

INTERPERSONAL AND ENVIRONMENTAL MICROAGGRESSIONS & DEPRESSION: THAI LGBTQ+ PERSPECTIVES

Rapinpat Yodlorchai^{1*}, Panrapee Suttiwan¹, Susan E. Walch², and Sakkaphat Ngamake¹

¹ Faculty of Psychology, Chulalongkorn University, Thailand

² Department of Psychology, University of West Florida, USA

ABSTRACT

***Corresponding author:**

Rapinpat Yodlorchai
rapinpat.y@gmail.com

Received: 26 December 2023

Revised: 23 April 2024

Accepted: 13 May 2024

Published: 31 July 2024

Citation:

Yodlorchai, R., Suttiwan, P., Walch, S. E., & Ngamake, S. (2024). Interpersonal and environmental microaggressions & depression: Thai LGBTQ+ perspectives. *Humanities, Arts and Social Sciences Studies*, 24(2), 353–363.

Microaggressions, which are subtle verbal and non-verbal insults or denigrations, have been identified as prevalent experiences among LGBTQ+ populations, often resulting in adverse mental health outcomes. In the Thai context, little research has explored the impact of both types of microaggressions on depression among LGBTQ+ individuals. This study aimed to investigate the relationship between interpersonal (INMG) and environmental microaggressions (ENMG) and depressive symptoms among Thai LGBTQ+ individuals. A sample of 307 Thai LGBTQ+ participants was surveyed using the Thai Sexual Orientation Microaggressions Scale and the PHQ-9 for depressive symptoms. Hierarchical regression analyses were employed to determine the unique effects of interpersonal and environmental microaggressions on depression, controlling for sociodemographic variables and internalized heterosexism (IHP). Both INMG ($\beta = .172, p = 0.008$) and ENMG ($\beta = .173, p = 0.007$) were significant predictors of depressive symptoms, accounting for approximately 24.2% of the variance. When introduced into the model, they accounted for a significant ΔR^2 of 0.079 ($p < 0.001$). After controlling for sociodemographics and IHP, these microaggressions contributed significantly to the explanation of depressive symptoms, emphasizing their key role in influencing the mental health of LGBTQ+ individuals in Thailand. Interpersonal and environmental microaggressions impose unique mental health challenges on Thai LGBTQ+ individuals. These findings accentuate the pressing need for interventions tailored to the cultural and regional contexts within Thailand. Furthermore, the research underscores the importance of acquiring a holistic understanding of the LGBTQ+ experience, advocating for a more systematic exploration across Thailand's varied geographical landscapes to offer comprehensive solutions.

Keywords: Microaggressions; depression; LGBTQ+; interpersonal; environmental; sexual orientation

1. INTRODUCTION

In contemporary societies, negative attitudes towards lesbian, gay, bisexual, queer, and other sexual minority populations (LGBTQ+) persist not just in overt forms but increasingly through subtle interactions known as microaggressions, which involve the communication of derogatory messages. While blatant heterosexism like discrimination and harassment is increasingly condemned, prejudices have evolved into more subtle manifestations. These microaggressions, defined as brief, everyday exchanges transmitting derogatory messages based on marginalized group membership (Sue et al., 2007), can be expressed in various ways. For example, asking a lesbian couple, "Which one of you is the man," promotes outdated gender roles. Saying, "That's so gay" to mean stupid perpetuates the notion that being gay is wrong. These frequent exchanges accumulate over time to produce minority stress (Meyer, 2003).

Minority stress theory provides a framework for understanding the impacts of microaggressions. This theory posits that minority groups confront chronic social stressors related to their stigmatized identity (Brooks, 1981; Meyer, 2003). Researchers have highlighted minority stress as a key factor contributing to mental health disparities among LGBTQ+ individuals, including higher rates of depression (Hatzenbuehler, 2009). However, few studies have differentiated between the relative impacts of interpersonal microaggressions, perpetrated directly by others, and environmental microaggressions, which are present in societal and institutional structures (Balsam et al., 2011).

While global perceptions of LGBTQ+ issues vary widely, nations like Thailand possess unique cultural nuances that shape the LGBTQ+ experience. Historically, Thailand's socio-cultural landscape has been relatively accepting of diverse sexual orientations and gender identities, particularly when juxtaposed against some of its neighboring countries. Nevertheless, the LGBTQ+ community in Thailand continues to grapple with particular stigmas and challenges (USAID, UNDP, 2014), despite its global reputation for tolerance. For instance, traditional Thai beliefs, deeply embedded in Buddhism, occasionally associate LGBTQ+ identities with karmic retribution from past lives, implying a "debt" for prior misdeeds. Additionally, the Kathoey or "third gender" — akin to trans-women — has been an integral part of Thai culture for centuries. This has given rise to blended notions of gender and sexuality, diverging from Western understanding. While such cultural constructs might not be overtly antagonistic, they can subtly uphold biases and influence the type and nature of microaggressions that LGBTQ+ individuals encounter in Thailand. Moreover, Thailand has, as of this study's timeline, not yet legalized LGBTQ+ marriages, despite a growing global push for LGBTQ+ rights, underscoring the broader systemic biases ingrained in society.

This introduction sets the stage for a deeper exploration of the mechanisms underlying the impact of microaggressions on the mental health of sexual minorities, with a specific focus on Thailand. The following literature review delves into existing research on minority stress, microaggressions, and their effects on mental health, identifying gaps in knowledge and paving the way for the present study's investigation into the differential relationships between interpersonal and environmental microaggressions relating to sexual orientation with symptoms of depression among sexual minorities in Thailand.

