

Impact of Sexual Orientation, Social Support and Family Support on Minority Stress in LGB People

Fernanda de Oliveira Paveltchuk*,¹

Orcid.org/0000-0002-8319-874X

Bruno Figueiredo Damásio²

Orcid.org/0000-0002-1150-092X

Juliane Callegaro Borsa¹

Orcid.org/0000-0001-7703-5509

¹*Pontifícia Universidade Católica do Rio de Janeiro, Rio de Janeiro, RJ, Brasil*

²*Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brasil*

Abstract

Lesbian, gay, and bisexual (LGB) individuals may have lower levels of mental health compared to heterosexual people. This study examined the impact of sexual orientation on the components of minority stress (victimization, internalized homophobia and concealment of sexual orientation), and the moderating role of social and family support in the relationship between sexual orientation and minority stress components. A total of 715 LGB people participated in this study, of which 29.1% reported being lesbian ($n = 208$), 32.2% gay ($n = 230$) and 38.8% bisexual ($n = 277$). Their ages ranged from 18 to 70 years ($M = 24.14$, $SD = 7.18$). The questionnaire was disseminated through social networks and answered on an online platform. A path analysis with moderation effects was conducted to test the interactions between the variables sexual orientation, victimization, internalized homophobia and concealment of sexual orientation. No relationship was found between the variables cited, which can be explained by the sociodemographic characteristics (race/ethnicity, income, education) of the participants. These results may be associated with a response bias due to the profile of the participant sample of the present study.

Keywords: Minority stress, family support, social support, sexual orientation, LGB.

Impacto da Orientação Sexual, Suporte Social e Familiar no Estresse de Minorias em Pessoas LGB

Resumo

Lésbicas, gays e bissexuais (LGB) podem apresentar menores níveis de saúde mental quando comparados a pessoas heterossexuais. Este estudo verificou o impacto da orientação sexual nos componentes do estresse de minorias (vitimização, homofobia internalizada e ocultação da orientação sexual), e o papel moderador dos suportes social e familiar na relação entre a orientação sexual e os componentes

* Mailing address: R. Marquês de São Vicente, 225 - Gávea, Rio de Janeiro - RJ, Brazil 22451-900. Phone: (21) 3527-2074. E-mail: paveltchuk@gmail.com

This study was carried out with financial support from the Coordination for the Improvement of Higher Education Personnel (CAPES).

do estresse de minorias. Participaram deste estudo 715 pessoas LGB, das quais 29,1% afirmaram ser lésbicas ($n = 208$), 32,2% gays ($n = 230$) e 38,8% bissexuais ($n = 277$). Suas idades variaram de 18 a 70 anos ($M = 24,14$; $DP = 7,18$). O questionário foi divulgado por meio de redes sociais e respondido em uma plataforma online. Uma *path analysis* com efeitos de moderação foi conduzida para testar as interações entre as variáveis orientação sexual, vitimização, homofobia internalizada e ocultação da orientação sexual. Não foram encontradas relações entre as variáveis citadas, o que pode ser explicado pelas características sociodemográficas (raça/etnia, renda, escolaridade) dos participantes. Tais resultados podem estar associados a um viés de resposta oriundo do perfil da amostra participante do presente estudo.

Palavras-chave: Estresse de minorias, suporte familiar, suporte social, orientação sexual, LGB.

Impacto de Orientación Sexual, Soporte Social y Familiar en Estrés de Minorías en Personas LGB

Resumen

Lesbianas, gays y bissexuales (LGB) pueden presentar menores niveles de salud mental en comparación con las personas heterosexuales. Este estudio verificó el impacto de la orientación sexual en los componentes del estrés de minorías (victimización, homofobia internalizada y ocultación de la orientación sexual), y el papel moderador de los soportes social y familiar en la relación entre la orientación sexual y los componentes del estrés de las minorías. En este estudio participaron 715 personas LGB, de las cuales el 29.1% afirmó ser lesbianas ($n = 208$), 32.2% gays ($n = 230$) y 38.8% bissexuales ($n = 277$). Sus edades variaron de 18 a 70 años ($M = 24.14$, $DE = 7.18$). El cuestionario fue divulgado a través de redes sociales y respondido en una plataforma online. Una ruta de análisis con efectos de moderación fue conducida para probar las interacciones entre las variables orientación sexual, victimización, homofobia internalizada y ocultación de la orientación sexual. No se encontraron relaciones entre las variables citadas, lo que puede ser explicado por las características sociodemográficas (etnia, renta, escolaridad) de los participantes. Estos resultados pueden estar asociados a un sesgo de respuesta proveniente del perfil de la muestra participante del presente estudio.

Palabras clave: Estrés de minorías, soporte familiar, soporte social, orientación sexual, LGB.

The aim of this study was to evaluate the impact of sexual orientation on the three components of minority stress (victimization, internalized homophobia and concealment of sexual orientation), and to verify the moderating role of social support and family support in the relationship between sexual orientation and the components of minority stress. Minority stress (MS) theory argues that minority groups are in a position of psychosocial vulnerability because they are exposed to specific chronic stressors derived from their minority status (Meyer, 2003). This means that people who are members of stigmatized groups may have lower rates of well-being and greater anxiety and depression, for example, than people with the same

sociodemographic characteristics who do not suffer stigmatization. Stress can be understood as a adaptation reaction of the body to some event that has taken it out of balance (Selye, 1973). This reaction, when chronic, is associated with the development of psychopathologies, such as anxiety and depression (McEwen, 2006). Lesbian, gay and bisexual (LGB) people may present higher levels of anxiety and depression, for example, when compared to heterosexual people (Carr & Pezzela, 2017). Stigma associated with non-heterosexual orientations is associated with impairments in the mental health of young LGB people (Hatzenbuehler, 2016). Thus, sexual minorities may present particular requirements due to their experiences. The MS theoretical

model advocates the existence of distal and proximal stressors for LGB individuals, these being: experiences of victimization (VIC), internalized homophobia (IH) and concealment of the sexual orientation – CSO (Meyer, 2003). Victimization experiences are the distal stressors of the theory and refer to any experience of violence and discrimination suffered, whether verbal or physical; the proximal stressors are internalized homophobia and concealment of the sexual orientation (Dunn, Gonzalez, Costa, Nardi, & Iantaffi, 2013).

