



OPEN ACCESS

EDITED BY Jaime I Napier New York University Abu Dhabi, United Arab Emirates

REVIEWED BY Tuuli Anna Renvik, City of Helsinki, Finland Ligia Orellana. University of La Frontera, Chile

*CORRESPONDENCE Bruno Ponte Belarmino Lima brunoponteblima@gmail.com

RECEIVED 16 September 2024 ACCEPTED 28 March 2025 PUBLISHED 16 April 2025

Lima BPB, Souza LEdC and Lima TJSd (2025) Heteronormative system justification and wellbeing among sexual minorities in Brazil: the role of internalized homophobia and in-group identification. Front. Soc. Psychol. 3:1496949. doi: 10.3389/frsps.2025.1496949

COPYRIGHT

© 2025 Lima, Souza and Lima, This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these

Heteronormative system justification and wellbeing among sexual minorities in Brazil: the role of internalized homophobia and in-group identification

Bruno Ponte Belarmino Lima^{1*}, Luana Elayne de Cunha Souza² and Tiago Jessé Souza de Lima¹

¹Social, Work and Organizational Psychology Program, University of Brasília, Brasília, Brazil, ²Graduate Program in Psychology, University Center of Brasília, Brasília, Brazil

One of the major tenets of system-justification theory is that justifying the social system exerts a palliative effect, being associated with positive wellbeing outcomes. Findings regarding this effect on social minorities, however, are less clear. The present article aims to propose and test a model explaining how system-justification relates to the wellbeing of Brazilian lesbians, gays and bisexuals, integrating variables previously studied independently, such as internalized homophobia and in-group identification. Seven-hundred and seventy-seven Brazilian cisgender LGBs responded to an online questionnaire. A simple mediation analysis and a moderated mediation model were conducted through Macro Process for SPSS. As expected, system-justification is indirectly associated with negative wellbeing outcomes through the internalization of homophobia. This relationship, however, is moderated by sexual minority subgroups, so that the mediation is only significant for gay men. On the other hand, system-justification is directly related to positive wellbeing outcomes (supporting the palliative effect). This positive relationship, however, is moderated by in-group identification, so that the higher the identification, the weaker is the association. Results are critically discussed and the collective and long-term implications of system-justification and its palliative effect are addressed.

system-justification, sexual minorities, palliative effect, internalized homophobia, ingroup identification

Introduction

In Brazil, despite some advances, the struggle for sexual minorities' rights and the fight against prejudice and discrimination has been suffering intense backlash from socially and politically conservative sectors. According to Jost et al. (2009), political conservatism is associated with the opposition or resistance to social change and a tolerance or acceptance of social inequality. In this sense, in the last three congressional elections (2014, 2018, 2022), the proportion of conservative lawmakers increased steadily, resulting in the most conservative Congress since the end of the Civil-Military Dictatorship.

Additionally, in 2018, Jair Bolsonaro was elected President, a former Congressman who defended the conservation of the nuclear heterosexual family based on religious Christian beliefs and opposed programs created to fight homophobia at schools and the rights of same-sex couples to form families, fostering a moral panic wave among Brazilian society (Lima and Lima, 2020).

Bolsonaro is the Brazilian representative of a larger and global tendency: the steep rise of social conservatism among civil and political society who feel threatened by the growing visibility of sexual minorities (Jost, 2021; Quinalha, 2022). In Brazil, the growth of conservative social movements is associated to fundamentalist Christian values and beliefs historically ingrained among Brazilian society, which is mostly composed of Christians. Bolsonaro, as well as other conservative members of the political arena, commonly call upon the Bible and Christian values to justify the opposition to LGB rights and policies (Cortês and Buzolin, 2024).

Social and political conservatism, in Brazil as well as in other countries, can be further explained and elucidated by the System-justification Theory. By proposing it, Jost and Banaji (1994) defended that individuals are psychologically motivated to justify, legitimate, naturalize and rationalize current social, economic, and political institutions and arrangements (Jost and Banaji, 1994).

System-justification is a motivated process because it satisfies epistemic, existential and relational needs by reducing uncertainty, threats and isolation, rendering the social world safer, simpler and easier to share (Hennes et al., 2012). There is also a hypothesis that system-justification may exert a palliative effect on individuals: that is, justifying the system may positively impact one's wellbeing and mental health, insofar as it helps individuals to rationalize the existence of hierarchical and unequal social arrangements. This effect is referred to as palliative because it reliefs the suffering related to perceiving such unfair arrangements without addressing or changing such arrangements, that is, ignoring the roots of such distress (Jost and Hunyady, 2003).

The palliative effect may not generalize to all kinds of social groups. For members of advantaged groups, system justification reinforces existing privileges and helps maintain social dominance, while also aligning one's worldview with the prevailing social order (Jost and Hunyady, 2005). Indeed, the empirical literature is clear about the relationship between system-justification and positive wellbeing and mental health outcomes (Jost and Thompson, 2000; O'Brien and Major, 2005; Vargas-Salfate et al., 2018), which supports the palliative effect hypothesis.

On the other hand, for members of disadvantaged groups, system justification has complex and ambivalent effects. This ambivalence arises because, in defending the social system, minority groups' members are defending arrangements that oppose their own interests and those of their in-groups. For these individuals, system-justification tendencies may operate in opposition to tendencies related to the self-enhancement and ingroup enhancement (Jost and Hunyady, 2005).

Moreover, it has been found that system justification is associated with internalized stigma (Hoffarth and Jost, 2017; Pacilli et al., 2011). This is because the defense and legitimization of unequal social arrangements can imply the acceptance by marginalized individuals of their subordinate status, leading them to subscribe to negative attitudes and beliefs toward their own

identity (Jost and Banaji, 1994; Meyer, 2013). This dynamic is evident among sexual minorities, who may justify and defend heteronormativity, that is, the belief that heterosexuality is superior, more natural and legitimate than homosexuality (Warner, 1993). Internalized homophobia (which refers to internalized stigma for sexual minorities), in turn, is associated with negative wellbeing and mental health outcomes (Hoy-Ellis, 2023). According to minority stress model, holding negative attitudes toward one's own sexual orientation leads to negative mental health and wellbeing outcomes. This is one among other stressors related to prejudice and discrimination that explains mental health gaps between heterosexuals and sexual minorities (Meyer, 2013). Therefore, for sexual minorities, system-justification motives conflicts with egoand group-justification motives, potentially leading to lower selfesteem, diminished in-group favoritism, and harm to psychological wellbeing (Jost et al., 2003; Wakslak et al., 2007).

In order to better understand the relationship between system-justification and wellbeing or mental health outcomes among social minorities, a meta-analysis (Lima et al., 2025) reviewing data from 34 articles and sampling more than 200.000 social minority individuals found that system-justification is associated with lower levels of psychological distress and higher levels of subjective wellbeing and self-esteem, supporting the palliative effect hypothesis even among social minority groups. Despite these results, there are articles used in the meta-analysis where the relationship between system-justification and wellbeing is negative, depending on mediator and moderator variables.

In this sense, Bahamondes-Correa (2016) found that system-justification's effect on psychological distress in Chilean gay men was partially mediated by internalized homophobia. Suppes et al. (2018) found similar results: system-justification was positively correlated with system-justification and negatively correlated with subjective wellbeing. Internalized homophobia refers to the negative attitudes that sexual minorities hold toward their own sexual orientation, resulted from the internalization of stigma among heteronormative environments (Meyer, 2013). Other investigations have also shown a significant association between system-justification and internalized stigma among gay men (Hoffarth and Jost, 2017; Pacilli et al., 2011).

These findings were theoretically anticipated by Jost and Banaji (1994) in their initial formulation of the theory. One of the motivations for the creation of the System-Justification Theory by the authors was the frequent reports of in-group derogation by social minority individuals, which questioned the in-group favoritism hypothesis derived from Social Identity Theory (Tajfel et al., 1982). Therefore, Jost and Banaji (1994) proposed that individuals were motivated to justify unequal system arrangements, which could explain a motivation to internalize stigma against one's own in-group.

Further, Bahamondes-Correa (2016) found that system-justification had an indirect positive effect on psychological distress, mediated by internalized homophobia. On the other hand, when controlling for internalized homophobia, system-justification exerted a palliative effect, reducing psychological distress. It is possible to infer, then, that system-justification has an ambivalent role on the wellbeing of sexual minorities: through the internalization of stigma, it may be detrimental;

but through other mechanisms, such as the reduction of perceived discrimination (Bahamondes et al., 2019), it may be psychologically beneficial.

The mediation, however, was not observed in lesbian women, for whom there was only a palliative effect. The author suggests this result may be due to different gender norms related to gay men and lesbian women (Bahamondes-Correa, 2016). Indeed, gay men are more disliked than lesbian women across 23 countries (Bettinsoli et al., 2020) and men who violate gender norms face greater social sanctions than women who do the same (Costa et al., 2013). Furthermore, studies have shown that gay men aspire to be more masculine than they perceive themselves to be, and those who attribute more importance to masculinity had more negative feelings toward their own sexual orientation (Sánchez et al., 2010; Sánchez and Vilain, 2012). Likewise, Brazilian gay and bisexual men with more anti-effeminacy attitudes (negative attitudes toward femininity among men) exhibited higher levels of internalized homophobia (Ramos et al., 2020).