2. LITERATURE REVIEW

Minority stress theory originated with Brooks' (1981) work, which showed that minority groups like lesbian women face additional stressors related to their stigmatized social status. According to Brooks (1981), minority stress accumulates over time, leading to psychological and physiological strain that ultimately impacts the health and wellness of minority individuals. Meyer (2003) expanded this framework concerning LGBTQ+ populations, outlining how stress processes like internalized homophobia, stigma, and prejudice events can lead to adverse health outcomes like depression.

Microaggressions are one manifestation of minority stress. Sue et al. (2007) defined microaggressions as brief, everyday exchanges that communicate derogatory messages to certain individuals based on their membership in a marginalized group. A substantial body of research has demonstrated the detrimental impact of minority stress on depression (Chen et al., 2021; Dyar et al., 2020; Hatzenbuehler, 2009; Kaufman et al., 2017; Meyer, 2003; Timmins et al., 2020; Whicker, 2016; Woodford et al., 2015) and other mental health issues such as anxiety, substance use, suicidal ideation, and low self-esteem among LGBTQ+ individuals (Bissonette & Szymanski, 2019; Kulick et al., 2017; Nadal et al., 2016; Salim et al., 2019). Microaggressions can be further categorized into interpersonal and environmental microaggressions (Balsam et al., 2011; Woodford et al., 2014).

Interpersonal microaggressions are direct exchanges that denigrate LGBTQ+ individuals. These could include assuming a gay man or lesbian woman is attracted to or will date anyone of the same gender, or asking a same-sex couple which partner is the "husband" or "wife." Microaggressions also manifest in statements that

perpetuate stereotypes, such as asking a lesbian if she hates men or telling a bisexual person they need to "pick a side." Though often unintentional, these comments communicate prejudicial attitudes towards LGBTQ+ identities. Recent studies have demonstrated concerning links between experiences of interpersonal microaggressions and heightened rates of depression, anxiety, and lowered self-esteem within the LGBTQ+ community (Crumley, 2019; Kulick et al., 2017; Matijczak et al., 2021; Woodford et al., 2014, 2018). For instance, a study by Matijczak et al. (2023) found that interpersonal microaggressions were positively related to depressive symptoms in a sample of LGB individuals. Their results also indicated that difficulties with emotion regulation strengthened this relationship. Similarly, Wike et al. (2023) discovered interpersonal microaggressions were significantly associated with symptoms of both anxiety and depression. However, environmental microaggressions were solely predictive of anxiety in their study of LGBTQ+ youth.

Environmental microaggressions encompass societal or systemic cues that signal prejudice, such as a lack of LGBTQ+ representation in media or movies that stereotype gay characters, the absence of anti-discrimination protections, or inaccessible infrastructure that excludes disabled individuals (Balsam et al., 2011). For LGBTQ communities, common environmental microaggressions in media involve comedic scenes in movies or shows that play on effeminate stereotypes about gay men or imply same-sex relationships are abnormal. For example, sitcoms may include minor gay characters whose sexuality becomes the butt of jokes, portray the "sassy gay friend" archetype, or express gay panic for humor. Though less commonly addressed in research, environmental microaggressions can significantly impact LGBTQ+ mental health. Empirical evidence indicates exposure to these societal or systemic cues of prejudice increases perceived stress, anxiety, and depression among LGBTQ+ populations (Crumley, 2019; Woodford et al., 2014). Environmental microaggressions warrant further scientific investigation given their clear detrimental effects on the mental health and well-being of sexual minorities.

In summary, recent empirical evidence demonstrates that both interpersonal and environmental microaggressions contribute to adverse mental health outcomes for LGBTQ+ populations. To account for the influence of internalized societal prejudices, researchers often control for internalized heterosexism when examining links between minority stressors and mental health outcomes in LGBTQ+ populations.

Internalized heterosexism, rooted in societal biases against LGBTQ+ individuals, refers to the internalization of these prejudices (Herek et al., 2009). Previous research demonstrates that higher levels of internalized heterosexism serve as a salient predictor of adverse mental health outcomes among LGBTQ+ populations, including heightened symptoms of depression (Herek et al., 2009; Szymanski & Henrichs-Beck, 2014; Szymanski et al., 2008; Szymanski & Sung, 2010). In light of its influential role, researchers commonly control for internalized heterosexism when examining relationships between minority stressors and mental health in LGBTQ+ populations (Brown-Beresford & McLaren, 2022; Timmins et al., 2020). This approach accounts for internalized prejudice as a confounding variable, providing a more rigorous test of the unique effects of stressors like microaggressions.

Acknowledging the growing recognition of microaggressions, there remains a gap in understanding concerning the differential impacts of interpersonal and environmental microaggressions, particularly within specific cultural contexts like Thailand. This gap highlights the need for further research tailored to the cultural nuances of different regions, such as Thailand, to elucidate the distinct mechanisms and implications of these two types of microaggressions.

To address this gap, the present study aims to investigate the differential relationships between interpersonal and environmental microaggressions concerning sexual orientation with symptoms of depression among sexual minorities in Thailand. By comparing the mental health impacts of these two microaggression types, the study seeks to contribute to a more comprehensive understanding of minority stress and mental health disparities within the Thai context, thereby informing targeted interventions and policy recommendations to support the mental health and well-being of sexual minority populations. Based on minority stress theory and prior empirical evidence, the following directional hypotheses are proposed:

H1: Interpersonal microaggressions will positively predict depressive symptoms.