Experiences of victimization may be associated with the development of symptoms of anxiety and depression (Birkett, Espelage, & Koenig, 2009). Verbal victimization, such as the repetition of negative nicknames, is associated with psychological stress and substance abuse in LGB adolescents (Tucker et al., 2016). According to a longitudinal US study conducted between 1995 and 2015, there was a decrease in the experiences of victimization of LGB individuals in the school environment over the observed period of time, however, the rates were higher than those of heterosexual people (O'Malley Olsen, Vivolo-Kantor, Kann, & Milligan, 2017). Discrimination in school contexts is linked to a burden on mental health and suicidal ideation in young LGB people (Russell, Ryan, Toomey, Diaz, & Sanchez, 2011). When compared to heterosexual people, LGB individuals present higher rates of sexual harassment at work and less support from the institutions, as well as reporting higher levels of posttraumatic stress and depression and lower levels of collective self-esteem (Smith, Cunningham, & Freyd, 2016). Victimization experiences vary according to the minority characteristics of each individual (Meyer, 2003). In a comparative study of white and Hispanic LGB individuals, for example, white women were found to have lower rates of discrimination throughout life (Kim & Fredricksen-Goldsen, 2016). In this way, victimization can impact the levels of well-being and mental health of LGB people.

Disclosure of the sexual orientation is associated with higher levels of well-being

(Legate, Ryan, & Rogge, 2017). This can happen because, although concealing the sexual orientation can avoid discrimination events, hiding it can also have negative effects (Quinn, 2017). In addition, it is associated with expectations of rejection and the development of pathologies such as social anxiety disorder (Pachankis & Goldfried, 2006). Being in the closet may also be associated with the development of chronic physical health conditions (Hoy-Ellis & Fredriksen-Goldsen, 2016). Admitting the sexual orientation can impact the well-being of LGB individuals, since the experience of not living with the need to hide part of one's identity can take away the constant feeling of vigilance of these people (Riggle, Rostoky, Black, & Rosenkrantz, 2017).

This sense of vigilance is associated with the expectations of rejection of those whose identities are stigmatized (Pachankis, Cochran, & Mays, 2015). Stigmatization can occur at different levels (Hatzenbuehler, 2017). Internalized homophobia (IH) is the LGB person's hostility towards their own sexual orientation (Frost & Meyer, 2009). Stress due to the minority condition may be associated with the strengthening of negative interpretive filters related to the minority condition (Stuber, Meyer, & Link, 2008). By affecting the image that LGB people have of themselves, IH can negatively affect the mental health and well-being of this group (Herrick, Stall, Goldhammer, Egan, & Mayer, 2013).

The MS theory considers community and individual factors that can act as moderators of the relationship between minority stressors and mental health outcomes (Meyer, 2003). Some of these factors are social support and family support. Social support, being defined as an individual's perception of being part of a group that values and supports him/her, has been indicated as an important stress moderator (Cobb, 1976; Meyer, 2003; Watson, Grossman, & Russell, 2016). Social support is associated with the subjective well-being of LGB individuals (Detrie & Lease, 2008), with its absence being associated with negative mental health outcomes in LGB individuals (Bränström, Hatzenbuehler,

& Pachankis, 2016). Social support is also associated with lower rates of interpersonal conflict in LGB people (Winderman, Martin, & Smith, 2017). In bisexual people, social support can act as a predictor of well-being and depression, while social support related to the sexuality may be negatively associated with the internalization of negative attitudes toward bisexuality (Sheets & Mohr, 2009).

Family support is also related to higher levels of well-being and greater resilience to stress (Buchanan & McConnell, 2016). In a study that related the definitions of gay and bisexual men regarding family and indices of depression and anxiety, those who defined their families as family of origin, compared to those who defined family as a family by choice or combination of the two, presented higher symptoms of the disorders mentioned (Soler, Caldwell, Córdova, Harper, & Bauermeister, 2017). In the study by Feinstein, Wadsworth, Davila, and Goldfried (2014), family support served as a protective factor against the development of internalized homophobia in lesbians and gay men. In bisexual men, parental support is associated with lower levels of stress resulting from the disclosure of the sexual orientation to other family members (Pollitt, Muraco, Grossman, & Russell, 2017). Family rejection is associated with lower mental health indices (Ryan, Huebner, Diaz, & Sanchez, 2009), higher indices of psychological stress and lower indices of well-being in LGB people (Shilo & Savaya, 2011). In Jamaican gay and bisexual men, family rejection also acted as a predictor of higher levels of depression (White, Sandfort, Morgan, Carpenter, & Pierre, 2016). Age, on the other hand, functions as a moderator of the sources of social support for LGB people who are also part of ethnic minorities, with older members of this group appearing to seek family support less (Wise, Smith, Armelie, Boarts, & Delahanty, 2017). Family support demonstrated a role as a protective factor against the development of psychopathologies in Portuguese LGB youths (Freitas, D'Augelli, Coimbra, & Fontaine, 2015).

It is understood that bisexual people have higher rates of mental health impairment when

compared to lesbian and gay people (Pollitt et al., 2017). This may be associated with the difficulty of bisexuals being accepted by their monosexual peers, be they heterosexual or homosexual (Ross, Dobinson, & Eady, 2010). Thus, the present study aimed to verify the impact of the sexual orientation on the levels of three minority stressors, these being: experiences of victimization, internalized homophobia and concealment of sexual orientation. In addition, it sought to verify the moderating role of social support and family support on the relationship between the above mentioned variables. Considering the aim of the study to investigate MS in LGB individuals and considering that MS is a subtype of stress specifically related to minorities, comparisons between sexual orientations were made specifically among lesbian, gay and bisexual individuals.