Therefore, gender identity is another variable that needs to be considered when investigating the relationship between system-justification and wellbeing. Bahamondes-Correa (2016)'s study, however included only gay men and lesbian women. There are no studies that analyze this relationship among bisexuals. Differently from homosexuals, bisexual individuals often face questions about the authenticity of their sexual orientation and are commonly perceived as confused or indecisive, beliefs that are linked to a binary perspective of sexual orientation (Eliason, 2000; Ochs, 1996).

Social invisibility can also lead to a weak sense of identification and community among bisexuals, especially among bisexual men (Duffin, 2016; Dodge et al., 2012), who tend to be perceived more negatively than bisexual women due to masculinity gender norms (Friedman et al., 2014; Helms and Waters, 2016; Eliason, 2000). Some bisexual men may also conceal their sexual orientation in order to avoid being rejected by female romantic partners, passing as heterosexual men (Galupo, 2011).

In that way, it is clear that the experience of stigmatization and identity formation of sexual minorities vary largely based on sexual orientation (bisexuality vs. homosexuality) and gender identity (men vs. women). Sexual minorities are not a homogenous group, which is why these subgroup variables may moderate the relationship between system-justification and wellbeing.

Besides gender identity and sexual orientation, system-justification's impact on wellbeing and mental health may also be moderated by in-group identification within the minority group (O'Brien and Major, 2005). For instance, individuals within the same social group, such as gay men, may vary in their level of identification with that group. Highly identified gay men may feel closer to other members of the group, perceive themselves as more similar to them, frequently think about belonging to the group and perceive this social identity as a central component of their self-concept (Tropp and Wright, 2001; Souza et al., 2019).

In that way, O'Brien and Major (2005) found that the effect of system-justifying beliefs on the self-esteem of African-Americans was moderated by in-group identification. For African-Americans who reported higher levels of identification with their in-group, system-justification was associated with lower levels of self-esteem,

while for those who reported lower levels of identification, system-justification related to higher levels of self-esteem. While in-group identification may be a coping mechanism for in-group threats (Branscombe et al., 1999), strong identification can also make individuals more vulnerable toward perceived discrimination, since a threat to the in-group becomes a threat to the individual (McCoy and Major, 2003). Indeed, a study found that in-group identification moderated the effect of microaggressions on the mental health of Black Brazilian women, strengthening this negative relationship (Martins et al., 2020). In that way, O'Brien and Major (2005) suggest that disidentification may be a coping strategy for minorities who endorse system-justifying beliefs (O'Brien and Major, 2005).

Even though this study focused on racial minorities, a similar logic may apply to sexual minorities. Unlike race, sexual orientation can often be concealed to avoid stigma, which may lead to greater variability in in-group identification (Doan and Mize, 2020). Additionally, heteronormativity often requires sexual minorities to initially conform to heterosexual norms before disclosing their identities (Dillon et al., 2011).

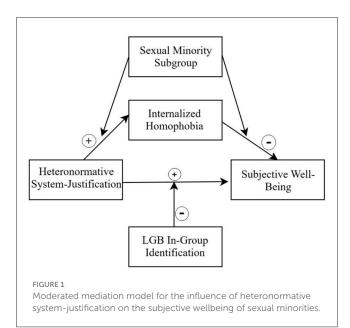
Although previous research has partially contributed to understanding the relationship between system-justification and wellbeing, it has often overlooked the combined effect of important variables such as internalized homophobia, in-group identification, gender identity and sexual orientation. Considering these variables in an integrated way is crucial for gaining a more nuanced perspective on how system justification relates to an individual's wellbeing. Furthermore, previous studies investigating the relationship between system-justification and wellbeing among sexual minorities (Bahamondes-Correa, 2016; Bahamondes et al., 2019) used General System-Justification scales (as opposed to specific scales for heteronormative systems). These studies also failed to include bisexual individuals, who are commonly marginalized even among sexual minorities.

The present research

Therefore, the current research addresses these gaps by proposing a moderated mediation model to provide a more comprehensive and integral understanding of the relationship between system-justification and wellbeing among Brazilian cisgender lesbians, gays and bisexuals, elucidating through which mechanisms these variables relate and how other variables may change this relationship.

The hypotheses are graphically depicted in Figure 1. Specifically, we hypothesized that Internalized Homophobia (IH) mediates the relationship between Heteronormative System-Justification (H-SJ) and Subjective WellBeing (SWB), so that Heteronormative System-Justification will have a positive direct effect on Subjective WellBeing (Hypothesis 1a), and a negative indirect effect on Subjective WellBeing through Internalized Homophobia (Hypothesis 1b).

Additionally, we propose that LGB In-Group Identification (LGB-ID) moderates the direct effect of Heteronormative System-Justification on Subjective WellBeing (Hypothesis 2). We anticipate that highly identified LGB individuals will experience greater



negative impacts on wellbeing due to the conflict between systemjustifying beliefs and their group identity. In contrast, those with lower in-group identification may benefit from system justification, as it could provide psychological comfort and a sense of stability.

Furthermore, we expect a moderation of the indirect effect of Heteronormative System-Justification on Subjective WellBeing by the Sexual Minority Subgroup (gay men, lesbian women, bisexual men and bisexual women), which is our Hypothesis 3. Although we expect a significant mediation among gay men, and not among lesbian women, as found in a previous study, we would like to investigate if there is a mediation via internalized homophobia among bisexual men and women, which was not tested yet and consists of an exploratory research question.

Method

Participants

The inclusion criteria for the study required participants to be Brazilian, identify as lesbian, gay, or bisexual, and be at least 18 years old (the age of legal consent in Brazil). The only exclusion criterion was identifying as transgender, as this study did not address the additional identity issues and stigmatization processes associated with being transgender. A total of 1,304 individuals initiated the survey, but 477 did not complete the necessary scales for analysis. Additionally, 8 transgender individuals (male and female) and 42 gender nonconforming individuals were excluded. The sample consisted on the remaining 777 Brazilian cisgender LGBs, including 260 gay men (33.5%), 213 lesbian women (27.4%), 258 bisexual women (33.7%) and 42 bisexual men (5.4%). Participants' age ranged from 18 to 69 (M = 29.01; SD = 8.58). Most participants were single (51.7%), middle-class (34.6%), white (57.7%) and had higher education degree (47.6%), did not have a religion (47.5%) and were politically oriented toward the left (89.8%; including extreme left, left and center-left). Among the participants who reported having a religion, most of them were catholic (17.1%).

Measures

Participants responded to an instrument that included sociodemographic questions, such as age, gender, sexual orientation, education, marital status, race, religion, political orientation (measured from 1 "extreme left" to 7 "extreme right") and socioeconomic class (measured from 1 "low" and 7 "high"), and the following measures.

Heteronormative system justification

We employed the *Heteronormative System-Justification Scale* (*H-SJS*) proposed by Lima and Souza (2024), ($\alpha=0.83$; $\omega=0.84$). Drawing inspiration from previous system-justification measures, such as the General System-Justification Scale (Kay and Jost, 2003) and the Gender-Specific System Justification Scale (Jost and Kay, 2005), the H-SJS assesses the extent to which sexual minorities justify, legitimize, and rationalize social arrangements related to their position in Brazilian society. Developed to investigate system justification within the context of sexual minorities, the scale comprises eight items (e.g., In general, society is fair to LGBs), rated on a Likert scale from 1 (completely disagree) to 6 (completely agree).

Subjective wellbeing

To measure SWB we employed the Positive and Negative Affects Scale (Diener and Emmons, 1984), adapted for the Brazilian context by Gouveia et al. (2019). It consists of 10 adjectives used to measure the level of positive affects (such as happy and satisfied) and negative affects (such as angry or unhappy) experienced. Participants rate each item with how much they have experienced recently these affects from 1 (not at all) to 7 (extremely). The scale presents satisfactory indices of reliability for both the positive (a = 0.82) and for the negative affects factor (α = 0.81). We also employed the Satisfaction with Life Scale (Diener et al., 1985), adapted for the Brazilian context by Gouveia et al. (2005). This measure is composed of 5 items that investigate the level of one's satisfaction with one's own life. The answers to each item are composed of a Likert scale ranging from 1 (completely disagree) to 7 (completely agree). The scale presents good indices of internal consistency ($\alpha = 0.89$). After negative affects scores were reversed (since they are understood as negatively related to wellbeing), a general SWB score was computed through the mean of the scores of three following variables: satisfaction with life, positive affects and negative affects. The use of these three variables is grounded in the concept of subjective wellbeing, which encompasses individuals' evaluations (life satisfaction) and experiences (positive and negative affects) of their lives (Diener and Emmons, 1984). Extensive empirical evidence supports their combined use as a measure of subjective wellbeing (Busseri, 2018).

Internalized homophobia

We employed the *Protocol of Evaluation of Minority Stress in Lesbians, Gays and Bisexuals* (PEM-LGB-BR; Costa et al., 2020). It includes both a feminine and a masculine version and is composed of three factors. One of these factors measures internalized homonegativity, that is, LGB's dissatisfaction with their own sexual orientation related to internalized stigma. It is composed of 7 items, such as "Social situations involving gay men make me feel uncomfortable" and "I feel comfortable being a homosexual or bisexual man" (reverse coded), measured through a Likert scale ranging from 1 (completely agree) and 7 (completely disagree) ($\alpha = 0.79$).

