity-friendly and affirming mental health professionals remain difficult.

The indirect effect of the Experiences of Discrimination Scale on rumination and social anxiety scores was 0.03 and 0.09 points lower, respectively, and was not statistically significant (table not shown), while the indirect effect of the Everyday Discrimination Scale on rumination accounted for 2.9 points (out of the 3.1 points due to SGM identity), significantly accounting for 95% of the effect ($p < 0.000$) (table not shown). Everyday discrimination on social anxiety represented 2.0 points (out of the 4.8 points due to SGM identity), significantly accounted for 41% of the variation ($p < 0.000$). This is particularly important as another theme discovered from the focus groups was that the experiences of discrimination and fear create social anxiety even among groups of similar others. As one focus group participant noted, "I find it interesting that currently we have created a safe zone and a safe group [this focus group] where we can talk openly and even so, we are silent, and that should tell us something. It tells us that even in a group [of SGM] where you should feel safe, still we don't. I guess everyone has an experience to share, but [we] don't feel comfortable"—22-year-old, gay, male.

Discussion

As these findings show, SGM persons in Macedonia experience twice the amount of discrimination, 9.1 points, as compared to non-SGM persons, 3.7 points, according to the Everyday Discrimination Scale. Independent of sexual orientation and gender identity, higher levels of everyday discrimination accounted for 95% of the social anxiety experienced by SGM, while to a lesser extent, rumination, 41%, an indicator of depressive symptomatology. It is also important to note that scales that helped define examples of discrimination (Everyday Discrimination Scale) seemed better suited to assess experiences of discrimination in the Macedonian context. While the Experiences of Discrimination Scale may have reliably captured discrimination and had a high Cronbach's statistic, it may have been understood differently by participants in this study sample. The Experiences of Discrimination Scale required persons to think back to experiences in specific situations asked by the scale and then self-identify the experience as discriminatory. However, each participant may process the experience differently, thus altering the conceptualization of discrimination in Macedonia as measured by the Experiences of Discrimination Scale. Given the high prevalence and pervasive discrimination, SGM in Macedonia may be desensitized to discrimination, similar to other minority populations (e.g., women) (Babaria, Abedin, Berg, & Nunez-Smith, 2012). So much that, without providing a cue that specifically defines the discrimination, they do not define the event as discriminatory, which may explain the low score. Future research in non-Western countries should be mindful

of this when attempting to measure discrimination, and scales may need to be improved upon for these contexts.

Our study showed that a partial exploration of the Minority Stress Model holds true in non-Western countries in that the rampant and daily discrimination due to identity increases the risk for poorer mental health in Macedonia (Bränström et al., 2016; Eldahan et al., 2016; Lee et al., 2016; Rendina et al., 2016). Our results, the first of their kind from Macedonia and the region, add to the existing literature and provide evidence from a setting where SGMs face discrimination at the individual, societal, and political levels. As noted earlier, the level of societal and political regulations and discrimination in Eastern Europe and Macedonia, in particular, perpetrated against SGMs is extensive (Kajevska, 2016; Stojanovski, 2016; Stojanovski et al., 2015; Stulhofer & Sandfort, 2005). As posited by the Minority Stress Model and confirmed in Macedonia, structures such as state-propagated discrimination and societal norms of sexism and misogyny (one form of minority-related stressors) generate mental health inequities experienced by SGM in the country. This prejudice produces discrimination and drives higher levels of rumination and social anxiety.

In order to address these issues, we have several recommendations for advocates and policy-makers in the region. First, the government needs to improve anti-discrimination laws so that they explicitly include protections for sexual and gender minorities. Previous studies in other countries on the lesbian, gay, and bisexual (LGB) community and their surrounding sociopolitical environment revealed a greater risk of adverse mental health in places where no legal protections against discrimination existed, even in Southeast Europe (Berg et al., 2013; Hatzenbuehler, 2011; Hatzenbuehler, Keyes, & Hasin, 2009). One study found a significant interaction between a lack of state-level policy protections and LGB status in the prediction of psychiatric disorders, including anxiety disorder and PTSD, as well as comorbid psychiatric conditions (Hatzenbuehler et al., 2009). The study by Berg et al. (2013) also depicted how a lack of legal protections for SGM increased internalized homonegativity within the MSM community. Avenues to improve policies may exist during the Macedonia's European Union (EU) accession path. For example, according to EU acquis Chapter 19 on social policy, the EU requires improvements to laws to ensure the protection of the rights of SGM in countries aiming to join the EU. Such policy and legal changes would allow for adequate legal protection for SGMs. In addition, advocates can use the fact that Macedonia is a signatory to the United Nations Covenant on Economic, Social, and Cultural Rights and European Convention for the Protection of Human Rights and Fundamental Freedoms in their advocacy efforts to gain protections. As depicted in previous studies, gaining and improving these legal protections can help increase feelings of safety and protection, which may then improve mental health outcomes.