Method

Participants

A total of 715 LGB people participated in this study, of whom 29.1% reported being lesbian ($n = 208$), 32.2% gay ($n = 230$) and 38.8% bisexual ($n = 277$). Their ages ranged from 18 to 70 years ($M = 24.14$, $SD = 7.18$). Regarding sex, 37.1% were male ($n = 265$), and 62.9% female ($n = 450$). Regarding gender identity, 35.8% were men ($n = 256$), 60.9% were women ($n = 436$) and 3.2% were self-declared non-binary trans people ($n = 23$). Among the trans people who responded to the survey, only non-binary trans people submitted complete responses. As, for the present study, complete responses were required for the execution of the analyses, only data from non-binary trans people were included. Regarding the place of residence, 85.0% ($n = 608$) of the respondents reported living in state capitals. Regarding the disclosure of the sexual orientation, 88.4% stated that they had declared it ($n = 632$). Regarding race/ethnicity, 69.4% reported being white ($n = 496$). Data were collected from all regions of the country, with 75.4% of the respondents from the Southeast region ($n = 539$).

Instruments

Sociodemographic questionnaire. This instrument was developed for the present study to collect sociodemographic information, such as: sexual orientation, gender identity, sex, religion, age, marital status, income, education level, region of residence, etc. The research focus of the study was the participants' sexual identity, rather than their sexual behavior. Therefore, the question used for sexual orientation was "what is your sexual orientation?", with "gay", "lesbian", "bisexual" and "other" as the response options. As the present study sought to compare MS levels of gay, lesbian and bisexual people, all those who answered "other" were excluded. In the question regarding gender identity ("what is your gender identity?"), the response options were "man", "trans man", "woman", "trans woman", "non-binary trans" and "other".

Enacted Stigma (Brazilian version adapted by Dunn et al., 2013). This instrument is composed of seven items referring to experiences of physical or verbal violence resulting from homophobia and is measured on a frequency scale. In the present study, reliability was measured by Cronbach's alpha (0.69), with a unifactorial structure suggested by the factorial analysis ($KMO = 0.766$, $X^2 [21] = 897.5$, $p < .001$).

Shortened Internalized Homonegativity Scale (Brazilian version adapted by Dunn et al., 2013). This instrument consists of seven items related to the respondent's feelings about his/her own sexual orientation. Response options range from 1 (totally disagree) to 7 (totally agree). Lower scores indicate greater internalized homophobia. In the present study, the reliability was measured by Cronbach's alpha (0.69) and the factorial structure suggested by the exploratory factor analysis was unifactorial ($KMO = 0.692$, $X^2 [21] = 722.9$, $p < .001$).

Outness Inventory (Brazilian version adapted by Dunn et al., 2013). The instrument consists of four items: family, heterosexual friends, LGBT friends and co-workers. The individual has to state whether they have admitted their sexuality to none, few, many, all, or if the item does not apply. In the present study, the

reliability was measured by Cronbach's alpha (0.71), with a unifactorial structure suggested by the exploratory factor analysis ($KMO = 0.668$, $X^2 [6] = 693.5$, $p < .001$).

Social Support Perception Scale (*Escala de Percepção de Suporte Social - EPSS*; Siqueira, 2008). The instrument consists of 29 items related to the perception of social support of the respondent. The response scale ranges from 1 to 4, where 1 = never and 4 = always. The respondent has to indicate the frequency with which he/she obtains emotional and practical support from his/her peers. In the present study, the reliability was measured by Cronbach's alpha (0.96) and a unifactorial structure was suggested by the exploratory factor analysis ($KMO = 0.964$, $X^2 [378] = 14495.9$, $p < .001$).

Family Support Perception Inventory (*Inventário de Percepção de Suporte Familiar - IPSF*; Baptista, 2005). The instrument consists of 42 items regarding the respondent's perception of family support. It has a Likert-type response scale, with three points: almost never/never, sometimes and almost always/always. The IPSF is composed of three subscales, which together generate a general factor. The data reported in this study are from the general factor, since, when carrying out the proposed analyses with each subscale, the results did not differ from the general result. In the present study, reliability was measured by Cronbach's alpha (0.95).

Data Collection Procedures

Participants were recruited from militancy and activism groups and social networks through the snowball technique (Patton, 1990), in which participants indicated the study to their peers. All those identified as lesbian, gay and bisexual, aged over 18 years were included. Data were collected virtually between March and July 2017.

Data Analysis Procedures

In order to evaluate the distribution of sociodemographic data in the study sample (e.g. age, gender identity, sexual orientation, region of residence, schooling and race/ethnicity), descriptive statistics were calculated

(mean, standard deviation, frequency and percentage). Multivariate Analyses of Variance (MANOVAs) were conducted to comprehend the mean differences in gay, lesbian and bisexual people regarding their levels of victimization experiences, internalized homophobia, and concealment of sexual orientation. In order to evaluate the mean differences in victimization, internalized homophobia, concealment of sexual orientation, family support and social support among lesbian, gay and bisexual people, multivariate analyses of variance (MANOVAs) were implemented, based on re-sampling procedures (bootstrapping of 1000 re-samples, with a confidence interval of 99%). The re-sampling procedure was used with the aim of ensuring more reliability for the results, and to remedy possible deviations from data distribution normality and incompatibility in the group sizes (Haukoos & Lewis, 2005).

A path analysis with moderation effects was conducted to test the interactions between sexual orientation and minority stressors, as well as to test the moderating role of family support and social support in the relationship between the variables mentioned above and the proposed theoretical model (MS; Figure 1). The fit of the models was evaluated from the CFI, TLI and RMSEA indices. The CFI and TLI values should be above 0.90. The RMSEA values should be below 0.08 (Brown, 2006).