H2: Environmental microaggressions will positively predict depressive symptoms.

The significance of this study lies in its capacity to address a gap in the existing literature by shedding light on the unique challenges faced by sexual minorities throughout Thailand. By incorporating cultural considerations into the research framework, this study endeavors to enhance our understanding of minority stress and mental health disparities among sexual minority populations globally. The findings have the potential to inform the development of tailored mental health interventions, policy recommendations, and awareness campaigns, targeting both interpersonal prejudice and broader systemic biases.

3. METHODS

3.1 Participants

We recruited participants using convenience and snowball sampling, primarily through word-of-mouth and social media platforms such as Facebook and Twitter. Eligible participants had to (a) be identified as a sexual minority, (b) be at least 18 years old, (c) reside in Thailand, and (d) be willing to complete a 30-minute online survey about their experiences. All survey materials were provided in Thai. Of the 309 individuals recruited, two were excluded due to over 50% missing data, resulting in a final sample of 307 participants with an average age of 28.1 years ($SD = 8.2$).

The sample predominantly consisted of individuals identified as female (55.4%) compared to those identified as male (44.6%). Regarding sexual orientation, the largest subgroup identified as gay (33.9%). For gender identity, most identified either as men (37.5%) or women (36.5%). The majority of participants held a bachelor's degree (65.8%), identified as Buddhist (71.7%), worked full-time (47.6%), and were single and not dating (44.3%). A detailed description of the participants' demographics can be found in Table 1.

3.2 Measures

3.2.1 Microaggressions

We employed the 18-item Thai Sexual Orientation Microaggressions Scale (T-SOMG), developed by Yodlorchai et al. (2023), to assess microaggressions. This scale encompasses two subscales: Interpersonal Microaggression (INMG) and Environmental Microaggression (ENMG). The INMG subscale contains 9 items, such as "I have experienced mockery of my behavior/mannerisms due to being LGBTQ+." Similarly, the ENMG subscale consists of 9 items, for instance, "I have encountered the negative use of terms like 'Tud' (akin to 'that is so gay') implying cowardice, unmanliness, or being uncool." Participants rated each item on a 7-point scale from 1 (never) to 7 (every day). We calculated mean scores for each subscale, with higher scores indicating more frequent microaggressions in the past year. The INMG (McDonald's Omega; $\omega_T = 0.90$, Cronbach's alpha; $\alpha = 0.87$) and ENMG ($\omega_T = 0.91$, $\alpha = 0.87$) subscales both demonstrated good reliability in this sample.

3.2.2 Internalized heterosexism

We measured internalized heterosexism using the Internalized Homophobia Scale-Revised (IHP-R) developed by Herek et al. (1998). This 5-item scale assesses the extent to which individuals resent their sexual orientation, avoid same-sex relationships/attractions, and experience discomfort with same-sex desires. We included an additional item that assessed intrapersonal microaggressions related to dismissing experiences as paranoia. Participants rated each item on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). An average score was calculated, with higher scores indicating greater internalized heterosexism. Past studies reported an internal consistency of 0.82 (Herek et al., 1998) and 0.79 (Bissonette & Szymanski, 2019). Validity was supported for sexual minority samples (Herek, 2000; Szymanski et al., 2008). In this study, the modified IHP-R showed acceptable reliability ($\omega_T = 0.80$, $\alpha = 0.73$).

3.2.3 Depression

We measured depressive symptoms using the 9-item Patient Health Questionnaire (PHQ-9) developed by Kroenke et al. (2001). This scale assesses the frequency of experiencing nine depressive symptoms over the previous two weeks, with each item rated from 0 (not at all) to 3 (nearly every day). Total scores range from 0 to 27, with higher scores indicating more severe depression. Sample items include "Little interest or pleasure in doing things" and "Feeling down, depressed, or hopeless." The PHQ-9 has shown high reliability for sexual minorities (Woodford et al., 2014) and good validity in general populations (Kocalevent et al., 2013). Past studies reported internal consistency values of 0.88 (Salim et al., 2019) and 0.92 (Timmins et al., 2020). In this sample, the PHQ-9 demonstrated excellent reliability ($\omega_T = 0.93$, $\alpha = 0.91$).

Table 1: Participants' demographic information ($N = 307$)

Variables	<i>n</i>	%
Assigned sex at birth		
Male	137	44.6
Female	170	55.4
Sexual orientation		
Lesbian	68	22.1
Gay	104	33.9
Bisexual	76	24.8
Queer	20	6.5

Table 1: Participants' demographic information (*N* = 307) (continued)

Variables	<i>n</i>	%
Questioning	10	3.3
Asexual	9	2.9
Pansexual	20	6.5
Residence		
Bangkok	123	40.1
Central Thailand (excluding Bangkok)	53	17.3
Eastern Thailand	20	6.5
Northeast Thailand	26	8.5
Northern Thailand	32	10.4
Southern Thailand	30	9.8
Western Thailand	23	7.5
Educational level		
Elementary/some high school	11	3.6
Graduated high school/vocational certificate	51	16.6
College/diploma/high vocational certificate	4	1.3
Bachelor's degree	202	65.8
Postgraduate degree/additional qualification	31	10.1
Doctorate degree/advanced degree	3	1.0
Professional degree	5	1.6
Religious belief		
Buddhist	220	71.7
Christian	7	2.3
Muslim	3	1.0
Other(s)	1	0.3
Non-believer	76	24.8

3.3 Design and procedure

This study was approved by the Institutional Review Board (No. 028.1/64) of Chulalongkorn University. Upon receiving approval, the online survey was launched, which started with an informed consent form detailing the study's purpose, potential risks, and benefits and assuring participants of confidentiality and their right to withdraw at any stage. All materials were presented in Thai. The survey encompassed questions about demographics, microaggressions, internalized heterosexism, and depression.