LGB in-group identification

To measure the construct, the *Multidimensional in-group identification scale* (Leach et al., 2008) was used. Adapted for the Brazilian context by Souza et al. (2019), this scale aims to measure the level of identification of an individual with their group of belonging (for instance, "I think people from the LGB group have a lot to be proud for"). It contains 14 items distributed among five factors. Items are responded through a 7-point Likert scale ranging from 1 (completely disagree) to 7 (completely agree). The five factors of the scale present good internal consistency indices with alphas (α) ranging from 0.78 to 0.94.

Procedures

A questionnaire was created using Survey Monkey platform and shared on social media platforms (Instagram, Facebook, WhatsApp, X, among others). To participate in the study, individuals had to agree with an informed consent form that informed the objectives of the research, the protection of the anonymity and the information disclosed, according to ethical guidelines and standards with human beings.

A targeted data collection strategy was employed to reach diverse profiles of sexual minorities regarding the variables of interest: two visual posters were used to recruit participants for the survey, depending on the context. Among LGBT and leftwing social media groups, the poster had a rainbow pride flag, to attract highly identified LGBs, once the flag is a symbol of the social and collective identity of LGBs (Wolowic et al., 2016). Among religious, conservative or right-wing social media groups, the rainbow flag was replaced by a more neutral stimulus, since lowly identified LGBs with high levels of internalized homophobia could be discouraged of participating in the survey by such a salient political symbol of LGBs collective mobilization.

Data analysis

Pairwise correlational analysis and ANOVAs were conducted as preliminary analysis to investigate correlations among the variables of interest and to access differences among various sexual minority groups in regard to these variables. A mediation model was conducted using PROCESS (model 4) to investigate if internalized homophobia mediated the effect of heteronormative system-justification on subjective wellbeing. Finally, a moderated mediation analysis was conducted using PROCESS (model 62) to test the model that include internalized homophobia as a mediator, and in-group identification and sexual minority subgroup as moderators. To better understand its effect, in-group identification was centered, adopting three cutoff points: 16% inferior, 68% medium and 16% superior (Hayes, 2017). To analyze the effect of the sexual minority subgroup, the multicategorical variable tool in PROCESS was used, creating three dummy variables, with the gay men subgroup as the reference category. Mediation and moderation analysis was performed using the Generalized Linear Model (GLM) approach with a 95% confidence interval (CI) calculated through bootstrapping procedures (5,000 resamples; Preacher and Hayes, 2008). Supplementary analyses used socioeconomic class and political orientation as covariates. All data analyses were conducted using SPSS version 20.

Results

Regression assumptions

Assumptions of linearity, independence of observations, and multicollinearity were assessed to ensure the validity of the analyses, as bootstrapping was used in mediation and moderation models to mitigate concerns related to normality and homoscedasticity (Hayes, 2017). Scatterplots of standardized residuals vs. predicted values showed a random distribution without curvilinear patterns in the relationships between HJS and IH, and between HJS and SWB, supporting linearity. Independence of observations was confirmed by Durbin-Watson statistics (1.864 for BES and 1.720 for HI), indicating no significant autocorrelation. Multicollinearity diagnostics revealed no concerns, with VIF values for Sexual Minority Group (1.009), HJS (1.020), and LGB-ID (1.028) well below the threshold of 5, and tolerance values (0.991, 0.980, and 0.973) above the 0.2 cutoff, confirming the absence of multicollinearity issues.

Correlational analyses

Afterwards, correlational analysis (see Table 1) of the full sample were conducted, showing that heteronormative system-justification (H-SJ) held significant positive associations with internalized homophobia (IH) and subjective wellbeing (SWB), and negative associations with LGB in-group identification (LGB-ID). Internalized homophobia was significantly and negatively associated with SWB and LGB-ID, while LGB-ID was positively correlated to SWB. When analyzing the groups separately by sexual orientation, the correlations differed. For gay men, H-SJ was only significantly (and positively) correlated to IH, but not for LGB-ID and SWB (see Table 2). For lesbian women, H-SJ only significantly correlated to SWB (positively), but not for LGB-ID or IH (Table 2). For bisexual men and women, H-SJ was positively correlated to

TABLE 1 Matrix correlations and descriptive statistics of variables for full sample.

Variables	1.	2.	3.	4.	5.	6.
H-SJ	-	0.18**	-0.15**	0.21**	0.38**	0.02
Internalized homophobia	-	-	-0.48**	-0.14**	0.22**	-0.02
LGB ID	-	-	-	0.13**	-0.19**	-0.05
Subjective wellbeing	-	-	-	-	0.20**	0.33**
Political orientation	-	-	-	-	-	0.08*
Socioeconomic class	-	-	-	-	-	-
M	1.74	3.96	4.17	3.80	2.18	2.12
SD	0.63	1.25	1.18	1.41	0.88	0.86

N=777. H-SJ, heteronormative system-justification; LGB-ID, LGB in-group identification. *p<0.05; **p<0.01. Values in bold are significant at the level of p<0.05.

TABLE 2 Matrix correlations and descriptive statistics of main variables for gays and lesbians.

Variables	1.	2.	3.	4.
H-SJ	-	0.30**	-0.10	0.09
Internalized homophobia	0.08	-	-0.47**	-0.23**
LGB ID	-0.08	-0.41**	-	0.27**
Subjective wellbeing	0.22**	0.01	0.02	-

Correlations for gays (N=260) are placed above the diagonal and for lesbians (N=213) below. H-SJ, heteronormative system-justification; LGB-ID, LGB in-group identification. **p < 0.01. Values in bold are significant at the level of p < 0.05.

TABLE 3 Matrix correlations and descriptive statistics of main variables for bisexuals.

Variables	1.	2.	3.	4.
H-SJ	-	0.19	-0.31*	0.42**
Internalized homophobia	0.11	-	-0.45**	-0.12
LGB ID	-0.06**	-0.51**	-	0.10
Subjective wellbeing	0.18**	-0.14*	0.10	-

Correlations for men are placed above the diagonal (N=42) and for women (N=258) below. H-SI, heteronormative system-justification; LGB-ID, LGB in-group identification. *p<0.05; **p<0.01. Values in bold are significant at the level of p<0.05.

SWB, negatively correlated to LGB-ID, but was not correlated to IH (see Table 3).

Subsequently, we conducted an ANOVA to test differences among sexual minority subgroup based on sexual orientation and gender identity. The results showed significant differences in levels of heteronormative system-justification, Welch's F (3, 172.7) = 5.069, p < 0.01, internalized homophobia, F (3, 773) = 7.56, p < 0.001, in-group identification, Welch's F (3, 175.95) = 8.28, p < 0.001, and subjective wellbeing, F (3, 773) = 3.583, p = 0.014. Means and standard deviation for each variable and each sexual minority group can be seen on Table 4.

A Games-Howell *post-hoc* analysis showed that gay and bisexual men had significantly higher levels of heteronormative system-justification compared to lesbian women, who had higher

levels than bisexual women. For internalized homophobia, gay men reported significantly higher level than the other groups, who did not differ among each other (Hochberg *post-hoc*). For LGB ingroup identification, lesbian women presented the higher levels, followed by bisexual women and gay men, while bisexual men presented the lowest level of identification (Games-Howell *post-hoc*). Finally, concerning subjective wellbeing, gay men presented significantly higher levels than the other groups, which did not differ among each other (Hochberg *post-hoc*).

Differences among the four subgroups in relation to the main analyzed variables, along with previous correlation analyses, confirmed the relevance of adding sexual orientation and gender identity as moderator variables in the model.

Mediation analysis

The simple mediation model was tested to evaluate the effect of heteronormative system-justification (H-SJ) on subjective wellbeing (SWB), with internalized homophobia (IH) as mediator. Initially, H-SJ positively predicted IH (b=0.30; SE=0.06; p<0.001), and IH negatively predicted SWB (b=-0.19; SE=0.04; p<0.001). Therefore, the analysis revealed that the indirect effect of H-SJ on SWB was negative and significant, b=-0.06 (SE=0.017), 95% CI: [-0.096, -0.028], p<0.001, while the direct effect was positive and significant, b=0.44 (SE=0.06), 95% CI: [0.31, 0.56], p<0.001. Since none of these confidence intervals include zero, it can be concluded that system-justification had a positive direct effect on wellbeing and a negative indirect effect via internalized homophobia, which mediated approximately 12.9% of this relationship, thereby corroborating Hypotheses 1a and 1b.

Testing for moderated mediation

To test the Hypothesis 2 and 3, a moderated mediation model (PROCESS model 62) was employed to examine potential moderating effects of LGB in-group identification and sexual minority subgroup (gay men, lesbian women, bisexual men and bisexual women) in the previously tested mediation model.

Initially, as observed in the simple mediation analysis, H-SJ significantly predicted IH (b=0.33, SE=0.09, p=0.0002),

TABLE 4 Mean and standard deviation of each variable of interest for each sexual minority group.