Table 1
Descriptive Statistics

	<i>N</i>	Minimum	Maximum	Mean	Standard deviation
Sexual orientation	715	1.00	3.00	2.06	0.84
Social support	715	31	116	75.80	18.17
Family support	715	46	124	86.26	17.31
Internalized homophobia	715	7.00	43.00	17.01	6.32
Victimization	715	7.00	24.00	10.23	3.18
Concealment of sexual orientation	715	4.00	20.00	15.11	3.21

There were differences between the groups regarding: victimization, $F(2, 714) = 38.85, p < .001, d = 0.098$; internalized homophobia, $F(2, 714) = 8.29, p < .001, d = 0.023$; concealment of sexual orientation, $F(2, 714) = 40.95, p < .001,$

Ethical Procedures

This study followed the recommendations of Resolution 466/2012 of the National Research Ethics Committee (CONEP). It was authorized by the Research Ethics Committee of the Federal University of Rio de Janeiro (CAAE: 66479617.1.0000.5582). The consent form was presented on the first page of the online questionnaire. Only those who agreed to participate had access to the study content. Those who did not consent were redirected to the end of the questionnaire. The participants were informed about the risks and benefits of responding to the study, and were assured that they could withdraw their consent, without detriment, at anytime.

Results

Table 1 presents the results for the descriptive statistics performed. It should be emphasized that the sample was composed only by non-heterosexual people. It can be seen that the indices of minority stressors presented were below medium, while the levels of social support and family support were in the mid-level. The majority of participants therefore reported low levels of victimization, internalized homophobia and concealment of sexual orientation, and medium levels of social and family support.

$d = 0.103$; family support, $F(2, 714) = 6.91, p < .01, d = 0.018$; and social support, $F(2, 714) = 6.52, p < .01, d = 0.019$. Group-to-group differences were verified from post-hoc tests (Table 2).

Table 2
Post-Hoc Comparisons between Gay, Lesbian and Bisexual Groups

Dependent variable	Sexual orientation		Difference of means	Standard error	<i>P</i>	99% confidence interval.	
						Lower Bound	Upper Bound
Internalized homophobia	Gay	Lesbian	1.370	0.598	.067	-0.393	3.134
		Bisexual	-0.968	0.558	.250	-2.612	0.676
	Lesbian	Bisexual	-2.339*	0.574	.000	-4.030	-0.647
Victimization	Gay	Lesbian	0.830	0.289	.013	-0.021	1.682
		Bisexual	2.327*	0.269	.001	1.534	3.122
	Lesbian	Bisexual	1.497*	0.277	.001	0.681	2.314
Concealment of sexual orientation	Gay	Lesbian	0.747	0.291	.031	-0.110	1.605
		Bisexual	2.382*	0.271	.001	1.582	3.181
	Lesbian	Bisexual	1.634*	0.279	.001	0.812	2.457
Family support	Gay	Lesbian	5.883*	1.642	.001	1.05	10.72
		Bisexual	1.416	1.531	1.000	-3.09	5.93
	Lesbian	Bisexual	-4.466	1.575	.014	-9.10	0.17
Social support	Gay	Lesbian	-1.986	1.725	.750	-7.07	3.10
		Bisexual	-5.684*	1.609	.001	-10.42	-0.95
	Lesbian	Bisexual	-3.698	1.654	.077	-8.57	1.17

**p* < .01.

To further analyze the relationships between the variables, a path analysis, subtype of modeling by structural equations, was performed using all the indicators described above. The purpose of this analysis was to verify the impact of the sexual orientation on indicators of MS. The social and family support indices were inserted as moderating variables. In order to use the sexual orientation variable as an independent variable, two dummy variables were constructed, ORIENT1 (gay = 1, lesbian and bisexual = 0) and ORIENT2 (lesbian = 1, gay and bisexual = 0). A dummy variable is created when the goal is to transform a categorical variable into a binary numerical variable (in zeros and ones; Field, 2009). Thus, two path analyses were performed, so that the value to be subtracted from the relationship between ORIENT1 and ORIENT2 was intelligible as the

impact of bisexuality on the indicators of MS (IH, VIC and CSO). The adjustment indices of the path analysis with multimoderation of ORIENT1 were: $\chi^2 = 390.030$; *df* = 12; RMSEA 90% CI [0.000-0.000] = 0.000; CFI = 1.000; TLI = 1.000. The adjustment indices of path analysis with multimoderation of ORIENT2 were: $\chi^2 = 325.995$; *df* = 12; RMSEA 90% CI [0.000-0.000] = 0.000; CFI = 1.000; TLI = 1.000 (Figure 1).

As shown in Figure 1, no variable had a significant impact on the others (*p* > .05). Therefore, in the present study, the sexual orientation of the respondents did not differentially the levels of IH, VIC and CSO levels (*p* > .05). In addition, SS and FS did not moderate the relation between the variables cited (*p* > .05).