3.4 Ethical approval

We adhered to the ethical guidelines for research on human subjects outlined by the Declaration of Helsinki. Before participation, each participant was informed about the objectives, potential risks, and benefits of the study, as well as their right to withdraw without consequences. To maintain confidentiality, all identifying details were removed and the data were anonymized. Concerning the secure storage of study data, the university's data privacy protocols were followed. There were no deviations from the preregistered protocol (No. 028.1/64) as approved by the Institutional Review Board (COA No. 088/2021).

3.5 Data analysis

3.5.1 Software and tools

Data analyses were conducted using the R statistical software (Version 4.3.0; R Core Team, 2022). The "model.matrix()" function from the base R package was used to create dummy variables. The car package (Fox & Weisberg, 2019) provided the "vif()" function for assessing multicollinearity and the "durbinWatsonTest()" function for the Durbin-Watson test of autocorrelation. The hierarchical regression was conducted using the "lm()" function from the base R package to determine the predictive value of interpersonal microaggressions and environmental microaggressions on the outcome variable (depressive symptoms).

3.5.2 Preliminary analyses

Prior to the main analyses, data were screened for missing values, outliers, and assumptions of normality. Descriptive statistics including means, standard deviations, ranges, skewness, and kurtosis were calculated to understand the distribution, central tendency, and variability of variables. Skewness and kurtosis values were inspected to evaluate the normality of the variables. All skewness values fell between -1.13 and 1.90, and all kurtosis values ranged from -0.88 to 5.01, within the recommended limits of -3 to 3 for skewness and -7 to 7 for kurtosis, indicating no significant deviations from normality (Byrne, 2010; Hair et al., 2019).

This suggested the data were approximately normally distributed. A correlational analysis examined zero-order relationships between interpersonal microaggressions, environmental microaggressions, internalized heterosexism, and depression.

Since the interpersonal microaggressions, environmental microaggressions, and internalized heterosexism scales have different response scales compared to the depression scale, z-score standardization was applied to these predictor variables to facilitate the interpretation and comparison of regression coefficients.

We dummy-coded the nominal categorical variables, comparing other categories against the chosen reference category. Specifically, “gay” was the reference for sexual orientation, while “Buddhist” referenced religious belief, “bachelor's degree” indicated educational level; and “Bangkok (BKK)” implied residence. These reference categories facilitated the inclusion of each variable in the regression models.

3.5.3 Main analyses

To thoroughly examine the relationship between interpersonal (INMG) and environmental microaggressions (ENMG) on depressive symptoms (PHQ), a hierarchical regression analysis was employed. The analysis was conducted in three steps to ascertain the incremental variance in depressive symptoms explained by each block of predictors:

Step 1: Sociodemographic variables, which included age, sexual orientation, education, residence, and religious belief, were entered to account for individual differences that might influence the dependent variable. These controls account for the effects of basic sociodemographic characteristics, ensuring that relationships observed in later steps are beyond these effects.

Step 2: Building on Step 1, this phase incorporated the additional control variable of internalized heterosexism (IHP). This ensured that the primary predictors of interest in the subsequent step were evaluated over and above individuals' internal feelings and beliefs about their sexual orientation.

Step 3: The main predictors of interest, INMG and ENMG were entered in this final step to assess their unique contributions in predicting depressive symptoms beyond all the previously entered variables.

The hierarchical regression analysis was chosen to understand the layered impact of different predictor blocks on depressive symptoms, providing insights into which factors play a more significant role.

4. RESULTS

4.1 Descriptive statistics

The sample consisted of 307 participants. The average score (M) for INMG was 4.04 with a standard deviation (SD) of approximately 1.43. ENMG exhibited a mean score of 5.76 with a variation represented by an SD of 1.03. For PHQ, the participants had an average score of 11.16 and an SD of 6.82. The mean for IHP was 1.58 ($SD = 0.64$). In terms of zero-order correlation (direct relationships between two variables without controlling for other variables), there was a moderately positive correlation between ENMG and INMG ($r = 0.49, p < 0.001$), indicating that individuals who reported higher levels of environmental microaggressions also tended to report higher levels of interpersonal microaggressions. Both forms of microaggressions had a weak positive relationship with symptoms of depression (ENMG: $r = 0.22, p < 0.001$; INMG: $r = 0.31, p < 0.001$). IHP also had a weak positive correlation with INMG ($r = 0.28, p < 0.001$) and PHQ ($r = 0.27, p < 0.001$). However, the correlation between ENMG and IHP was not significant ($r = 0.03, p = 0.573$). The zero-order correlation and descriptive statistics are provided in Table 2.

4.2 Assumption checks

Variance inflation factors (VIFs) assessed multicollinearity between predictors in the regression model. VIF values substantially above 10 indicate problematic collinearity. In the current analysis, all VIFs were well below 10 (range: 1.035 to 1.638), suggesting multicollinearity was not a concern.

The Durbin-Watson test evaluated the independence of residuals. Values near 2 indicate no autocorrelation, while values below 1 or above 3 are problematic. The Durbin-Watson value was 1.978, very close to 2, indicating that residuals were independent. The associated p-value of .790 confirmed the absence of significant autocorrelation.