Sexual minority group	Variable				
	H-SJ M (SD)	IH M (SD)	LGB-ID M (SD)	SWB M (SD)	
Gay men	1.70 ^a (0.71)	2.27 ^a (1.06)	5.19 ^b (1.01)	4.18 ^a (1.17)	
Lesbian women	1.54 ^b (0.63)	2.14 ^b (0.96)	5.46 ^a (0.82)	3.87 ^b (1.01)	
Bisexual men	1.79 ^a (0.90)	2.89 ^b (1.22)	4.68 ^c (1.06)	3.92 ^b (1.05)	
Bisexual women	1.51 ^c (0.54)	2.12 ^b (1.0)	5.28 ^b (0.80)	3.93 ^b (1.08)	
Full sample	1.59 (0.65)	2.22 (0.04)	5.27 (0.91)	4.0 ^b (1.12)	

H-SJ, heteronormative system-justification; IH, internalized homophobia; LGB-ID, LGB in-group identification; SWB, subjective wellbeing. Values with the same letter (such as "a" or "b") have no significant statistical differences.

TABLE 5 Direct conditional effect (H-SJ impact on SWB moderated by LGB identification).

LGB in-group identification	Ь	SE	t	р	95% CI
Low	0.51	0.07	7.70	0.00	[0.38, 64]
Medium	0.38	0.07	5.66	0.00	[0.25, 51]
High	0.26	0.09	2.97	0.00	[0.09, 0.43]

and IH, in turn, significantly predicted SWB (b = -0.28, SE = 0.07, p < 0.001), demonstrating that higher levels of heteronormative system justification are associated with increased internalized homophobia, which subsequently leads to lower subjective wellbeing. The direct effect of H-SJ on SWB, however, was positive (b = 0.39, SE = 0.06, p < 0.001). Furthermore, to test whether LGB in-group identification moderates the effect of H-SJ on SWB, the interaction between H-SJ and LGB identification was examined. The significant interaction (b = -0.15, SE = 0.05, p = 0.003) indicates that the effect of H-SJ on SWB varies by LGB identification level. As seen on Table 5, the higher the levels of LGB identification, the weaker was the positive association of heteronormative system-justification and subjective wellbeing, corroborating Hypothesis 2. The interaction can also be graphically inferred with Figure 2.

We also observed that the indirect effect of H-SJ on SWB via IH is moderated by sexual minority subgroup, since results revealed significant interactions between H-SJ and sexual minority subgroup, supporting Hypothesis 3 (see Figure 3). The conditional effects of H-SJ on SWB were analyzed at different levels of the moderators, LGB identification and sexual minority subgroup (see Table 6). For gay men, the indirect and negative effect of H-SJ on wellbeing was significant at low, moderate and high levels of LGB identification, as none of the confidence intervals included zero at any level of LGB identification. However, for lesbian women and bisexual men and women, the indirect effect was non-significant, as the confidence intervals included zero at all levels of LGB identification. Therefore, the mediation of the effect of systemjustification on wellbeing via internalized homophobia was only significant for gay men. This finding supports the notion that internalized homophobia plays a mediating role for gay men, but not for other sexual minorities. In the case of bisexual men, however, the smaller number of participants may account for the non-significant results.

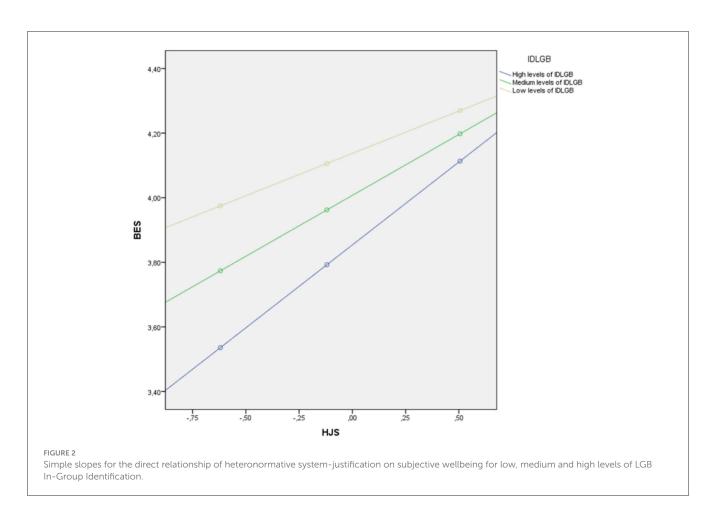
Exploratory analysis

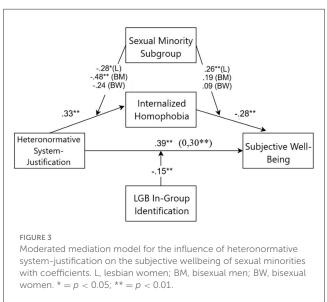
Exploratory analyses were conducted to test the hypothesized model while controlling for socioeconomic class and political orientation. The importance of these analyses relies on the association of wellbeing with socioeconomic class, whether measured subjectively or objectively (Tan et al., 2020), and the happiness gap found between conservatives (right-wing) and liberals (left-wing), with the latter reporting being happier than the former (Napier and Jost, 2008). Right-wing political orientation is also positively linked to system-justification in the large majority of countries, with few exceptions such as France (Jost, 2018). In that way, it is important to understand to what extent our models work while controlling for these two variables.

The results were largely consistent with our main findings. When controlling for socioeconomic class, the mediation via internalized homophobia and the moderation by LGB identification and sexual minority group were significant and the relationships did not change direction. When controlling for political orientation, there was also no significant change. However, when both variables were included simultaneously as covariates, the interaction between LGB identification and H-SJ predicting SWB was no longer statistically significant (b=-0.07, SE=0.05, p=0.11), although the regression coefficients continued to show a numerical decline as LGB identification levels increased. We report these exploratory analyses in full in Supplementary material.

Discussion

This study aimed to test a moderated mediation model for the effect of the heteronormative system-justification (H-SJ) on the subjective wellbeing (SWB) of sexual minorities, analyzing the mediation role of internalized homophobia (IH) and the moderation roles of LGB in-group identification (LGB-ID) and





the sexual minority subgroups. Accordingly, our three hypotheses were tested and corroborated: H-SJ's effect on SWB was mediated by IH (Hypothesis 1); the direct effect of H-SJ on SWB was moderated by LGB-ID (Hypothesis 2); and the indirect effect of H-SJ on SWB was moderated by the sexual minority subgroups (Hypothesis 3). With the exception of Hypothesis 2, all these results

were unchanged by inserting socioeconomic class and political orientation simultaneously as covariates.

The mediation role of internalized homophobia

The results provided support for Hypothesis 1, showing that internalized homophobia significantly mediated the relationship between heteronormative system-justification and wellbeing among Brazilian LGB individuals. Similar to the findings of Bahamondes-Correa (2016) with Chilean gay men, heteronormative system-justification exerted a positive direct effect on wellbeing, and a negative indirect effect through the increase of internalized homophobia.

While theoretical and empirical evidence suggests that system-justification exerts a palliative effect on the wellbeing of individuals from both dominant and stigmatized groups (Brandt et al., 2020; Vargas-Salfate et al., 2018; Hadarics et al., 2021; Vargas-Salfate, 2019), as its fulfills basic psychological needs (Hennes et al., 2012), there is also evidence that minority groups can be harmed by it (Godfrey, 2013; Chang and Kang, 2018), with the internalization of prejudice and stigma being one of the mechanisms underlying this relationship.

Therefore, the results suggest that perceiving the system to be fair and legitimate toward sexual minorities may be both beneficial

TABLE 6 Indirect conditional effect (H-SJ's impact on SWB moderated by LGB identification, sexual minority subgroup).

Sexual minority subgroup	LGB identification	В	SE	95% CI
Gay men	Low	-0.111	0.042	[-0.208, -0.045]
	Medium	-0.090	0.035	[-0.167, -0.031]
	High	-0.072	0.033	[-0.146, -0.014]
Lesbian women	Low	-0.002	0.012	[-0.031, 0.020]
	Medium	-0.001	0.007	[-0.018, 0.014]
	High	0.001	0.008	[-0.014, 0.019]
Bisexual men	Low	0.007	0.026	[-0.049, 0.061]
	Medium	0.014	0.030	[-0.040, 0.082]
	High	0.020	0.036	[-0.040, 0.105]
Bisexual women	Low	-0.018	0.018	[-0.061, 0.011]
	Medium	-0.009	0.015	[-0.044, 0.018]
	High	-0.002	0.016	[-0.036, 0.034]

and harmful, depending if these perceptions are associated with negative beliefs toward one's own sexual orientation or not. LGBs who justify the system without internalizing the stigma surrounding their own identity can be psychologically benefited, while those who internalize it can suffer in terms of wellbeing.

The moderation role of LGB in-group identification

The results also corroborated Hypothesis 2, showing that LGB in-group identification moderate the relationship between heteronormative system-justification and subjective wellbeing. The palliative effect of system-justification was stronger for individuals with lower levels of LGB identification compared to those with higher levels of LGB identification. This suggests that the more strongly sexual minority individuals identify with the in-group, the less they will benefit from system-justification in terms of wellbeing. We will call this decrease of the palliative (or positive) effect of system-justification the *mitigating role of LGB-identification on the palliative effect*.