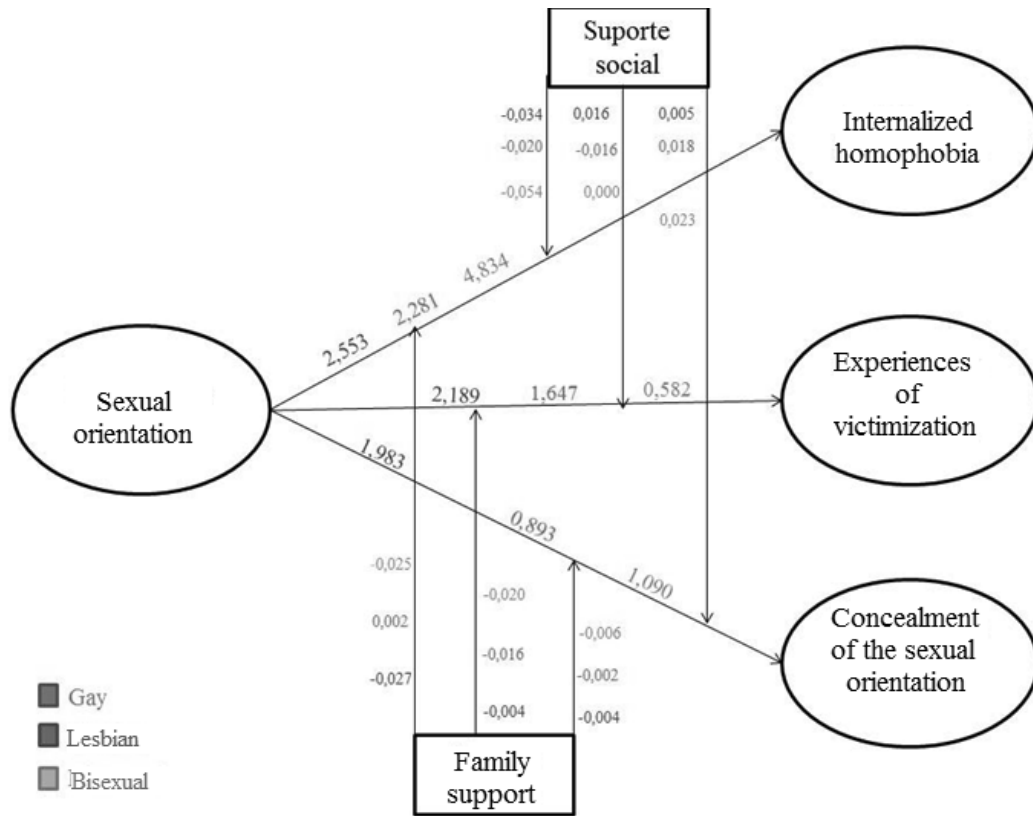


Figure 1. Path-analysis model of the statistically non-significant relations between ORIENT, IH, VIC and CSO, moderated by SS and FS.

Discussion

This study sought to investigate how sexual orientation could impact the levels of internalized homophobia, experiences of victimization and concealment of sexual orientation in a sample of gay, lesbian and bisexual men and women. As this was the focus of the study, heterosexual people were not part of this sample. The results of the path analysis demonstrated that sexual orientation did not have a significant impact on the levels of the minority stressors. That is, the initial hypothesis that the different sexual orientations of the sample would impact differently on their levels of internalized homophobia, experiences of victimization and concealment of sexual orientation was refuted. Therefore, the results of the present study do not agree with the majority of the literature, which indicates that bisexual people present higher rates of minority stress, anxiety and depression when compared to gay and lesbian people (Katz-Wise, Mereish, & Woulfe, 2016; Molina et al.,

2015; Watson, Velez, Brownfield, & Flores, 2016).

A possible reason for these results may be the low level of minority stressors in the sample participating in the present study. As already mentioned, the respondents reported low levels of experiences of victimization, internalized homophobia and concealment of sexual orientation. In a group with low rates of minority stressors, it may be that sexual orientation does not really impact these outcomes. As the MS theory states, the more closely integrated the minority identity, the lower the rates of stress and the higher the levels of anxiety and depression (Meyer, 2003). Those LGB individuals with high identity integration tend not to have their sexual orientation as a key variable for the outcomes of low internalized homophobia, low concealment of sexual orientation and little experience of victimization (Meyer, 2003). Thus, from the results found, it is understood that for a sample with low levels of MS, it does not matter whether they are gay, lesbian or bisexual.

By understanding health not only as an absence of pathologies, but as an absence of pathologies with high levels of well-being (World Health Organization [WHO], 1946), it becomes clearer that a theory that works with negative concepts, such as stress, minority identity and higher indices of psychopathologies such as anxiety and depression, is not applicable to a sample of LGB people who do not have the traditional conditions of minority groups.

With an integrated identity and a non-aversive context, the respondents may have found individual and collective resources so that their minority status was not a determining factor in their mental health outcomes. The concept of empowerment can help in comprehending this logic, with empowerment being understood as a process or mechanism that allows individuals to master their lives (Rappaport, 1984). More recent LGB-affirmative therapy initiatives, such as the study by Pachankis et al. (2015) of a transdiagnostic treatment for MS in Cognitive-Behavioral Therapy, propose empowerment as a coping strategy useful for people in minorities. In the study cited above, the intervention proposal, called ESTEEM (“Effective Skills to Empower Effective Men”), highlights strategies for the empowerment of gay and bisexual men with high indices of MS (Pachankis et al., 2015). Therefore, empowerment can be a key tool for positive mental health outcomes in LGB individuals. In an empowered sample such as that of the present study, it makes sense that sexual orientation does not impact the MS indices.

In this sense, it is important to comprehend the characteristics of the participants of the present study: the sample consisted mainly of women (60.7%), young people ($M = 24.4$ years; $SD = 7.18$ years), white (69.4%), that had admitted their sexuality (88.4%), university students or with higher education (69.8%), middle-class (69.5%), and that lived in urban areas (85.0%). Thus, the concept of empowerment makes even more sense regarding the results found. It is known that women with high levels of well-being tend to be more engaged in responding to mental health research than men, which increases the chances that the majority of the

completed responses in this questionnaire were from women (Damásio, Golart, & Koller, 2015). Although lesbian and bisexual women are seen as part of two minorities (i.e. gender and sexual orientation, Meyer, 2003), their rates of well-being and integration of sexual identity may have been higher than their male peers, which may have led to them being the majority of respondents in the present sample. In addition, it can be highlighted that the majority of the sample were university students or had completed a higher education course. High levels of education are associated with lower rates of prejudice (Maykovich, 1975), which may have contributed to the low levels of MS in the respondents. In addition, income may also function as a protective factor against MS, since high levels of income are associated with more positive attitudes towards LGB people (Corrales, 2015). As most respondents claimed to be middle class, it is possible that this is another condition for the positive indices of MS in the sample.

The region of residence of the participants should also be highlighted: most reported living in urban areas, which is associated with lower levels of homophobia and conservatism (Barefoot, Rickard, Smalley, & Warren, 2015). Therefore, it is possible to assume that the levels of MS of LGB people living in this area are lower, facilitating an understanding of the results found in this study.

The social support (SS) and family support (FS) indices reported by the sample presented mid-levels in the response scales used. From the perspective of the MS theory (Meyer, 2003), these results are better than expected for a sexual minority sample, suggesting that the sample had both collective and contextual coping resources and a reasonable support network. Social support is associated with positive mental health outcomes in general (Detrie & Lease, 2008). This applies especially to people who are part of social minorities, as these groups are often victims of prejudice on the part of society (Meyer, 2003). The absence of SS has been related to higher levels of substance dependence in older gay and bisexual men (Bryan, Kim, & Fredriksen-Goldsen, 2016). Also, it should be

noted that higher levels of SS and FS seem to be associated with a higher socioeconomic level in LGB individuals (McConnell, Birkett, & Mustanski, 2015). As the present sample reported to be mostly middle-class, the reported SS levels, also medium, seem to be consistent with this data. Thus, several contextual conditions may have contributed to the empowerment of the respondents.