Residual plots were visually inspected to assess the homoscedasticity or constant variance of residuals at all levels of predictors. The Breusch-Pagan test provided further quantitative evaluation. The non-significant result ($p = .325$) indicated no evidence of heteroscedasticity, satisfying the assumption.

In combination, these diagnostic tests verified that the key assumptions of multiple regression were satisfied. This supported the validity of the model and the reliability of the results. Thorough assumption testing lent credibility to the subsequent analytic findings and interpretation of data.

Table 2: Zero-order correlations matrix, descriptive statistics, and reliability scores of measured variables

Variables	INMG	ENMG	IHP	PHQ
INMG	(0.90)			
ENMG	0.49***	(0.91)		
IHP	0.28***	0.03	(0.80)	
PHQ	0.31***	0.22***	0.27***	(0.93)
<i>M</i>	4.04	5.76	1.58	11.16
<i>SD</i>	1.43	1.03	0.64	6.82
α	0.87	0.87	0.73	0.91
Range	1–7	1–7	1–5	0–27

Note: Pearson correlation matrix with variables ($N = 307$). The diagonal displays the measures of internal consistency as Omega total (ω_T). INMG = Interpersonal Microaggressions. ENMG = Environmental Microaggressions. IHP = Internalized Homophobia Scale-Revised. PHQ = Patient Health Questionnaire-9. *M* = Mean, *SD* = Standard Deviation, α = Cronbach's Alpha.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

4.3 Hierarchical regression analysis

To discern the unique contributions of the demographic factors, IHP, and primary predictors of interest (INMG and ENMG) in predicting depressive symptoms (PHQ), we undertook a hierarchical regression analysis (see Table 3). It is essential to note that the scores in the models for this study were standardized. Consequently, the estimate values correspond directly to the beta values, allowing for a direct interpretation of their standardized effect on the outcome.

In Step 1, we included control variables such as age, dummy variables for sexual orientation (bisexual, lesbian, other), religion (Christian, Muslim, Non-believer, Other), resident area (outside BKK), and education (below bachelor's degree, advanced degrees). This initial model was statistically significant, $F(11, 295) = 2.9$, $p = 0.001$ explaining 9.76% of the variance in PHQ. After adjusting for the number of predictors, the R^2 was 6.40%. This foundational step ensured that subsequent relationships were assessed beyond these basic sociodemographic factors.

In the second step of the analysis in the current study, the inclusion of IHP as a control variable enhanced the model's explanatory power. The R^2 rose from 9.76% in Step 1 to 16.29% (adjusted $R^2 = 12.88\%$) in Step 2, marking a change of $\Delta R^2 = 6.53\%$. This enhancement in model fit was statistically robust, as indicated by the model's F -statistic, $F(12, 294) = 4.768$, $p < 0.001$. Beyond the sociodemographic factors from Step 1, this addition showcased the unique contribution of these control variables in explaining the variance in PHQ. Notably, IHP stood out as a significant control predictor within this enhanced model ($\beta = .270$, $p < 0.001$). This highlighted the importance of internal feelings and beliefs about one's sexual orientation in influencing PHQ, above and beyond the demographic factors. When comparing the change in R^2 between Step 1 and Step 2, the F -statistic for the change in R^2 yielded a significant $F(1, 294) = 22.944$, $p < .001$.

In Step 3, the final model incorporated the primary predictors of interest: INMG and ENMG. The explained variance of the model rose to 23.79% (adjusted $R^2 = 20.95\%$), with a significant result of $F(14, 292) = 6.657$, $p < 0.001$. This marks an additional increase in R^2 of 7.9% beyond Step 2. The inclusion of these focal predictors highlighted their meaningful contributions in explaining PHQ scores, supporting H1 and H2. Specifically, INMG emerged as a significant predictor in the final model ($\beta = .172$, $p = 0.008$), accentuating the role of negative interpersonal messages about non-heterosexuality in predicting poorer psychological health. Meanwhile, ENMG also exhibited a modest but statistically significant predictive effect ($\beta = .173$, $p = 0.007$), suggesting environmental microaggressions also positively contributed to depressive symptoms. Comparing Step 2 and Step 3, the F -statistic for the change in R^2 was significant, $F(2, 292) = 15.22$, $p < .001$, further underscoring the value added by incorporating these critical predictors into the regression model. The results provide support for the hypothesized relationships, with both INMG and ENMG making unique and statistically meaningful contributions as key drivers of variance in PHQ depressive symptom scores.

In conclusion, this analysis sheds light on the intricate relationship between interpersonal and environmental microaggressions and depressive symptoms of individuals across diverse sexual orientations. These findings highlight the need for greater awareness and sensitivity regarding microaggressions to promote the well-being of sexual minorities. Reducing prejudicial attitudes on an interpersonal and societal level could help alleviate psychological distress.