The structural and societal violence SGMs face in Macedonia creates inequities in receiving accessible, acceptable, quality, and timely mental health services that meet their needs and ensuring their right to health. Another recommendation is that the government should modernize psychology textbooks utilized in the Faculties of Psychology so that up-to-date research and information regarding sexual and gender minorities is taught. The latest psychological research has been revised and no longer defines homosexuality as a disease (Drescher, 2015). This has a negative effect on sexual and gender minority youth's ability to access acceptable and quality mental health services. In addition, students should have recourse to report cases of discrimination to education officials and policies should be enacted to adequately address their concerns.

In addition, we recommend the exploration of different avenues to improve mental health services for SGMs in Macedonia. For example, provision of mental health services and access to therapists through civil society organization that are identity affirming may be an appropriate venue, which research has shown is effective in addressing minority stress and mental health (Pachankis, 2014). In addition, civil society organizations should identify and maintain lists of psychologists and other types of professional therapists who are SGM friendly that they can refer their members to for mental health services. Moreover, providing mental health support via mobile applications may assist in providing mental health support. Research has shown mobile mental health services are an effective means of mental health provision (Ainsworth et al., 2013; Hull, 2015; Younes, Chollet, Menard, & Melchior, 2015). This may be a particularly useful avenue of mental health service provision and ensuring privacy and confidentiality for SGM in highly discriminatory social and political environments, especially important for those in smaller towns and cities.

As with any research study, limitations do exist. The concept of gender identity may have become conflated with those of gender, in that cisgender females may have associated their experiences to discrimination to their female gender identity. However, in this study, cisgender non-heterosexual females had scores two times higher than cisgender heterosexual females, providing confidence that the cisgender identity is not the driving force for experiences of discrimination, but rather sexual orientation. The current literature of sexual orientation and gender identity is grounded predominately in Western cultures, so additional thought must be given to other sociopolitical environments. In Macedonia, and other post-Yugoslav nations, the misogyny and patriarchy within those nations create dimensions and norms that devalue cisgender females, which could explain reasons for why experiences of discrimination existed in non-SGM persons, albeit much lower than in SGM persons.

Research in nations with deeply and historically rooted sexism and gender norms should be mindful of such conflation in order to avoid misrepresenting findings. Another limitation of the study was the inability to achieve a representative random sample of non-SGM and SGM participants. In addition, we did not conduct subgroup analyses with the various SGM subpopulations in our study to protect the confidentiality and identity of our study participants in a country with high levels of interpersonal and political discrimination. As noted in the findings, our sample was highly educated and predominately Macedonian ethnicity, which may have skewed results in that they were more open to take the survey and disclose issues of sexual and/or gender identity. Although we were not able to get a representative random sampling, research with populations that are difficult to find tends to incorporate purposeful snowball sampling in order to attain access to the hidden population when otherwise not possible (Biernacki & Waldorf, 1981; Platt et al., 2006).

This study fills critical gaps in our understanding of sexuality, discrimination, and mental health in non-Western countries. Our findings are the first in the region to examine how discrimination, the consequence of structural issues, creates the mental health issues sexual and gender minorities in Southeastern Europe experience. This paper underscores the importance of the multisectored, multilevel, and interdisciplinary approach needed in order to address the specific vulnerabilities and inequities sexual and gender minorities struggle with in Macedonia.

Conclusions

SGMs in Macedonia experience higher levels of discrimination than heterosexual and cisgendered counterparts due to cultural and social norms that exclude SGMs. The discrimination is also a mediator to increased social anxiety and rumination. Policy initiatives and novel mental health programs and clinical services are needed to address the inequities and ameliorate the mental health consequences of sociopolitical stigma experienced by SGMs.

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