Family support, in turn, is also associated with higher rates of mental health and resilience in minority groups (Buchanan & McConnell, 2016). In LGB people, this specific type of support is often not found, unlike the case of ethnic minorities, for example. When individuals discover that they are outside the norm of heterosexuality, being part of a sexual minority, they may not receive support from their family members (Soler et al., 2017). Higher levels of FS are associated with greater well-being among LGB individuals (Snapp, Watson, Russell, Diaz, & Ryan, 2015). The absence of FS is associated with greater stress in adolescence for LGB people (McConnell, Birkett, & Mustanski, 2016) and higher levels of depressive symptoms and internalized homophobia in gay and lesbian individuals (Feinstein et al., 2014).

In addition to the aforementioned reasons, it is possible that the absence of relationships between the variables selected for the analyses occurred due to study limitations. The data were collected through an online platform, and the sample consisted of non-clinical respondents with low levels of IH, VIC and CSO, as well as medium levels of social and family support. The dissemination of the study took place through LGBT groups and social network groups, which may explain the greater access of those with lower MS, since they are probably part of a more empowered group. In addition, it is also possible that the measures used in this study did not access the entire experience of being part of a socially vulnerable group. Measures of IH, VIC and CSO do not specifically differentiate between the stressors of gay and lesbian individuals and those of bisexual people. Therefore, it is fundamental that new studies are carried out,

taking into account the particularities of each of these groups. In this sense, the adaptation and construction of new instruments, in addition to the proposal for new studies, both more specific, could be interesting and provide powerful initiatives in understanding what it is to be part of a sexual minority in Brazil, and what the factors are that can function as protection or risk in the development of a fuller life experience for LGB people.

Final Considerations

The present study aimed to verify the impact of sexual orientation on the levels of three minority stressors: internalized homophobia (IH), victimization (VIC) and concealment of sexual orientation (CSO) in Brazilian lesbian, gay and bisexual (LGB) individuals. In addition, it also aimed to evaluate the moderation of social support (SS) and family support (FS) on the relationship between sexual orientation and minority stressors. Minority stress (MS) theory states that people who are part of social minorities may have their mental health compromised as a result of specific chronic stressors, such as IH, VIC and CSO (Meyer, 2003). Bisexual people appear to present greater anxiety and depression compared to lesbians and gay men (Pollitt et al., 2017). This may be due to the difficulty of bisexuals being accepted by both heterosexuals and homosexuals (Ross et al., 2010). In this study, no relationships were found between the variables. This may have occurred due to the sociodemographic characteristics of the respondents. Young LGB individuals, with high indices of income and education, living in urban areas appear to have higher levels of social support and lower MS. Another possible explanation for the results found is the empowerment of the present sample: as the levels of internalized homophobia, victimization and concealment of sexual orientation were low, while those of social support and family support were medium. Accordingly, it can be concluded that the conditions of the respondents differed from the classic conditions of minority groups. Finally,

the possibility is highlighted that the results found are associated with a response bias, and the data may present a more positive reality than that found in other areas of the country, because people with higher levels of well-being tend to account for higher rates of complete responses in online questionnaires. The study may also have reached people with sociodemographic characteristics that functioned as protection factors as it was disseminated through an online platform, which certainly restricts the diversity of responses. It is important to point out that more studies on the theme should be performed, in ways that diminish the outstanding biases, so that the diverse reality of the country is reflected in the data, since that of urban areas of the Brazilian Southeast seems to reflect conditions and resources which are probably not replicable in other contexts.

References

- Baptista, M. N. (2005). Desenvolvimento do Inventário de Percepção de Suporte Familiar (IPSF): Estudos psicométricos preliminares. *Psico-USF*, 10(1), 11-19. Retrieved from http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1413-82712005000100003&lng=pt&tlng=pt
- Barefoot, K. N., Rickard, A., Smalley, K. B., & Warren, J. C. (2015). Rural lesbians: Unique challenges and implications for mental health providers. *Journal of Rural Mental Health*, 39(1), 22-33. doi: 10.1037/rmh0000014
- Birkett, M., Espelage, D. L., & Koenig, B. (2009). LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence*, 38(7), 989-1000. doi: 10.1007/s10964-008-9389-1
- Bränström, R., Hatzenbuehler, M. L., & Pachankis, J. E. (2016). Sexual orientation disparities in mental health: The moderating and mediating role of sociodemographic and minority stress factors. *European Journal of Public Health*, 26(1), 224. doi: 10.1093/eurpub/ckw170.047
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. Nova York: The Guilford Press.
- Bryan, A. E., Kim, H. J., & Fredriksen-Goldsen, K. I. (2017). Factors associated with high-risk alcohol consumption among LGB older adults: The roles of gender, social support, perceived stress, discrimination, and stigma. *The Gerontologist*, 57(Suppl. 1), S95-S104. doi: 10.1093/geront/gnw100
- Buchanan, T. M., & McConnell, A. R. (2016). Family as a source of support under stress: Benefits of greater breadth of family inclusion. *Self and Identity*, 16(1), 97-122. doi: 10.1080/15298868.2016.1226194
- Carr, S., & Pezzella, A. (2017). Sickness, "sin" and discrimination: Examining a challenge for UK mental health nursing practice with lesbian, gay and bisexual people. *Journal of Psychiatric and Mental Health Nursing*, 24, 553-560. doi: 10.1111/jpm.12402
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300-314. Retrieved from http://journals.lww.com/psychosomaticmedicine/Abstract/1976/09000/Social_Support_as_a_Moderator_of_Life_Stress.3.aspx
- Corrales, J. (2015). The Politics of LGBT Rights in Latin America and the Caribbean: Research Agendas. *Revista Europea de Estudios Latinoamericanos y del Caribe*, (100), 53. Retrieved from <http://www.jstor.org/stable/43673537>
- Damásio, B. F., Golart, J. B., & Koller, S. H. (2015). Attrition rates in a Brazilian longitudinal survey on positive psychology: Empirical and methodological considerations. *Psico-USF*, 20(2), 219-228. doi: 10.1590/1413-82712015200203
- Detrie, P. M., & Lease, S. H. (2008). The relation of social support, connectedness, and collective self-esteem to the psychological well-being of lesbian, gay, and bisexual youth. *Journal of Homosexuality*, 53(4), 173-199. doi: 10.1080/00918360802103449
- Dunn, T. L., Gonzalez, C. A., Costa, A. B., Nardi, H. C., & Iantaffi, A. (2013). Does the Minority Stress Model Generalize to a Non-US Sample? An examination of minority stress and resilience on depressive symptomatology among sexual minority men in two urban areas of Brazil. *Psychology of Sexual Orientation and Gender Diversity*, 1(2), 117-131. doi: 10.1037/sgd0000032