Table 3: Hierarchical regression results for depressive symptoms

Variable	1		2		3	
	B	SE B	B	SE B	B	SE B
Step 1 – Sociodemographic variables						
Age	0.010	0.008	0.009	0.008	0.016*	0.007
Sexual orientation-bisexual	0.078	0.155	0.157	0.150	0.236	0.146
Sexual orientation-lesbian	-0.162	0.163	-0.033	0.160	-0.015	0.153
Sexual orientation-others	0.038	0.179	0.086	0.173	0.124	0.165
Religion-Christian	-0.086	0.389	0.017	0.376	-0.007	0.361
Religion-Muslim	-0.210	0.569	-0.071	0.550	0.088	0.526
Religion-Non-believer	-0.088	0.138	0.030	0.135	-0.046	0.132
Religion-others	1.595	0.979	1.682	0.945	1.115	0.908
Education-below bachelor's degree	0.287*	0.143	0.259	0.138	0.210	0.132
Education-advanced degrees	-0.623***	0.175	-0.652***	0.169	-0.730***	0.162
Resident-outside BKK	0.080	0.117	0.065	0.113	0.059	0.108
Step 2 – Internalized heterosexism						
IHP	--	--	0.270***	0.056	0.205***	0.056
Step 3 – Main predictor						
INMG	--	--	--	--	0.172**	0.065
ENMG	--	--	--	--	0.174**	0.064
<i>R</i> ²	0.098		0.163		0.242	
Adjusted <i>R</i> ²	0.064		0.129		0.206	
ΔR^2	--		0.065***		0.079***	

Note: B values correspond to the beta values, as scores in the model are standardized. INMG = Interpersonal Microaggressions. ENMG = Environmental Microaggressions. IHP = Internalized Homophobia Scale-Revised. PHQ = Patient Health Questionnaire-9.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

5. DISCUSSION

In the hierarchical regression analyses conducted, both demographic variables and internalized homophobia (IHP) were controlled. After accounting for these controls, higher education levels were associated with reduced depressive symptom scores. This was consistent with previous studies that suggested higher education is linked to better mental health outcomes, possibly due to increased coping resources and social support (Halpern-Manners et al., 2016).

Concerning the delineated hypotheses, the results validated the first hypothesis of this study that interpersonal microaggressions would correlate positively with depressive symptoms. The significant positive association underscored the mental health implications of direct prejudice and discrimination individuals might have encountered. These findings resonated with past studies indicating that direct experiences of prejudice can profoundly impact mental health, leading to heightened levels of depression (Kulick et al., 2017; Matijczak et al., 2021, 2023; Woodford et al., 2018).

Transitioning to the broader environmental context, the second hypothesis that environmental microaggressions would positively associate with depressive symptoms was also supported. Environmental microaggressions displayed a significant positive relationship with depressive symptoms, echoing the argument by Crumley (2019) and Woodford et al. (2014) that even indirect environmental prejudices could have profound ramifications on an individual's mental health. Notably, the current study diverges from the findings of some prior pieces of research. While previous studies (Kulick et al., 2017; Woodford et al., 2018) found only interpersonal microaggressions to be significant when modeling both together, the results of this study indicate a slightly stronger effect of environmental microaggressions. One possible explanation for this contrast may lie in the unique socio-cultural context of the current study, particularly the absence of LGBTQ+ marriage laws in Thailand. This absence implies disparities in rights and equality between LGBTQ+ individuals and heterosexual counterparts, exemplifying the broader systemic biases and challenges the community contends with, potentially magnifying the impact of environmental microaggressions. Furthermore, the observed differential impact could be attributed to the pervasive and chronic nature of environmental microaggressions. Unlike interpersonal microaggressions, which are typically directed at individuals on a

personal level, environmental microaggressions manifest in the broader social and cultural context, creating an ongoing atmosphere of invalidation and marginalization (Sue et al., 2007). This persistent exposure to subtle forms of discrimination in various social settings, such as educational institutions, workplaces, and public spaces, may contribute to heightened stress levels and diminished psychological well-being among LGBTQ+ individuals (Meyer, 2003; Hatzenbuehler, 2009).

The significant positive associations between both interpersonal and environmental microaggressions and depressive symptoms underscore the critical role of these stressors in mental health outcomes, consistent with previous research (Woodford et al., 2018). Consistent with minority stress theory (Meyer, 2003), higher levels of both interpersonal and environmental microaggressions were associated with increased occurrences of depressive symptoms, PTSD symptoms, emotional dysregulation symptoms, and suicidal tendencies.

The implications of this study are twofold. Firstly, it fills a crucial gap in the literature by foregrounding the experiences of the Thai LGBTQ+ community and confirming the universality of the impact of microaggressions on mental health outcomes. The synthesis of the findings with the minority stress theory offers valuable insights into the complex interplay between social stressors and mental health outcomes among sexual minorities. The findings extend our understanding by highlighting the significance of environmental microaggressions, which are often overlooked in existing literature.

Secondly, it underscores the urgent need for tailored interventions and structural reforms to combat systemic biases and enhance the mental well-being of the LGBTQ+ community in Thailand. Specifically, counseling services must be culturally adapted to assist LGBTQ+ individuals in addressing microaggressions and developing effective coping strategies. These interventions should validate the experiences of microaggressions, which are often subtle and challenging to recognize. Educational programs, policy changes, and community-based initiatives are essential components of this approach, aimed at raising awareness, addressing systemic biases, and fostering supportive networks.

6. CONCLUSION

This study aimed to explore the relationships between interpersonal and environmental microaggressions concerning sexual orientation and depressive symptoms among LGBTQ+ individuals in Thailand. As hypothesized, both types of microaggressions (interpersonal and environmental) were found to have significant positive associations with depression scores, even after controlling for demographic variables and internalized heterosexism. These findings not only corroborated previous research but also enriched the understanding of the mental health implications derived from such specific prejudices. In light of these outcomes, there emerges a pressing necessity to address both interpersonal and systemic biases. Addressing these microaggressions could be instrumental in mitigating depression levels among LGBTQ+ individuals in Thailand, thereby enhancing their overall well-being.