The results are similar to O'Brien's and Major (2005), who found that the effect of system-justifying ideologies on the self-esteem of African-Americans was moderated by ingroup identification. While in the present study LGB in-group identification merely decreased the palliative effect, this other study revealed that lowly identified African-Americans could be harmed by system-justification, possibly through the internalization of stigma toward the in-group, a variable not investigated then.

Our findings also dovetail with the Rejection-Identification Model (Branscombe et al., 1999), which posits that group identification can serve to protect racial minorities from the psychological and health impairments caused by discrimination. While in-group identification was associated with positive wellbeing outcomes, as the identification model would predict, the inclusion of system justification highlights an additional pathway through which members of minority groups can maintain

wellbeing, even in the face of discrimination. Indeed, our results show that the effect of system justification on wellbeing is strongest among the least identified, suggesting that minority group members may have multiple routes (through group identification and through system justification) to positive wellbeing. Future research should investigate if these results also hold for racial minorities.

Furthermore, in line with previous research, identification with a minority group is associated with a greater critical awareness of stigmatization and higher perceptions of social injustice, which can lead to a stronger inclination toward collective action to defend the minority group's interests (Diemer et al., 2016; van Zomeren et al., 2008; Yip and Chan, 2021). A high identification with the minority group, therefore, seems to be in direct opposition to system-justification. In fact, the preliminary correlational analyses revealed a significant negative relationship between heteronormative system-justification and LGB in-group identification.

Therefore, the attenuation of the palliative effect by LGB ingroup identification may arise from cognitive dissonance between system-justifying beliefs and the motivational basis of in-group favoritism (Tajfel and Turner, 1978). It is also possible that LGBs highly identified with the in-group rely on alternative coping mechanisms, since LGB identification is a protective factor against prejudice, discrimination and other stressors according to the minority stress model (Meyer, 2013).

In conclusion, those who strongly identify as LGBs may not benefit as much with system-justification as those who are less identified, but they may not need system-justification to feel good about themselves in the first place, since in-group identification in itself is a source of wellbeing. As O'Brien and Major (2005) suggested, system-justification and in-group identification may be two (mutually exclusive) alternatives for low-status groups to cope with a marginalizing system. Our data and analyses point toward the same direction. It seems that while system-justification allow LGBs to be satisfied with the system, in-group identification may foster satisfaction within that particular group, which can even provide tools for collective action and change.

The role of LGB identification, however, should be further investigated among other samples, since our exploratory analyses including socioeconomic class and political orientation together resulted in a non-significant interaction of LGB identification with system-justification impacting on wellbeing. These results may be explained by the moderate correlations between subjective wellbeing and political orientation and socioeconomic class. Additionally, introducing two covariates can reduce statistical power due to the redistribution of variance among predictors and increased standard errors, which can affect the detection of interaction effects (Hayes, 2017).

Another possible explanation is that these covariates absorb variance previously explained by the interaction term, as political orientation and socioeconomic class are known to influence both system justification and wellbeing (Jost et al., 2004; Napier and Jost, 2008). Given that our sample consists predominantly of politically left-leaning individuals (89.8%) and a significant portion identifies as middle- and upper-class (64.7%), it is also possible that the overall homogeneity in these characteristics limits the variance available for detecting interaction effects when controlling for both variables simultaneously. In other words, if most participants share similar socioeconomic and ideological backgrounds, their influence on system justification and wellbeing may already be embedded in the broader pattern of results, reducing the distinct explanatory power of LGB identification when these covariates are included. Furthermore, our explanatory model is based on a well-supported theoretical framework that emphasizes the role of the key variables in our analysis, rather than these two covariates.

The moderating role of sexual minority subgroup

The evidence also supported our Hypothesis 3: sexual minority subgroup moderated the indirect effect of heteronormative system-justification on wellbeing. The results demonstrated that the mediation effect of internalized homophobia varied across gender and sexual orientation subgroups. The mediation of internalized homophobia was significant only for gay men, but not for lesbian women and bisexual men and women. These findings are consistent with Bahamondes-Correa (2016)'s study, which demonstrated that the effect of system-justification on psychological distress was mediated by internalized homophobia among Chilean gay men but not among lesbian women. The authors attribute these differences to distinct gender roles and social norms that differ for men and women belonging to sexual minorities.

Therefore, it seems that system-justification appears to negatively affect sexual minority men, more so than women, because of masculine gender norms and anti-effeminacy attitudes associated with internalized homophobia. However, in line with the findings for lesbian and bisexual women, the mediation was not significant for bisexual men. This result could be related to the intersection of masculine gender norms and stigma concerning bisexuality.

As discussed previously, bisexual individuals have historically faced erasure and challenges to the legitimacy of their sexual orientation (Hartman, 2013; Bergler, 1956). Moreover, bisexual

men are often perceived more negatively than bisexual women, which may contribute to a greater tendency to conceal their sexual orientation and pass as heterosexuals, potentially affecting their sense of identity (Duffin, 2016; Dodge et al., 2012). This weaker sense of identification might be one possible explanation for why bisexual men in our sample did not show a significant indirect effect of system-justification on wellbeing via internalized homophobia. Indeed, bisexual men reported the lowest levels of LGB identification among all four subgroups. Disidentification with a minority group has been documented as a coping mechanism in response to stigma (O'Brien and Major, 2005), and this strategy could be particularly accessible to bisexual men, given the social invisibility of bisexuality and the relative ease of passing as heterosexual men compared to gay men.

However, it is important to acknowledge the small number of bisexual male participants in our study, which limits the robustness of these findings. Given this limitation, our results should be interpreted with caution. Future studies with larger bisexual male samples will be better positioned to clarify the nature of the relationship between system-justification and wellbeing among these individuals and to determine whether internalized homophobia plays a significant role in this dynamic.

Theoretical and sociopolitical implications

The present study contributes to the growing body of literature examining the effects of system justification and other conservative ideologies on wellbeing and mental health, particularly among marginalized social groups. However, it is also unprecedented in several ways: it is situated in the Brazilian context, employs a specific heteronormative system justification scale, includes bisexual individuals in the sample, investigates the role of LGB in-group identification, and, most importantly, integrates multiple variables into a single model. This comprehensive approach allows for a deeper understanding of when, how, and to what extent sexual minorities are positively or negatively affected by system justification.

Overall, despite the mediation through internalized homophobia—observed only among gay men—our results indicate a predominant palliative effect of system justification among sexual minorities. This finding may initially suggest that conservative ideologies are beneficial to them. However, a critical analysis of its social and political implications is essential. While endorsing beliefs that legitimize and justify the heteronormative system may be positively associated with subjective wellbeing, this same system in Brazil is responsible for the exclusion, marginalization, and violence against sexual minorities as a group (Associação Brasileira de Lésbicas, Gays, Bissexuais, Travestis e Transexuais (ABGLT), 2016; de Oliveira and Mott, 2023; Pinto et al., 2020). This remains true regardless of whether individual sexual minority members are personally affected by these structures or whether they recognize their impact.

Moreover, conforming to the status quo has been associated with lower levels of social outrage, which is a key drive for social and political mobilization. Collective actions have historically been the fuel to social and political reform and transformation, especially the ones aiming equality, justice and social wellbeing (Badaan et al.,

2020; Jost et al., 2017; Osborne et al., 2019). In this sense, system-justification may provide short-term, individual level psychological benefits, but it prevents LGBs from critically questioning and challenging heteronormative social arrangements that perpetuate social, political and psychological vulnerability of sexual minorities.

The present study also put forward a possible "antidote" to the palliative function of system-justification on sexual minorities: in-group identification. The more strongly LGBs individuals identified with their in-group, the weaker was the palliative effect of heteronormative system-justification, that is, the less they benefited from it. In-group identification, however, is a protective factor to sexual minorities in the face of stigma (Meyer, 2013). It is possible that highly identified LGBs rely on ingroup identification to cope with a minority status, rather than on system-justification. However, unlike system-justification, ingroup identification fosters critical awareness, which can, in turn, promote the transformation of social arrangements (Diemer et al., 2016; van Zomeren et al., 2008; Yip and Chan, 2021).

Additionally, these findings have implications for mental health practitioners. Firstly, it poses the questions: how can we critically address the contradiction between the psychological benefits that system justification offers to LGB individuals and the ongoing violence and stigmatization perpetuated by the very heteronormative systems they justify, or fail to fully recognize as harmful? How to acknowledge and discuss such an effect without fostering the conformation and resignation to the status quo and to heteronormativity? How can we address system-justification as a coping mechanism for sexual minorities while remaining critical about the heterosexist system?

Addressing such questions responsibly requires recognizing heteronormativity and inequality as deeply rooted and structural issues that are politically and ideologically sustained and that impact the rights, the liberties and the livelihood of sexual minorities. In this context, psychology, as emphasized by both the American Psychological Association (2021) and the Federal Council of Psychology (2023), has an ethical obligation to critically address social and political structures of dominance that perpetuates violence and discrimination, which invariably takes a significantly toll on the mental health and wellbeing of these individuals.

Limitations and future directions

The study conducted was of correlational nature, limiting our ability to draw causal inferences from the relationship between variables. Future experimental or longitudinal studies could provide deeper understanding of the palliative effect of system-justification among sexual minorities. In addition, despite our efforts to diversify our sample, it was composed of a rather privileged group of Brazilian lesbians, gays and bisexuals in terms of socioeconomic class, education and race. Future studies might analyze if the palliative effect persists among socioeconomic and racially marginalized Brazilians LGBs, employing an intersectional approach to this line of research.