- Feinstein, B. A., Wadsworth, L. P., Davila, J., & Goldfried, M. R. (2014). Do parental acceptance and family support moderate associations between dimensions of minority stress and depressive symptoms among lesbians and gay men?. *Professional Psychology: Research and Practice, 45*(4), 239. doi: 10.1037/a0035393
- Field, A. (2009). *Discovering statistics using SPSS*. New York: Sage.
- Freitas, D. F., D'Augelli, A. R., Coimbra, S., & Fontaine, A. M. (2015). Discrimination and mental health among gay, lesbian, and bisexual youths in Portugal: The moderating role of family relationships and optimism. *Journal of GLBT Family Studies, 12*(1), 68-90. doi: 10.1080/1550428X.2015.1070704
- Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals. *Journal of Counseling Psychology, 56*(1), 97-109. doi: 10.1037/a0012844
- Haukoos, J. S., & Lewis, R. J. (2005, April). Advanced statistics: Bootstrapping confidence intervals for statistics with "difficult" distributions. *Academic Emergency Medicine, 12*(4), 360-365.
- Hatzenbuehler, M. L. (2016). Advancing research on structural stigma and sexual orientation disparities in mental health among youth. *Journal of Clinical Child & Adolescent Psychology, 46*(3), 463-475. doi: 10.1080/15374416.2016.1247360
- Hatzenbuehler, M. L. (2017). The influence of state laws on the mental health of sexual minority youth. *JAMA Pediatrics, 171*(4), 322-324. doi: 10.1001/jamapediatrics.2016.4732
- Herrick, A. L., Stall, R., Goldhammer, H., Egan, J. E., & Mayer, K. H. (2013). Resilience as a research framework and as a cornerstone of prevention research for gay and bisexual men: Theory and evidence. *AIDS and Behavior, 18*(1), 1-9. doi: 10.1007/S10461-012-0384-X
- Hoy-Ellis, C. P., & Fredriksen-Goldsen, K. I. (2016). Lesbian, gay, & bisexual older adults: Linking internal minority stressors, chronic health conditions, and depression. *Aging & Mental Health, 20*(11), 1119-1130. doi: 10.1080/13607863.2016.1168362
- Katz-Wise, S. L., Mereish, E. H., & Woulfe, J. (2016). Associations of bisexual-specific minority stress and health among cisgender and transgender adults with bisexual orientation. *The Journal of Sex Research, 1*-12. doi: 10.1080/00224499.2016.1236181
- Kim, H. J., & Fredriksen-Goldsen, K. I. (2016). Disparities in mental health quality of life between Hispanic and non-Hispanic White LGB midlife and older adults and the influence of lifetime discrimination, social connectedness, socioeconomic status, and perceived stress. *Research on Aging, 9*, 991-1012. doi: 10.1177/0164027516650003
- Legate, N., Ryan, R. M., & Rogge, R. D. (2017). Daily autonomy support and sexual identity disclosure predicts daily mental and physical health outcomes. *Personality and Social Psychology Bulletin, 43*(6), 860-873. doi: 10.1177/0146167217700399
- Maykovich, M. K. (1975). Correlates of racial prejudice. *Journal of Personality and Social Psychology, 32*(6), 1014-1020. doi: 10.1037/0022-3514.32.6.1014
- McConnell, E. A., Birkett, M. A., & Mustanski, B. (2015). Typologies of social support and associations with mental health outcomes among LGBT youth. *LGBT Health, 2*(1), 55-61. doi: 10.1089/lgbt.2014.0051
- McConnell, E. A., Birkett, M., & Mustanski, B. (2016). Families matter: Social support and mental health trajectories among lesbian, gay, bisexual, and transgender youth. *Journal of Adolescent Health, 59*(6), 674-680. doi: 10.1016/j.jadohealth.2016.07.026
- McEwen, B. S. (2006). Protective and damaging effects of stress mediators: Central role of the brain. *Dialogues in Clinical Neuroscience, 8*(4), 367. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181832/>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674. doi: 10.1037/0033-2909.129.5.674
- Molina, Y., Marquez, J. H., Logan, D. E., Leeson, C. J., Balsam, K. F., & Kaysen, D. L. (2015). Current intimate relationship status, depression, and alcohol use among bisexual women: The mediating roles of bisexual-specific minority stressors. *Sex Roles, 73*(1-2), 43-57. doi: 10.1007/s11199-015-0483-z
- O'Malley Olsen, E. O., Vivolo-Kantor, A. M., Kann, L., & Milligan, C. N. (2017). Trends in school-