6.1 Limitations

While this study offers key insights, several limitations warrant acknowledgment. First, the cross-sectional design precluded making causal inferences about the directionality of relationships. Longitudinal studies that track individuals over time would provide a clearer picture of the causal mechanisms. Second, reliance on self-reported data introduced potential vulnerabilities to response or recall biases. Third, the use of convenience sampling restricted the generalizability of the findings. Adopting more representative sampling strategies would bolster external validity. Fourth, examining potential moderators, such as coping mechanisms or social support, might have yielded deeper insights into the specific conditions influencing the observed relationships. Lastly, since the study concentrated on cisgender LGBTQ+ individuals, its findings might not be generalizable to transgender individuals. Despite these limitations, the research represents a significant step forward in our comprehension of the subject.

6.2 Recommendations

Drawing from the findings and the acknowledged limitations, we can propose several recommendations. First, future research should adopt a longitudinal approach to discern the directional and causal relationships between microaggressions, mental health, and related variables such as expectation of rejection, rejection sensitivity, or resilience. This longitudinal approach will offer deeper insights into the enduring effects of microaggressions, thereby informing the development of targeted interventions.

Second, exploring potential moderating factors, such as social support and LGBTQ+ community connectedness, would enrich our understanding of the complex interplay between microaggressions and mental health outcomes. Investigating these factors could shed light on protective mechanisms and inform the development of resilience-building interventions. In addition, investigation is needed concerning the mechanisms underpinning the relationship between microaggressions and mental health, including coping

strategies and sexual orientation concealment. Exploring potential mediators between microaggressions and mental health issues can provide deeper insights, paving the way for more effective preventive measures and interventions along the continuum.

In summary, the findings of the current study underscore the importance of addressing microaggressions as a critical aspect of promoting mental health and well-being among sexual minorities. By integrating these insights into future research and interventions, we can work towards creating more inclusive and supportive environments for sexual minority communities, thereby significantly advancing both research and practice in this domain.

REFERENCES

- Balsam, K. F., Molina, Y., Beadnell, B., Simoni, J., & Walters, K. (2011). Measuring multiple minority stress: The LGBT people of color microaggressions scale. *Cultural Diversity and Ethnic Minority Psychology, 17*(2), 163–174. <https://doi.org/10.1037/a0023244>
- Bissonette, D., & Szymanski, D. M. (2019). Minority stress and LGBTQ college students' depression: Roles of peer group and involvement. *Psychology of Sexual Orientation and Gender Diversity, 6*(3), 308–317. <https://doi.org/10.1037/sgd0000332>
- Brooks, V. R. (1981). *Minority stress and lesbian women*. Lexington Books.
- Brown-Beresford, E., & McLaren, S. (2022). The relationship between self-compassion, internalized heterosexism, and depressive symptoms among bisexual and lesbian women. *Journal of Bisexuality, 22*(1), 90–115. <https://doi.org/10.1080/15299716.2021.2004483>
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). Routledge/Taylor & Francis Group.
- Chen, J.-S., Huang, Y.-T., Lin, C.-Y., Yen, C.-F., Griffiths, M. D., & Pakpour, A. H. (2021). Relationships of sexual orientation microaggression with anxiety and depression among lesbian, gay, and bisexual Taiwanese youth: Self-identity disturbance mediates but gender does not moderate the relationships. *International Journal of Environmental Research and Public Health, 18*(24), Article 12981. <https://doi.org/10.3390/ijerph182412981>
- Crumley, K. (2019). *Impact and perception of they systematic response to lesbian, gay, bisexual, transgender, queer, and other sexual minority orientations (LGBTQ+) microaggressions* [Bachelor's thesis, University of Regina]. oURspace. <https://ourspace.uregina.ca/items/dd4b3975-865d-48ab-b4fb-bdb28e4da56c>
- Dyar, C., Sarno, E. L., Newcomb, M. E., & Whitton, S. W. (2020). Longitudinal associations between minority stress, internalizing symptoms, and substance use among sexual and gender minority individuals assigned female at birth. *Journal of Consulting and Clinical Psychology, 88*(5), 389–401. <https://doi.org/10.1037/ccp0000487>
- Fox, J., & Weisberg, S. (2019). *An R companion to applied regression* (3rd ed.). SAGE Publications.
- Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2019). *Multivariate data analysis* (8th ed.). Pearson Prentice.
- Halpern-Manners, A., Schnabel, L., Hernandez, E. M., Silberg, J. L., & Eaves, L. J. (2016). The relationship between education and mental health: New evidence from a discordant twin study. *Social Forces, 95*(1), 107–131. <https://doi.org/10.1093/sf/sow035>
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin, 135*(5), 707–730. <https://doi.org/10.1037/a0016441>
- Herek, G. M. (2000). The psychology of sexual prejudice. *Current Directions in Psychological Science, 9*(1), 19–22. <https://doi.org/10.1111/1467-8721.00051>
- Herek, G. M., Cogan, J. C., Gillis, J. R., & Glunt, E. K. (1998). Correlates of internalized homophobia in a community sample of lesbians and gay men. *Journal of the Gay and Lesbian Medical Association, 2*(1), 17–25.
- Herek, G. M., Gillis, J. R., & Cogan, J. C. (2009). Internalized stigma among sexual minority adults: Insights from a social psychological perspective. *Journal of Counseling Psychology, 56*(1), 32–43. <https://doi.org/10.1037/a0014672>
- Kaufman, T. M. L., Baams, L., & Dubas, J. S. (2017). Microaggressions and depressive symptoms in sexual minority youth: The roles of rumination and social support. *Psychology of Sexual Orientation and Gender Diversity, 4*(2), 184–192. <https://doi.org/10.1037/sgd0000219>
- Kocalevent, R.-D., Hinz, A., & Brähler, E. (2013). Standardization of the depression screener patient health questionnaire (PHQ-9) in the general population. *General Hospital Psychiatry, 35*(5), 551–555. <https://doi.org/10.1016/j.genhosppsych.2005.07.003>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>