The model proposed in this study can be tested in LGB samples from other countries to assess if cultural differences can

result in different relationships between the studied variables. As previously noted, the contemporary backlash against sexual diversity rights, policies, and visibility—driven by conservative leaders and parties—is a global phenomenon observed in countries such as the U.S., Russia, Hungary, and Argentina (Butler, 2024). Despite the particularities of the Brazilian context, where conservatism is closely linked to fundamentalist Christian values and beliefs (Cortês and Buzolin, 2024), similar patterns may emerge in future research conducted in these countries. However, we anticipate potential differences in contexts where sexual minorities have never been granted civil rights or are criminalized, such as Saudi Arabia and Iran.

Despite the targeted data collection strategy employed to diversify the sample, 89,8% of the participants identified with left political ideology (either center-left, left or extreme left) and the levels of internalized homophobia and system-justification were generally low. This may reflect the higher adhesion of sexual minorities to left-wing ideology, once this end of the spectrum has been historically associated with collective movements headed by social minorities (Trevisan, 2018; Jost, 2020). However, it may also suggest sampling bias, as our strategy may not have sufficiently engaged right-wing, system-justifying LGBs with high internalized homophobia.

As previously mentioned, the small number of bisexual men surveyed raises concerns about the reliability of our findings for this group. It is important to acknowledge the challenges associated with recruiting bisexual men in psychological research (Geary et al., 2018; Meyer et al., 2021). Differences between bisexual men and other sexual minorities may explain our smaller number of bisexuals recruited. Male bisexuals present higher levels of identity confusion, internalized homophobia and less community connection (Balsam and Mohr, 2007; Meyer et al., 2021; Chard et al., 2015). Our preliminary analysis found similar results, with bisexual men presenting lower LGB identification, higher internalized homophobia and also higher system-justification, three related constructs. It is possible to presume that sexual minorities higher in internalized homophobia (such as bisexual men) are less inclined to respond to a survey where the participation requires disclosing one's sexual identity (despite the participation being anonymous), since internalized homophobia and outness are also related (Freire et al., 2023; Weber-Gilmore

Additionally, our study was subject to the resource and time constraints, which may have impacted participant recruitment (Lakens, 2022). While the statistical power for this subgroup is limited, small sample sizes in underrepresented populations remain informative for further investigation (Funder and Ozer, 2019; Lakens, 2022). Our findings should be interpreted with caution but still contribute to the limited body of research on the effects of system justification on bisexual men, particularly in a non-WEIRD context where this group remains understudied. To address these challenges, it is crucial for future studies to adopt more inclusive recruitment strategies to ensure a more representative understanding of bisexual men's experiences in psychological research (Dodge et al., 2012).

As previously discussed, our findings highlight that the moderating role of LGB identification lost statistical significance

when political orientation and socioeconomic class were included as covariates. This finding raises theoretical and methodological questions about how group identification, ideology, and structural factors interact. Research indicates that conservative political views can lead individuals to distance themselves from marginalized identities (Jost et al., 2009), while higher socioeconomic status may reduce the salience of minority identities due to lower exposure to discrimination (Manstead, 2018). Future studies should examine whether this pattern is replicable across different contexts and samples, and, if so, further explore the psychological mechanisms through which political and socioeconomic variables modulate LGB identification's role as a moderator in system-justification processes.

Furthermore, since our sample is not representative of the Brazilian LGB population and includes a relatively small number of participants, the generalizability of these findings is limited. Future replications of our models are needed to provide further evidence, whether in support of or against our hypotheses. Additionally, future studies could expand on these findings by testing similar explanatory models on the influence of system justification on the subjective wellbeing of transgender individuals, who were not included in this study but experience similar—yet often more severe—processes of stigmatization, exclusion, and violence in Brazil due to their gender identity and expression.

It is also important to further investigate the mechanisms underlying the palliative effect of system-justification among LGBs, a topic not explored in the present study. In Chilean sexual minorities, the reduction of perception of stigma was found to mediate the positive effect of system-justification on their wellbeing (Bahamondes et al., 2019). In other populations, system-justification has been found to benefit individuals through the increase of perceived personal control (McCoy et al., 2013; Vargas-Salfate et al., 2018). Future research should investigate whether these or other variables account for the palliative effect of system justification among Brazilian LGB individuals.

There is also a growing line of research addressing the collective and political implications of system-justification, as mentioned before. To our knowledge, such studies have not yet been conducted in Brazil, despite their potential relevance to the current sociopolitical landscape, where far-right conservative ideologies—strongly linked to the defense of heteronormative arrangements—have been on the rise. Therefore, it is crucial to understand how system-justification affects the collective action and political behavior of sexual minorities, which are socially available (although costly) tools for these individuals to question and positively transform the social reality.

Final considerations

Despite its limitations, the present study presents, tests and corroborate a new model that helps understanding how system-justification relates to the wellbeing of sexual minorities in Brazil, addressing the role of internalized homophobia, ingroup identification and specific sexual minority identities. The study paints a complex relationship between the main variables, which must be considered by researchers who will investigate it among sexual minorities or other social minority groups, who

are harmed by the social system, but who may be palliatively benefit from justifying it. The results will also be able to inform the work of social and clinical psychologists who help sexual minorities and should be interpreted critically. Such professionals must acknowledge how social and political attitudes are related to the mental health and wellbeing of these individuals and how societal phenomenon cannot be separated from their psychological life.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Ethics Committee at the Universidade de Fortaleza (University of Fortaleza). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

BL: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Writing – original draft, Writing – review & editing. LS: Conceptualization, Formal analysis, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing. TL: Data curation, Methodology, Software, Supervision, Writing – original draft, Writing – review & editing.

Funding

The author(s) declare that financial support was received for the research and/or publication of this article. This work was funded by the Cearense Foundation of Scientific and Technological Development Support, who awarded the first author with a grant during his Master's degree (Edict VRPG N° 06/2021), and by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) – Finance Code 001.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of

their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/frsps.2025. 1496949/full#supplementary-material

References

American Psychological Association, A. P. A. Task Force on Psychological Practice with Sexual Minority Persons. (2021). Guidelines for Psychological Practice with Sexual Minority Persons. Washington, DC: APA.

Associação Brasileira de Lésbicas, Gays, Bissexuais, Travestis e Transexuais (ABGLT) (2016). Pesquisa Nacional sobre o Ambiente Educacional no Brasil 2015: as experiências de adolescentes e jovens lésbicas, gays, bissexuais, travestis e transexuais em nossos ambientes educacionais. Niterói: Associação Brasileira de Lésbicas, Gays, Bissexuais, Travestis e Transexuais.

Badaan, V., Jost, J. T., Osborne, D., Sibley, C. G., Ungaretti, J., Etchezahar, E., et al. (2020). Social protest and its discontents: a system justification perspective. *Contention* 6, 1–22. doi: 10.3167/CONT.2018.060102

Bahamondes, J., Sibley, C. G., and Osborne, D. (2019). "We look (and feel) better through system justifying lenses": system-justifying beliefs attenuate the well-being gap between the advantaged and disadvantaged by reducing perceptions of discrimination. *Pers. Soc. Psychol. Bull.* 45, 1391–1408. doi: 10.1177/0146167219829178

Bahamondes-Correa, J. (2016). System justification's opposite effects on psychological wellbeing: testing a moderated mediation model in a gay men and lesbian sample in Chile. *J. Homosexuality* 63, 1537–1555. doi: 10.1080/00918369.2016. 1223351

Balsam, K. F., and Mohr, J. J. (2007). Adaptation to sexual orientation stigma: a comparison of bisexual and lesbian/gay adults. *J. Couns. Psychol.* 54, 306–319. doi: 10.1037/0022-0167.54.3.306

Bergler, E. (1956). Homosexuality: Disease or Way of Life. New York, NY: Collier.

Bettinsoli, M. L., Suppes, A., and Napier, J. L. (2020). Predictors of attitudes toward gay men and lesbian women in 23 countries. Soc. Psychol. Pers. Sci. 11, 697–708. doi: 10.1177/1948550619887785

Brandt, M. J., Kuppens, T., Spears, R., Andrighetto, L., Autin, F., Babincak, P., et al. (2020). Subjective status and perceived legitimacy across countries. *Eur. J. Soc. Psychol.* 50, 921–942. doi: 10.1002/ejsp.2694

Branscombe, N. R., Schmitt, M. T., and Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: implications for group identification and well-being. *J. Pers. Soc. Psychol.* 77:135. doi: 10.1037/0022-3514.77.1.135

Busseri, M. A. (2018). Examining the structure of subjective well-being through meta-analysis of the associations among positive affect, negative affect, and life satisfaction. *Pers. Individ. Dif.* 122, 68–71. doi: 10.1016/j.paid.2017.

Butler, J. (2024). Quem tem medo do gênero? São Paulo: Boitempo Editorial.