- related victimization of lesbian, gay, and bisexual youths – Massachusetts, 1995–2015. *American Journal of Public Health*, e1-e3. doi: 10.2105/AJPH.2017.303761
- Pachankis, J. E., & Goldfried, M. R. (2006). Social anxiety in young gay men. *Journal of Anxiety Disorders*, 20(8), 996-1015. doi: 10.1016/j.janxdis.2006.01.001
- Pachankis, J. E., Cochran, S. D., & Mays, V. M. (2015). The mental health of sexual minority adults in and out of the closet: A population-based study. *Journal of Consulting and Clinical Psychology*, 83(5), 890-901. doi: 10.1037/ccp0000047
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. New York: Sage.
- Pollitt, A. M., Muraco, J. A., Grossman, A. H., & Russell, S. T. (2017). Disclosure stress, social support, and depressive symptoms among cisgender bisexual Youth. *Journal of Marriage and Family*. doi: 10.1111/jomf.12418
- Quinn, D. M. (2017). Issue introduction: Identity concealment: Multilevel predictors, moderators, and consequences. *Journal of Social Issues*, 73(2), 230-239. doi: 10.1111/josi.12213
- Rappaport, J. (1984). Studies in empowerment: Introduction to the issue. In R. E. Hess (Ed.), *Studies in empowerment: Steps toward understanding and action* (pp. 1-8). New York: Routledge.
- Riggle, E. D., Rostosky, S. S., Black, W. W., & Rosenkrantz, D. E. (2017). Outness, concealment, and authenticity: Associations with LGB individuals' psychological distress and well-being. *Psychology of Sexual Orientation and Gender Diversity*, 4(1), 54-62. doi: 10.1037/sgd0000202
- Ross, L. E., Dobinson, C., & Eady, A. (2010). Perceived determinants of mental health for bisexual people: A qualitative examination. *American Journal of Public Health*, 100(3), 496-502. doi: 10.2105/AJPH.2008.156307
- Russell, S. T., Ryan, C., Toomey, R. B., Diaz, R. M., & Sanchez, J. (2011). Lesbian, gay, bisexual, and transgender adolescent school victimization: Implications for young adult health and adjustment. *Journal of School Health*, 81(5), 223-230. doi: 10.1111/j.1746-1561.2011.00583.x
- Ryan, C., Huebner, D., Diaz, R. M., & Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, 123(1), 346-352. doi: 10.1542/peds.2007-3524
- Selye, H. (1973). The Evolution of the Stress Concept: The originator of the concept traces its development from the discovery in 1936 of the alarm reaction to modern therapeutic applications of syntoxic and catatonic hormones. *American Scientist*, 61(6), 692-699. Retrieved from <http://www.jstor.org/stable/27844072>
- Sheets, R. L., Jr., & Mohr, J. J. (2009). Perceived social support from friends and family and psychosocial functioning in bisexual young adult college students. *Journal of Counseling Psychology*, 56(1), 152-163. doi: 10.1037/0022-0167.56.1.152
- Shilo, G., & Savaya, R. (2011). Effects of family and friend support on LGB youths' mental health and sexual orientation milestones. *Family Relations*, 60(3), 318-330. doi: 10.1111/j.1741-3729.2011.00648.x
- Siqueira, M. M. M. (2008). Construção e validação da escala de percepção de suporte social. *Psicologia em Estudo*, 13(2), 381-388. Retrieved from <http://www.redalyc.org/articulo.oa?id=287122107021>
- Smith, C. P., Cunningham, S. A., & Freyd, J. J. (2016). Sexual violence, institutional betrayal, and psychological outcomes for LGB college students. *Translational Issues in Psychological Science*, 2(4), 351-360. doi: 10.1037/tps0000094
- Snapp, S. D., Watson, R. J., Russell, S. T., Diaz, R. M., & Ryan, C. (2015). Social support networks for LGBT young adults: Low cost strategies for positive adjustment. *Family Relations*, 64(3), 420-430. doi: 10.1111/fare.12124
- Soler, J. H., Caldwell, C. H., Córdova, D., Harper, G., & Bauermeister, J. A. (2017). Who counts as family? Family typologies, family support, and family undermining among young adult gay and bisexual men. *Sexuality Research and Social Policy*, 1-16. doi: 10.1007/s13178-017-0288-7
- Stuber, J., Meyer, I., & Link, B. (2008). Stigma, prejudice, discrimination and health. *Social Science & Medicine*, 67(3), 351-357. doi: 10.1016/j.socscimed.2008.03.023
- Tucker, J. S., Ewing, B. A., Espelage, D. L., Green, H. D., De La Haye, K., & Pollard, M. S. (2016).

- Longitudinal associations of homophobic name-calling victimization with psychological distress and alcohol use during adolescence. *Journal of Adolescent Health*, 59(1), 110-115. doi: 10.1016/j.jadohealth.2016.03.018
- Watson, R. J., Grossman, A. H., & Russell, S. T. (2016). Sources of social support and mental health among LGB youth. *Youth & Society*, 1-19. doi: 10.1177/0044118X16660110
- Watson, L. B., Velez, B. L., Brownfield, J., & Flores, M. J. (2016). Minority stress and bisexual women's disordered eating: The role of maladaptive coping. *The Counseling Psychologist*, 44(8), 1158-1186. doi: 10.1177/0011000016669233
- White, Y., Sandfort, T., Morgan, K., Carpenter, K., & Pierre, R. (2016). Family relationships and sexual orientation disclosure to family by gay and bisexual men in Jamaica. *International Journal of Sexual Health*, 28(4), 306-317. doi: 10.1080/19317611.2016.1227015
- Winderman, K., Martin, C. E., & Smith, N. G. (2017). Career indecision among LGB college students: The role of minority stress, perceived social support, and community affiliation. *Journal of Career Development*, 1-15. doi: 10.1177/0894845317722860
- Wise, A. E., Smith, B. C., Armelie, A. P., Boarts, J. M., & Delahanty, D. L. (2017). Age moderates the relationship between source of social support and mental health in racial minority lesbian, gay, and bisexual youth. *Journal of Health Psychology*, 1-10. doi: 10.1177/1359105316686667
- World Health Organization. (1946). *Constituição da Organização Mundial da Saúde*. Retrieved from <http://www.direitoshumanos.usp.br/index.php/OMS-Organiza%C3%A7%C3%A3o-Mundial-da-Sa%C3%BAde/constituicao-da-organizacao-mundial-da-saude-omswho.html>

Received: 18/05/2018

1st revision: 26/09/2018

Accepted: 12/11/2018



© The Author(s), 2018. Open Access. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.