- Kulick, A., Wernick, L. J., Woodford, M. R., & Renn, K. (2017). Heterosexism, depression, and campus engagement among LGBTQ college students: Intersectional differences and opportunities for healing. *Journal of Homosexuality*, 64(8), 1125–1141. <https://doi.org/10.1080/00918369.2016.1242333>
- Matijczak, A., McDonald, S. E., Tomlinson, C. A., Murphy, J. L., & O'Connor, K. (2021). The moderating effect of comfort from companion animals and social support on the relationship between microaggressions and mental health in LGBTQ+ emerging adults. *Behavioral Sciences*, 11(1), Article 1. <https://doi.org/10.3390/bs11010001>
- Matijczak, A., Tomlinson, C., Pham, A., Corona, R., & McDonald, S. (2023). Relations between interpersonal microaggressions, depressive symptoms, and pet attachment in an LGBTQ + emerging adult sample. *Journal of LGBT Youth*, 20(3), 658–679. <https://doi.org/10.1080/19361653.2022.2091078>
- 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), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Nadal, K. L., Whitman, C. N., Davis, L. S., Erazo, T., & Davidoff, K. C. (2016). Microaggressions toward lesbian, gay, bisexual, transgender, queer, and genderqueer people: A review of the literature. *The Journal of Sex Research*, 53(4–5), 488–508. <https://doi.org/10.1080/00224499.2016.1142495>
- R Core Team. (2022). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>
- Salim, S., Robinson, M., & Flanders, C. E. (2019). Bisexual women's experiences of microaggressions and microaffirmations and their relation to mental health. *Psychology of Sexual Orientation and Gender Diversity*, 6(3), 336–346. <https://doi.org/10.1037/sgd0000329>
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, 62(4), 271–286. <https://doi.org/10.1037/0003-066X.62.4.271>
- Szymanski, D. M., & Henrichs-Beck, C. (2014). Exploring sexual minority women's experiences of external and internalized heterosexism and sexism and their links to coping and distress. *Sex Roles*, 70(1–2), 28–42. <https://doi.org/10.1007/s11199-013-0329-5>
- Szymanski, D. M., & Sung, M. R. (2010). Minority stress and psychological distress among Asian American sexual minority persons 157. *The Counseling Psychologist*, 38(6), 848–872. <https://doi.org/10.1177/0011000010366167>
- Szymanski, D. M., Kashubeck-West, S., & Meyer, J. (2008). Internalized heterosexism: A historical and theoretical overview. *The Counseling Psychologist*, 36(4), 510–524. <https://doi.org/10.1177/0011000007309488>
- Timmins, L., Rimes, K. A., & Rahman, Q. (2020). Minority stressors, rumination, and psychological distress in lesbian, gay, and bisexual individuals. *Archives of Sexual Behavior*, 49(2), 661–680. <https://doi.org/10.1007/s10508-019-01502-2>
- USAID, UNDP. (2014). *Being LGBT in Asia: Thailand country report*. UNDP Asia-Pacific Regional Centre.
- Whicker, D. R. (2016). *Masculinity matters: Perceptions of one's own gender status and the effects on psychosocial well being among gay men* [Doctoral dissertation, Marquette University]. e-Publications@Marquette. https://epublications.marquette.edu/cgi/viewcontent.cgi?article=1667&context=dissertations_mu
- Wike, T., Tomlinson, C. A., Wagaman, A., Matijczak, A., Murphy, J., Watts, K., O'Corner, K., & McDonald, S. (2023). The role of thwarted belongingness on the relationship between microaggressions and mental health for LGBTQ+ emerging adults. *Journal of Youth Studies*, 26(2), 286–303. <https://doi.org/10.1080/13676261.2021.2010687>
- Woodford, M. R., Kulick, A., Sinco, B. R., & Hong, J. S. (2014). Contemporary heterosexism on campus and psychological distress among LGBQ students: The mediating role of self-acceptance. *American Journal of Orthopsychiatry*, 84(5), 519–529. <https://doi.org/10.1037/ort0000015>
- Woodford, M. R., Paceley, M. S., Kulick, A., & Hong, J. S. (2015). The LGBQ social climate matters: Policies, protests, and placards and psychological well-being among LGBQ emerging adults. *Journal of Gay & Lesbian Social Services*, 27(1), 116–141. <https://doi.org/10.1080/10538720.2015.990334>
- Woodford, M. R., Weber, G., Nicolazzo, Z., Hunt, R., Kulick, A., Coleman, T., Coulombe, S., & Renn, K. A. (2018). Depression and attempted suicide among LGBTQ college students: Fostering resilience to the effects of heterosexism and cisgenderism on campus. *Journal of College Student Development*, 59(4), 421–438. <https://doi.org/10.1353/csd.2018.0040>
- Yodlorchai, R., Suttiwan, P., Walch, S., & Ngamake, S. (2023). Developing and validating Thai sexual orientation microaggression and microaffirmation scales. *Journal of Homosexuality*, 1–29. <https://doi.org/10.1080/00918369.2023.2275301>