Chang, H. I. L., and Kang, W. C. (2018). Why do the poor oppose income redistribution? An empirical test on the impacts of nationalism and fatalism. *So. Sci. J.* 55, 422–431. doi: 10.1016/j.soscij.2018.05.002

Chard, A. N., Finneran, C., and Sullivan, P. S. (2015). Experiences of homophobia among gay and bisexual men: results from a cross-sectional study in seven countries. *Cult. Health Sex.* 17, 1174–1189. doi: 10.1080/13691058.2015.1042917

Cortês, A. M., and Buzolin, L. G. (2024). Paths towards LGBT rights recognition in Brazil. Sex. Res. Soc. Policy. 21, 1206–1219. doi: 10.1007/s13178-023-00931-y

Costa, A. B., Paveltchuk, F., Lawrenz, P., Vilanova, F., Borsa, J. C., Damásio, B. F., et al. (2020). Protocolo para avaliar o estresse de minoria em lésbicas, gays e bissexuais. *Psico-USF* 25, 207–222. doi: 10.1590/1413-82712020250201

Costa, Â. B., Peroni, R. O., and Bandeira, D. R. (2013). Homophobia or sexism? A systematic review of prejudice against nonheterosexual orientation in Brazil. *Int. J. Psychol.* 48, 900–909. doi: 10.1080/00207594.2012.729839

de Oliveira, J. M. D., and Mott, L. (2023). Mortes violentas de LGBT+ no Brasil: relatório 2022. Editora Grupo Gay da Bahia (Salvador).

Diemer, M. A., Rapa, L. J., and Voight, A. M. (2016). Critical consciousness: a developmental approach to addressing marginalization and oppression. *Child Dev. Perspect.* 10, 216–221. doi: 10.1111/cdep.12193

Diener, E., and Emmons, R. A. (1984). The independence of positive and negative affect. J. Pers. Soc. Psychol. 47:1105. doi: 10.1037/0022-3514.47.5.1105

Diener, E., Emmons, R. A., and Larsen, R. J. (1985). The satisfaction with life scale. J. Pers. Assess. 49, 71–75. doi: 10.1207/s15327752jpa4901_13 Dillon, F. R., Worthington, R. L., and Moradi, B. (2011). "Sexual identity as a universal process," in *Handbook of Identity Theory and Research*, eds S. Schwartz, K. Luyckx, and V. Vignoles (New York, NY: Springer), 649–670. doi:10.1007/978-1-4419-7988-9_27

Doan, L., and Mize, T. (2020). Sexual identity disclosure among lesbian, gay, and bisexual individuals. Soc. Sci. 7, 504–527. doi: 10.15195/v7.a21

Dodge, B., Schnarrs, P. W., Reece, M., Goncalves, G., Martinez, O., Nix, R., et al. (2012). Community involvement among behaviorally bisexual men in the Midwestern USA: experiences and perceptions across communities. *Cult. Health Sex.* 14, 1095–1110. doi: 10.1080/13691058.2012.721136

Duffin, T. P. (2016). The lowdown on the down low: why some bisexually active men choose to self-identify as straight. J. Bisex. 16, 484–506. doi: 10.1080/15299716.2016.1252301

Eliason, M. (2000). Bi-negativity: the stigma facing bisexual men. J. Bisex. 1, 137-154. doi: $10.1300/J159v01n02_05$

Federal Council of Psychology. Regional Councils of Psychology (2023). Referências Técnicas para Atuação de Psicólogas, Psicólogos e Psicólogues em Políticas Públicas para População LGBTQIA+. Brasília: Technical Reference Center in Psychology and Public Policies.

Freire, F. R., Soeiro, C., and Almeida, T. C. (2023). The link between intimate partner violence, outness and internalized homophobia in an LGBT+ sample. *Med. Sci. Forum* 22, 1–4. doi: 10.3390/msf2023022024

Friedman, M. R., Dodge, B., Schick, V., Herbenick, D., Hubach, R. D., Bowling, J., et al. (2014). From bias to bisexual health disparities: attitudes toward bisexual men and women in the united states. *LGBT Health* 1, 309–318. doi: 10.1089/lgbt.2014.0005

Funder, D. C., and Ozer, D. J. (2019). Evaluating effect size in psychological research: sense and nonsense. *Adv. Methods Pract. Psychol. Sci.* 2, 156–168. doi: 10.1177/2515245919847202

Galupo, M. P. (2011). Bisexuality: complicating and conceptualizing sexual identity. *J. Bisexu.* 11, 545–549. doi: 10.1080/15299716.2011.620866

Geary, R. S., Tanton, C., Erens, B., Clifton, S., Prah, P., Wellings, K., et al. (2018). Sexual identity, attraction and behaviour in Britain: the implications of using different dimensions of sexual orientation to estimate the size of sexual minority populations and inform public health interventions. *PLoS ONE* 13:e0189607. doi: 10.1371/journal.pone.0189607

Godfrey, E. B. (2013). System justification, mental health, and behavior among disadvantaged mothers and their children. *Basic Appl. Soc. Psychol.* 35, 382–395. doi: 10.1080/01973533.2013.803965

Gouveia, V. V., Barbosa, G. A., and Andrade, E. D. O. (2005). Medindo a satisfação com a vida dos médicos no Brasil. *J. Bras. Psiquiatr.* 54, 298–305.

Gouveia, V. V., Ribeiro, M. G. C., Loureto, G. D. L., Silva, O. F. D., Gouveia, R. S., Vilar, R., et al. (2019). Escala de Afetos Positivos e Negativos (EAPN-10): evidências de sua adequação psicométrica. *Trends Psychol.* 27, 189–203. doi: 10.9788/TP2019.1-14

Hadarics, M., Kende, A., and Szabó, Z. P. (2021). The relationship between income inequality and the palliative function of meritocracy belief: the micro- and the macrolevels both count. *Front. Psychol.* 12, 1–12. doi: 10.3389/fpsyg.2021.709080

Hartman, J. E. (2013). Creating a bisexual display: making bisexuality visible. *J. Bisex.* 13, 39–62. doi: 10.1080/15299716.2013.755727

Hayes, A. F. (2017). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. Guilford publications.

Helms, J. L., and Waters, A. M. (2016). Attitudes toward bisexual men and women. *J. Bisex.* 16, 454–467. doi: 10.1080/15299716.2016.1242104

Hennes, E. P., Hannah Nam, H., and Stern, C. (2012). Not all ideologies are created equal: epistemic, existential, and relational needs predict system-justifying attitudes. Soc. Cogn. 30, 669–688. doi: 10.1521/soco.2012.30.6.669

Hoffarth, M. R., and Jost, J. T. (2017). When ideology contradicts self-interest: conservative opposition to same-sex marriage among sexual minorities-a commentary on pinsof and haselton. *Psychol. Sci.* 28, 1521–1524. doi: 10.1177/0956797617694866

Hoy-Ellis, C. P. (2023). Minority stress and mental health: a review of the literature. $\it J. Homosex. 70, 806-830.$ doi: 10.1080/00918369.2021.2004794

- Jost, J., and Hunyady, O. (2003). The psychology of system justification and the palliative function of ideology. *Eur. Rev. Soc. Psychol.* 13, 111–153. doi: 10.1080/10463280240000046
- Jost, J. T. (2018). A quarter century of system justification theory: questions, answers, criticisms, and societal application. *Br. J. Soc. Psychol.* 58, 263–314. doi: 10.1111/bjso.12297
- Jost, J. T. (2020). A Theory of System Justification. Cambridge: Harvard University Press. doi: 10.4159/9780674247192
- Jost, J. T. (2021). Left and Right: The Psychological Significance of Political Distinction. Cambridge, MA: Oxford University Press.
- Jost, J. T., and Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *Br. J. Soc. Psychol.* 33, 1–27. doi: 10.1111/j.2044-8309.1994.tb01008.x
- Jost, J. T., Banaji, M. R., and Nosek, B. A. (2004). A decade of system justification theory: accumulated evidence of conscious and unconscious bolstering of the status quo. *Polit. Psychol.* 25, 881–919. doi: 10.1111/j.1467-9221.2004. 00402.x
- Jost, J. T., Blount, S., and Pfeffer, J. (2003). Fair market ideology: its cognitive motivational underpinnings. *Res. Organ. Behav.* 25, 53–91. doi: 10.1016/S0191-3085(03)25002-4
- Jost, J. T., Federico, C. M., and Napier, J. L. (2009). Political ideology: its structure, functions, and elective affinities. *Annu. Rev. Psychol.* 60, 307–337. doi: 10.1146/annurev.psych.60.110707.163600
- Jost, J. T., and Hunyady, O. (2005). Antecedents and consequences of system-justifying ideologies. *Curr. Directions Psychol. Sci.* 14, 114–118. doi: 10.1111/j.0963-7214.2005.00377.x
- Jost, J. T., and Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: consequences for specific and diffuse forms of system justification. *J. Pers. Soc. Psychol.* 88:498. doi: 10.1037/0022-3514.88.3.498
- Jost, J. T., Sterling, J., and Stern, C. (2017). "Getting closure on conservatism, or the politics of epistemic and existential motivation," in *The Motivation-Cognition Interface* (Routledge), 56–87. doi: 10.1177/0963721410364008
- Jost, J. T., and Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *J. Exp. Soc. Psychol.* 36, 209–232. doi: 10.1006/jesp.1999.1403
- Kay, A. C., and Jost, J. T. (2003). Complementary justice: effects of "poor but happy" and "poor but honest" stereotype exemplars on system justification and implicit activation of the justice motive. *J. Pers. Soc. Psychol.* 85:823. doi: 10.1037/0022-3514.85.5.823
- Lakens, D. (2022). Sample size justification. Collabra Psychol. 8, 1–28. doi: 10.1525/collabra.33267
- Leach, C. W., Van Zomeren, M., Zebel, S., Vliek, M. L., Pennekamp, S. F., Doosje, B., et al. (2008). Group-level self-definition and self-investment: a hierarchical (multicomponent) model of in-group identification. *J. Pers. Soc. Psychol.* 95:144. doi: 10.1037/0022-3514.95.1.144
- Lima, B. P. B., and Souza, L. E. C. (2024). Supporting one's own oppression: measuring the heteronormative system-justification for lesbians, gays and bisexuals [Manuscript submitted for publication]. Graduate Program of Psychology, University of Fortaleza, Fortaleza.
- Lima, B. P. B., Souza, L. E. C., and Jost, J. T. (2025). System-justification, subjective well-being and mental health symptoms in members of disadvantaged minority groups. *Clin. Psychol. Rev.* 115, 1–14.
- Lima, E. C. d A. L., and Lima, I. C. C. (2020). O neoconservadorismo religioso e heteronormatividade: a "bolsonarização" como produção de sentido e mobilização de afetos. *Cadernos Campo Rev. Ciênc. Soc.* 28, 325–350. doi: 10.47284/2359-2419.2020.28.325350
- Manstead, A. S. R. (2018). The psychology of social class: How socioeconomic status impacts thought, feelings and behavior. *Br. J. Soc. Psychol.* 57, 267–291. doi: 10.1111/bjso.12251
- Martins, T. V., Lima, T. J. S. D., and Santos, W. S. (2020). Effects of gendered racial microaggressions on the mental health of black women. *Ciênc. Saúde Coletiva* 25, 2793–2802. doi: 10.1590/1413-81232020257.29182018
- McCoy, S. K., and Major, B. (2003). Group identification moderates emotional responses to perceived prejudice. *Pers. Soc. Psychol. Bull.* 29, 1005–1017. doi: 10.1177/0146167203253466
- McCoy, S. K., Wellman, J. D., Cosley, B., and Saslow, L. (2013). Is the belief in meritocracy palliative for members of low status groups? Evidence for a benefit for self-esteem and physical health via perceived control. *Eur. J. Soc. Psychol.* 43, 307–318. doi: 10.1002/ejsp.1959
- Meyer, I. H. (2013). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychol. Sex. Orientation Gender Divers.* 1, 3–26. doi: 10.1037/0033-2909.129.5.674
- Meyer, I. H., Russell, S. T., Hammack, P. L., Frost, D. M., and Wilson, B. D. M. (2021). Minority stress, distress, and suicide attempts in three cohorts

of sexual minority adults: a U.S. probability sample. *PLoS ONE*, 16:e0246827. doi: 10.1371/journal.pone.0246827

- Napier, J. L., and Jost, J. T. (2008). Why are conservatives happier than liberals? *Psychol. Sci.* 19, 565-572. doi: 10.1111/j.1467-9280.2008.02124.x
- O'Brien, L. T., and Major, B. (2005). System-justifying beliefs and psychological well-being: the roles of group status and identity. *Pers. Soc. Psychol. Bull.* 31, 1718–1729. doi: 10.1177/0146167205278261
- Ochs, R. (1996). "Biphobia: it goes more than two ways," in *Bisexuality: The Psychology and Politics of an Invisible Minority*, ed. B. A. Firestein (Thousand Oaks, CA: Sage), 217–239.
- Osborne, D., Jost, J. T., Becker, J. C., Badaan, V., and Sibley, C. G. (2019). Protesting to challenge or 155 defend the system? a system justification perspective on collective action. *Eur. J. Soc. Psychol.* 49, 244–269. doi: 10.1002/ejsp. 2522
- Pacilli, M. G., Taurino, A., and Jost, J. T. (2011). System justification, right-wing conservatism, and internalized homophobia: gay and lesbian attitudes toward same-sex parenting in Italy. Sex Roles 65, 580–595. doi: 10.1007/s11199-011-9069-5
- Pinto, I. V., Andrade, S. S. de Rodrigues, A., Santos, L. L., Marinho, M. A. S., Benício, L. A., et al. (2020). Perfil das notificações de violências em lésbicas, gays, bissexuais, travestis e transexuais registradas no Sistema de Informação de Agravos de Notificação, Brasil, 2015 a 2017. *Rev. Bras. Epidemiol.* 23, 1–13. doi: 10.1590/1980-549720200006.supl.1
- Preacher, K. J., and Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav. Res. Methods* 40, 879–891. doi: 10.3758/BRM.40.3.879
- Quinalha, R. (2022). Movimento LGBTI+: uma breve história do século XIX aos nossos dias. São Paulo: Autêntica.
- Ramos, M., de Costa, M. A. B., and Cerqueira-Santos, E. (2020). Effeminacy and anti-effeminacy: interactions with internalized homophobia, outness, and masculinity. *Trends Psychol.* 28, 337–352. doi: 10.1007/s43076-020-00025-3
- Sánchez, F. J., and Vilain, E. (2012). "Straight-acting gays": the relationship between masculine consciousness, anti-effeminacy, and negative gay identity. *Arch. Sex. Behav.* 41, 111–119. doi: 10.1007/s10508-012-9912-z
- Sánchez, F. J., Vilain, E., and Westefeld, J. S. (2010). Masculine gender role conflict and negative feelings about being gay. *Prof. Psychol. Res. Pract.* 41, 104–111. doi: 10.1037/a0015805
- Souza, L. E. C., Lima, T. J. S., Maia, L. M., and Fontenele, A. B. G. (2019). A hierarchical (multicomponent) model of in-group identification: adaptation of a measure to the Brazilian context. *Psicol. Reflexão Crít.* 32, 1–9. doi: 10.1186/s41155-019-0131-6
- Suppes, A., Napier, J., and van der Toorn, J. (2018). The palliative effect of system justification on the health and happiness of lesbian, gay, bisexual and transgender individuals. *Pers. Soc. Psychol. Bull.* 45, 372–388. doi: 10.1177/014616721878 5156
- Tajfel, H., and Turner, J. C. (1978). "Intergroup behavior," in $\it Introducing~Social~Psychology, Vol. 401, 149–178.$
- Tajfel, H., Turner, J. C., and Austin, W. G. (1982). Social psychology of intergroup relations. *Annu. Rev. Psychol.* 33, 1–39. doi: 10.1146/annurev.ps.33.020182. 000245
- Tan, J. J. X., Kraus, M. W., and Carpenter, N. C. (2020). The association between objective and subjective socioeconomic status and subjective wellbeing: a meta-analytic review. *Psychol. Bull.* 146, 970–1020. doi: 10.1037/bul0000258
- Trevisan, J. S. (2018). Devassos no Paraíso A homossexualidade no Brasil, da colônia à atualidade. Rio de Janeiro: Objetiva.
- Tropp, L. R., and Wright, S. C. (2001). Ingroup identification as the inclusion of ingroup in the self. *Pers. Soc. Psychol. Bull.* 27, 585–600. doi: 10.1177/0146167201275007
- van Zomeren, M., Postmes, T., and Spears, R. (2008). Toward an integrative social identity model of collective action: a quantitative research synthesis of three socio-psychological perspectives. *Psychol. Bull.* 134, 504–535. doi: 10.1037/0033-2909.134.4.504
- Vargas-Salfate, S. (2019). The role of personal control in the palliative function of system justification among indigenous and non-indigenous Peruvian students. *Rev. Psicol. Soc.* 34, 168–201. doi: 10.1080/02134748.2018.1537650
- Vargas-Salfate, S., Paez, D., Khan, S. S., and Liu, J. H. Zúñiga, H. (2018). System justification enhances wellbeing: a longitudinal analysis of the palliative function of system justification in 18 countries. *Br. J. Soc. Psychol.* 57, 567–590. doi: 10.1111/bjso.12254
- Wakslak, C. J., Jost, J. T., Tyler, T. R., and Chen, E. S. (2007). Moral outrage mediates the dampening effect of system justification on support for redistributive social policies. *Psychol. Sci.* 18, 267–274. doi: 10.1111/j.1467-9280.2007. 01887.x
- Warner, M. (1993). Fear of a Queer Planet. Minneapolis: University of Minnesota Press.

Weber-Gilmore, G., Rose, S., and Rubinstein, R. (2011). The impact of internalized homophobia on outness for lesbian, gay and bisexual individuals. *Prof. Couns.* 1, 163–175. Available online at: http://tpcjournal.nbcc.org/

Wolowic, J. M., Heston, L. V., Saewyc, E. M., and Porta, C. (2016). Chasing the rainbow: lesbian, gay, bisexual, transgender and queer youth and

pride semiotics. *Cult. Health Sex.* 19, 557–571. doi: 10.1080/13691058.2016. 1251613

Yip, C. C. H., and Chan, K. K. S. (2021). How sense of community affects sense of self among sexual minorities: critical consciousness as a mediating mechanism. *Am. J. Community Psychol.* 68, 177–186. doi: 10.1007/s10508-011-9767-8